



**Problem Gambling Treatment  
Program Outcomes  
(1999-2009)**

**Date: August 2012**

## **Executive Summary**

Rideauwood Addiction and Family Services admitted their first gambling client in June 1996, a few months after Casino du Lac-Leamy opened its doors. Although previously Rideauwood was serving youth, adults, and their families for substance abuse and the stressors that arise from it, requests for counselling on gambling issues were few. However, shortly after Casino du Lac-Leamy's construction, people began calling requesting for support in dealing with their compulsive gambling behaviour, and in distress about the situations they were finding themselves in due to it. In order to address this need one of Rideauwood's substance use counsellors underwent additional training and education on how to specifically treat those with gambling issues. Following this Rideauwood's Problem Gambling Program opened with the aims of treating gambling along a harm reduction to abstinence continuum, and preventing relapse with the application of appropriate intervention strategies. Since the initiation of this program, data on the gambling habits before, and during, the treatment of more than 500 gambling clients has been collected. Evaluation data on both gambling losses, as well as treatment outcomes have been compiled and the results have been summarized in this report. These results illustrate both the devastating financial impact gambling can have on an individual's life, as well as the strong and statistically significant effect that treatment has on reducing this destructive behaviour.

To illustrate these propitious treatment effects, before entry into the program male clients were on average, losing more than \$3,000 a month due to gambling, however during the first few months of treatment these losses were reduced to \$800 a month. This represents savings of more than \$26,000 a year, per client. Women also show significant improvements, though on average they are losing significantly less than males when they begin to seek out treatment. Before entry into the program female clients were on average, losing \$1,300 a month, and during the first few months of treatment these losses are reduced to \$400 a month, savings of almost \$11,000 a year. Furthermore, the trend observed in this data indicates that clients continue to improve while in the program, such that for each additional month a client is in treatment, their gambling behaviour continues to be reduced.

### **Gambling and Problem Gambling in Canada: A Brief Introduction**

Problem gambling can be defined as an irregularity in behavior that favors an increase in the frequency, amounts wagered, and leisure time spent participating in a gambling related activity (PGPS, 2004). The pattern of behavior that the individual engages in, compromises personal and professional relationships thus affecting a substantial number of people and not just the problem gambler (Shaffer and Korn, 2002). While gambling behaviour in general is becoming more accessible in society and in our homes since the introduction of online gambling, so too is the risk of pathological and problem gambling (undefined, 2012). The underlying social causes of problem gambling remain largely debated and unknown, however it is believed that individuals classified as moderate to severe problem gamblers, display similar susceptibilities to the rewarding neurobiological mechanisms that are also associated with chemical addictions (Goodman, 2008). Furthermore, even though problem gambling is not sex specific in itself,

epidemiological evidence suggests that instances appear to be greater in males, with males not only participating more in these activities but also engaging in more illegal gambling activities and wagering more than their female counterparts (Shaffer & Korn, 2012).

While there are obvious negative effects of gambling at the forefront, gambling also has potentially unseen adverse and unintended consequences that have a great impact on both society at large, and the individual. For example, of direct consequence to gambling, immense financial troubles often arise which can result in bankruptcy, and poverty (Shaffer & Korn, 2002; Community Research Partners, 2010). The financial burden imposed on the individual as a result of this problem can further lead to a number of dysfunctional consequences such as the loss of employment, major depression, the act of suicide, its ideation and attempt, family dysfunction such as divorce and domestic violence towards spouse and children, as well as an increase in engaging in criminal behaviour to alleviate the direct and indirect problems of gambling related activities (Shaffer & Korn, 2002).

In 2010, it was reported that revenue gained from all provincial and territorial government-controlled lotteries approximated \$13.74 billion per year, thus providing great societal value at the economic forefront (Marshall, 2011; undefined (2), 2012). However, while the majority of gamblers are able to engage in these activities without perceived problems, it has been reported that 3.2% of Canadians are affected by moderate problem gambling and an additional 0.7% of Canadians are affected by severe problem gambling (Marshall, 2011). In Ontario alone, it is estimated that approximately 5% of the population suffers from moderate to severe problems, with almost 10% being “at risk” for problem gambling (CAMH, 2012). In Ottawa this estimate would equal to approximately 30,740 people as being moderate to severe problem gamblers, and 61,480 people being “at risk” for problem gambling (undefined (1), 2001-2011). In addition, these findings are believed to be grossly underestimated as problem gambling is often under reported for a variety of reasons, however, the need for increased intervention and counselling services is evident. The statistics reported above illustrate a need for problem gambling focused treatment that addresses not only the direct and indirect problems gambling may cause, but also the underlying aspects that may drive the behavior as well.

## **Rideauwood Gambling Data Statistics**

In June of 1996 Rideauwood officially introduced its Problem Gambling Program co-run by Jane Aston and Bob McCaw. While the program continues to evolve based on the needs of the clients, the programs prime outcome objectives of harm reduction and ideally abstinence for the problem gambler remain the same. It strives to keep the client actively engaged in the treatment process with the hopes of increasing his/her motivation for change. It aims to provide the necessary coping strategies at an individual basis, and applies cognitive restructuring while aiming to reduce stress and prevent relapse should that be the client's objective. Furthermore, the program focuses on developing and restructuring relationships and communication skills, with the hopes of aiding the individual and those affected around him/her to return to a well-balanced life structure. Data on the outcomes of the Rideauwood Gambling Problem program are reported below.

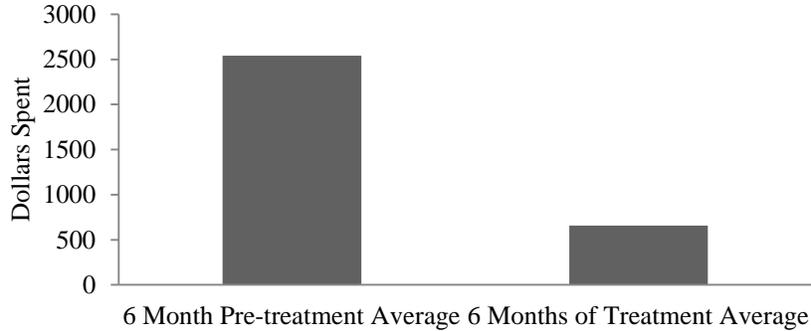
When looking at the data as a whole, roughly 514 (145 female, 342 male, 27 unknown) clients submitted self-reported data on their monthly gambling habits, which included reporting on estimates of the number of days spent gambling and the monthly amount lost (see appendix A). All data was collected over the course of ten years (1999-2009). Of these 514 participants, 116 reported monthly estimates on their gambling habits for the 6 months prior to treatment which was used as baseline measures for comparison (see appendix B). The following document presents results of this evaluation, primarily focusing on the 116 entries which have both data collected while in treatment, and baseline measures prior to treatment. Following this primary section, titled "Gambling Data: Comparisons of Treatment vs. Pre-treatment Averages", data will then be presented involving all 514 entries.

### **Gambling Data: Comparisons of Treatment vs. Pre-treatment Averages**

A paired samples t-test was conducted to compare the average amount of money lost on gambling per month prior to treatment to the average amount lost on gambling related activities while in counselling (figure 1). Of the 116 participants who had a baseline measure, results show that there was a significant difference ( $t(115) = 4.35, p < .001$ ) between the monthly average amount lost in the 6 months prior to treatment ( $M = 2541.65, SD = 4170.31; min = 6.67, max = 28,333.30$ ) and the monthly average amount lost in the 6 months the clients received treatment ( $M = 656.21, SD = 2844.77; min = 0, max = 29,333.30$ ). That is, participants lost more in the pre-treatment months than they did during the months that the individual received counselling. Of these participants, 76 were male, 37 were female, and 3 did not report their sex.

**Figure 1**

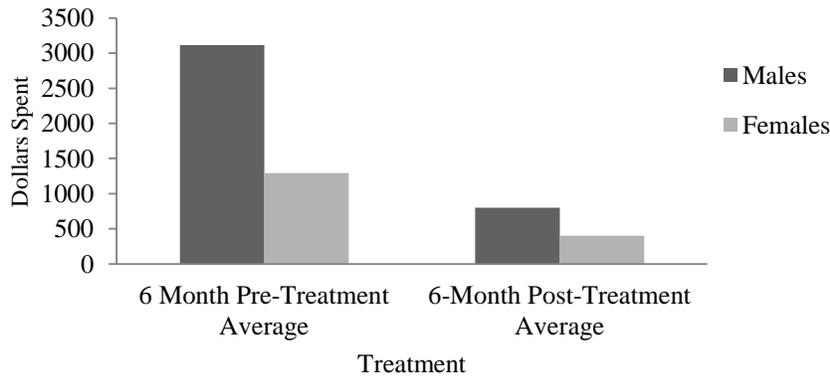
**Amount Spent 6 Months Before Treatment and 6 Months During Treatment**



Upon further analysis of this data, it is shown that males spent an average of \$3114.36 each month in the six months pre-treatment ( $SD = 4992.65$ ), an amount which was significantly lower in female clients. Females spent an average of \$1295.23 per month ( $SD = 4992.65$ ) in the 6 months prior to entrance ( $t(111) = -2.19, p < .05$ ). At the 6-months of treatment interval males were spending on average \$801.06 per month ( $SD = 3490.32$ ) a difference of \$2313.13 or 74.27% less than in the 6 months prior to treatment average ( $t(75) = 3.57, p < .05$ ). Females were spending on average \$404.41 ( $SD = 578.36$ ) in the first 6 months of treatment, a difference of \$890.82 or 68.78% less than their pre-treatment average ( $t(36) = 5.04, p < .05$ ) (see figure 2).

**Figure 2**

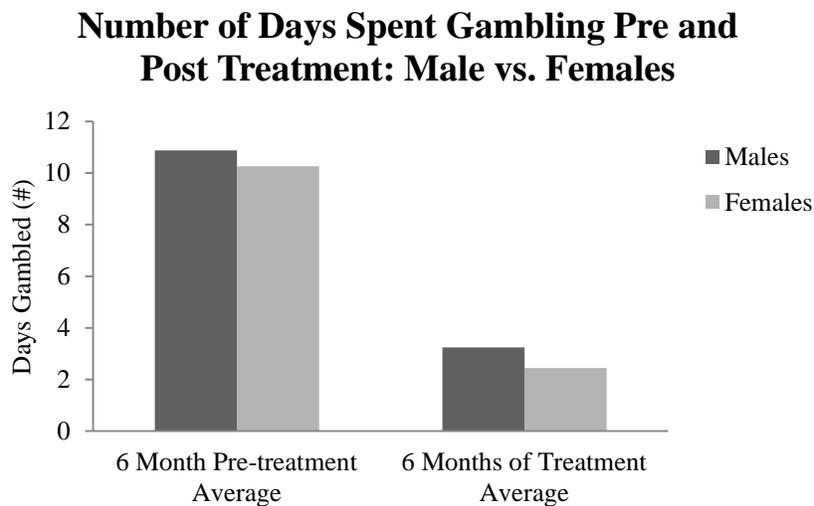
**Money Spent Pre and Post Treatment: Males vs. Females**



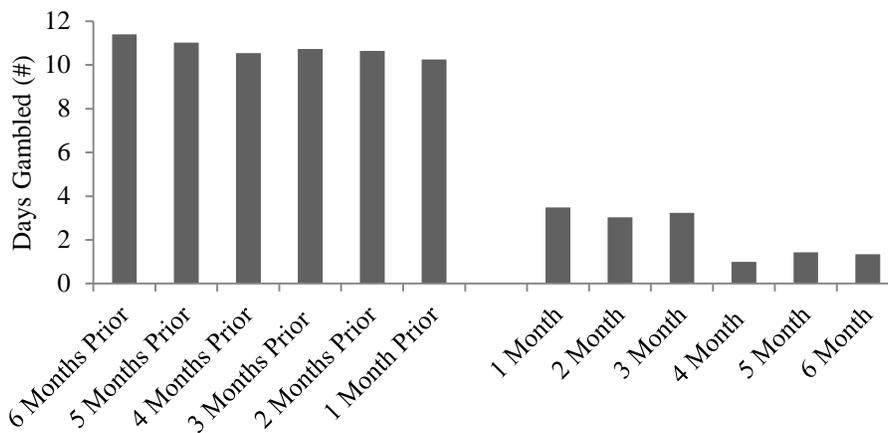
In regards to how frequently clients were gambling, a paired samples *t*-test was conducted comparing the average number of days per month spent participating in gambling related activities in the six months prior to treatment to the average frequency in the first 6 months of treatment (see figure 3). 118 clients submitted data on their gambling activities prior to treatment as well as for at least one month in the first six months of treatment. Of these 118 participants 78 were male, 37 were female, and 3 did not report their sex. No significant gender related differences were observed in relation to the frequency of gambling activities. Results show that treatment did have a significant impact ( $t(117) = 4.07, p < .001$ ) on reducing the average number of days spent participating in gambling related activities. Prior to treatment clients were on average gambling 11 days a month ( $M = 10.89, SD = 7.92; min = 0, max = 30$ ) which was reduced to less than 3 days a month at the 6 months of treatment interval ( $M = 2.94, SD = 5.26; min = 0, max = 30$ ).

Upon further analysis of this data, it is shown that males spent an average of 10.88 ( $SD = 3.40$ ) days gambling a month in the 6 months prior to treatment while females spent an average of 10.26 days a month ( $SD = 7.18$ ). At the 6-months of treatment interval males spent an average of 3.24 ( $SD = 6.05$ ) days participating in gambling (a 68% reduction) while females spent an average of 2.44 ( $SD = 3.40$ ) days participating at the 6-month treatment interval (a 76.22% reduction) (see figure 3).

**Figure 3**



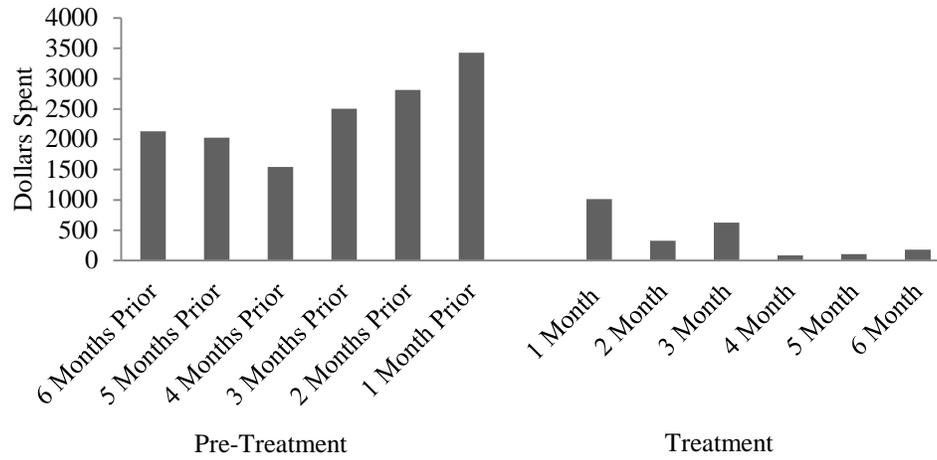
### Number of Days Gambled 6 Months Before and During Treatment



The following figure separates the self reported dollars spent participating in gambling related activities by month, for the 6 months prior to treatment and during the first 6 months of treatment (see figure 4). In each month prior to treatment clients lost significantly more money than in any of the months in which the clients received counselling ( $p < .05$ ). In other words, any month in treatment is significantly better than any month not in treatment. Means and standard deviations can be seen in table 1, further separation by sex can be seen in figure 5 with means and standard deviations shown in table 2. When comparing only the month prior to treatment to the one month treatment average, a similar result is shown ( $t(114) = 3.75, p < .001$ ) as the trends above; loses are significantly reduced after one month of treatment ( $M = 1012.24, SD = 5605.83$ ) in comparison to the one month prior to treatment average ( $M = 3429.93, SD = 6427.91$ ). The same is true for the number of days gambled ( $t(115) = 6.58, p < .001$ ); number of days gambled in the month prior to treatment ( $M = 10.25, SD = 8.64$ ) was greater than the one month after treatment average ( $M = 3.48, SD = 5.88$ ).

**Figure 4**

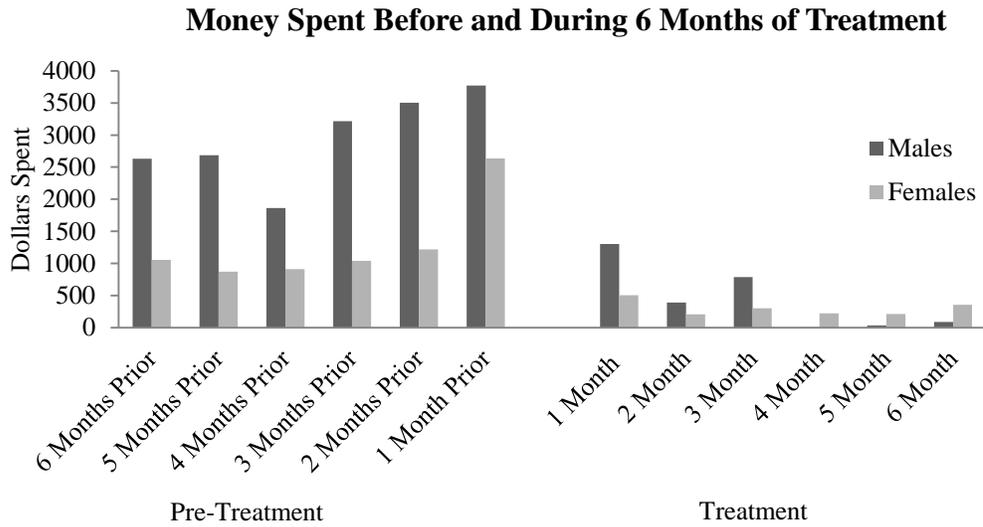
**Money Spent Before and During 6 Months of Treatment**



**Table 1:** Average amount spent 6 months before treatment and 6 months during treatment

Pre-Treatment			Treatment		
Month	Mean	SD	Month	Mean	SD
<b>1</b>	3429.93	6927.91	<b>1</b>	1012.24	5603.83
<b>2</b>	2811.40	2745.92	<b>2</b>	328.17	1135.12
<b>3</b>	2502.96	5423.45	<b>3</b>	627.10	2832.90
<b>4</b>	1542.09	2339.12	<b>4</b>	85.48	250.16
<b>5</b>	2028.85	7009.97	<b>5</b>	103.48	383.92
<b>6</b>	2129.27	4422.66	<b>6</b>	181.90	535.86

**Figure 5**



**Table 2:** Average amount spent separated by males and females 6 months before treatment and 6 months during treatment

	Males			Females		
	Mean	SD	N	Mean	SD	N
<b>Pre-treatment</b>						
6 months prior	3768.586	7988.382	76	2634.054	4346.332	37
5 months prior	3504.324	6934.801	74	1221.081	1282.705	37
4 months prior	3215.072	6597.536	69	1041.111	1339.025	36
3 months prior	1864.242	2765.906	66	910.556	1017.453	36
2 months prior	2683.846	8782.934	65	873.611	953.676	36
1 months prior	2632.4	5382.04	65	1056.061	997.243	33
<b>Treatment</b>						
1 month	1304.997	6925.286	76	506.632	845.678	38
2 month	394.103	1383.36	39	210.105	286.202	19
3 month	788.281	3530.576	32	301.765	503.739	17
4 month	3.889	11.448	18	225.455	391.443	11
5 month	36.765	145.269	17	215.455	597.183	11
6 month	88	247.016	15	356.111	836.562	9

**Gambling Data: The Months during Treatment**

The following is a figure that represents the data compiled across all 517 participants over a 9 month period during which treatment took place. The average amount spent during each month is presented in table 3. Due to missing cells throughout the sample, as well as a paucity of data on the six months prior to treatment, repeated measures statistical analysis was unable to be performed on this.

**Figure 6**



**Table 3:** Self-reported average amount spent during treatment

<b>Treatment</b>			
<b>Month</b>	<b>Mean</b>	<b>SD</b>	<b>N</b>
1	1280.211	7783.978	444
2	350.223	1480.705	234
3	285.268	1675.495	181
4	99.404	427.71	136
5	126.736	415.618	106
6	207.8	609.208	85
7	278.889	1052.883	72
8	147.797	511.28	59
9	189.25	700.327	40



**Appendix A: MONTHLY OUTCOME QUESTIONNAIRE**

**Name:** \_\_\_\_\_

**Date:** \_\_\_\_\_

Please answer the following two questions as your BEST estimate using numbers.

In the last four weeks,

- How many days did you gamble, approximately? \_\_\_\_\_
- How much money did you lose, approximately? \_\_\_\_\_

**Appendix B: ADMISSION GAMBLING QUESTIONNAIRE**

**IN QUESTIONS 1 to 6, PLEASE GIVE US YOUR BEST ESTIMATE AS A NUMBER.**

1. In the month before you came to Rideauwood's Gambling Program,

i) How many days did you gamble, approximately? \_\_\_\_\_

ii) How much money did you lose, approximately? \$ \_\_\_\_\_

2. In the month before that,

i) How many days did you gamble, approximately? \_\_\_\_\_

ii) How much money did you lose, approximately? \$ \_\_\_\_\_

3. In the month before that,

i) How many days did you gamble, approximately? \_\_\_\_\_

ii) How much money did you lose, approximately? \$ \_\_\_\_\_

4. In the month before that,

i) How many days did you gamble, approximately? \_\_\_\_\_

ii) How much money did you lose, approximately? \$ \_\_\_\_\_

5. In the month before that,

i) How many days did you gamble, approximately? \_\_\_\_\_

ii) How much money did you lose, approximately? \$ \_\_\_\_\_

6. In the month before that,

i) How many days did you gamble, approximately? \_\_\_\_\_

ii) How much money did you lose, approximately? \$ \_\_\_\_\_

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- Undefined (3). (2012). Net Revenue from Government Run Gambling. In *Ontario Problem Gambling Research Centre*. Retrieved July 9, 2012, from <http://www.gamblingresearch.org/content/default.php?id=4669>.

## Gambling Resource Websites

(1) Tips for Safer Gambling Research:

Website provides some myth and facts about gambling. Tips for safer gambling, as well as, information on problem gambling, and additional resources.

Website: <http://safeorsorry.ca/index.php>

(2) Center for Addiction and Mental Health (CAMH): The Problem Gambling Project.

Website:

[http://www.camh.ca/en/hospital/care\\_program\\_and\\_services/addiction\\_programs/Pages/guide\\_problem\\_gambling\\_srv.aspx](http://www.camh.ca/en/hospital/care_program_and_services/addiction_programs/Pages/guide_problem_gambling_srv.aspx)

(3) Ontario Problem Gambling Research Centre

Website: <http://www.gamblingresearch.org/>

(4) Responsible Gambling Council (Ontario)

The Responsible Gambling Council (RGC) is an independent non-profit organization dedicated to problem gambling prevention.

Website: <http://www.responsiblegambling.org/>

(5) Journal of gambling issues

Website: <http://jgi.camh.net/loi/jgi>

(6) Ontario Problem Gambling helpline

Website: <http://www.opgh.on.ca/>

Telephone: 1-888-230-3505

(7) Gamblers Anonymous

Website: <http://www.gamblersanonymous.org/ga/>