ADDICTIONS FOUNDATION OF MANITOBA

Student Gambling Report Summary: Manitoba 2007

November 2008

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Addictions Foundation of Manitoba

The Addictions Foundation of Manitoba is responsible for providing rehabilitation and prevention services for Manitoba citizens relating to substance use and problem gambling.

***VISION**:*

Manitobans living free from the harms of alcohol, other drugs and gambling.

***MISSION**:*

To enhance the health of Manitobans by reducing the harm of alcohol, other drugs and gambling through leadership in education, prevention, and rehabilitation.

***VALUES**:*

We believe our greatest asset is our staff, and acknowledge their contribution and passion in supporting the following organizational values:

- *The dignity and diversity of each individual;*
- *The capacity of clients and communities for change;*
- *Collaborative relationships with stakeholders, partners and the self-help community;*
- *Continuous improvement and best practices;*
- *A continuum of services and programs; and*
- *A safe and respectful work environment.*

The authors of this report would like to thank Brian Broszeit for assisting with the development of the scannable form and so many other tasks. Special thanks to the school staff and students for their time and participation. Without their assistance, this report would not have been possible. If you would like to see a copy of the survey, please call Jackie Lemaire at 944-7067.

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Introduction

Background

The Addictions Foundation of Manitoba (AFM) conducts regular prevalence studies[1] within the student population of the province in order to better understand what substances and forms of gambling are common with this group and to what degree youth are engaging in these behaviors. Information gathered from these studies can be used by school boards and individual schools to improve available resources, as well as by public health agencies in the development and maintenance of public services. AFM can also use this information in their school-based programs with school-based staff incorporating the statistics within their education programs for students.

This survey builds on a foundation of data already gathered by similar studies conducted in previous years, since 1993. Originally a smaller survey consisting of 18 schools (most of which were included because they had implemented some substance use prevention programs that required evaluation), it has now grown into a large-scale study consisting of over 50 schools and 5000 students. As substance use and youth involvement in gambling appears to be occurring at earlier and earlier ages[2], this study and the most recent study in 2005 have included grade 7 and grade 8 students. Prior to 2005 these reports only included students in seniors 1 through 4.

Along with the continued addition of grades 7 and 8 students, this survey also includes private and independent schools as well as French speaking schools. Surveys were translated and Francophone schools were able to administer the survey in French. Bilingual and immersion schools were given the option of administering the survey in the language of their choice.

With the inclusion of these schools the results are as representative as possible of the student population in Manitoba. The surveys done in those years may have been less representative of provincial substance use as private religious schools had previously been excluded, as had French schools.

The following results are from randomly selected classrooms in randomly selected school across rural and urban areas. Most provincial schools were included in the random selection process and this provides an increased confidence in the ability of the sample to represent the province.

Of the total number of schools (n=65) that were randomly selected, 15% declined to participate. The refusal of many schools was partially due to administrative processes causing the survey to be pushed back past December and into exam time with the more

[1] Please note: as of February 2008 the AFM is no longer responsible for prevalence research. Manitoba Health and Healthy Living made a policy decision to remove this responsibility from the mandate of the AFM.

[2] Early engagement in the use of substance and gambling has been proven in several research studies to be a risk factor for problems in later adulthood (for example, see Derevensky & Gupta, 2004).

senior students. Principals considered the schools to be too busy and decided not to participate. Some of the lower grade level schools declined to participate; some reasons included that the administration felt that substance use was not a problem for their school and some schools worried that parents would not want their children to be asked questions about substance use.

A higher proportion of high schools declined participation in the current study compared to 2005 (15.4% versus 6.5%). This may have biased the results as there may have been something distinct about the schools which refused to participate. In addition, due to a lack of senior grades participating, the data in the current study had to be weighted to reflect the true proportion of grade levels in the province. The data from the 2005 report was not weighted; therefore, any comparisons made between the two studies should be done so with caution.

Methodology

Random selection

Over 600 schools made up the original database from which schools would be selected. Schools with fewer than 100 students were excluded as there was concern over the capacity for the surveys to be anonymous where there were only a handful of students in each grade. This left a total of 377 schools from which the random selection could be made. These included public, private, and independent, as well as English, French and bilingual schools. From this list, 65 schools were chosen using a random number generator on a statistical computer program. Every school on the list had an equal chance of being selected. Within selected schools, random classes stratified by grade were chosen to participate. In schools with fewer than 400 students, two classes per grade were selected. Three classes per grade were selected from schools with 400 to 800 students, and four classes per grade were selected from schools with more than 800 students. In schools that had fewer than 200 total students, all students were permitted to participate, provided the administration agreed. This was done so that participants from each school would represent the sample to the same extent that the school represents the provincial student population.

Administration

Once the selections had been made, letters were sent to schools boards indicating which school(s) in their district had been selected and requesting permission to conduct the research. Letters were also sent to the principals of the selected schools. The letters were followed up by phone calls in which principals had opportunities to ask questions and consent to or decline participation. Overall, ten schools declined due to administration issues, recently completing a different survey through another public health agency or simply feeling that the questions were too sensitive for their population.

Participating schools were then sent letters for the parents, informing them of the project and allowing them to decline their child's involvement. Survey administrators were given

clear and standardized instructions and a short paragraph of instruction to read to the students prior to passing out the surveys. Each student received written instructions, a survey and an envelope. They were asked to place the survey in the envelope upon completion and seal it, to ensure anonymity.

The sample

In total, 5173 students from 55 schools across the province completed the survey. A number of schools declined participation this year as there were some administrative setbacks and the survey was considerably delayed. This delay led to a number of large high schools to decline participation as the timing was inconvenient. As a result, the sample from older grades was diminished and the total raw sample consisted of more grade 7 and 8 students than seniors 1 through 4. To correct this inconsistency, the dataset was weighted to reflect the true proportion of grade levels in the province. The Manitoba education website provided total numbers of enrolment per grade and the ratio of each grade to total enrolment. Table 1 shows the actual numbers and percentage of students surveyed, as well as the numbers and percentages with the weights applied.

Table 1. Distribution of gender and grade before and after statistical weighting.

	before weights	after weights
	%	%
Gender		
males	50.8	50.4
females	49.2	49.6
Grade		
grade 7	21.0	15.9
grade 8	20.8	16.2
senior 1	16.7	16.9
senior 2	14.1	16.8
senior 3	14.8	16.4
senior 4	12.6	17.8
Total	100	100

The reason this weighting is important is because prevalence rates differ substantially in different grades, particularly, younger grades invariably use less alcohol and drugs than older grades. So if more grade 7 and 8 students complete the survey than the senior grades, prevalence rates appear lower than they actually are. The weights correct this problem. The numbers used for the rest of the analyses[3] are those in the "after weights' columns in Table 1.

[3] In addition, several cases were removed from the analyses to ensure validity of the data (several students reported to gamble on 'blinko' which was a fictitious gambling activity incorporated into the survey to increase validity of the findings). Therefore, the final sample size was 4956.

The questionnaire

Questions were selected based on two major factors: 1) what previous Manitoba reports had asked (for provincial comparisons across time) and 2) what other provinces were asking (so national comparisons could be made). The biggest problem with this method is that comparisons to previous Manitoba studies will be much more difficult as many questions did change. The benefit is that within the next few years, as other provinces start implementing these questions, more detailed interpretations of the data can be made.

The survey was made up of 82 questions about alcohol use, cannabis and other drug use, and gambling behaviour[4]. Information related to the alcohol and other drug use section of the survey will appear in a separate report.

Problem Gambling. The DSM-IV-MR-J (Fisher, 2000) was developed to measure problem gambling in adolescence and is based on the adult diagnostic criteria for pathological gambling defined by the Diagnostic and Statistical Manual for Mental Disorders-IV (American Psychiatric Association, 1994). This measurement instrument was used in the last survey – therefore, the decision was made to include it again.

In addition, the SOGS-RA was also incorporated in the survey in order to allow for cross-provincial/territorial comparisons.

Scores from each of these instruments were only considered valid when students answered ALL of the questions. For example, if a student only filled in a few answers to the DSM-IV-MR-J, their score would not be considered valid as it would not be comparable to those students who completed every question. In these cases, the students would be considered "missing". Proportion totals would be taken out of the new sample size.

Validity check and exclusionary factors

There are many problems associated with school-based surveys and one of them is that some students may not take the survey seriously and be dishonest in their responding. This was particularly concerning as the gambling section was at the very end of the survey. In an effort to increase the validity of the study, a fictitious gambling activity called *Blinko* was inserted into the survey. If any participant endorsed gambling in this fictitious activity they were excluded from analyses as the reliability of their responses was compromised. A total of 36 students reported betting on *Blinko* and so were not included in further analyses. It should also be noted that several students endorsed the use of a fictitious drug and they were also removed from the total sample before analyses.

As nearly all the analyses in this report are expressed as a function of gender and grade, students who failed to disclose this information were also excluded from analyses as their responses could not be interpreted with any precision. Gender was unreported by 48

[4] This report will only discuss the analyses relating to gambling.

students and so these participants were excluded. After this filter, another 38 participants who did not report their grade level were also excluded.

For the gambling portion of the analyses a total of 217 students were rejected from the study. This places the final sample size at 4956 students.

The students

Table 2 below shows the average grades achieved by the students, separated by grade and gender. Overall, female students and those in lower grades report a more positive academic record. It should be noted these results are based on self-reports and these grades were not confirmed with their actual academic record.

Table 2. Average marks as a function of gender and grade level (%).

	A (80%-100%)	B (70%-79%)	C (60%-69%)	D (50%-59%)	F (<50%)
Males					
grade 7	48.1	30.6	14.8	5.6	0.8
grade 8	49.4	32.0	14.3	3.5	0.8
senior 1	37.2	32.7	18.7	8.8	2.7
senior 2	38.4	29.8	22.4	8.8	0.6
senior 3	35.6	30.9	23.7	8.3	1.5
senior 4	35.6	34.2	21.4	8.2	0.7
Females					
grade 7	64.5	22.6	8.7	2.8	1.4
grade 8	62.6	24.0	10.2	2.4	0.8
senior 1	51.3	24.8	15.3	5.8	2.8
senior 2	50.6	30.1	12.3	5.5	1.5
senior 3	47.8	32.8	14.2	4.9	0.3
senior 4	50.6	29.1	14.4	5.9	0.0

Results

Gambling Activities

Overall, 34% of all students reported some form of gambling in the past year. This is slightly lower than the 2005 study where 38% reported some form of gambling. As Table 3 indicates, males and older youth were more likely to engage in gambling activities. These results are consistent with our previous study and with other prevalence studies across Canada. Table 4 on the following page shows percent of students who have gambled on various activities in the past year and frequencies per activity. Figure 1 on page 9 compares gambling activities by study year (2005 and 2008).

Table 3. Percent of males and females in each grade who have gambled in the past 12 months.

	Males (%)	Females (%)	Overall (%)
Grade level			
grade 7	31.8	20.0	26.1
grade 8	36.6	23.2	30.0
senior 1	40.2	26.5	34.0
senior 2	39.6	30.0	35.1
senior 3	43.9	31.4	37.2
senior 4	43.0	38.7	40.6
Overall	39.1	28.8	34.0

Common Gambling Activities

Raffles, poker and sporting events were the most common types of gambling activities. Poker was also the second most common gambling activity in the 2007 youth prevalence in Ontario[5]. The 2005 study in Manitoba found similar types of gambling activities to be popular; in particular, cards, sporting events and raffles. The least common forms of gambling among our youth include betting on slot machines, VLTs and dice. As Figure 1 shows on page 9, computer-related forms of gambling (betting on computer/video games and Internet gambling) have increased slightly since the last prevalence study.

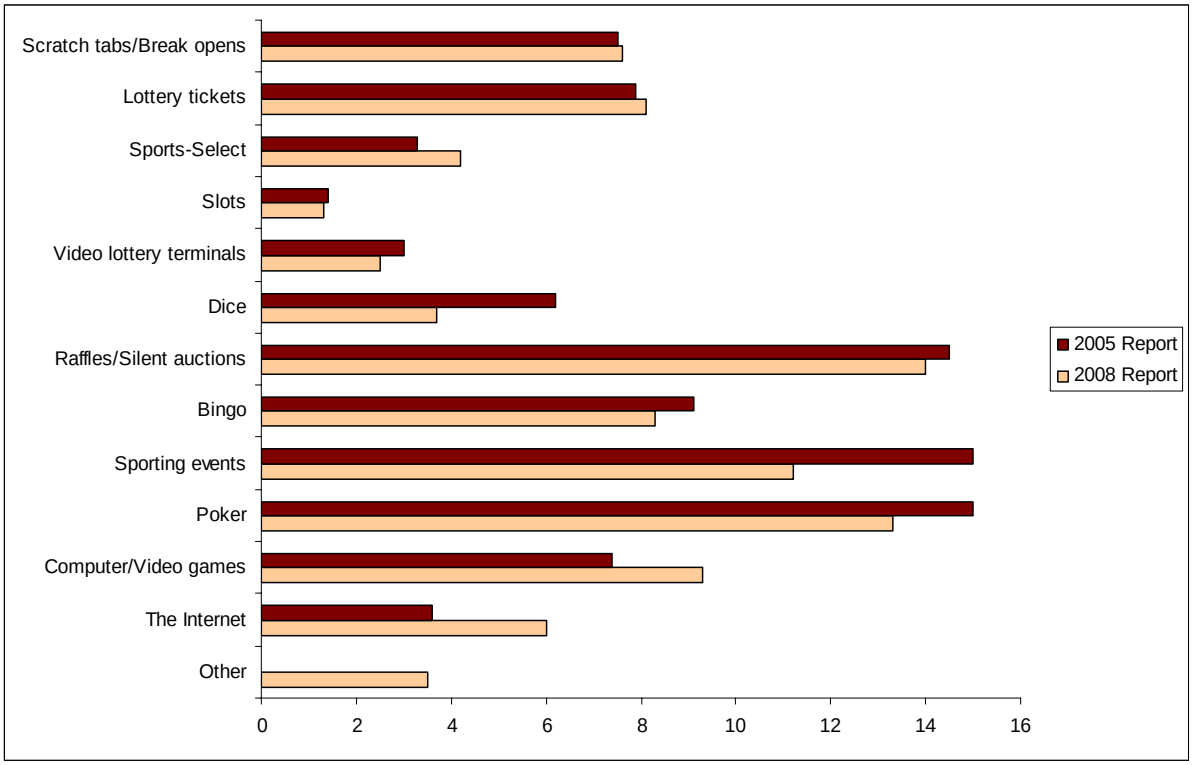
[5] This Responsible Gambling Council project was based on a sample of 2140 youth ages 15-17 responding to an electronic survey.

Table 4. Percent of students who have bet money on various activities in the past year

Past Year Gambling Activity	Frequency (%)						Frequency (%)		
	Not at all	Several times/yr	Less than 1/month	About 1/week	Daily or almost daily	Don't know what this is	Yes	No	Don't know what this is
Internet	93.2	1.4	0.9	1.0	2.6	0.8	6.0	93.2	0.8
Computer/Video Games	90.1	3.8	2.3	1.3	1.9	0.6	9.3	90.1	0.6
Poker	86.0	6.4	4.8	1.6	0.5	0.7	13.3	86.0	0.7
Bingo	91.2	4.5	2.8	0.8	0.2	0.6	8.3	91.2	0.6
Raffles	85.0	9.2	4.5	0.3	0.0	1.0	14.0	85.0	1.0
Dice	94.6	2.0	0.9	0.4	0.4	1.7	3.7	94.6	0.7
VLTs	96.0	1.1	0.9	0.5	0.1	1.5	2.5	96.0	1.5
Slot machines	97.9	0.7	0.4	0.1	0.1	0.8	1.3	97.9	0.8
Sport Select	93.2	2.1	1.0	0.8	0.2	2.7	4.2	93.2	2.7
Lottery tickets	91.2	4.2	2.5	1.3	0.2	0.7	8.1	91.2	0.7
Scratch tabs/Break opens	90.9	4.2	2.4	0.7	0.2	1.4	7.6	90.9	1.4
Sporting events, pools and games	88.1	6.1	3.2	1.3	0.5	0.8	11.2	88.1	0.8
Other	95.7	1.8	0.9	0.5	0.3	0.8	3.5	95.7	0.8

*total n's (sample size) per question vary due to missing responses; on average 318 students provided missing response per gambling activity.
*percentages may not equal 100% due to rounding.

Figure 1: Past year gambling activities by year[6]



Gambling Context

Table 5. Percentage of past year gamblers and the age at which they first gambled

	Males (%)	Females (%)
Before age 10	21.5	18.1
11	16.6	14.9
12	16.3	18.5
13	15.9	14.2
14	13.0	7.9
15	9.0	10.0
16	4.6	6.6
17	1.7	5.7
18 or older	1.4	4.0

Table 5 shows that past year student gamblers report gambling at a very young age; with over 54.4% of males and 51.5% of females starting to gamble at the age of 12 or younger. As noted previously, gambling at an earlier age increases the risk of developing problems with gambling. These results confirm that youth begin gambling early in their lives and underscore the need for gambling education and prevention at soon as possible.

[6] Note: In the 2005 report, “cards for money” was used instead of “poker”.

Table 6. Percentage of past year gamblers and where they usually gamble.

	Males (%)	Females (%)
At home	67.5	73.1
At school during breaks	12.6	7.6
At school – while skipping class	1.9	1.7
At work	2.9	3.8
In bars	4.2	6.5
At the casino	2.3	3.4
On the street	8.5	4.0

Although most students have not gambled in the past year, of those that have, the majority report gambling at home. The next more common venue for gambling is at school. The results of this section suggest that parents/guardians, sibling, teachers and educational assistants have a significant role to play in prevention and intervention when it comes to gambling.

Table 7. Percentage of students by gambling status and endorsement of multiple choice questions

	Past Year Gamblers (%)	Non-Past Year Gamblers (%)	Overall (%)
Who is your preferred teacher on gambling?			
*Your teacher	10.1	9.5	9.7
*Gambling education expert	19.2	19.1	19.1
*School counselor	4.3	5.5	5.1
*A parent/caregiver	35.9	39.6	38.3
*A peer	30.6	26.3	27.8
The AFM has a website for gambling called…			
*www.luckyday.ca[7]	2.9	2.2	2.4
*www.pokerstars.ca	13.8	6.0	8.7
*www.knowthefacts.ca	19.9	14.4	16.3
I don't know	63.5	77.4	72.6
If I try harder at gambling, I will get better and win money			
*true	10.3	3.9	6.1
*false[8]	57.8	53.1	54.7
*don't now	32.0	43.0	39.2

[7] This is the correct answer.
[8] This is the correct answer.

Several miscellaneous questions were asked of the students testing their knowledge about the AFM www.luckyday.ca website and about their beliefs in gambling myths (e.g., if I try harder at gambling, I will get better and win money). In addition, students were asked to identify from whom they would prefer to learn about gambling. Table 7 on page 10 provides a summary of the results.

Most students indicated that they would prefer to learn about gambling from their parents or a caregiver. Learning from peers was also a popular choice. Non-past year gamblers were slightly more likely to prefer learning from a parent/caregiver compared to their past year gambling counterparts. Most students could not pick the correct AFM website from a list of options; this finding is consistent with the "It's Your Lucky Day: Program Evaluation" where most students did not remember the name of the website. Past year student gamblers were more likely (13.8% versus 6.0%) to pick the www.pokerstars.ca website compared to non-past year gamblers. The pokerstars.ca website is a popular Internet gambling site and many students have probably been on the site or have seen website advertisements in the past. Over half of the students disagreed with the statement, "If I try harder at gambling, I will get better and win money". Slightly more past year gamblers than non gamblers agreed with the statement (10.3% versus 3.9%). There was also a significant number of students who reported that they "didn't know" what the answer to this popular gambling myth was and this finding emphasizes the continued need to provide education to all youth on gambling myths and misperceptions.

Problem Gambling

Table 8. Percent of students by gender by DSM-IV-MR-J categories[9]

	Males (%)	Females (%)	Overall (%)
Social gambler	27.6	20.2	23.8
Problem Gambler	0.9	0.5	0.6

As Table 8 shows, 0.6% of students are classified as problem gamblers with males being more likely to meet the criteria for problem gambling. These numbers are slightly lower than in 2005 and this may be due to many reasons including the fact that even with weighting, the sample could be biased due to a larger number of high schools which declined to participate. The DSM-IV-MR-J offers another method for categorizing problem gambling among youth. Table 9 on page 12 shows the results of the method that includes a new category called "at-risk". The SOGS-RA was also included in the survey

[9] It should be noted that the 2005 report determined problem gambling rates differently than was done in the current study. In 2005 all past year gambling students were included in the results, even if they missed a few questions on the DSM-IV-MR-J. The current study (and the results in Tables 8, 9, 10 and 11) excluded those students who missed one ore more questions on the DSM-IV-MR-J and the SOGS-RA. However, analysis was done using the DSM-IV-MR-J data (only) and the method of including all students was followed. The following rates were found with this method: 33.2% social gambler and 0.8% problem gambler. The 2005 report found that 32.7% of the sample was considered social gamblers and 2.3% problem gamblers. Therefore, even with the inclusion of all students (even those that missed questions), the problem gambling rate is relatively stable (0.8% versus 0.6%) and both are lower than the 2005 report (2.3%).

and the results are show on Table 10. It should be noted that the SOGS-RA is known to be a more liberal tool for estimating problem gambling, and as such, the rates are usually larger when using this instrument as compared to more conservative measures such as the DSM-IV-MR-J.

Table 9. Percent of students by gender by the revised DSM-IV-MR-J categories

	Males (%)	Females (%)	Overall (%)
Social gambler	24.9	19.2	22.0
At-risk	2.7	1.0	1.8
Problem Gambler	0.9	0.5	0.7

Table 10. Percent of students by gender by SOGS-RA categories

	Males (%)	Females (%)	Overall (%)
Non-problem gambler	27.8	20.0	23.9
At-risk	2.5	1.4	2.0
Problem Gambler	1.6	0.6	1.1

Problem Gambling by Grade

The following tables outline problem gambling categories by grade. As the rates were so similar per measurement instrument, the SOGS-RA was chosen for this section.

Table 11. Percent of students by grade by SOGS-RA categories

	Grade 7 (%)	Grade 8 (%)	Senior 1 (%)	Senior 2 (%)	Senior 3 (%)	Senior 4 (%)	Overall (%)
Non-problem gambler	16.3	20.2	21.9	24.6	27.4	31.9	23.9
At-risk	0.8	2.3	2.3	1.4	2.3	2.6	2.0
Problem Gambler	1.0	0.6	1.9	0.8	1.2	1.2	1.1

Summary

Gambling among grade 7 to senior 4 students in Manitoba appears to be a relatively common activities with more than one in three having gambling on some form of activity in the past year. However, based on the results of this study, it appears only a small percentage of Manitoban youth can be classified as problem gamblers according to the standardized measurements used (and even less so compared to 2005). This survey found youth engaging in the same gambling activities as in 2005, however, there has been a slight increase in Internet-related gambling such as poker sites and betting on computer/video games (it should also be noted that these types of gambling activities were most likely to be played “daily or almost daily” compared to any others; although the percentages that gambled daily on any form of gambling were small). The results of this survey also suggest that Manitoban youth may require more information on gambling

myths and information on how to get help (e.g. the AFM www.luckyday.ca website). It also seems plausible that educating parents about gambling among youth would be extremely beneficial considering that many of the respondents reported that they would enjoy learning about gambling from their parents and/or caregivers.

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Addictions Foundation of Manitoba

1031 Portage Avenue
Winnipeg, Manitoba R3G 0R8
Phone: (204) 944-6200
Toll free: 1-866-638-2561
Fax: (204) 786-7768
www.afm.mb.ca