Gender Differences in Gambling Behavior and Social Costs of Gambling Disorders

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Pathological Gambling was defined as an disorder by the American Psychiatric Association in 1980, when the diagnostic criteria for pathological gambling were published in the Diagnostic and Statistical Manual, Third edition.\(^1\) Approximately 20 years of epidemiological research found that males were over-represented in both community and treatment samples of people with gambling disorders. In both a recent meta-analysis of gambling disorder prevalence research and a review of the literature by the National Research Council, male gender is identified as a significant risk factor for gambling disorders.

Research on the social costs of gambling disorders is a relatively new field. The typical methodology has been to calculate social costs from statewide surveys of Gambler’s Anonymous participants who have been mostly males (72\% -78\%). The only exception was Montana where the gender distribution was evenly split.\(^8\) However, the Montana study did not calculate an annual cost per person with gambling disorder.\(^8\) The literature on females with gambling disorders is relatively sparse. The early studies found that female gamblers usually experienced shorter gambling careers and less social costs, such as gambling debts.\(^9,10,11\)

Two relatively recent gambling disorder surveys have found a more equal distribution of gambling disorders among males and females.\(^12,13\) The recent Louisiana Economic Analysis of Gambling surveyed a statewide sample of GA and treatment participants and also found a more equal distribution among men and women.\(^14\) This paper will report on the differences among male and female problem gamblers in the 1999 Louisiana GA and treatment sample.
Methods

An anonymous, voluntary social cost questionnaire was distributed to all state gambling disorder treatment sites and GA meeting sites in the state of Louisiana in January of 1999. Seventy-eight questionnaires were returned in time for statistical analysis. Questions included duration of gambling, career, treatment, employment, civil and criminal justice experience, and amount of gambling related debt. Methods have been completely described in the original report.14

Results

Demographics of GA/Treatment Sample: Ages for the GA sample ranged from 22 to 70, with a mean age of 45. Religious affiliations reported were 62% Protestants and 31% Catholic. Gender distribution was 52.6 male and 48.7% female. Self-reported racial configuration was: Caucasian, 80.8%; African-American, 12.8%; American Indian, 3.8%; Asian-Pacific Islander, 1.28%; and other, 1.28%. Eighteen percent of the sample worked at clerical level positions, 15% worked in a skilled manual labor, and 14% worked in managerial/supervisory positions. Fifteen percent worked in sales, and 8% in service positions. Four percent were educators, and 3% were students. Four percent were craftsman and another 3% were in professional services. Artists/writers, gaming industry, manufacturing, technical/research, farm and law enforcement professions each had 1.3%.

Income: Forty-one percent had a total household income below $50,000, 47.4% had a total household income between $50,000 and $100,000, and 11.5% had a total household income over $100,000.
Marital Status: Fifty-five percent were married and 5% were in common law/cohabitation relationships. Fifteen percent were divorced, 9% were separated, and 15% were never married.

Education: Thirty-nine percent had been to college or trade school and 26% had a bachelor’s degree or higher.

Current Employment: Sixty-five percent were full-time employed and 5% part-time. Eight percent were full-time homemakers and 10% were disabled. Six percent were unemployed, 4% were retired, and less than 2% were students.

Bad Loans: Fifty-six percent (n=44) had defaulted on loans that ranged from $75 to $80,000, with the mean loan amount $10,210.

Amount Lost in last year gambled: Fourteen percent of the sample lost between $1,000 to $4,999 in the last year gambled, 22% lost between $5,000 and $9,999, 21% percent lost between $10,000 and $24,999 and another 21% of the sample lost between $25,000 and $49,000. Twelve percent lost between $50,000 and $99,999 and 3% lost more than $100,000 dollars.

Amount Lost in Lifetime: Fifty-one percent lost less than $50,000, 27% of the sample lost between $50,000 and $99,999 during their lifetime as a result of gambling (losses minus winning) and 22% lost between $100,000 and $10,000,000.

Gambling Career: All data is described in medians. The respondents, started gambling at age 25, started weekly gambling at age 34, their gambling problems began at age 37, they began borrowing to gamble at age 38, their problem gambling lasted four years, and they had been in GA/Treatment for four months. Their lifetime gambling lost was between $25,000 to $50,000 and their last year gambling lost was between $10,000 to $25,000. The social costs per
level 4 Louisiana gambler was $10,187 per year, with majority of costs from time missed from work ($4673), bad debts ($1422), lost productivity ($1003), and theft ($1731).

It is generally known that means are the most sensitive point estimates in the population, yet means can occlude valuable information about a bi-modal population. Such is the case in the determination of social costs of gambling in Louisiana. For example, in the calculation of number of months of unemployment that were due to gambling, the average of three weeks (.75 months) does not reflect the statistically significant ($p < .01$) difference in months of unemployment due to gender. Males reported that zero months of their average 5.6 months of unemployment were directly attributed to gambling, while females reported that six weeks of their average of 7.25 months of unemployment could be directly attributed to gambling activities. Significant differences due to gender were also observed in hospital costs. The average cost of treatment was $23,375. The cost for males at $28,250 was significantly higher ($p < .001$) than that for females at $22,500. Males sought treatment for substance abuse 43.44 times on average. Their frequency was significantly ($p < .05$) higher than that of females at 15.17 times on average. The overall average of 24.56 times presenting for substance abuse treatment does not adequately reflect this gender difference in social costs. Similarly, males presented for inpatient psychiatric treatment 24 days on average as a result of gambling, which was significantly more frequent ($p < .001$) than females at 19 days on average. The overall average of 21.5 days of psychiatric inpatient treatment does not reflect this significant gender difference. Mental health services were accessed twice as often (15.75 times) by females than by males (7.67 times), although the overall average was 12.29 times. The average number of times respondents had been in jail, 2.6, came exclusively from females. The lack of reported jail sentences from males could easily be explained by the fact that the males are still incarcerated.
Similarly, females reported an average of 40.67 months on probation compared to 24.86 months for males. The overall average of 29.6 months of probation conservatively estimates the social costs, and reflects the fact, again, that males are still incarcerated and not on probation. Finally, the gender differences in gambling career length, although not statistically significant, was clinically significant. The overall average of 6.75 years presents a conservative estimate. The average gambling career for males was 9.26 years, and the average gambling career for females was 4.38 years. Length of gambling career may mirror findings in other pathologies that females present earlier for treatment and males postpone treatment until symptoms and outcomes reach crisis proportions beyond denial.

Table 1 shows gender differences in co-morbidities among gamblers in treatment. Table 2 illustrates gender differences in games selected by gamblers in treatment.

**Discussion**

Significant differences were found in this relatively small sample. Females tended to have shorter gambling careers and seek treatment earlier than males. However, within their shorter careers, females tended to have higher annual social costs, than males do, indicating that females were more likely to experience social consequences of their gambling behavior earlier in their gambling career. This study obviously needs replication with larger sample. However, in the developing field of social cost measurement of gambling disorders, this study indicates that male and female social cost calculations may need to be separated and then summed into a total social cost.
References

## Table One

Co-Morbidities in Gamblers Anonymous Sample February 1999 by Gender

<table>
<thead>
<tr>
<th>Co-Morbidities</th>
<th>Frequency</th>
<th>Percent of Total Sample</th>
<th>[Row] % Within Comorbidities</th>
<th>% of Total W/ Level 3 Gambling Pathology</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>Male</td>
<td>Female</td>
<td>Total</td>
</tr>
</tbody>
</table>
| Anorexia/Bulimia/Eating Disorder | 4 | 0    | 4     | 5.1%  | 0   | 5.1    | 0   | 100    | 100%
| Overeating Problem         | 31        | 10   | 21    | 39.7% | 12.8| 26.9   | 32.3| 67.7   | 87.1%
| Compulsive Shopping        | 16        | 1    | 15    | 20.8% | 1.3 | 19.5   | 6.3 | 93.8   | 81.3%
| Depression/Psychiatric Problem | 46       | 22   | 24    | 59%   | 28.2| 30.8   | 47.8| 52.2   | 97.8%
| Drinking Problem           | 22        | 16   | 6     | 28.2% | 20.5| 7.7    | 72.7| 27.3   | 95.5%
| Drug Problem               | 22        | 11   | 11    | 28.2% | 14.1| 14.1   | 50  | 50     | 90.9%
| Marijuana                  | 13        | 9    | 4     | 16.6% | 11.5| 5.1    | 69.2| 30.8   | 84.6%
| “Uppers”                   | 4         | 2    | 2     | 5.1%  | 2.6 | 2.6    | 50  | 50     | 100%
| “Downers”                  | 12        | 2    | 10    | 15.4% | 2.5 | 12.8   | 16.7| 83.3   | 91.7%
| Narcotics                  | 3         | 2    | 1     | 3.8%  | 2.5 | 1.3    | 66.7| 33.3   | 66.7%
| Hallucinogens              | 1         | 1    | 0     | 1.3%  | 1.3 | 0      | 100 | 0      | 100%
| Problem w/Other Drugs      | 4         | 4    | 0     | 5.1%  | 5.1 | 0      | 100 | 0      | 100%
| Problem w/Other Specific Drug | 3     | 3    | 0     | 3.8%  | 3.8 | 0      | 100 | 0      | 100%
Table Two

Mean Amount Spent on Each Game by Gender in the GA Treatment Sample N=65

<table>
<thead>
<tr>
<th>Games</th>
<th>Total N</th>
<th>Overall Mean</th>
<th>N Males</th>
<th>Mean Males</th>
<th>N Females</th>
<th>Mean Females</th>
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</thead>
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<tr>
<td>Sports</td>
<td>26</td>
<td>$333.15</td>
<td>12</td>
<td>$270.08</td>
<td>14</td>
<td>$387.21</td>
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<tr>
<td>ElecVidPok/Slots</td>
<td>48</td>
<td>$2,049.54</td>
<td>19</td>
<td>$3,229.89</td>
<td>29</td>
<td>$1,276.21</td>
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<tr>
<td>PariMutuel</td>
<td>19</td>
<td>$576.32</td>
<td>8</td>
<td>$896.25</td>
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<td>$343.64</td>
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<tr>
<td>Elec@HorsTrak</td>
<td>18</td>
<td>$429.44</td>
<td>6</td>
<td>$586.67</td>
<td>12</td>
<td>$350.83</td>
</tr>
<tr>
<td>RiverCasino</td>
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<td>$1,282.40</td>
<td>20</td>
<td>$994.75</td>
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<td>$1,487.86</td>
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<tr>
<td>Lottery</td>
<td>40</td>
<td>$61.28</td>
<td>20</td>
<td>$92.80</td>
<td>20</td>
<td>$29.75</td>
</tr>
<tr>
<td>Charity</td>
<td>15</td>
<td>$91.73</td>
<td>7</td>
<td>$105.14</td>
<td>8</td>
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<td>StockMkt</td>
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<td>$555.00</td>
<td>3</td>
<td>$733.33</td>
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<td>$20.00</td>
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<td>LandCasNotInd</td>
<td>15</td>
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<td>$780.00</td>
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<tr>
<td>IndianCasino</td>
<td>17</td>
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<td>$1,842.86</td>
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<td>$422.00</td>
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<td>TelComputer</td>
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<td>OutofState</td>
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<td>$869.50</td>
<td>9</td>
<td>$662.22</td>
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<td>$1,039.09</td>
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<td>Cards</td>
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<td>$175.28</td>
<td>9</td>
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<td>9</td>
<td>$181.11</td>
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<tr>
<td>Skill</td>
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<td>$106.43</td>
<td>4</td>
<td>$113.75</td>
<td>3</td>
<td>$96.67</td>
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<tr>
<td>Chance</td>
<td>3</td>
<td>$53.33</td>
<td>3</td>
<td>$53.33</td>
<td>0</td>
<td>$0.00</td>
</tr>
</tbody>
</table>