

MEASURING GAMBLING AND PROBLEM GAMBLING IN ONTARIO

By Jamie Wiebe, Eric Single and Agata Falkowski-Ham

December 04, 2001

**Canadian Centre on Substance Abuse
Responsible Gambling Council (Ontario)**

TABLE OF CONTENTS

TABLE OF CONTENTS	i
LIST OF TABLES	ii
TABLE OF FIGURES	iv
EXECUTIVE SUMMARY	1
CHAPTER 1: INTRODUCTION	6
1.1 Study objectives	8
1.2 Study significance	8
CHAPTER 2: DESIGN AND METHODOLOGY	9
2.1 Sampling strategy	9
2.2 Response rates	10
2.3 Data collection	12
2.4 Measurement instrument and gambling classification	12
2.5 Analytical strategy	14
2.6 Study limitations	16
CHAPTER 3: GAMBLING AND GAMBLING PATTERNS IN ONTARIO	18
3.1 Gambling activities	18
3.2 Characteristics of persons engaging in different types of gambling	23
3.2.1 Gambling tickets	23
3.2.2 Electronic gambling	25
3.2.3 Casinos	27
3.2.4 Gambling with family or friends	29
3.2.5 Bingo	31
3.2.6 Sports betting	33
3.2.7 Horse racing	35
3.2.8 Speculative investments	37
3.3 Interrelationship of different gambling activities	39
3.4 Reasons for gambling at casinos and perceived benefits	41
CHAPTER 4: PROBLEM GAMBLING IN ONTARIO	47
4.1 CPGI levels	47
4.2 Endorsement of CPGI items by gambling level	48
4.3 Gambling activities of different types of gamblers	49
4.4 Money and time spent	53

4.5	Problems experienced from gambling	55
4.6	Family gambling	56
CHAPTER 5: CHARACTERISTICS OF DIFFERENT TYPES OF GAMBLERS IN ONTARIO		58
5.1	Socio-demographic characteristics	58
5.2	Reasons for going to a casino and perceived benefits	63
5.3	Beliefs and attitudes of different types of gamblers	66
5.4	Early gambling experience	68
5.5	Health and well-being	69
5.6	Problems resulting from others' gambling	73
5.7	Awareness of gambling services	74
CHAPTER 6: GAMBLING AND SUBSTANCE USE		75
CHAPTER 7: CONCLUSIONS AND DISCUSSION		79
REFERENCES		89
APPENDIX A: QUESTIONNAIRE		90
ENDNOTES		120

LIST OF TABLES

Table 2.1:	Sample description	10
Table 2.2:	Contact summary	11
Table 2.3:	CPGI scoring and labels	13
Table 2.4:	Comparison of weighted and unweighted sample demographic characteristics	14
Table 2.5:	Calculation of confidence intervals for Gambling Survey (0.95 confidence level)	16
Table 3.1:	Frequency of participation in various gambling activities	20
Table 3.2:	Gambling activities by median amount of money spent, won or lost on a typical occasion	22
Table 3.3:	Buying lottery, scratch, and raffle tickets by demographic characteristics	24
Table 3.4:	Electronic gambling by demographic characteristics	26
Table 3.5:	Gambling in casinos by demographic characteristics	28
Table 3.6:	Gambling with friends and family by demographic characteristics	30
Table 3.7:	Playing bingo by demographic characteristics	32
Table 3.8:	Sports betting by demographic characteristics	34
Table 3.9:	Betting on horse races by demographic characteristics	36
Table 3.10:	Making speculative investments by demographic characteristics	38
Table 3.11:	Correlation matrix (Pearson) of different types of gambling activities (numerical)	40
Table 3.12:	Reasons for gambling at a casino, among those who visited a casino in the past year	41
Table 3.13:	Reasons for gambling by demographic characteristics, among those who visited a casino in the past year	43
Table 3.14:	Perceived benefits of gambling among those who reported gambling in the past year	44
Table 3.15:	Benefits of gambling by demographic characteristics, among those who reported gambling in the past year	46
Table 4.1:	Endorsement of Scored CPGI items by CPGI level	48
Table 4.2:	Gambling activities by CPGI levels	50
Table 4.3:	Gambling activity by CPGI levels	52
Table 4.4:	Casino visits in the past year by CPGI levels, among those who visited a casino in the past year	53
Table 4.5:	Correlation between CPGI score and gambling expenditures	54
Table 4.6:	Problems experienced from gambling by CPGI level, among those who reported gambling in the past year	56
Table 4.7:	Gambling problems in family by CPGI levels	57
Table 5.1:	Gender, age, marital status, education, employment status, income, family composition, and region by CPGI levels	61
Table 5.2:	Reasons for going to a casino by CPGI level, among those who visited a casino in the past year	64

Table 5.3:	Benefits received from gambling by CPGI level, among those who gambled in the past year	66
Table 5.4:	Whether respondents believe that after losing many times in a row one is more likely to win, among those who gambled in the past year	67
Table 5.5:	Whether respondents believe that one can win more if one uses a system by CPGI level, among those who gambled in the past year	68
Table 5.6:	Remembering first big win by CPGI levels, among those who gambled in the past year	68
Table 5.7:	Remembering first big loss by CPGI levels, among those who gambled in the past year	69
Table 5.8:	Health status by CPGI levels	69
Table 5.9:	Stress indicators by CPGI levels	70
Table 5.10:	Urge to drink alcohol when something painful happens by CPGI levels	71
Table 5.11:	Urge to use drugs/medication when something painful happens by CPGI levels	71
Table 5.12:	Number of people respondents can turn to by CPGI levels	72
Table 5.13:	To whom you would turn when dealing with gambling-related problems by CPGI levels	72
Table 5.14:	Problems experienced from someone else's gambling by CPGI levels	73
Table 5.15:	Awareness of toll-free gambling help line and gambling counselling services by CPGI levels	74
Table 6.1:	Alcohol, tobacco, and illicit drug use by CPGI levels	76
Table 6.2:	Use of alcohol or drug while gambling, and gambling while intoxicated on alcohol or drugs by CPGI levels	77
Table 6.3:	Personal or family alcohol or drug problem by CPGI levels	78

LIST OF FIGURES

Figure 4.1:	CPGI levels	47
--------------------	-------------	----

EXECUTIVE SUMMARY

The following report presents the results of a survey regarding the nature and extent of gambling and gambling problems in Ontario. The survey was conducted in the spring of 2001 by the Canadian Centre on Substance Abuse and the Responsible Gambling Council (Ontario) under a grant from the Ontario Problem Gambling Research Centre. The study is intended to determine the prevalence of gambling and problem gambling among Ontario adults, to describe the characteristics of individuals experiencing gambling-related problems, to describe the relationship between problem gambling and substance abuse, and to discuss the implications of the findings to treatment and prevention programming.

Design and Methodology: The study is based on a stratified random sample of all persons aged 18 or older living in Ontario households that have a telephone. A sample of 5,000 persons was interviewed by Viewpoints Research, Inc., from March to May, 2001. Approximately two-thirds (62%) of those contacted refused participation, and 1% did not complete the interview, leaving a response rate of 37%. The response rate is within the range found in other gambling studies and the distribution of demographic characteristics compares favourably with those of the population of Ontario. Nonetheless, the data were weighted by age and region to help offset any sampling bias.

Respondents were asked a series of questions regarding their involvement in various gambling activities, problem gambling behaviour, adverse consequences resulting from gambling, and socio-demographic and other characteristics relating to problem gambling. The measure of gambling problems used in this survey is the recently developed Canadian Problem Gambling Index (CPGI), consisting of nine items: chasing losses, escalating bets to maintain excitement, feeling one might have a problem with gambling, borrowing or selling to get gambling money, betting more than one can afford, feeling guilty, being criticized by others for gambling behaviour, incurring harm to one's health and having financial difficulties to one's household due to gambling (Wynne and Ferris, 2001).

The CPGI was developed to better measure gambling problems in the general population in comparison with the more commonly used South Oaks Gambling Screen (SOGS), which is based on studies of clinical populations of pathological gamblers. The CPGI makes a distinction between non-problem gambling, those at risk of developing serious problems, those with moderate gambling problems and those with severe problems. It has been shown to have good construct validity and reliability in psychometric testing (Ferris and Wynne, 2001). Unfortunately, because the CPGI is a relatively new measure, the results of this survey cannot be compared with prior surveys. However, the results do provide a baseline measure for future studies on trends in problem gambling among Ontario adults.

Rates and Correlates of Gambling: Gambling is a very common activity, and approximately five of six Ontario adults (83%) report gambling in some fashion in the previous year. The most common gambling activity is the purchase of lottery tickets (64.6%), followed by raffle tickets (51.0%), scratch tickets (31.6%) and playing slot machines or video lottery terminals (VLTs) (28.3%). In addition, 13.2% bet on the outcome of a sporting event, 11.8% bet on arcade or video games, 10.0% bet on cards or games with friends, 9.5% gamble at out-of-province casinos, 8.5% play bingo, 7.2% gamble at casino table games, 6.4% make speculative investments, 6.0% play Sports Select and 5.4% bet on horse races. Finally, less than 1% of the population report gambling on the Internet (0.6%) or making bets with a bookie (0.4%). Examination of the frequency of gambling shows that the activity that respondents participate in most frequently is lottery tickets. For most Ontario adults who gamble, frequency of participation is less than once a month.

With regard to the characteristics of different types of gamblers, those who buy lottery, scratch or raffle tickets tend to be fairly representative of the general population in terms of demographic characteristics. Most other gambling activities involve a disproportionate numbers of young adult males. Sports betting is particularly likely to involve males, while speculative investments and travelling out of province to casinos are most common among those with higher income. Contrary to the popular image of bingo as an elderly activity, young adults are the most likely to gamble at bingo games. Internet gambling is reported by less than 1% of respondents.

The most common reasons given for gambling involve sociable motives: 28.0% do it “for the enjoyment of gambling”, 26.0% to watch others gamble, 24.3% to win money, 21.1% for the entertainment, and 17.5% to socialize. Similarly, the most commonly cited benefits of going to casinos is to win money (42.2%), because it’s exciting or fun (36.6%), or to socialize (26.1%).

Gambling Problems: Perhaps the major finding of this study is that there are a significant number of Ontario adults who report problems as a result of their gambling. Of the total sample, 16.8% were non-gamblers, 69.8% report that they gamble without any problems, 9.6% are classified as “at risk” in that they have indicated relatively minor problems, 3.1% score as having moderate gambling problems and 0.7% are rated as having severe gambling problems on the CPGI. Thus, 3.8% or approximately 340,000 Ontarians 18 years or older report problems of sufficient magnitude to rank as having moderate or severe gambling problems on the CPGI.

The most commonly reported gambling problems relate to income loss or debt. As the severity of gambling problems increases, the likelihood of experiencing relationship problems, loneliness or increased isolation, health problems, and stress or depression also increases. For most gambling activities, as the frequency of gambling increases, the likelihood of experiencing gambling problems increases. The most common gambling activities among those experiencing severe gambling problems are playing lottery tickets, slot machines, scratch tickets and casino table games. Although those with severe gambling problems constitute a minority of all gamblers for any type of gambling activity, it is noteworthy that nearly one in every four Ontario adults who gamble with a bookie (23.8%) report severe gambling problems. Severe problem gamblers are also the most likely to gamble at casinos and the most likely to report committing a crime to support their gambling. The reader is cautioned that the causal priority between gambling and associated problems is not always clear. For example, to what extent does involvement in crime lead to gambling problems and to what extent does gambling lead to crime? Although the connection that the respondents in this survey make between their gambling problems and various adverse consequences appears to be quite plausible, one cannot be certain of a causal linkage with only subjective data from one point in time. An important task for future research is to conduct longitudinal studies examining the relationship between gambling behaviour and associated problems over time in order to better establish the causal role of gambling problems.

Those with moderate or severe gambling problems tend to be disproportionately young (between the ages of 18 and 24), unattached males. Students and unemployed persons have above-average rates of gambling problems. Education is negatively related to gambling problems, with highest rates of moderate or severe problems among the better educated. Low-income persons are less likely to gamble at all, but they are more vulnerable to developing gambling problems if they do. Placing a high importance on religion in one's life relates to lower levels of gambling, but it does not relate either positively or negatively to the development of gambling problems among those who gamble.

Those with moderate or severe gambling problems cite more perceived benefits from gambling, and they are more likely to remember a big win as well as a big loss from gambling. The more severe a gambling problem, the more likely that the gambler holds a false belief that the odds of winning change depending on previous outcomes of a game or by using a betting system. Moderate or severe problem gamblers are more likely to have health problems. Approximately one in four moderate or severe problem gamblers report being under a doctor's care for emotional or physical problems due to stress, and more than one in three report feeling seriously depressed at times. Approximately one in sixteen severe problem gamblers (6.1%) have even considered suicide.

These problems are exacerbated by the finding that problem gamblers tend to have very poor social supports and they are often poorly informed of available services that might help their situation. Moderate or severe problem gamblers have fewer persons they feel they can turn to for help with personal problems. The majority are unaware of toll-free help lines and more than two in five are unaware of gambling counselling services. Gambling problems are often complicated as well by substance misuse. Problem gamblers are not more likely to drink, but they tend to have higher rates of consumption than other gamblers. Moderate and severe problem gamblers smoke more often than other gamblers, and they are more likely to use illicit drugs. They are more likely to use alcohol or drugs while gambling, and to get high on alcohol or drugs while gambling. The higher one's involvement in gambling problems, the greater the likelihood

that there is a family history of alcohol or drug problems. These findings indicate that the problems of substance abuse and gambling are closely connected.

Conclusions: This study has potentially important implications for interventions aimed at preventing or dealing with gambling problems in Ontario. The finding that there are a significant number of Ontarians who experience moderate or severe problems resulting from their gambling indicates a strong need for the continued expansion of services relating to problem gambling. There are also implications for the targeting of interventions. In particular, the finding that there are high rates of gambling problems among young adults indicates a need to enhance policies and programs aimed at preventing or reducing gambling problems in this age group. Another challenge regarding the provision of gambling problem services concerns elderly Ontarians. While less common than among younger adults, gambling problems among the elderly are often exacerbated by social isolation and concurrent health problems.

The findings of this study also have implications for the study of underlying determinants of gambling problems. It is striking that many Ontarians have mistaken beliefs concerning randomness and probabilities while gambling, indicating a need for enhanced prevention programming that provides valid information on the real odds of success in gambling. The finding that gambling problems and substance abuse are closely connected indicates the potential usefulness of screening clients in gambling counselling and treatment programs for alcohol and drug problems. By the same token, persons presenting with alcohol and drug problems should be screened for gambling problems.

Although the findings have immediate implications for the targeting and design of interventions for gambling problems, the real value of this study lies in the provision of baseline data for the evaluation of future trends. It is hoped these findings will be used in combination with those from future studies to establish trends in gambling behaviour and to better understand the underlying determinants of gambling problems. The eventual goal is to develop a body of knowledge that will allow policy makers and gambling specialists to more effectively deal with gambling problems.

1. INTRODUCTION

Over the past two decades, the availability of gambling in a variety of forms has increased markedly in Canada (Ladouceur, 1996), and in North America more generally. Prior to the 1970s, legal gambling in Canada was limited to occasional charity bingos and raffles, midway games of chance, pari-mutuel wagering on horse races, private non-commercial card games, and friendly bets between individuals (Campbell & Lowman, 1988). Thirty years later, legalized gambling in Canada has expanded to include slot machines, video gambling devices, casinos, large-scale bingo halls, and sports and off-track horse race betting. A recent report indicates that the total net gambling profit for all gaming sectors and for all provinces in 1999-2000 is \$5.7 billion, which indicates a 7.5% increase since 1998-1999 (Canadian Gaming News, 2001).¹

In Ontario, the first casino opened in Windsor in 1994, followed by Casino Niagara and Rama in 1996. Total net gaming profits for Ontario amount to \$2.0 billion, of which \$919.9 million comes from casinos (Canadian Gaming News, 2001). In 1999-2000, Ontario Lotteries had a net total income of \$731.9 million dollars (Canadian Gaming News, 2001). Ontario leads all provinces in the amount of money wagered annually on charitable gaming, with a net income of \$344.1 million (Canadian Gaming News, 2001). Horse racing is another popular activity, bringing in \$48 million dollars across the country. As much as two-thirds of all racetrack wagering occurs in Ontario (Canadian Gaming News, 2001).

The increased expansion and availability of gambling opportunities has led to concerns about the potential social and economic impacts. In 1997, an inter-provincial group of government agencies with responsibility for mitigating problem gambling commissioned the Canadian Centre on Substance Abuse to conduct research that (1) clarified the concept of problem gambling with the general population; (2) developed an operational definition to guide research, treatment and prevention; and (3) designed and tested a new instrument for measuring problem gambling in non-clinical settings (i.e., the community). This three-year research project entitled “Measuring Problem Gambling in Canada” has recently been completed. A main outcome is the development of a new measurement instrument, the Canadian Problem Gambling

Index (CPGI), which has been validated in a Canada-wide survey (Ferris & Wynne, 2001). It is envisaged that over the next two years a number of provinces will conduct prevalence studies based on the CPGI.

The most recent data on the prevalence of gambling in Ontario is from a 1995 study conducted by the Addictions Research Foundation (Ferris & Stirpe, 1995). The findings showed an increase in gambling participation from an earlier study conducted in 1993 (CFCG/Insight Canada, 1993), with 84% of Ontarians having participated in some gambling activities in the past year. Of the total sample, 1% of respondents were gambling at probable pathological levels. The South Oaks Gambling Screen (SOGS) was used to assess the prevalence of problem gambling.

For the most part, the SOGS has been the preferred instrument among researchers assessing the prevalence of pathological or problem gambling in the general population. One of the main reasons is that it is the instrument that has received the most validity and reliability testing (Shaffer et al., 1997). However, it has not been without criticism. One of the main criticisms has centred on the fact that it was developed in a clinical setting, and yet it is used in general population studies (Culleton, 1989).

The purpose of this research is to provide current information on: (1) the gambling activities engaged in by adults in Ontario, and (2) the extent and characteristics of problem gambling in Ontario communities. Because it is better at measuring gambling problems in the general population, the CPGI will be the survey instrument used in this study. Although the SOGS would permit comparison of results to earlier estimates of pathological gambling, it was developed from clinical studies of pathological gamblers and it does not measure non-pathological gambling problems as well as the CPGI. The present study is timely and will contribute not only to knowledge of gambling and problem gambling in the Province of Ontario, but to an inter-provincial and national understanding of this serious public health issue as well.

The focus of this study is the general population of adults. In addition, the Canadian Centre on Substance Abuse and the Responsible Gambling Council (Ontario) will be using the

data related to older adults (60 years of age and older) to prepare a report specifically examining gambling practices among this population.

1.1 Study objectives

The overall goal of the proposed study is to improve understanding of the extent and nature of gambling among adults in Ontario. The following objectives will guide the study:

1. To determine the prevalence of gambling and problem gambling within the population of adults in Ontario;
2. To describe and analyze the characteristics and behaviour of individuals experiencing gambling-related problems;
3. To describe and analyze the relationship between problem gambling and substance use;
4. To offer recommendations that may assist Ontario agencies in targeting and designing treatment, prevention and education programs that aid problem gamblers.

1.2 Study significance

This research is deemed to be significant on at least two main levels. First, it will provide baseline data on the extent to which adults in Ontario gamble, including the types of gambling activities preferred, frequency and duration of play, and amounts wagered. This information will be important to the provincial and municipal governments, and to community agencies, as well as non-governmental groups and citizens seeking information relating to gambling policy in the province. Second, data will be developed on the nature and extent of gambling problems in Ontario, and on the characteristics, behaviours, and consequences of uncontrolled gambling behaviour. This information will be very important for government and community agencies charged with helping problem gamblers as it will (1) provide insights that may assist in the development of programs and services for problem gamblers, and (2) provide a prospective baseline against which to measure the effectiveness of these program/service interventions over time.

2. DESIGN AND METHODOLOGY

A telephone survey was conducted with a sample of 5,000 adults 18 years of age and older from Ontario. The data was collected during the months of March to May, 2001. Of the total sample, 1,500 individuals were 60 years of age and older. This over-sampling was conducted in order to provide precise estimates and more thorough information on the prevalence and nature of gambling and problem gambling among older adults. A report specific to gambling among older adults in Ontario is currently being prepared by the Canadian Centre on Substance Abuse and the Responsible Gambling Council (Ontario). The focus of this report is the general population.

2.1 Sampling strategy

A stratified, random sample of approximately 5,000 Ontario residents aged 18 years and older who live in a household with a phone were contacted by telephone. The sample was stratified by region, age and gender to ensure adequate representation on these variables. Stratification by region was conducted according to the seven provincial District Health Council (DHC) regions so that the resultant descriptive statistical data and analysis may be useful to DHS advisory councils in planning/evaluating gambling-related programs and services.

The sample size provides reasonably exact estimates of population means on key variables. For example, 5,000 cases provide a 95% confidence interval for a sample estimate of 50% (i.e., the estimate with the largest range of variation) of plus/minus 1.4%. Thus, one can be reasonably certain (95 out of 100 times) that the true population mean falls between 48.6% and 51.4% when the sample mean is 50% on a particular variable. For smaller sample means, the range of confidence intervals is even smaller. Thus, for example, an estimate of 3% (the approximate prevalence of moderate problem gambling) based on a random sample of 5,000 has a 95% confidence interval of plus/minus less than one-half of one per cent, specifically between 2.53% and 3.47%. The standard error of estimates and associated confidence intervals in the sampling design may be slightly larger due to the stratified sampling design, but the sample is of sufficient size to ensure reasonably robust and generalizable results.

The quotas for the sample are presented in Table 2.1. As shown, the sample has accurate regional and gender distribution. As indicated, individuals 60 years and older were over-sampled for a study that is specifically examining gambling among older adults. In the present study, data are weighted to reflect the distribution of the population (see Chapter 2 – Analytical Strategy).

Table 2.1: Sample description

	Total Population 18 yrs+		Sample	
	Frequency	Per cent	Frequency	Per cent
Region				
East	1,227,904	13.7	700	14.0
Central East	1,421,141	15.8	735	14.7
Toronto	1,958,721	21.8	1,130	22.6
Central West	1,582,269	17.6	825	16.5
Central South	878,349	9.8	530	10.6
South West	1,181,023	13.2	680	13.6
North	724,100	8.1	400	8.0
Total	8,973,507	100.0	5,000	100.0
Age				
18-24	984,697	12.1	466	9.3
25-34	1,715,097	21.1	860	17.2
35-49	2,551,657	31.4	1,467	29.3
50-59	1,080,254	13.3	688	13.8
60 or over	1,780,066	21.9	1,500	30.0
Refused/missing			19	0.4
Total	8,111,771	100.0	5,000	100.0
Gender*				
Male	4,595,320	48.9	2,409	48.2
Female	4,803,929	51.1	2,591	51.8
Total	9,399,249	100.0	5,000	100.0

*Based on individuals 15 years and older in Ontario

2.2 Response rates

Table 2.2 below summarizes the number of telephone contacts, and results, for obtaining the sample for this study. A total of 30,776 households were successfully contacted and asked if anyone in the household met the age requirement. Of these, 17,067 were either not eligible or their eligibility could not be ascertained, leaving 13,709. Of these, 8,592 refused to participate,

and a further 106 terminated the survey before completion. Therefore, among the households with a known eligible respondent, the response rate was 37%, the refusal rate was 62%, and 1% resulted in incomplete interviews.

Table 2.2: Contact summary

Total number of attempts	115,589
Not in service	2,695
Fax/ modem line	507
Business line	516
Total eligible contacts (total number)	111,871
Busy	4,977
Answering machine	37,840
No answer	25,615
Communication/ language problem	1,719
Illness/ Incapable	333
Select person not available	10,611
Total actual contacts	30,776
Disqualified or not ascertained	17,067
Respondent refusal	8,592
Terminated prior to completion	106
Completed interview	5,011

Response rates for general problem gambling surveys in Canada range from 65% in Ontario (Ferris & Stirpe, 1995) to 25% in British Columbia (Gemini Research, 1994). The response rate achieved in this study is toward the lower range. Survey research professionals in the United States and Canada have found that response rates for telephone surveys in the general population have declined in recent years as individuals in the general population become more reluctant to participate in this type of research (Gemini Research, 1994). The over-sampling of older adults may have also contributed to the low response rate. That is, older adults may be more suspicious of telephone solicitations and as such, less likely to participate in a study. Unfortunately, demographic information from those who refused to participate was not collected.

2.3 Data collection

Data collection was conducted by Viewpoints Research Inc. Telephone numbers were selected from a database based on a random selection of live residential numbers from the Ontario regions. This sample selection technique ensures that both listed numbers, numbers listed after directories have been published, and unlisted numbers are included in the sample. Potential households were selected through the use of Random Digit Dialling (RDD), and within each household, the closest birthday method was used to select a respondent.

If someone in the household met the age requirements, the interviewer asked to speak to that person. If more than one person met the age requirements, the person whose birthday came next was asked to complete the interview (a process used to randomize the selection within each household). Only one individual from each household was asked to participate. The telephone script for consent is contained in Appendix A. At the end of each interview, participants were asked if they would be willing to be re-interviewed in the future. Of the total sample, 91% (n=4,209) agreed.

Using a computer-assisted telephone-interviewing system (CATI), survey responses were entered in real time by trained telephone interviewers. The CATI system is designed to ensure that data are entered accurately within the guidelines set out in the questionnaire, eliminating data entry errors. Additionally, ongoing monitoring by supervisors helped to ensure that surveys were entered in a precise and consistent manner. Supervisors verified 10% of all completions.

2.4 Measurement instrument and gambling classification

The core of the questionnaire was the Canadian Problem Gambling Index (CPGI), which consists of four main sections: gambling involvement, problem gambling behaviour, consequences of problem gambling behaviour, and correlates of problem gambling behaviour (Ferris & Wynne, 2001). As well, a number of substance use questions were added to the questionnaire. A copy of the questionnaire is contained in Appendix A.

Problem gambling is defined as “gambling behaviour that creates negative consequences for the gambler, others in his or her social network, or for the community” (Ferris & Wynne, p.3). The problem gambling severity index has nine items, which include: chasing losses, escalating to maintain excitement, borrowing/selling to get gambling money, betting more than one can afford, feeling guilty, being criticized by others, harm to health, financial difficulties to one’s household, and feeling one might have a problem with gambling. The first four items are behavioural items, the last five are consequences of gambling. Most of the items are adapted from SOGS or DSM. The exceptions are harm to health and financial difficulties to one’s household, which are original to the CPGI.

Nine of the items are scored, placing an individual at one of four levels. Level 1, which consists of a score of 0, constitutes the problem-free gambling group. Level 4, a score of 8 or greater, represents the most severe problem gambling group. The creators of the CPGI labelled Levels 1 to 4 as non-problem gambling, low-risk gambling, moderate-risk gambling and problem gambling (Ferris & Wynne, 2001). However, we were uncomfortable with these labels, particularly low risk and moderate risk. There is very limited information on the progression of gambling problems. Until more is learned, through longitudinal studies, a decision was made to use the following labels: non-problem gamblers, at risk, moderate problems and severe problems (see Table 2.3).

Table 2.3: CPGI scoring and labels

Gambling Levels	Score/# of items
Level 1: Non-problem gamblers	Score of 0/no items
Level 2: At risk	Score of 1-2
Level 3: Moderate problems	Score of 3-7
Level 4: Severe problems	Score of 8 + (to maximum of 27)

The CPGI has received extensive psychometric testing (Ferris & Wynne, 2001). Reliability of the new measure was shown to be good, with a co-efficient alpha of 0.84. Test-retest analysis produced an acceptable correlation of 0.78. Validity was tested a number of ways. Face/content validity was addressed through continual feedback from numerous gambling experts. A test of criterion validity was achieved by comparing the CPGI to DSM-IV and the

SOGS. It was found that the CPGI was highly correlated with these two measures (0.83). Construct validity was demonstrated by expected correlations between CPGI scores and money spent on gambling, gambling frequency, and number of adverse consequences reported.

2.5 Analytical strategy

For the purpose of this study, data are weighted according to the age distribution in each of the seven health regions in Ontario. Table 2.4 compares the demographic characteristics of the weighted and unweighted sample.

Table 2.4: Comparison of weighted and unweighted sample demographic characteristics

Characteristics:	Weighted Sample	Unweighted Sample
Gender		
Male	49.0	48.2
Female	51.0	51.8
Marital Status		
Married or living with partner	59.5	59.2
Widowed	5.2	8.4
Divorced/Separated	11.3	11.2
Single, never married	24.0	21.1
Age		
18-24	11.1	9.3
25-34	20.5	17.2
35-49	35.0	29.3
50-59	16.4	13.8
60 +	16.6	30.0
Missing	0.4	0.4
Education		
< high school	9.9	12.1
high school	22.5	23.2
Some post-secondary	12.2	12.1
Completed post-secondary	32.5	30.8
Completed post-graduate	22.7	21.8
Employment Status		
Employed	71.6	63.2
Unemployed	9.4	8.8
Students	3.2	2.7
Retired	15.2	24.7
Other	0.5	0.5
Household Income		

< \$20, 000	9.6	10.1
< \$30, 000	8.3	9.1
< \$40, 000	9.1	9.5
< \$50, 000	8.8	8.7
< \$60, 000	9.5	9.2
\$60, 000 or more	54.6	53.4
Region		
East	14.0	14.0
Central East	14.7	14.7
Toronto	22.6	22.6
Central West	16.5	16.5
Central South	10.6	10.6
South West	13.6	13.6
North	8.0	8.0

The SPSS computer statistical software package was used to provide frequency distributions, and to conduct chi-square test and analysis of variance procedures to determine overall levels of association. All reported tests of significance were set at probability levels equal to or greater than 0.95. Post-hoc testing was completed on select variables to determine which gambling categories differed from one another. This procedure was followed to avoid excessive error rates. The confidence intervals associated with each gambling category appear in Table 2.5.

Many of the analyses contained in this report examine differences associated with gambling level, which includes non-gamblers and the four gambling levels measured by the nine scored items. Non-gamblers are those who indicate that they have not gambled on any of a list of 17 gambling activities in the past year. The scored questions on the CPGI – the ones that assess gambling level – are not asked if individuals indicate that they have not gambled on any of the gambling activities in the past year, or if an individual states that “I do not gamble” twice.²

Table 2.5: Calculation of confidence intervals for Gambling Survey (0.95 confidence level)

	All	Gamblers	Non-Gamblers	Non-Problem	At risk	Moderate problems	Severe problems
Percentage	Confidence Interval + and -						
95%	0.63%	0.69%	1.47%	0.75%	2.11%	3.66%	7.93%
90%	0.86%	0.96%	2.02%	1.04%	2.91%	5.04%	10.92%
85%	1.03%	1.14%	2.41%	1.23%	3.46%	6.00%	13.00%
80%	1.15%	1.27%	2.70%	1.38%	3.88%	6.72%	14.56%
75%	1.25%	1.38%	2.92%	1.50%	4.20%	7.28%	15.76%
70%	1.32%	1.46%	3.09%	1.58%	4.45%	7.70%	16.68%
65%	1.37%	1.52%	3.22%	1.65%	4.63%	8.02%	17.36%
60%	1.41%	1.56%	3.31%	1.69%	4.75%	8.23%	17.83%
55%	1.43%	1.58%	3.36%	1.72%	4.83%	8.36%	18.11%
50%	1.38%	1.59%	3.37%	1.73%	4.85%	8.40%	18.20%
45%	1.43%	1.58%	3.36%	1.72%	4.83%	8.36%	18.11%
40%	1.41%	1.56%	3.31%	1.69%	4.75%	8.23%	17.83%
35%	1.37%	1.52%	3.22%	1.65%	4.63%	8.02%	17.36%
30%	1.32%	1.46%	3.09%	1.58%	4.45%	7.70%	16.68%
25%	1.25%	1.38%	2.92%	1.50%	4.20%	7.28%	15.76%
20%	1.15%	1.27%	2.70%	1.38%	3.88%	6.72%	14.56%
15%	1.03%	1.14%	2.41%	1.23%	3.46%	6.00%	13.00%
10%	0.86%	0.96%	2.02%	1.04%	2.91%	5.04%	10.92%
5%	0.63%	0.69%	1.47%	0.75%	2.11%	3.66%	7.93%
(N)	4631	3787	844	3214	408	136	29

For example, the percentage of non-problem gamblers who play purchase scratch tickets is 36%. To find the confidence interval, look under the non-problem gambler column, and find the percentage closest to 36%. In this case, the closest % is 35%. The confidence interval is approximately then 36% plus or minus 1.65%. For individuals with severe gambling problems, the percentage who purchase scratch tickets is 54.5%. The closest value in the table is 55%. The confidence interval is approximately 54.5%, plus or minus 18.11%.

2.6 Study limitations

A major restriction of any cross-sectional design is that, strictly speaking, causal inferences are not possible with data from only one point in time. Observed statistical relationships only signify associations between variables. In order to infer a causal relationship, a

longitudinal research design is required. An important limitation associated with telephone surveys is that the results may not be generalizable to the population at large, particularly those who do not have access to a telephone or refuse to participate. This is particularly a concern given the low response rate associated with this study. However, as indicated above, the demographic characteristics of both the weighted and unweighted samples compare well with the demographic characteristics of the general population of Ontario.

3. GAMBLING AND GAMBLING PATTERNS IN ONTARIO

This section provides an overview of gambling patterns in Ontario. Topics covered include the types of gambling activities engaged in, money spent on gambling (including winning and losses), as well as socio-demographic characteristics associated with individuals participating in the various gambling activities. The section concludes with a look at the reasons and perceived benefits associated with gambling.

3.1 Gambling activities

Gambling, in one form or another, is very common in Ontario. Of the total sample, 83.2% have engaged in one or more gambling activities in the year prior to the survey. As shown in Table 3.1, the most common form of gambling is the purchasing of lottery tickets (64.6%), followed by raffle tickets (51.0%). Very few individuals report gambling on the Internet (0.6%) or making bets with a bookie (0.4%).³

Examination of the frequency of engaging in various gambling activities shows that the activity that respondents participate in most frequently is lottery tickets. For most gambling activities, frequency of participation is on a less-than-once-a-month basis.

Table 3.1 also presents for each type of gambling activity the average number of occasions per year per person engaging in this type of gambling as well as the number of occasions per year per capita (including non-gamblers). These are minimum estimates. In computing the mean number of occasions per year for each type of gambling, the answer categories are scaled according to minimum number of occasions; thus, “at least once a week” is only scored 52 (the minimum number for those providing this answer), “at least once a month” is scored 12, and “less than once a month” is scored 1. The gambling activities most often engaged in are buying lottery tickets (15.19 occasions per person), scratch tickets (4.47 occasions per person) and raffle tickets (2.02 occasions per person). While relatively few persons engage in betting on sports with bookies, betting on games with friends, betting on games of skill, buying Sports Select tickets, bingo and speculative investments, those who engage in these types of

gambling activities tend to do so frequently. For example, less than 1% of respondents reported betting on sports with bookies, but among those who do, the mean number of occasions is 58.87 times per year.

Table 3.1: Frequency of participation in various gambling activities.

Gambling Activities	Overall participation in past year	Daily	At least once a week	At least once a month	Less than once a month	Never	# of occasions per year per this type gambler	# of occasions per year per capita	(N)
Lottery tickets	64.6	0.5	22.0	15.2	27.1	35.4	23.50	15.19	(4993)
Raffle tickets	51.0	0.1	0.8	6.9	43.2	49.0	3.97	2.02	(4987)
Scratch tickets	31.6	0.4	3.6	8.8	18.8	68.5	14.15	4.47	(4998)
Slot machines or VLTs	28.3	0.2	0.5	2.7	24.9	71.7	5.07	1.44	(4992)
Outcome of sporting event	13.2	0.1	0.9	1.7	10.5	86.8	9.75	1.29	(4995)
Arcade or video games	11.8	0.3	0.9	2.1	8.6	88.2	14.75	1.74	(4997)
Games of skill	10.2	0.2	1.5	1.9	6.6	89.8	16.70	1.70	(4996)
Card or board games with friends, etc.	10.0	0.1	0.7	1.7	7.4	90.0	11.89	1.19	(4998)
Casinos out of the province	9.5	0	0.0	0.4	9.1	90.5	1.68	0.16	(4995)
Bingo	8.5	0.1	1.5	1.5	5.4	91.5	16.60	1.41	(4999)
Casino table games	7.2	0.1	0.2	0.7	6.3	92.7	6.28	0.45	(4997)
Speculative investments	6.4	0.2	0.5	1.6	4.2	93.6	16.14	1.04	(4990)
Sport Select	6.0	0.1	1.0	1.5	3.4	94.0	19.69	1.19	(4997)
Horse races	5.4	0.1	0.3	0.4	4.7	94.6	8.79	0.48	(4999)
Slot machines /VLTs other than at casinos	2.2	0.0	0.1	0.5	1.6	97.7	10.40	0.23	(5000)
Internet	0.6	0.0	0.1	0.1	0.4	99.4	17.37	0.11	(4999)
Sports with bookie	0.4	0	0.1	0.2	0.1	99.6	58.87	0.24	(4998)

Respondents were asked about the amount of money being spent on each type of gambling activity on a typical occasion, as well as reported winnings and losses. Because particularly large wins or losses skew the results, the median, or middle number, is reported rather than the mean. The median provides a more accurate reflection of the experience of the typical gambler with regard to spending, winning and losing on various gambling activities.

Not surprisingly, the most money spent on a typical occasion is on speculative investments. This is followed by betting on sports with a bookie, casino table games and on casinos out of the province. With most activities there is a tendency to lose more money than win. The only types of gambling where the median winnings exceed losses are speculative investments, bets on sports with a bookie, and card or board games with friends. Given the role that skill plays in successfully gambling on speculative investments and betting on card or board games with friends, it is possible that some persons lose disproportionately and the majority win more than they lose.

However, it is noteworthy that the typical gambler who bets with bookies claims to win more than they lose. While statistically possible (as a few gamblers may win the lion's share of available winnings), this is highly unlikely. The odds are determined in such a manner that the bookie cannot lose, and the odds are overwhelming that most gamblers will lose more than they win. Similarly, the median winnings on casino table games is equal to the median losses. As with bookies, the odds at such games are set such that in the long run the house profits regardless of the outcome. Thus, it is likely that some gamblers who bet with bookies and play casino table games appear to overestimate winnings and/or underestimate losses on a typical gambling occasion.

Table 3.2: Gambling activities by median amount of money spent, won or lost on a typical occasion

Gambling Activities	Median amount money spent (\$)	Median reported winnings (\$)	Median reported losses (\$)	(N)
Speculative investments	1 000.00	100.00	14.83	(247)
Sports with bookie	75.42	200.00	50.00	(19)
Casino table games	60.00	40.00	40.00	(310)
Casinos out of the province	50.00	10.00	25.00	(446)
Slot machines or VLTs	30.00	5.00	20.00	(1329)
Internet	30.00	0	30.00	(27)
Bingo	25.00	0	20.00	(398)
Horse races	20.00	10.00	14.38	(262)
Slot machines or VLTs other than at casinos	12.44	0	6.00	(98)
Outcome of sporting event	10.00	0	5.00	(567)
Games of skill	10.00	0	5.00	(430)
Card or board games with friends, etc.	10.00	5.00	3.00	(449)
Raffle tickets	5.00	0	5.00	(2389)
Sport Select	5.00	0	5.00	(249)
Arcade or video games	5.00	0	5.00	(488)
Scratch tickets	4.00	2.00	3.00	(1420)
Lottery tickets	24.00	0	24.00	(3084)

3.2 Characteristics of persons engaging in different types of gambling

This section examines the relationship between selected socio-demographic characteristics and engaging in various gambling activities. Although a number of statistically significant differences are observed in these demographic groups, many of these differences are not large. The description below highlights some of the more major differences. A detailed description is provided in Tables 3.3 to 3.10.

3.2.1 Gambling tickets

Of the total sample, 65% of respondents indicated that they had purchased a lottery ticket in the year prior to the study. Significant differences were observed related to age, marital status, educational attainment, job status, income and region. For example, in terms of marital status, divorced/separated respondents are the most likely to purchase lottery tickets (71.7%) and single individuals the least likely (59%). For the most part, differences in these demographic groups are not large and it may be generally stated that lottery players are fairly representative of the general population.

Approximately one-third (31.6%) of respondents have purchased scratch tickets in the past year. With the exception of income, significant differences were observed in all the socio-demographic groups. Females (34.7%) are more likely than males (28.2%) to engage in this gambling activity. Furthermore, gambling on scratch tickets decreases with increasing age. Whereas 41% of 18-24 year olds gambled on scratch tickets in the past year, only 19.7% of individuals 60 years and older engaged in this behaviour.

Just over half (51.0%) of Ontarians purchased a raffle ticket in the past year. Significant differences were observed in all of the demographic categories examined. For the most part, however, differences were not notable. It appears that individuals that purchase raffle tickets are fairly representative of the population.

Table 3.3: Buying lottery, scratch, and raffle tickets by demographic characteristics

Demographic Characteristics	Gambling Activities		
	Lottery %	Scratch %	Raffles %
All participants	64.6	31.6	51.0
Gender		***	*
Male	65.8	28.2	49.5
Female	63.6	34.7	52.4
Age	***	***	***
18-24	49.6	41.0	35.9
25-34	63.2	37.5	47.1
35-49	70.5	33.1	56.9
50-59	70.5	26.1	56.8
60 +	58.0	19.7	47.9
Marital Status	***	***	***
Married/living with partner	66.1	30.6	55.1
Widowed	58.5	21.5	41.5
Divorced/separated	71.7	32.3	50.7
Single, never married	59.0	35.9	43.0
Educational attainment	***	***	***
Some high school	66.6	36.6	38.5
Completed high school	67.6	37.5	49.9
Some post-secondary	65.5	35.2	47.8
Completed post-secondary	65.3	30.2	54.6
Completed post-graduate	59.4	23.6	54.0
Job Status	***	***	***
Employed	67.6	33.1	53.5
Unemployed	59.3	37.1	41.9
Student	39.4	28.6	34.8
Retired	59.1	20.9	48.8
Other	57.7	36.0	46.2
Income	***		***
<\$20, 000	56.3	32.7	35.5
< \$30, 000	64.4	34.9	43.1
< \$40, 000	66.1	33.3	41.4
< \$50, 000	65.3	30.6	50.0
< \$60, 000	70.2	35.8	56.1
\$60, 000 +	64.8	29.9	55.7
Region	***	***	***
East	64.9	31.3	54.4
Central East	69.0	30.8	54.8
Toronto	62.9	25.0	45.1
Central West	63.2	32.8	49.5
Central South	67.2	38.1	46.6
South West	59.4	33.0	51.8
North	69.5	38.3	61.7

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.2.2 Electronic gambling

Thirty per cent (28.3%) of respondents reported playing slot machines or VLTs in casinos the past year. Engagement in this gambling activity was related to all demographic groups with the exception of gender. Respondents between the ages of 18-24 years are the most likely to play slot machines/VLTs in a casino (34.2%), whereas those who are 60 years of age or older are the least likely (23%). Consistent with the finding related to age, single individuals are the most likely group to engage in this activity.

Few (2.2%) respondents have gambled on slot machines or VLTs outside of a casino. Engagement in this activity was related to gender, age, marital status, education, and employment. Being male, between the ages of 18-24, single and a student were all related to gambling on slots/VLTs in a venue other than a casino.

Approximately one in ten (11.8%) respondents bet on arcade or video games in the past year. Engagement in this activity was related to all demographic groups with the exception of income. Males are more likely (15.6%) than females (8.2%) to gamble on arcade or video games. There is a strong relationship between this activity and age, with participation decreasing with increasing age. Whereas 30.6% of 18-24 year olds engaged in this activity, the corresponding rate for those 60 years and older is 0.5%. Being a student and single is also related to gambling on arcade or video games.

When asked about gambling on the Internet, only 0.6% reported engaging in this activity in the year prior to the study. No relationships were observed between this activity and any of the demographic groups.

Table 3.4: Electronic gambling by demographic characteristics

Demographic Characteristics	Gambling Activity			
	Slots/VLTs in casinos %	Slots/VLTs out of casino %	Arcade/Video games %	Internet %
All participants	28.3	2.2	11.8	0.6
Gender		*	***	
Male	27.5	2.7	15.6	0.9
Female	29.1	1.8	8.2	0.4
Age	***	***	***	
18-24	34.2	6.1	30.6	1.4
25-34	32.2	2.3	19.2	0.6
35-49	27.6	1.8	11.4	0.7
50-59	26.4	1.3	2.2	0.6
60 +	23.0	1.2	0.5	0.1
Marital Status	***	***	***	
Married/living with partner	27.0	1.8	9.4	0.6
Widowed	26.2	0.4	0.8	0
Divorced/separated	26.7	2.5	9.4	0.9
Single, never married	32.8	3.7	21.2	0.9
Educational attainment	*	**	**	
Some high school	28.3	2.6	6.3	0.4
Completed high school	30.2	3.2	13.0	0.7
Some post-secondary	31.7	3.3	12.3	0.8
Completed post-secondary	28.1	1.4	12.2	0.8
Completed post-graduate	24.8	1.8	12.4	0.4
Job Status	*	***	***	
Employed	29.3	2.5	13.7	0.8
Unemployed	25.7	1.3	10.0	0.2
Student	32.7	7.4	28.6	0.6
Retired	24.3	0.9	0.7	0.3
Other	19.2	0	4.0	0
Income	**			
<\$20, 000	25.8	3.3	11.5	0.8
< \$30, 000	27.4	1.9	10.9	0.7
< \$40, 000	26.0	2.0	11.4	0.9
< \$50, 000	26.1	2.3	12.5	0.9
< \$60, 000	36.2	1.3	11.1	0.6
\$60, 000 +	28.3	2.3	12.1	0.5
Region	**		***	
East	28.9	2.4	9.0	0.3
Central East	29.6	1.8	10.9	0.4
Toronto	25.9	3.1	14.1	0.5
Central West	25.2	1.9	14.1	1.1
Central South	33.3	1.3	9.7	1.3
South West	28.2	2.8	13.1	0.3
North	32.0	1.3	7.8	0.5

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.2.3 Casinos

Of the total sample, 7.2% of respondents have gambled on casino table games in the past year. Significant differences were observed related to all of the demographic groups with the exception of educational attainment. Males were approximately three times more likely than females to gamble on casino table games. As age increased, participation rates decreased. Whereas 13.7% of individuals between the ages of 18-24 participated in this activity, the corresponding rate for those 60 years and older was 2.8%. Respondents living in the South West region are least likely to play casino table games (3.2%), and those living in the Central South region are the most likely (9.3%) to engage in this activity.

Just less than 10 per cent (9.5%) of respondents have gambled at casinos out of the province. The only demographic groups not related to this activity are age and marital status. In terms of income, the most likely group to engage in this activity are those with incomes greater than \$60,000. Individuals from the East and North are the most likely to frequent out-of-province casinos (13.3%), while those from the South West are the least likely (5.9%).

Table 3.5: Gambling in casinos by demographic characteristics

Demographic Characteristics	Gambling Activity	
	Casino table games %	Casinos out of the province %
All participants	7.2	9.5
Gender	***	**
Male	11.0	10.7
Female	3.6	8.3
Age	***	
18-24	13.7	9.2
25-34	11.6	11.0
35-49	5.7	8.9
50-59	5.1	9.7
60 +	2.8	8.6
Marital Status	***	
Married/living with partner	6.5	9.6
Widowed	2.7	7.3
Divorced/separated	5.2	7.5
Single, never married	10.9	10.6
Educational attainment		***
Some high school	4.5	7.1
Completed high school	6.7	7.4
Some post-secondary	7.2	13.0
Completed post-secondary	7.5	8.9
Completed post-graduate	8.6	11.6
Job Status	***	*
Employed	8.5	10.0
Unemployed	4.9	6.0
Student	6.2	10.5
Retired	3.2	9.5
Other	0	0
Income	***	***
<\$20, 000	3.8	6.7
< \$30, 000	5.3	6.5
< \$40, 000	3.9	6.8
< \$50, 000	7.3	9.5
< \$60, 000	7.4	8.6
\$60, 000 +	8.7	11.0
Region	***	***
East	5.7	13.3
Central East	8.8	7.6
Toronto	8.6	10.3
Central West	7.6	8.4
Central South	9.3	8.9
South West	3.2	5.9
North	6.8	13.3

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.2.4 Gambling with family or friends

Ten per cent (10.0%) of respondents bet on card/board games with friends. Being male, between the ages of 18-24, single and a student are related to engagement in this activity.

Ten per cent (10.2%) of respondents reported betting on games of skill. Again, being male, single and between ages of 18-24 is related to this activity.

Table 3.6: Gambling with friends and family by demographic characteristics

Demographic Characteristics	Gambling Activity	
	Card/board games with friends %	Games of skill %
All participants	10.0	10.2
Gender	***	***
Male	12.5	13.6
Female	7.6	6.9
Age	***	***
18-24	21.5	28.8
25-34	12.0	14.4
35-49	9.0	8.1
50-59	6.5	5.4
60 +	5.5	1.7
Marital Status	***	***
Married/living with partner	8.5	8.0
Widowed	6.2	1.9
Divorced/separated	9.2	8.7
Single, never married	15.1	17.9
Educational attainment	***	
Some high school	6.9	7.5
Completed high school	12.4	11.9
Some post-secondary	12.2	11.0
Completed post-secondary	9.4	10.2
Completed post-graduate	8.7	9.2
Job Status	***	***
Employed	11.1	11.7
Unemployed	8.1	8.4
Student	13.0	19.9
Retired	5.4	2.4
Other	4.0	4.0
Income		*
<\$20, 000	6.5	12.7
< \$30, 000	10.2	7.0
< \$40, 000	9.0	10.3
< \$50, 000	11.6	13.6
< \$60, 000	10.7	10.3
\$60, 000 +	10.4	9.6
Region		**
East	7.9	11.1
Central East	8.6	7.9
Toronto	10.2	8.6
Central West	11.3	9.7
Central South	10.0	10.2
South West	11.2	13.7
North	11.0	11.8

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.2.5 Bingo

Less than 10 per cent (8.5%) of respondents have played bingo in the past year. Relationships were observed between all the demographic groups and playing bingo. Females are approximately three times more likely (12.2%) than males (4.7%) to play bingo. Contrary to its image as an activity of the elderly, individuals 18-24 years of age are the most likely to play bingo. Participation decreases with increasing levels of education. While 16.3% of those with less than high school have played bingo, the corresponding rate for those with a post-graduate education is 4.3%. The highest participation rates are among the lowest income group. In terms of region, individuals from the North are the most likely group to play bingo (15.5%).

Table 3.7: Playing bingo by demographic characteristics.

Demographic Characteristics	Gambling Activity
	Bingo %
All participants	8.5
Gender	***
Male	4.7
Female	12.2
Age	***
18-24	13.4
25-34	8.2
35-49	7.7
50-59	7.7
60 +	8.2
Marital Status	**
Married/living with partner	7.5
Widowed	13.0
Divorced/separated	10.1
Single, never married	9.4
Educational attainment	***
Some high school	16.3
Completed high school	10.1
Some post-secondary	9.9
Completed post-secondary	7.6
Completed post-graduate	4.3
Job Status	***
Employed	7.4
Unemployed	15.8
Student	12.4
Retired	8.2
Other	16.0
Income	***
<\$20, 000	14.6
< \$30, 000	12.6
< \$40, 000	12.3
< \$50, 000	6.6
< \$60, 000	8.2
\$60, 000 +	6.6
Region	***
East	9.3
Central East	6.9
Toronto	7.0
Central West	7.0
Central South	7.7
South West	10.6
North	15.5

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.2.6 Sports betting

Of the total sample, 13.2% of respondents bet on the outcome of a sporting event in the past year. Participation was related to all demographic groups, with the exception of region. Males are approximately four times more likely (20.2%) than females (6.5%) to participate in this activity. While respondents 60 years of age or older are least likely to bet on sporting events (5.1%), those who are 25-34 years of age are most likely (19.4%).

Just over five per cent of respondents (6.0%) bet on Sport Select in the past year. Gambling on Sports Select was related to gender, age, marital status, education and employment status. Males are five times more likely (10.3%) than females (1.9%) to gamble on Sports Select. Participation decreases with age, with 14.6% of individuals 18-24 years pursuing this activity, compared with 0.8% of respondents 60 years and older.

Very few Ontarians (0.4%) have bet on sports with a bookie in the past year. The only demographic group related to this activity is gender. Males (0.8%) are more likely than females (0.1%) to bet on sports with a bookie.

Table 3.8: Sports betting by demographic characteristics.

Demographic Characteristics	Gambling Activity		
	Outcome of sporting events %	Sport Select %	Sports with bookie %
All participants	13.2	6.0	0.4
Gender	***	***	***
Male	20.2	10.3	0.8
Female	6.5	1.9	0.1
Age	***	***	
18-24	14.1	14.6	0.7
25-34	19.4	8.9	0.5
35-49	14.8	5.4	0.5
50-59	9.8	2.9	0.2
60 +	5.1	0.8	0.2
Marital Status	***	***	
Married/living with partner	12.5	4.4	0.4
Widowed	6.2	1.5	0
Divorced/separated	12.8	5.5	0.7
Single, never married	16.8	11.1	0.5
Educational attainment	***	***	
Some high school	6.3	3.7	0.4
Completed high school	11.9	7.6	0.4
Some post-secondary	17.4	7.1	0.5
Completed post-secondary	13.8	6.4	0.6
Completed post-graduate	14.5	4.2	0.3
Job Status	***	***	
Employed	15.7	7.4	0.5
Unemployed	6.8	3.9	0.4
Student	14.2	6.8	0.6
Retired	5.5	1.1	0.1
Other	8.0	0	0
Income	***		
<\$20, 000	9.4	6.3	0
< \$30, 000	9.0	4.8	0
< \$40, 000	12.1	7.0	0.2
< \$50, 000	12.9	6.4	0.7
< \$60, 000	17.1	7.6	0.4
\$60, 000 +	14.1	5.7	0.5
Region			
East	12.7	6.7	0
Central East	13.1	5.4	0.5
Toronto	11.7	6.3	0.7
Central West	14.9	5.9	0.6
Central South	14.7	7.7	0.6
South West	12.2	4.1	0.1
North	14.8	6.0	0

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.2.7 Horse racing

About five per cent (5.4%) of respondents bet on horse races in the past year. Participation is related to gender, education, income and region. Males (6.3%) are more likely than females (4.6%) to engage in this gambling activity. Respondents living in the Central West region of Ontario are the most likely group (7.5%) to bet on horse races. Conversely, those living in the Eastern (3.7%) or Northern (3.8%) regions of Ontario are the least likely to bet on horse races.

Table 3.9: Betting on horse races by demographic characteristics.

Demographic Characteristics	Gambling Activity
	Horse Races %
All participants	5.4
Gender	**
Male	6.3
Female	4.6
Age	
18-24	4.7
25-34	4.8
35-49	6.0
50-59	5.9
60 +	5.2
Marital Status	
Married/living with partner	5.8
Widowed	4.2
Divorced/separated	5.3
Single, never married	4.8
Educational attainment	*
Some high school	3.3
Completed high school	4.7
Some post-secondary	7.1
Completed post-secondary	5.9
Completed post-graduate	5.6
Job Status	
Employed	5.5
Unemployed	4.3
Student	5.6
Retired	5.8
Other	7.7
Income	***
<\$20, 000	3.7
< \$30, 000	2.4
< \$40, 000	2.4
< \$50, 000	4.5
< \$60, 000	8.0
\$60, 000 +	6.4
Region	*
East	3.7
Central East	4.8
Toronto	6.1
Central West	7.5
Central South	4.9
South West	5.6
North	3.8

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.2.8 Speculative investments

Although all financial investments involve a degree of risk, the term “speculative investments” generally refers to the purchase of commodities or highly speculative stocks with a potentially high rate of return, but which also carry very high risk. Of the total sample, 6.4% of respondents made speculative investments in the year prior to the study. Engagement in this activity is related to gender, age, education, employment status, income and region. Males (8.6%) are twice as likely as females (4.4%) to make speculative investments. Generally, participation increases with education and income. Individuals residing in the Toronto region are the most likely to engage in speculative investments (9.4%), while those in Central South (3.6%) and South West (3.7%) are least likely.

Table 3.10: Making speculative investments by demographic characteristics.

Demographic Characteristics	Gambling Activity
	Speculative Investments %
All participants	6.4
Gender	***
Male	8.6
Female	4.4
Age	**
18-24	6.7
25-34	8.3
35-49	6.2
50-59	7.2
60 +	3.7
Marital Status	
Married/living with partner	6.7
Widowed	4.2
Divorced/separated	4.4
Single, never married	7.2
Educational attainment	***
Some high school	2.4
Completed high school	4.2
Some post-econdary	5.1
Completed post-secondary	7.8
Completed post-graduate	9.4
Job Status	***
Employed	7.4
Unemployed	2.4
Student	6.8
Retired	4.4
Other	7.7
Income	***
<\$20, 000	2.3
< \$30, 000	3.1
< \$40, 000	3.3
< \$50, 000	6.6
< \$60, 000	5.3
\$60, 000 +	8.4
Region	***
East	6.9
Central East	7.6
Toronto	9.4
Central West	5.8
Central South	3.6
South West	3.7
North	4.8

Note: * p.<0.05, **p.<0.01, *** p.<0.001

3.3 Interrelationship of different gambling activities

Table 3.11 examines the relationships among the various gambling activities; that is, whether individuals who gamble on certain activities are more or less likely to engage in other gambling activities. Almost all of the different types of gambling activities are significantly related to engaging in most other forms of gambling. The strongest positive relationship is between gambling on slots/VLTs outside of a casino and making bets on sports with a bookie, as well as betting on horse races. The next strongest relationship is between making bets on horse races and making bets with a bookie. Next, those who play slot machines or VLTs in casinos are more likely to play slot machines or VLTs outside of a casino. Finally, playing slots outside of casinos is positively associated with making bets on sporting events.

Thus, a person who engages in one form of gambling is generally more likely to engage in most other forms of gambling. However, there are notable exceptions. Internet gambling does not relate to any other form of gambling. Nor does making speculative investments. Playing bingo relates to buying lottery or scratch tickets, playing slot machines or VLTs at casinos and travelling to casinos out of province, but bingo players are not more likely to engage in other forms of gambling. Travelling to casinos out of province is related to playing slot machines or VLTs in Ontario, but it is otherwise not strongly related to most forms of gambling in the province.

Table 3.11: Correlation matrix (Pearson) of different types of gambling activities

	Scratch	Raffle	Horse races	Bingo	Slots/VLTs in casino	Casino table games	Slots/VLTs out of casino	Sport Select	Sporting events	Board games	Games of skill	Arcade games	Internet	Sports with bookie	Speculative investing	Casinos out of province
Lottery	.255*** (4992)	.131*** (4983)	.014 (4993)	.082*** (4993)	.079*** (4989)	.107*** (4992)	.008 (4994)	.172*** (4991)	.097*** (4989)	.003 (4992)	.019 (4989)	.070*** (4991)	.021 (4993)	.017 (4992)	.024 (4984)	.036* (4989)
Scratch		.150*** (4986)	.003 (4996)	.160*** (4996)	.049*** (4989)	.154*** (4994)	.013 (4998)	.132*** (4995)	.124*** (4992)	.019 (4996)	.121*** (4993)	.173*** (4994)	-.003 (4996)	.161*** (4995)	.018 (4988)	.033* (4993)
Raffles			.001 (4987)	.005 (4987)	.019 (4980)	.302*** (4985)	.071*** (4988)	.205*** (4985)	.217*** (4983)	.011 (4987)	.013 (4984)	.158*** (4985)	.001 (4987)	.042** (4986)	.009 (4978)	.020 (4984)
Horse races				.012 (4998)	.234*** (4991)	.058*** (4995)	.578*** (4999)	.046*** (4996)	.233*** (4994)	.237*** (4997)	.000 (4994)	.030* (4995)	.003 (4998)	.421*** (4996)	.005 (4989)	-.001 (4994)
Bingo					.341*** (4990)	-.003 (4995)	.016 (4999)	.010 (4996)	.001 (4994)	.008 (4997)	.020 (4994)	.017 (4995)	-.002 (4998)	-.002 (4996)	-.006 (4989)	.034* (4994)
Slots/VLTs in casinos						.076*** (4988)	.402*** (4992)	.054*** (4989)	.177*** (4986)	.150*** (4990)	.000 (4987)	.036* (4988)	.000 (4990)	.293*** (4989)	.003 (4982)	.272*** (4987)
Casino table games							.091*** (4996)	.280*** (4994)	.290*** (4991)	.063*** (4995)	.007 (4992)	.186*** (4993)	.001 (4995)	.065*** (4994)	.016 (4986)	.016 (4992)
Slots/VLTs out of casino								.077*** (4997)	.370*** (4995)	.371*** (4998)	.019 (4995)	.053*** (4996)	-.001 (4990)	.651*** (4998)	.001 (4990)	.085*** (4995)
Sport Select									.219*** (4992)	.036** (4995)	.026 (4992)	.271*** (4993)	.010 (4996)	.087*** (4995)	-.003 (4987)	.044** (4992)
Sporting events										.172*** (4994)	.045*** (4991)	.154*** (4992)	.019 (4995)	.317*** (4994)	.007 (4987)	.035* (4991)
Board games											.053*** (4995)	.146*** (4996)	.001 (4998)	.308*** (4997)	.007 (4989)	-.001 (4995)
Games of skills												.154*** (4993)	.016 (4995)	.036* (4994)	.009 (4986)	.007 (4992)
Arcade/video games													-.002 (4996)	.229*** (4995)	.001 (4988)	.001 (4993)
Internet														-.001 (4998)	-.001 (4990)	.004 (4995)
Sports with bookie															.008 (4989)	.007 (4994)
Speculative investing																.017 (4995)

Note: * p.<0.05, **p.<0.01, ***p.<0.001

3.4. Reasons for gambling at casinos and perceived benefits

The reasons individuals gamble may vary depending on the activity. As such, a question was posed specific to casino attendance. Participants who had gambled at a casino were asked to provide the reasons underlying their participation in this activity. As shown in Table 3.12, the most common reason for gambling at a casino was related to the enjoyment it provides. Other than enjoyment, the next common reasons were being able to watch others gamble, winning money, and the musical entertainment.

Table 3.12: Reasons for gambling at a casino, among those who visited a casino in the past year

Reasons for gambling	Percent
Enjoyment of gambling	28.0%
To watch others gamble	26.0%
To win money	24.3%
Musical entertainment	21.1%
Socialize	17.5%
To drink alcohol	6.2%
Other	2.5%
Tourist attraction	2.6%
Occasion	2.2%
To eat	2.2%
For the company	1.4%
Work related	1.2%
Atmosphere	0.9%
(N)	(1,779)

Table 3.13 examines the relationship between socio-demographic characteristics and the reasons people give for attending a casino. Males are more likely than females to go to casinos for the enjoyment of gambling and to drink alcohol. Single respondents, students, and those between 18 and 24 years of age are the most likely to go to a casino to win money and to drink alcohol. Widowed respondents are the most likely to frequent casinos to socialize with others. The older age groups are the most likely to go to a casino to dine, because it is a tourist attraction, and for a special occasion. Respondents living in the East region of Ontario are the most likely to go to a casino to dine. Those residing in the North are most likely to go for the shows and to socialize. Individuals from the Toronto region are the most likely to go to casinos

for the enjoyment of gambling. Finally, respondents from Central South and Central West Ontario are the most likely to go to win money.

Table 3.13: Reasons for gambling by demographic characteristics, among those who visited a casino in the past year

Reasons: Characteristics:	Enjoyment of gambling	To win money	To watch	Shows	To drink	Occasion	Socialize	Tourist attraction	Atmosphere	To eat	For the company	Other	Work
Gender	*				**								
Male	30.4	24.1	25.6	21.5	7.7	1.8	17.5	2.4	1.1	2.0	0.9	2.3	1.6
Female	25.5	24.5	26.5	20.7	4.7	2.6	17.4	2.8	0.7	2.3	1.9	2.7	0.8
Marital Status		***	*		***		*					*	
Married (living with partner)	26.6	21.3	24.5	22.5	4.9	2.3	16.4	2.2	1.0	2.6	1.3	1.7	1.6
Widowed	26.3	24.7	16.0	18.8	2.5	1.3	23.5	2.5	0	3.7	2.5	3.7	1.2
Divorced/Separated	25.6	23.7	27.1	19.6	5.5	1.0	12.6	5.0	0.5	1.5	1.0	5.0	0.5
Single, never married	31.9	30.6	30.4	19.4	10.1	2.4	21.2	2.8	1.0	1.0	1.2	3.2	0.8
Age	*	***	*		***					**			
18-24	34.6	33.5	29.7	17.1	14.4	1.9	20.2	1.5	1.5	0	0.4	1.9	0.4
25-34	26.1	28.9	27.3	21.4	8.7	1.4	20.5	2.8	1.2	1.2	1.9	3.1	1.2
35-49	24.6	21.5	25.0	23.1	3.4	2.9	15.4	2.9	1.0	2.1	1.0	2.1	2.1
50-59	31.6	18.4	29.8	22.1	4.8	0.7	15.8	2.6	0.4	4.0	1.8	4.0	0.4
60 +	28.6	19.8	18.1	18.5	1.2	3.2	17.3	3.2	0.4	4.0	1.6	1.6	0.8
Education		*	*						*			*	
< high school	28.1	24.7	19.9	15.0	7.2	1.2	15.7	5.4	1.8	3.0	1.2	1.2	0
high school	31.9	29.7	21.6	23.3	5.6	1.7	16.4	2.0	0.2	2.5	1.5	1.5	0.5
Some post-secondary	31.5	26.0	28.7	20.2	8.2	1.9	20.5	1.2	1.9	1.6	1.2	1.9	1.2
Completed post-secondary	24.3	21.9	28.4	20.8	5.8	2.4	18.5	2.8	1.1	2.3	1.6	2.4	2.1
Completed post-graduate	28.0	21.6	28.0	22.2	5.5	2.4	16.1	2.6	0	2.1	1.1	4.5	1.1
Employment Status		**	*		**					***			
Employed	27.8	23.5	26.3	20.7	6.9	2.3	18.7	2.9	0.8	1.5	1.4	2.6	1.5
Unemployed	28.5	29.7	29.0	29.9	4.9	0.7	10.3	0	1.4	1.4	0.7	2.8	0
Students	35.4	42.2	40.6	18.5	12.5	0	10.9	1.6	3.1	0	1.6	3.1	0
Retired	27.3	21.1	19.8	19.5	1.2	2.9	16.5	2.9	0.4	6.6	1.2	1.2	0.4
Other	0	40.0	16.7	0	0	0	20.0	0	0	20.0	0	16.7	0
Household Income													
< \$20, 000	27.6	25.3	32.4	18.8	5.9	1.8	14.7	1.8	0	1.8	1.2	3.6	1.2
< \$30, 000	27.9	25.0	23.4	19.9	5.0	2.1	17.7	1.4	0.7	1.4	0.7	1.4	0.7
< \$40, 000	32.6	23.6	24.3	15.4	4.2	2.1	17.4	2.8	0.7	1.4	2.1	2.8	0.7
< \$50, 000	31.6	29.0	25.0	26.5	7.7	0.6	19.4	2.6	0	1.9	0.6	4.5	0.6
< \$60, 000	25.3	23.7	30.9	17.5	4.6	2.6	21.6	4.1	1.5	0.5	1.5	4.1	0.5
\$60, 000 or more	27.5	23.6	24.8	22.2	6.8	2.4	16.9	2.5	1.2	2.7	1.4	1.9	1.6
Region	***	***		*			*			***			
East	26.5	20.5	27.8	20.8	5.4	3.1	19.7	2.3	0.8	6.2	0.8	2.3	0.4
Central East	26.9	21.6	22.6	24.3	6.4	1.1	17.0	1.4	0.7	2.8	0.4	3.2	2.1
Toronto	36.6	27.7	27.4	24.0	8.6	2.9	14.0	3.4	0.6	0.9	0.6	4.3	0.6
Central West	30.9	29.2	30.5	17.9	6.5	2.4	16.2	3.4	1.0	0.3	1.7	0.3	1.0
Central South	24.3	29.6	22.3	15.7	5.2	2.2	16.1	2.2	1.7	1.7	3.0	2.2	3.1
South West	21.8	16.1	29.0	19.5	2.7	1.5	17.6	2.7	0.8	0.4	2.3	1.5	0.8
North	23.4	24.7	19.0	26.6	8.2	1.3	26.6	2.5	0.6	4.4	0.6	3.2	0.6

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

Participants were also asked to cite the benefits they receive from gambling. As shown in Table 3.14, the most common benefit is winning money, followed by fun/excitement and an opportunity to socialize.

Table 3.14: Perceived benefits of gambling among those who reported gambling in the past year

Benefits	Per cent
Can win money	42.2%
It's exciting/fun	36.6%
An opportunity to socialize	26.1%
None	18.9%
Decreases boredom	12.6%
Get to be around others/decreases isolation	8.9%
Forget about problems	4.6%
Charity support	3.2%
Other	1.8%
For variety/something to do	1.6%
Fantasy/to dream	0.5%
Satisfy curiosity	0.3%
Challenging	0.2%
Increases self-worth (stocks)	0.1%
(N)	(3,730)

Table 3.16 examines socio-demographic characteristics associated with the perceived benefits of gambling. Single individuals, and those between the ages of 18 and 24 years are the most likely to identify socializing, less isolation and boredom, and excitement as benefits. The younger age groups are also most likely to perceive winning money as a benefit. Divorced or separated individuals are the most likely to perceive forgetting problems as a benefit, and married individuals are the most likely to identify charity support as a benefit. Widowed individuals are the most likely to state that there are no benefits. Respondents with less than high school education are most likely to benefit from gambling through reduced isolation, but are the least likely to report socializing and reduced boredom as benefits. The unemployed are the most likely to benefit by forgetting problems. Participants with incomes less than \$20,000 are most likely to indicate reduction in boredom and isolation, and forgetting about problems as some of the benefits of gambling. Finally, respondents residing in Northern Ontario are most likely to suggest the following benefits of gambling: socialization, reduction in isolation, and ability to

forget about problems. Those from the Toronto region are most likely to indicate that fun/excitement and winning money are benefits of gambling.

Table 3.15: Benefits of gambling by demographic characteristics, among those who reported gambling in the past year

Perceived benefits: Characteristics:	Socialize	Less isolation	Forget problems	Fun, exciting	Less boredom	Win money	None	Something to do	Challenging	Increased self -worth (stocks)	Charity support	Fantasies	Satisfy curiosity	Other
Gender					***									
Male	27.1	9.5	4.7	36.0	14.4	43.4	17.8	1.7	0.3	0.1	2.8	0.4	0.2	1.8
Female	25.0	8.2	4.4	37.1	10.8	40.9	20.0	1.4	0.2	0.1	3.6	0.6	0.5	1.8
Marital Status	***	***	***	**	***		***				*			
Married or living with partner	23.4	7.1	3.4	34.8	9.9	42.0	19.9	1.8	0.2	0.1	3.9	0.5	0.3	1.9
Widowed	26.8	10.4	5.5	33.9	9.8	37.6	26.2	1.8	0	0	3.0	0.6	0	1.2
Divorced/Separated	23.7	10.4	6.7	35.0	16.4	40.0	21.7	0.9	0.5	0	1.8	0.7	0.9	1.4
Single, never married	33.0	12.1	6.2	41.8	17.8	44.5	13.7	1.3	0.2	0.1	2.0	0.4	0.2	1.9
Age	***	***		***	***	***	***							
18-24	40.4	13.5	5.4	47.9	24.0	45.8	7.4	1.3	0.5	0	1.1	0	0.5	1.8
25-34	30.1	9.2	4.0	43.0	15.0	47.3	12.9	1.8	0.2	0.1	3.6	0.2	0.2	2.3
35-49	23.5	8.3	4.7	34.6	11.3	43.5	18.9	1.2	0.1	0.1	3.4	0.6	0.4	1.4
50-59	20.7	6.0	4.4	30.5	8.1	37.6	25.7	2.1	0	0	3.4	0.8	0.2	2.1
60 +	20.8	9.0	4.3	30.0	8.4	33.6	29.1	1.7	0.2	0	3.4	0.4	0.2	1.9
Education	**	***		*	***		***		***		***			
< high school	21.8	14.0	6.0	37.4	16.9	39.1	22.3	1.4	0	0	2.3	0.6	0.6	2.3
High school	28.8	11.4	5.3	36.3	13.4	41.1	18.0	2.5	0.1	0	0.9	0.1	0.3	0.9
Some post-secondary	30.4	9.4	3.8	40.0	16.5	46.6	13.1	1.7	1.0	0	3.8	0	0.2	1.9
Completed post- secondary	25.2	7.1	4.5	38.3	11.4	43.8	18.3	1.2	0.2	0.2	4.2	0.7	0.2	2.2
Completed post- graduate	23.9	6.5	3.7	31.9	9.7	39.6	22.4	1.3	0	0.1	4.0	0.8	0.5	1.7
Employment Status	***		*	**	***	***	***	*	**					
Employed	26.6	8.3	4.4	37.9	12.6	43.1	17.2	1.4	0.1	0.1	3.3	0.5	0.4	1.8
Unemployed	23.8	12.1	7.6	30.3	17.0	45.0	19.1	2.4	0.3	0	3.5	0.6	0	1.5
Student	44.3	12.2	0.9	43.1	23.5	50.4	9.5	4.3	1.7	0	1.7	0	0	1.7
Retired	20.9	8.5	3.8	31.2	7.3	33.1	30.0	1.4	0.2	0	2.4	0.4	0	2.0
Other	11.8	12.5	6.3	31.3	17.6	47.1	31.3	6.3	0	0	5.9	0	0	5.9
Household Income		***	***		***									
< \$20, 000	30.3	14.2	8.4	37.3	18.5	42.2	16.5	1.7	0	0	3.2	0.3	0	2.9
< \$30, 000	25.9	10.4	6.1	39.5	17.2	42.7	19.7	1.6	0	0	1.6	0.6	0.6	1.0
< \$40, 000	26.3	7.5	3.8	38.4	11.0	43.1	17.1	1.7	0.6	0	3.2	0.3	0.3	2.3
< \$50, 000	27.0	10.0	4.7	33.7	12.0	45.6	19.6	1.5	0	0.3	3.2	1.2	0.3	2.2
< \$60, 000	27.1	11.1	5.7	35.7	12.9	44.4	17.6	1.6	0.3	0	1.8	0.3	0.3	2.3
\$60, 000 or more	25.0	7.4	3.6	36.3	11.2	41.0	19.7	1.6	0.2	0.1	3.6	0.4	0.3	1.6
Region	***	*	*	**		*								
East	29.0	7.5	2.4	34.5	12.0	44.6	19.3	1.1	0	0	3.2	0.9	0.7	1.5
Central East	23.5	7.9	4.2	32.6	9.7	44.3	20.3	1.6	0.4	0	3.5	0	0.2	3.0
Toronto	24.3	7.6	5.2	41.1	13.9	44.7	19.3	0.7	0.4	0.2	2.1	0.6	0	2.0
Central West	22.7	7.8	4.1	40.2	11.9	43.6	18.7	2.1	0.2	0	2.9	0.6	0.2	1.1
Central South	24.1	10.5	5.3	34.1	14.1	38.9	18.6	1.9	0.2	0	4.1	0.5	0.5	1.2
South West	28.3	11.4	3.9	33.1	11.4	37.0	17.1	2.2	0.2	0	4.3	0.4	0.4	1.6
North	35.7	12.0	7.7	36.0	16.0	37.7	18.8	1.8	0	0.3	2.8	0	0.6	2.2

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

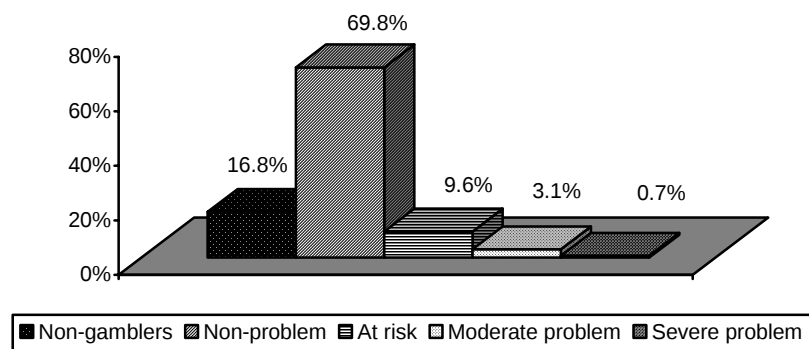
4. PROBLEM GAMBLING IN ONTARIO

This section explores the prevalence of gambling and problem gambling among participants, as well as gambling patterns associated with the various levels of gambling. The areas that will be addressed include gambling activities, time and money spent on gambling, and problems experienced from gambling.

4.1 CPGI levels

Participants were presented with a comprehensive list of gambling activities, and asked if they had spent money betting on any of the activities in the past 12 months. Of the total sample, 16.8% were classified as non-gamblers, having spent no money on gambling activities in the past year. The majority (69.8%) of respondents had gambled in the past year, and were not reporting problems from their gambling. Of the total sample, 9.6% may be at risk of gambling problems, and 3.1% were experiencing moderate gambling problems. Less than 1% (0.7%) were experiencing severe gambling problems.

Figure 4.1: CPGI levels



4.2 Endorsement of CPGI items by gambling level

The scored items on the CPGI include items that assess both thoughts and behaviours considered indicative of gambling problems. Table 4.1 shows the proportion of affirmative responses (sometimes, most of the time, or almost always) to the scored CPGI items, by CPGI level. This information is presented to provide a greater appreciation of the characteristics associated with increasing levels of gambling problems. It should be noted, however, that the relatively high representation of those with severe gambling problems is expected, given that these are the very questions used to construct the CPGI gambling levels.

Among the three CPGI levels, the most commonly endorsed items include feeling guilty, chasing losses and betting more than one can afford. Those with severe gambling problems are also likely to feel that they have a problem with gambling. In a related manner, a series of questions were posed that asked respondents to list some of the problems they have experienced while gambling. A discussion of these findings appears in section 4.6.

Table 4.1: Endorsement of scored CPGI Items by CPGI Level

CPGI item:	CPGI Levels		
	At risk	Moderate problem	Severe problem
Feel guilty about gambling	30.6%	53.5%	87.9%
Chasing losses	31.8%	51.7%	84.8%
Bet more than could afford	20.4%	36.2%	87.9%
People criticized your gambling	8.4%	33.8%	75.8%
Feel gambling has caused health problems	6.7%	31.5%	72.7%
Feel that you have a problem with gambling	5.6%	30.3%	84.8%
Need to gamble with larger amounts of money to get the same feeling of excitement	10.1%	22.4%	57.6%
Feel your gambling has caused financial problems	3.8%	21.5%	75.8%
Borrowing or selling things to gamble	4.0%	9.7%	54.5%
(N)	(408)	(135)	(29)

4.3 Gambling activities of different types of gamblers

The most common gambling activity for all levels of gamblers is buying lottery tickets (see Table 4.2). The most common activities among those experiencing severe gambling-related problems are lottery tickets, slot machines, scratch tickets and casino table games. For most activities, as the severity of gambling problems increases, the likelihood of engaging in that activity also increases.

As shown in Table 4.2, most Ontarians do not engage in any gambling activity on a weekly or greater basis. However, as the severity of gambling problems increases, so does gambling frequency. The most frequently pursued gambling activities among those with severe gambling problems include purchasing lottery tickets, scratch tickets and playing slot machines/VLTs in casinos.

Table 4.2: Gambling activities by CPGI levels

Gambling Activities	CPGI Levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problem	
Lottery tickets					
Activity in past year	76.5%	79.3%	84.7%	84.8%	77.2%
Weekly activity***	25.8%	29.4%	39.9%	63.6%	27.1%
Raffle tickets					
Activity in past year**	61.7%	55.0%	58.3%	39.4%	60.6%
Weekly activity***	0.9%	1.8%	4.2%	0	1.1%
Scratch tickets					
Activity in past year***	36.0%	49.2%	63.9%	54.5%	38.8%
Weekly activity***	3.3%	11.0%	21.5%	18.25%	5.0%
Slot machines or VLTs					
Activity in past year***	31.8%	50.1%	56.7%	62.5%	35.1%
Weekly activity***	0.2%	1.8%	8.5%	16.1%	0.9%
Outcome of sporting event					
Activity in past year***	14.9%	22.2%	26.8%	24.2%	16.3%
Weekly activity***	0.8%	2.7%	7.7%	3.0%	1.3%
Arcade of video games					
Activity in past year***	13.0%	24.0%	18.1%	15.2%	14.5%
Weekly activity***	0.8%	4.5%	4.2%	6.1%	1.4%
Games of skill					
Activity in past year***	10.5%	22.3%	25.7%	15.6%	12.5%
Weekly activity***	1.6%	4.5%	6.3%	0	2.1%
Card or board games with friends, etc.					
Activity in past year***	10.9%	19.6%	24.3%	15.2%	12.5%
Weekly activity***	0.8%	1.8%	5.6%	3.0%	1.1%
Casinos out of the province					
Activity in past year***	10.1%	19.9%	19.4%	33.3%	11.8%
Weekly activity**	0	0	0.7%	0	0.1%
Bingo					
Activity in past year***	8.5%	17.5%	29.2%	33.3%	10.6%
Weekly activity***	1.1%	3.6%	16.7%	6.1%	2.0%
Casino table games					
Activity in past year***	6.9%	17.8%	23.1%	45.5%	9.1%
Weekly activity***	0.0%	0.4%	2.8%	12.1%	0.3%
Speculative investments					
Activity in past year***	6.6%	13.3%	16.8%	18.2%	7.8%
Weekly activity**	0.5%	0.9%	2.8%	3.0%	0.7%
Horse races					
Activity in past year***	5.7%	10.3%	13.9%	30.3%	6.8%
Weekly activity***	0.3%	1.1%	2.1%	6.1%	0.5%
Sport Select					
Activity in past year***	5.7%	16.2%	20.1%	27.3%	7.6%
Weekly activity***	0.7%	3.6%	9.7%	15.2%	1.5%
Slot machines or VLTs other than at casinos					
Activity in past year***	1.9%	4.9%	10.4%	18.2%	2.7%
Weekly activity***	0%	0.2%	2.1%	6.1%	0.2%
Sports with bookie					
Activity in past year***	0.2%	1.3%	2.8%	15.2%	0.5%
Weekly activity***	0%	0.7%	0.7%	6.1%	0.2%
Internet					
Activity in past year***	0.6%	2.0%	2.8%	3.0%	0.8%
Weekly activity***	0.1%	0.9%	0	0	0.2%
(N)	(3,213)	(408)	(136)	(29)	(3,786)

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

A significant relationship was observed between gambling level and total number of gambling activities. As the severity of gambling problems increases, the number of gambling activities that participants engage in also increases ($F(3, 3799)=122.046$, $p.<0.001$). On average, non-problem gamblers engage in 3.0 gambling activities, those at risk of gambling problems engage in 4.3 activities, those with moderate gambling problems engage in 5.0 gambling activities, and those with severe gambling problems engage in 5.5 gambling activities.

Whereas Table 4.2 provides a description of the types of gambling activities engaged in at different levels of problem gambling, Table 4.3 presents the proportion of persons at each level of problem gambling among those engaging in each type of gambling. This allows us to see the relationship of particular types of gambling to problem gambling more clearly. As will be recalled, 0.7% of the sample experiences severe gambling problems. With the exception of purchasing raffle tickets, those with severe gambling problems are over-represented on every type of gambling activity. The gambling activities engaged in by the highest proportion of those with severe gambling problems include betting on sports with a bookie, followed by playing slot machines or VLTs outside of casinos, playing casino table games, and betting on horse races.

Table 4.3: Gambling activity by CPGI levels

Gambling Activities	CPGI Levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problem	
Lottery tickets	83.1%	11.9%	4.1%	0.9%	77.2%
Raffle tickets**	85.4%	10.4%	3.6%	0.6%	60.6%
Scratch tickets***	78.0%	14.7%	6.2%	1.2%	38.8%
Slot machines or VLTs***	76.1%	16.5%	5.9%	1.5%	35.1%
Outcome of sporting event***	76.9%	15.8%	6.1%	1.3%	16.3%
Arcade or video games***	75.3%	19.2%	4.7%	0.9%	14.5%
Games of skill***	70.7%	20.5%	7.7%	1.0%	12.5%
Card or board games with friends, etc. ***	73.5%	18.1%	7.3%	1.0%	12.5%
Casinos out of the province***	72.0%	19.4%	6.2%	2.4%	11.8%
Bingo***	67.8%	19.2%	10.3%	2.7%	10.6%
Casino table games***	63.7%	22.6%	9.4%	4.3%	9.1%
Speculative investments***	70.5%	19.5%	7.9%	2.0%	7.8%
Horse races***	71.0%	17.6%	7.6%	3.8%	6.8%
Sport Select***	62.6%	24.5%	9.9%	3.1%	7.6%
Slot machines or VLTs other than at casinos***	58.3%	21.4%	14.6%	5.8%	2.7%
Sports with bookie***	28.6%	28.6%	19.0%	23.8%	0.5%
Internet***	56.3%	28.1%	12.5%	3.1%	0.8%
(N)	(3,213)	(408)	(136)	(29)	(3,786)

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

Questions were posed specific to casino gambling. As shown in Table 4.4, the majority of non-problem gamblers had not visited a casino in the year prior to the study. As the severity of gambling problems increases, the likelihood of having been to a casino in the past year increases ($X^2=109.586$, d.f.=3, p.<0.001). Those with severe gambling problems are twice as likely as non-problem gamblers to have been to a casino in the past year.

Table 4.4: Casino visits in the past year by CPGI levels, among those who visited a casino in the past year

Visits to casino	CPGI levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problem	
Yes	40.2%	60.0%	65.5%	81.3%	43.7%
No	59.8%	40.0%	34.5%	18.8%	56.3%
(N)	(3207)	(405)	(135)	(28)	(3,775)

4.4 Money and time spent

While being asked about participation in various gambling activities, respondents were also asked about their expenditures for each gambling activity that they have participated in during the past year. Table 4.5 shows the relationship between CPGI score and expenditures. With the exception of purchasing Sport Select, betting on games of skill, and betting on arcade/video games, higher expenditures are associated with a higher score on the index of gambling problems. The highest correlation between amount spent on a particular type of gambling and problem gambling level occurs with respect to Internet gambling ($r=.584$), betting with a bookie ($r=.505$), gambling at horse races ($r=.416$), and playing slot machines or VLTs in a casino ($r=.357$).

Table 4.5: Correlation between CPGI score and gambling expenditures

Money spent on gambling activities	CPGI score	
	Pearson r	(N)
Lottery tickets	0.094***	(2,972)
Scratch tickets	0.128***	(1,486)
Raffle tickets	0.046*	(2,310)
Horse Races	0.416***	(261)
Bingo	0.148**	(406)
Slot machines or VLTs (casino)	0.357***	(1,348)
Casino table games	0.494***	(345)
Slot machines or VLTs (not at casinos)	0.254*	(100)
Sport Select	0.077	(293)
Outcome of sporting event	0.221***	(623)
Card or board games with friends	0.377***	(475)
Games of skill	0.059	(484)
Arcade or video games	0.064	(557)
Internet	0.584**	(30)
Sports with bookie	0.505*	(21)
Speculative stock investments	0.170**	(294)
Casinos out of province	0.286***	(444)

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

Respondents were asked to provide the total amount of money they have spent on all gambling activities in the past month. Again, CPGI level was significantly related to total expenditures ($F\{3, 3723\}=32.607$, $p.<0.001$). On average, non-problem gamblers spent \$43.36 in the past month, at risk gamblers spent \$96.77, moderate problem gamblers spent \$568.88, and those with severe gambling problems spent an average of \$865.41 on all gambling activities in the past month.

Respondents were also asked how much money they have lost and won on all types of gambling in the past month. The results show that non-problem gamblers tend to report winning the least amount of money, and those with severe gambling problems report the most winnings ($F\{3, 3725\}=8.738$, $p.<0.001$). On average, non-problem gamblers claim to have won an average of \$38.82 in the last month, at risk gamblers \$79.29, moderate problem \$321.57, and those with severe gambling problems claim to have won \$486.16 in the past month.

Surprisingly, there are much smaller differences between different gambling levels regarding the reported amount of money lost ($F\{3, 3666\}=1.728, p>0.05$). Given that those with severe gambling problems experience significant gambling problems, their claim to have not lost more than other gamblers is questionable. This finding suggests that those with gambling problems fail to acknowledge the extent of their gambling losses.

The amount of time normally spent each month gambling was also assessed. Overall, those with severe gambling problems spend in excess of 30 times the amount of time that non-problem gamblers spend on gambling per month ($F\{3, 3639\}=77.945, p.<0.001$). On average, non-problem gamblers spent 1.4 hours on all gambling activities in the past month; those at risk of gambling problems, 5.6 hours; moderate gambling problems, 9.7 hours; and those with severe gambling problems, an average of 32.5 hours.

4.5 Problems experienced from gambling

Respondents were presented with a list of potential gambling-related problems and asked to identify those that they have experienced. The large majority (91.8%) of gamblers have not experienced any gambling-related problems. Of the problems experienced, the most common is related to income loss or debt. As the severity of gambling problems increases, the likelihood of experiencing the following problems also increases: income or money loss/debt, relationship problems, loneliness/increased isolation, and health problems. Other responses that were given included work problems, stress/depression, disappointment, guilt, and loss of control.

Table 4.6: Problems experienced from gambling by CPGI level, among those who report gambling in the past year.

Problems experienced from gambling	CPGI Levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problem	
None***	95.2%	83.9%	56.3%	19.4%	91.8%
Income or money loss/debt***	3.1%	9.6%	25.7%	50.0%	5.1%
Relationship problems***	0.7%	4.8%	7.6%	40.6%	1.7%
Loneliness/increased isolation***	0.3%	2.1%	5.6%	29.0%	1.0%
Health problems***	0.3%	1.4%	6.3%	21.9%	0.8%
Other***	0.6%	0.9%	4.2%	3.1%	0.8%
(N)	(3,166)	(400)	(136)	(28)	(3,730)

Note: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Respondents were also asked whether they have ever engaged in petty crime or other criminal activity to support their gambling habits. Most (99.4%) have never engaged in criminal activity to support their gambling. Of all gamblers, those with severe gambling problems are the most likely group to have supported their gambling through crime ($X^2=16.045$, d.f.=3, $p < 0.001$). The proportion who reported engaging in crime to support their gambling is 0.6% among non-problem gamblers, 0.4% among at risk gamblers, 0.7% among moderate problem gamblers and 6.1% among those with severe gambling problems. Thus, of all gamblers, those with severe gambling problems are the most likely group to engage in crime to support their gambling.

4.6 Family gambling

Survey participants were asked to indicate whether anyone in their family ever had a gambling problem (see Table 4.7). One-tenth (10.2%) of respondents said that someone in their family had or used to have a gambling problem. The proportion reporting gambling problems among family members increased from 5.9% among non-gamblers to 9.5% among non-problem gamblers. Furthermore, when compared with non-problem gamblers, the proportion reporting gambling problems among family members doubled for those at risk of gambling problems. In general, the proportion reporting gambling problems among family members increased as CPGI levels increased ($X^2=69.334$, d.f.=4, $p < 0.001$).

Table 4.7: Gambling problems in family by CPGI levels

Gambling problems in family	CPGI Levels					All participants
	Non-gamblers	Non-problem	At risk	Moderate problem	Severe problem	
Yes	5.9%	9.5%	18.0%	20.9%	22.9%	10.2%
No	94.1%	90.5%	82.0%	79.1%	77.4%	89.8%
(N)	(837)	(3,187)	(402)	(132)	(27)	(4,585)

5. CHARACTERISTICS OF DIFFERENT TYPES OF GAMBLERS IN ONTARIO

This section examines characteristics associated with non-gamblers and the different levels of gamblers. Areas covered include socio-demographic characteristics, reasons for gambling and perceived benefits, beliefs about how gambling works, early gambling experience, health and well-being, and awareness of gambling services.

5.1 Socio-demographic characteristics

Table 5.1 summarizes the socio-demographic characteristics of non-gamblers and individuals gambling at the four CPGI gambling levels.

Males are more likely to become involved with gambling problems than females. A greater proportion of females are non-problem gamblers, and a greater proportion of males gamble at more problematic levels ($X^2=18.7$, d.f.=4, $p.<0.001$).

There is no clear linear relationship between age and gambling levels, but gambling problems occur disproportionately in two different age groups. First, young adults aged 18 to 24 years of age are the most likely to be gambling at problematic levels. While levels of gambling problems are lower among those 25-34 years of age, respondents aged 35-59 report higher than average levels of gambling problems. Respondents 60 years of age and older are the least likely age group to experience severe gambling problems and the most likely group to be non-gamblers ($X^2=187.103$, d.f.=16, $p.<0.001$). Thus, gambling problems appear to be related to the life cycle in a complex fashion. Young adults under the age of 25 are most prone to develop gambling problems. Between the ages of 25 and 35, when many persons are beginning families or advancing their careers, gambling problems tend to be less common. Then gambling problems increase somewhat through middle age, but decline again after the age of 60.

In terms of marital status, single individuals, including those who are divorced or separated, are the most likely to be gambling at problematic levels. Widowed individuals

are the least likely to experience severe gambling problems, and the most likely group to be non-gamblers ($X^2=88.074$, d.f.=12, $p.<0.001$).

Although educational attainment is significantly related to gambling level, there is no clear pattern ($X^2=56.069$, d.f.=16, $p.<0.001$). Those with some high school are the most likely group to be classified as non-gamblers as well as moderate problem gamblers. The most likely group to experience severe gambling problems are those with some post-secondary education.

Gambling level is related to the respondent's job status ($X^2=136.344$, d.f.=16, $p.<0.001$). Employed respondents are the most likely to be non-problem gamblers. Those who are unemployed and students are the most likely to experience severe gambling problems. It should be noted that the causal direction of the relationship between unemployment and serious gambling problems is not clear. In some cases, unemployment may stimulate excessive gambling while in other cases, it may be the result of gambling problems.

Low-income persons are not more likely to gamble, but they are more vulnerable to gambling problems if they do. Individuals with incomes less than \$30,000 are the most likely to be classified as problem gamblers. Interestingly, they are also the most likely to be non-gamblers. ($X^2=48.420$, d.f.=20, $p.<0.001$).

Gambling problems are somewhat more common than average among those with no children living in the household, perhaps because this group would not only include elderly respondents, but also many single young adults ($X^2=27.019$, d.f.=16, $p.<0.001$). Among those who do have persons under the age of 18 living in the house, the number of children is related to higher levels of gambling problems. Individuals with the largest families (four or more individuals over 18 years of age in the household) are the most likely to experience severe gambling problems, as well as the most likely to be non-gamblers.

Problem gambling is related to the region of the province where an individual resides ($X^2=60.394$, d.f.=24, $p<0.001$). Individuals residing in the Toronto region are the most likely group to experience moderate and severe gambling problems, as well as to be non-gamblers. Persons residing in the South West region of Ontario are also more likely to report higher than average gambling problem levels.

Respondents were asked to rate the importance of religion in their lives. Those who consider religion to be very or somewhat important in their lives are somewhat more likely to be non-gamblers (18.4% vs. 13.1% among those who place less importance on religion), but they are no less likely to become problem gamblers if they do gamble ($X^2=22.451$, d.f.=4, $p<0.001$).

Table 5.1: Gender, age, marital status, education, employment status, income, family composition and region by CPGI levels

Demographic Characteristics	CPGI Levels				
	Non-gamblers %	Non-problem gamblers %	At risk %	Moderate problem %	Severe problem %
Gender ***					
Male	16.2	68.4	10.9	3.5	1.0
Female	17.4	71.2	8.3	2.7	0.4
Age ***					
18-24	15.0	57.8	20.3	5.8	1.2
25-34	15.6	70.4	10.9	2.6	0.6
35-49	13.9	73.2	9.3	2.8	0.8
50-59	15.7	73.5	6.5	3.5	0.8
60 +	26.6	67.0	4.3	2.0	0.1
Marital Status ***					
Married/living with partner	16.8	72.3	7.8	2.4	0.7
Widowed	28.3	63.3	5.5	2.5	0.4
Divorced/separated	14.0	71.6	10.1	3.6	0.8
Single, never married	15.5	64.4	14.6	4.7	0.8
Educational attainment ***					
Some high school	21.7	63.9	8.4	5.3	0.7
Completed high school	16.0	68.7	10.9	3.8	0.6
Some post-secondary	15.4	67.0	11.9	4.2	1.4
Completed post-secondary	15.3	71.8	9.9	2.6	0.4
Completed post-graduate	18.2	72.3	7.2	1.5	0.9
Employment Status ***					
Employed	13.7	72.4	10.0	3.3	0.7
Unemployed	22.2	61.5	11.6	3.2	1.6
Student	23.0	52.0	19.6	4.1	1.4
Retired	26.0	67.2	4.4	2.1	0.1
Other	36.0	56.0	4.0	4.0	0
Income ***					
<\$20, 000	22.4	58.2	13.1	5.3	0.9
< \$30, 000	17.1	67.5	10.9	2.9	1.6
< \$40, 000	18.0	70.2	7.9	3.5	0.5
< \$50, 000	16.7	70.0	9.4	3.0	1.0
< \$60, 000	13.3	73.3	10.1	3.1	0.2
\$60, 000 +	16.1	71.6	9.0	2.7	0.6
Number of people under 18*					
None	17.6	69.2	9.4	3.0	0.8
One	14.8	70.7	11.5	2.8	0.1
Two	15.6	72.6	7.7	3.9	0.2
Three	14.0	70.7	10.9	3.5	0.9
Four or more	22.4	61.8	11.8	1.3	2.6

Region***					
East	14.1	75.5	8.3	1.4	0.6
Central East	14.1	70.6	11.7	3.3	0.3
Toronto	19.0	64.8	10.8	3.9	1.4
Central West	17.2	69.0	10.3	2.9	0.7
Central South	18.2	70.5	6.8	3.3	1.2
South West	19.0	69.1	9.0	2.8	0
North	12.7	75.4	7.9	3.7	0.3
Religion ***					
Very/somewhat important	18.4	68.9	9.0	3.0	0.7
Not very/not at all important	13.1	72.2	10.7	3.3	0.7

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

5.2 Reasons for going to a casino and perceived benefits

Those respondents who went to a casino in the past year were asked to cite the reasons for their visit from a list provided. Of the total sample, 38% reported that they had attended a casino in the year prior to the study. There were even a small number of non-gamblers who went to a casino, typically to watch others gamble or for other entertainment. As shown in Table 5.2, the most common reasons included the enjoyment of gambling (28.6%), watching others gamble (26.6%), to win money (25.2%), to enjoy the musical entertainment (20.9%) or to simply socialize (18.0%). Generally, as the severity of problem gambling increases, participants are more likely to give multiple reasons for visiting casinos and they are more likely go for the enjoyment of gambling, to win money, and to drink alcohol.

Table 5.2: Reasons for going to a casino by CPGI level, among those who visited a casino in the past year

Reasons for gambling:	Gambling Levels					Total casino visitors
	Non-gambler	Non-problem	At risk	Moderate problem	Severe Problem	
Enjoyment of gambling***	6.6%	24.4%	45.2%	45.2%	73.1%	28.6%
To watch others gamble*	40.8%	25.3%	26.6%	30.1%	30.8%	26.6%
⁴ To win money***	11.8%	20.4%	37.8%	57.0%	57.7%	25.2%
Musical entertainment	17.3%	21.5%	20.8%	17.2%	19.2%	20.9%
Socialize*	7.9%	19.2%	17.0%	17.2%	0	18.0%
To drink alcohol***	6.7%	5.2%	8.5%	12.9%	19.2%	6.4%
Other	1.3%	2.9%	2.3%	1.1%	0	2.6%
Tourist attraction*	6.6%	2.8%	0.4%	2.2%	0	2.5%
Occasion	1.3%	2.8%	0.8%	0	0	2.2%
To eat	2.7%	2.4%	1.5%	1.1%	0	2.2%
For the company	1.3%	1.5%	0.4%	0	0	1.2%
Work related	2.7%	1.1%	0.8%	0	0	1.0%
Atmosphere	0	0.9%	1.5%	0	0	0.9%
(N)	(73)	(1,252)	(240)	(89)	(23)	(1,677)

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

Respondents who gambled in the past year were also presented with a list of potential benefits associated with gambling, and asked to indicate the ones they received (see Table 5.3). Originally, responses were categorized into a multiple response variable; however, for this analysis, each response has been re-categorized into a dichotomy with “yes” (for those who identified that response as a reason) or “no” (for non-responses).

The most common response among all levels of gamblers was winning money (42.1%), followed by excitement or fun (36.5%), and having an opportunity to socialize (26.0%). The perceived benefit of winning money was strongly related to level of gambling problems. The proportion who identify winning money as a benefit of gambling increases progressively from 39.8% of non-problem gamblers to 66.7% of those with the most severe gambling problems. Those with severe gambling problems were also the most likely group to identify decreased boredom and isolation, and forgetting problems as benefits. Non-problem gamblers were the most likely group to indicate that there were no benefits.

Table 5.3: Benefits received from gambling by CPGI level, among those who gambled in the past year

Perceived Benefits:	CPGI Levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problems	
Can win money***	39.8%	50.0%	63.2%	66.7%	42.1%
It's exciting/fun***	33.6%	50.8%	53.5%	45.5%	36.5%
An opportunity to socialize***	23.8%	38.2%	36.8%	27.3%	26.0%
None***	21.4%	6.3%	6.3%	12.1%	19.0%
Decreases boredom***	10.4%	23.1%	23.6%	33.3%	12.6%
Get to be around others/decreases isolation***	7.2%	15.1%	20.1%	24.2%	8.8%
Forget about problems***	3.1%	10.2%	16.0%	18.8%	4.6%
Charity support**	3.6%	0.7%	0.7%	0	3.1%
Other*	1.6%	2.5%	4.9%	0	1.8%
For variety/something to do	1.4%	2.9%	0.7%	3.0%	1.6%
Fantasy/to dream	0.6%	0	0	0	0.5%
Satisfy curiosity	0.4%	0	0	0	0.3%
Challenging**	0.1%	0.9%	0.7%	0	0.2%
Increases self-worth (stocks)	0.1%	0	0	0	0.1%
(N)	(3,146)	(406)	(136)	(29)	(3,717)

Note: * p.<0.05, ** p.<0.01, *** p.<0.001

5.3 Beliefs and attitudes of different types of gamblers

As a gauge of participant's understanding of how gambling works, questions were posed about randomness and probabilities. A fundamental statistical principle underlying most games of chance is the concept of independent events, whereby the chances of success do not change from one play (e.g., a roll of dice or spin of a roulette wheel) to the next. Thus, unless a game is rigged in some fashion, the probability of winning or losing does not change regardless of previous outcomes. Nonetheless, when asked if after losing many times in a row, one is more likely to win, a small but substantial proportion of the respondents (13.6%) agreed or strongly agreed with this false statement (see Table 5.4). As the severity of gambling problems increases, the likelihood of believing that a win is more likely after a losing streak also increases ($X^2=156.597$, d.f.=9, $p.<0.001$), thus

providing support to the notion that cognitive deficiencies play a role in the development of some gambling problems.

Table 5.4: Whether respondents believe that after losing many times in a row one is more likely to win, among those who gambled in the past year

Reaction to statement: “After losing many times in a row one is more likely to win”	CPGI Level				All gamblers
	Non- problem	At risk	Moderate problem	Severe problems	
Strongly agree	0.5%	1.4%	6.5%	12.1%	0.9%
Agree	11.5	16.5	25.2	27.3	12.7
Disagree	57.7	61.5	51.8	42.4	57.8
Strongly disagree	30.3	20.6	16.5	18.2	28.6
(N)	(3,109)	(400)	(132)	(29)	(3,670)

The statistical principle of independent events also implies that there is no betting system that can increase the odds of winning. Respondents were also asked whether having a system increases the odds of winning at gambling. Again, a substantial proportion of respondents (24.5%) agreed with this false statement. A false belief that a betting system can increase the odds of winning is strongly related to problem gambling level. The proportion who falsely believe in a betting system increases progressively from 21.1% among non-problem gamblers to 39.2% among those at risk of gambling problems and 48.3% with moderate gambling problems. Interestingly, among those with the most severe gambling problems the proportion who believe in a betting system decreases somewhat to 43.8%, perhaps indicating the mitigating influence of experience ($X^2=175.037$, d.f.=9, $p.<0.001$).

Table 5.5: Whether respondents believe that one can win more if one uses a system by CPGI levels, among those who gambled in the past year.

“One can win more if one uses a system”	CPGI Levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problems	
Strongly agree	1.7%	5.7%	13.5%	9.4%	2.7%
Agree	19.4	33.5	34.8	34.4	21.8
Disagree	52.8	45.2	36.2	37.5	51.2
Strongly disagree	26.0	15.6	15.6	18.8	24.4
(N)	(3,064)	(400)	(133)	(28)	(3,625)

5.4 Early gambling experience

Research has found an association between an early big win and problem gambling. When participants were asked about a first big win, only one in four gamblers recalled one (see Table 5.6). However, as the severity of gambling problems increases, the likelihood of recalling a first big win also increases progressively from 21.7% among non-problem gamblers to 63.6% among the most severe problem gamblers ($X^2=207.405$, d.f.=3, $p.<0.001$).

Table 5.6: Remembering first big win by CPGI levels, among those who gambled in the past year

Remembered having a big win	CPGI Level				All gamblers
	Non-problem	At risk	Moderate problem	Severe Problem	
Yes	21.7%	45.4%	55.9%	63.6%	26.1%
No	78.3	54.6	44.1	36.4	73.9
(N)	(3,109)	(400)	(132)	(29)	(3,670)

Participants were also asked about an early big loss (see Table 5.7). Again, the majority (90.9%) do not remember experiencing one. Recollection of a loss, however, increases with increasing severity of gambling problems ($X^2=218.216$, d.f.=3, $p.<0.001$). Thus, the more severe the respondent’s gambling problems, the more likely that he or she will remember both a big win or a big loss.

Table 5.7: Remembering first big loss by CPGI levels, among those who gambled in the past year

Remembered having a big loss	CPGI Levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problem	
Yes	6.5%	17.1%	29.9%	54.5%	9.1%
No	93.5	82.9	70.1	45.5	90.9
(N)	(3,192)	(408)	(136)	(29)	(3,765)

5.5 Health and well-being

The majority of respondents rate their health status as “very good” or “good” (see Table 5.8). Non-gamblers and non-problem gamblers are the most likely groups to rate their health as “very good”. A significant relationship was observed between health ratings and problem gambling level ($X^2=77.229$, d.f.=16, $p.<0.001$). Generally, the greater the respondent’s gambling problems, the poorer his or her health status. However, it should be noted just as the most severe problem gamblers are more likely than the overall average to report poor or very poor health, there are also a disproportionate number of non-gamblers who similarly report poor or very poor health. This indicates that to some extent, health status is both a cause and a consequence of gambling activity – just as gambling problems may lead to poor health, so too health problems may render some persons unable to gamble as much as they might otherwise.

Table 5.8: Health status by CPGI levels

Health status	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
Very good	50.0%	50.0%	39.4%	28.5%	30.3%	48.1%
Good	36.9	39.4	46.4	50.7	48.5	40.1
Fair	8.9	8.2	11.1	17.4	18.2	9.0
Poor	2.5	2.0	2.7	3.5	0.0	2.2
Very poor	1.7	0.4	0.5	0.0	3.0	0.6
(N)	(841)	(3,209)	(405)	(136)	(29)	(4,620)

All respondents were asked whether they have been under a doctor’s care because of physical or emotional problems brought on by stress (see Table 5.9). There is a

significant relationship between likelihood of having been under doctor's care and CPGI levels ($X^2=33.074$, d.f.=4, $p.<0.001$). Those with moderate and severe gambling problems are the most likely to report being under a doctor's care for emotional or physical problems brought on by stress. Nearly one in four of these gamblers report that they have been given medical care due to stress.

Table 5.9 also examines depression by CPGI levels. ($X^2=94.870$, d.f.=4, $p.<0.001$). As shown, those with moderate and severe gambling problems are the most likely to report feeling seriously depressed. Non-problem gamblers are the least likely group. Gamblers were also asked if they have seriously considered suicide as a result of their gambling (see Table 5.9). Those with severe gambling problems are by far the most likely group to have considered suicide due to their gambling ($X^2=37.294$, d.f.=3, $p.<0.001$). One in sixteen severe problem gamblers (6.1%) report that they have considered suicide. When asked whether respondents ever felt an urge to gamble when something painful happened, the majority (98.3%) of gamblers indicated that they never felt this need. Table 5.9 shows that as the severity of gambling problems increases, the likelihood of needing to gamble when something painful happens also increases ($X^2=121.524$, d.f.=3, $p.<0.001$).

Table 5.9: Stress indicators by CPGI levels

Stress indicators:	CPGI Levels				
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem
Under doctor's care for emotional or physical problems due to stress	13.3% (840)	11.9% (3,198)	17.2% (406)	25.4% (135)	24.2% (29)
Feeling seriously depressed	15.6% (842)	14.0% (3,206)	27.5% (406)	32.9% (135)	39.4% (29)
Seriously considering suicide as result of gambling	N/A	0.3% (3,207)	0.0% (408)	0.7% (136)	6.1% (29)
Need to gamble when something painful happened	N/A	0.7% (3,208)	4.5% (407)	6.3% (136)	18.2% (29)

A number of other questions were posed related to how individuals deal with painful events in their lives. One question asked participants whether they have an urge to

drink when something painful happens in their life (see Table 5.10). A significant association was observed between this question and CPGI levels ($X^2=94.235$, d.f.=4, $p.<0.001$). Non-gamblers were the least likely group to have an urge to drink alcohol when something painful happens to them.

Table 5.10: Urge to drink alcohol when something painful happens by CPGI levels

Urge to drink when something painful happens	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
Yes	9.4%	16.4%	28.1%	32.4%	18.8%	16.8%
No	90.6	83.7	71.9	67.6	81.3	83.2
(N)	(842)	(3,206)	(408)	(134)	(29)	(4,619)

Respondents were also asked whether they have an urge to use drugs or medication when something painful happens to them (see Table 5.11). Again, a significant relationship was observed with CPGI levels ($X^2=78.261$, d.f.=4, $p.<0.001$). Consistent with responses to the alcohol question, non-gamblers were the least likely group to feel an urge to use drugs or medication when dealing with a painful event in their life.

Table 5.11: Urge to use drugs/medication when something painful happens by CPGI levels

Urge to use drugs or medication when something painful happens	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
Yes	6.9%	7.2%	13.7%	24.8%	18.2%	8.4%
No	93.1	92.8	86.3	75.2	81.8	91.3
(N)	(841)	(3,208)	(408)	(134)	(29)	(4,620)

When asked to indicate how many people respondents can turn to for support or help if they had a serious personal problem, just under one-half (46.6%) of the respondents said that they have between one to five people (see Table 5.12). Of the total sample, only 1.5% of respondents reported having no one to turn to when dealing with

personal problems. A significant relationship was observed with CPGI levels ($X^2=61.479$, d.f.=12, $p.<0.001$). Those with severe gambling problems are particularly likely to have no one at all to turn to when dealing with serious personal problems.

Table 5.12: Number of people respondents can turn to by CPGI levels

Number of people you can turn to when dealing with personal problems	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
None	1.0%	1.5%	0.9%	2.9%	15.6%	1.5%
1-5	51.0	44.9	51.1	50.4	37.5	46.6
6-10	29.9	34.8	32.7	28.5	28.1	33.5
11 or more	18.1	18.7	15.3	18.2	18.8	18.3
(N)	(782)	(3,074)	(389)	(130)	(28)	(4,403)

When asked to identify the individuals that participants would turn to for help with gambling-related problems, family member and gambling counsellor are the most common responses (see Table 5.13). Those with the most severe gambling problems are more likely than other types of gamblers to turn for assistance to friends rather than family or professional help. Moderate problem gamblers, however, are the most likely to identify gambling counsellors as a potential source of help.

Table 5.13: To whom you would turn when dealing with gambling-related problems by CPGI levels

To whom you would turn when dealing with personal problems	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problems	
Family***	32.2%	40.3%	48.3%	43.9%	31.0%	39.9%
Gambling counsellor***	37.2	39.4	28.0	42.7	30.0	38.0
Friend***	20.1	27.4	35.6	23.7	51.7	27.1
Family doctor**	22.8	27.6	22.3	17.6	16.7	25.9
Social worker/psychologist/psychiatrist	23.9	21.2	18.0	17.4	16.7	21.2
Minister, priest or rabbi***	29.1	14.6	13.7	12.2	13.3	16.7
Other	5.4	5.3	5.7	4.6	10.3	5.4
(N)*	(709)	(2,926)	(383)	(123)	(26)	(4,167)

Note: * $p.<0.05$, ** $p.<0.01$, *** $p.<0.001$

5.6 Problems resulting from others' gambling

It was noted earlier that more than one in eight Ontario adults (13.7%) report at least one of the nine problem gambling indicators used in the CPGI. These items only refer, however, to the respondent's own situation. A more comprehensive picture of the extent of gambling problems in Ontario would include information on problems arising from other persons' gambling. Participants were asked whether they ever experienced any problems as a result of someone else's gambling. Although the large majority (94.8%) have not experienced any problems as a result of someone else's gambling, 5.2% indicate that others' gambling has caused a problem for them. As seen in Table 5.14, 3.2% of non-gamblers and 4.7% of non-problem gamblers have experienced a problem from others' gambling. When we add these respondents with the number who report a gambling problem of their own, it is found that approximately one in six Ontario adults (16.2%) report a problem resulting from either their own or another person's gambling. Furthermore, Table 5.14 also shows that as the severity of gambling problems increases, so does the likelihood of being negatively impacted by others' gambling ($X^2=59.869$, d.f.=4, $p.<0.001$). The proportion reporting problems from others' gambling increases progressively from 3.2% among non-gamblers to nearly one in every four (24.3%) among those with most severe gambling problems.

Table 5.14: Problem experienced from someone else's gambling by CPGI levels

Problems experienced from someone else's gambling	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
Yes	3.2%	4.7%	8.3%	13.4%	24.3%	5.2%
No	96.8	95.3	91.7	86.6	75.7	94.8
(N)	(842)	(3,208)	(408)	(134)	(29)	(4,621)

5.7 Awareness of gambling services

Respondents were asked about their awareness of gambling services in Ontario. Less than one-half are aware of Ontario's toll-free gambling help line (36.1%), and of gambling counselling services available in their community (46.4%) (see Table 5.15). While awareness of these sources of help is related to level of gambling problem, the relationship is not as strong as one might expect. A substantial number of gamblers at all levels of gambling problems are unaware of either the help line or gambling counselling services. Whereas those with severe gambling problems are the most likely group to be aware of counselling services ($X^2=44.320$, d.f.=4, $p.<0.001$), they are the least likely type of gamblers to know about the help line ($X^2=17.198$, d.f.=4, $p.<0.01$).

Table 5.15: Awareness of toll-free gambling help line and gambling counselling services by CPGI levels

Percentage aware of:	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
Toll-free gambling help line	29.6% (844)	37.5% (3,214)	37.3% (408)	35.4% (136)	33.3% (29)	36.1% (4,631)
Counselling services	38.0% (844)	47.0% (3,214)	51.9% (408)	61.1% (136)	63.6% (29)	46.6% (4,631)

6. GAMBLING AND SUBSTANCE USE

This section examines relationships between CPGI gambling levels and the use of psychoactive substances such as alcohol, tobacco and illicit drugs. Levels of lifetime and current substance use by different types of gamblers are presented, as well as findings regarding the extent to which gamblers use psychoactive substances while gambling.

Table 6.1 examines the use of alcohol, tobacco and illicit drugs by problem gambling level. The first general finding is that gamblers are more likely to consume alcohol, smoke tobacco or use illicit drugs when compared with non-gamblers. Thus, gamblers are more likely to consume alcohol and have higher rates of drinking compared with non-gamblers. Gamblers are more likely to have ever smoked cigarettes, to be current smokers and to be current daily smokers compared with non-gamblers. With regard to illicit drugs, non-gamblers are less likely than all types of gamblers to have ever used cannabis, cocaine, ecstasy, or heroin, LSD or other psychedelics, and they are also less likely to have used any of these illicit drugs in the past year.

Second, among different levels of problem gambling, it is generally (but not always) found that the greater the involvement in gambling problems, the higher the use of alcohol, tobacco and illicit drugs. While there is relatively little difference regarding the proportion who ever or currently drink alcohol, the mean number of drinks per drinking occasion increases progressively from 2.6 drinks per occasion for non-problem gamblers, to 3.6 among those at risk of gambling problems, and 4.2 drinks per occasion among those with moderate gambling problems. However, the mean number of drinks per occasion among those with severe gambling problems is 3.0. Among different types of gamblers who smoke, the greater the involvement in gambling problems, the higher the proportion who are current or daily smokers and the higher mean number of cigarettes smoked. Rates of ever or current use of illicit drugs tend to be highest among those with moderate and severe gambling problems, compared with non-gamblers or at-risk gamblers.

Table 6.1: Alcohol, tobacco and illicit drug use by CPGI levels

	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
Alcohol Use:						
% consuming alcohol ever in lifetime	85.4%	96.7%	95.1%	93.7%	87.9%	94.5%
% consuming alcohol in past year	67.3%	87.9%	85.6%	83.3%	72.7%	84.0%
Mean # of drinks per occasion	2.2	2.6	3.4	4.2	3.0	2.5
Tobacco Use:						
% ever smoked	56.1%	70.9%	71.7%	79.9%	75.8%	68.8%
% current smokers	16.7%	29.1%	41.3%	48.6%	46.9%	29.0%
% current daily smokers	13.5%	23.1%	34.8%	38.9%	40.6%	23.3%
Mean # of cigarettes smoked per day, among smokers	14.1	13.5	15.0	16.4	16.6	14.2
Illicit drug use:						
Ever used marijuana or hashish	27.9%	43.1%	50.0%	53.8%	36.4%	41.5%
Used marijuana or hashish in past year	5.9%	11.7%	19.5%	28.7%	15.2%	12.0%
Ever used cocaine	3.1%	7.0%	11.7%	16.7%	18.2%	7.2%
Used cocaine in past year	0.1%	0.7%	2.0%	6.3%	3.0%	0.9%
Ever used ecstasy (MDMA)	1.8%	3.0%	7.2%	8.5%	18.2%	3.5%
Used ecstasy (MDMA) in past year	0.6%	1.2%	3.4%	5.0%	12.1%	1.5%
Ever used heroin, LSD, other psychedelics	4.7%	8.7%	15.3%	17.0%	15.2%	9.0%
Used heroin, LSD, other psychedelics in past year	0.3%	0.7%	1.8%	4.2%	6.1%	0.8%
(N≥)	(841)	(3209)	(405)	(136)	(29)	(4,620)

Note: All relationships are statistically significant ($p < 0.001$).

Thus, the greater the involvement in gambling and gambling problems, the greater the use of alcohol, tobacco and/or illicit drugs. Indeed, many Ontarians indulge in both the use of psychoactive substances and in gambling at the same time. As shown in Table 6.2, approximately one in six gamblers (19.0%) have used alcohol or drugs while gambling. Table 6.2 also examines the use of alcohol or drugs while gambling by

different levels of problem gambling. A significant relationship was observed ($X^2=83.518$, d.f.=3, $p.<0.001$), with non-problem gamblers the least likely to use alcohol or drugs while gambling. Those with moderate gambling problems report the most use.

Participants were also asked if they have ever gambled while drunk or high (see Table 6.2). This also produced a significant association with CPGI levels ($X^2=151.939$, d.f.=3, $p.<0.001$). Again, non-problem gamblers are the least likely, and moderate problem gamblers the most likely to report gambling while drunk or high.

Table 6.2: Use of alcohol or drugs while gambling, and gambling while intoxicated on alcohol or drugs by CPGI levels

	CPGI Levels				All gamblers
	Non-problem	At risk	Moderate problem	Severe problem	
Per cent reporting use of alcohol or drugs while gambling***	16.5% (3,203)	31.1% (407)	35.4% (136)	30.3% (29)	19.0% (3,775)
Per cent reporting ever gambling while high on alcohol or drugs***	4.5% (3,203)	16.5% (407)	22.2% (136)	12.5% (28)	6.6% (3,774)

Note: *** $p<0.001$.

Participants were also asked whether they have ever felt that they might have an alcohol or drug problem. Approximately one in twelve respondents (9.1%) stated that they did have an alcohol or drug problem (see Table 6.3). Self-reported alcohol or drug problems are strongly related to level of problem gambling. The proportion who report having an alcohol or drug problem increases progressively from 6.1% among non-gamblers to 24.2% among those with severe gambling problems ($X^2=37.360$, d.f.=4, $p.<0.001$).

Table 6.3: Personal or family alcohol or drug problem by CPGI levels

Indicator of alcohol or drug problem with respondent or family member:	CPGI Levels					All participants
	Non-gambler	Non-problem	At risk	Moderate problem	Severe problem	
% feel that they might have an alcohol or drug problem***	6.1% (841)	8.8% (3,207)	12.2% (406)	18.2% (136)	24.2% (29)	9.1% (4,619)
% with family member who has an alcohol or drug problem***	26.6% (835)	37.8% (3,181)	39.8% (401)	51.1% (134)	43.8% (28)	36.6% (4,579)

Note: *** $p < 0.001$.

Table 6.3 also presents the proportion of respondents who report a family history of alcohol or drug abuse by gambling level. More than one-third of the total sample (36.6%) indicated that someone in their family had an alcohol or drug problem. Non-gamblers are the least likely group to have family alcohol or drug problems. Moderate problem gamblers, followed by those with severe gambling problems, are the most likely groups to report a history of substance abuse in their families ($X^2=50.469$, d.f.=4, $p < 0.001$).

In summary, these findings indicate that the problems of substance abuse and gambling problems are closely connected. Gamblers are more likely to use alcohol and drink at higher levels compared with non-gamblers. They are also more likely to smoke and use illicit drugs. Among gamblers, the greater the involvement with gambling problems, the higher the rates of substance use and misuse. The greater the involvement in gambling problems, the higher the proportion who report an alcohol or drug problem and the greater the likelihood that one has a family history of such problems.

7. CONCLUSIONS AND DISCUSSION

This study provides current baseline information on the nature and extent of gambling among adults in Ontario. A noteworthy aspect of this study is recognition of the diversity associated with various gambling activities. Often, distinctions are not made between types of gambling activities. Rather, the various activities are collapsed into a general “gambling” category. As shown in the results of this study, there are clear differences associated with participation in various activities. Different types of gambling relate to different social characteristics, and the proportion of gamblers who develop problems varies considerably from one type of gambling to another.

A major objective of this research is to identify the extent to which people are experiencing problems related to their gambling. The study provides current baseline information that can be used to track changes over time as gambling policies and practices evolve and develop in Ontario in the coming years. In addition to measuring levels of problem gambling, this study has examined factors associated with problem gambling behaviours. Such information will be useful in developing and improving future policy, prevention and education gambling strategies in Ontario.

Given a broad definition of gambling, the results show that the large majority of Ontarians gamble. At the same time, the large majority do not experience any problems related to their gambling. For most, gambling consists mainly of purchasing the occasional lottery or raffle ticket. Approximately one-third purchase scratch tickets, and just over one-quarter gamble on slot machines. Less than one in ten play bingo or table games at a casino. Very few, less than 1%, gamble on the Internet or make bets with a bookie.

The vast majority of gamblers feel that they receive benefits from their gambling. Not surprising, the most common benefit cited is winning money. Gambling is also appealing because it is perceived to be exciting and provides an opportunity to socialize. Basically, most respondents view gambling as a form of entertainment.

For the most part, various gambling activities are related to other gambling activities. That is, individuals who gamble on certain activities (e.g., buying lottery tickets) are more likely to gamble in other ways (e.g., buying scratch tickets). To some extent, almost all gambling activities are positively related to one another. The exceptions are Internet gambling and speculative investments. It is fairly easy to understand how speculative investments are distinct from other activities. It is very interesting that Internet gambling has little or no relationship to other forms of gambling.

Increasingly, Internet gambling and the potential problems that may result from this form of gambling represent a growing area of concern. Consistent with the results from this study, most research has thus far found very low participation rates. It does not appear that those who are engaging in other forms of gambling gamble on the Internet because of its high accessibility. Rather, those who engage in Internet gambling appear at this time to be quite different from the general population of gamblers. In contrast to other activities, those who engage in Internet gambling are not doing it for the socializing opportunities. It is a solitary behaviour. As further research is conducted on Internet gambling, it will be interesting to gain insight into the unique factors associated with participation in this form of gambling.

Examination of the socio-demographic variables associated with gambling activities revealed substantial gender differences. For most activities, participation is over-represented by males. The only activities where participation is greater among females are with scratch tickets, raffle tickets, and bingo. It is curious why these particular gender differences exist. One potential influence is marketing.

A major emphasis of the present study has been the examination of the extent and characteristics of problem gambling. The extent of gambling problems in Ontario is a concern. The results show that 3.1% are experiencing moderate gambling problems and 0.7% severe gambling problems. In terms of actual numbers, this translates to 278,179 people with moderate gambling problems and 62,815 people with severe gambling

problems. That is, approximately 340,000 adults in Ontario are experiencing moderate to severe problems related to their gambling.

It is difficult to determine whether these rates represent an increase or decrease since the expansion of gambling in this province. In 1995, a general population prevalence study was conducted in Ontario (Ferris and Stirpe, 1995). Of the total sample, 1% were gambling at the most severe level. The 1995 study used the South Oaks Gambling Screen (SOGS) to assess problem gambling. That instrument is not directly comparable to the CPGI, the instrument used in the present study.

However, as part of the validation process of the CPGI, a survey was administered to a national sample in 1999 (Ferris and Wynne, 2001). A total of 871 adults from Ontario were surveyed. The results showed that 2.6% had moderate gambling problems and 1.0% had severe problems. Thus, in a two-year period, the proportion of the population experiencing moderate or severe gambling problems increased from 3.6% to 3.8%. On one hand, this would not appear to be cause for alarm. The prior survey was based on a relatively small sample; there was a relatively small increase; and the proportion of those with severe problems actually declined. On the other hand, the increase in moderate or severe gambling problems was approximately 5.6% ($0.2/3.6$), or 2.8 % per year. This represents an increase of approximately 10,000 persons with moderate or severe gambling problems each year in Ontario. A possible interpretation of these findings is that although some severe problem gamblers ceased or reduced their gambling due to treatment, bankruptcy or other reasons in the past two years, they were more than offset by an increase in the number of moderate problem gamblers. If future surveys confirm this upward trend, it could have important implications to the provision of gambling services in the province, indicating a need for continued expansion of service provision.

A central focus of the present study was identifying relationships between problem gambling and a diverse range of factors. Examination of gambling patterns reveals substantial differences between problem and non-problem gamblers. With the

exception of purchasing raffle tickets, those with severe gambling problems are over-represented on every type of gambling activity. The gambling activities engaged in by the highest proportion of those with moderate to severe gambling problems are betting on sports with a bookie, playing slot machines or VLTs outside of casinos, Internet gambling and playing casino table games. A particularly noteworthy finding is related to making bets with a bookie. Although very few individuals pursue this form of gambling, of those who do, nearly one-half (43%) experience moderate to severe problems.

It is important to keep in mind that the activity of gambling in itself does not necessarily lead to a gambling problem. Although individuals with gambling problems participate in most gambling activities to a greater extent than non-problem gamblers, the majority of persons who engage in any particular type of gambling activity experience no problems as a result of their gambling. What these results do suggest is that engagement in activities that are generally not common is related to an increased likelihood that individuals will have gambling problems. Although there does not appear to be a set progression in the involvement of problem gamblers in different types of gambling activities, it is hoped that future analyses of data from this and other surveys will examine the extent to which involvement in gambling activities represents a uni-dimensional phenomenon with a common set of underlying determinants.

Problem and non-problem gamblers basically share similar motivations for gambling. The main difference is the extent to which problem gamblers perceive various benefits. For instance, winning money is the most common benefit cited by all gamblers. However, severe problem gamblers are much more likely than non-problem gamblers to perceive this as a benefit (67% vs. 40%). Other benefits commonly perceived by those with the most severe gambling problems are excitement (46%) decreased boredom (33%), and an opportunity to socialize (27%). These reasons suggest that loneliness may occupy an important relationship with gambling problems.

Not unexpectedly, the most common negative consequence identified by all gamblers is the loss of money. In general, as the severity of gambling problems increases,

the amount of money spent, won, and lost on gambling activities also increases. Taking speculative investments out of the equation, severe problem gamblers spend and lose the most money on sports with a bookie, slot machines in casinos, and casino table games.

A related area concerns respondents' understanding of probabilities and the principle of randomness. In most forms of gambling, the outcome of each gamble is independent of prior outcomes. This principle underlies most games of chance, and therefore the extent to which an individual understands this concept may play a role in the development of gambling problems. The results showed that individuals with gambling problems are more likely than non-problem gamblers to believe that a win is more likely after a losing streak and that having a system increases the overall odds of winning at gambling. At the same time, a notable proportion of non-problem gamblers also carry these incorrect beliefs.

In terms of the socio-demographic characteristics associated with problem gambling, no one is immune to gambling problems. Gambling-related problems are evident among all age groups, income and education levels and regions of the province. This being said, there is a strong relationship between gender, age and gambling problems. Being male, between the ages of 18 to 24 years, is clearly related to the development of moderate to severe gambling problems. Among 18 to 24 year olds, 7% experience moderate to severe gambling problems. This compares with 3.8% for the general population. Young adults are the most likely group to purchase scratch tickets, play slots in a casino, gamble on arcade games, play casino table games, gamble with friends/family, play Sports Select, and, somewhat surprisingly, play bingo. The most common benefit they receive from gambling is excitement, followed by winning money and socializing. They are the most likely age group to identify less boredom, less isolation and forgetting problems as benefits associated with gambling. They are the least likely age group to feel that there are no benefits associated with gambling. When asked to provide the reasons for going to a specific gambling venue, namely casinos, this age group was the most likely to identify drinking alcohol as a reason. These findings have

potentially important implications for the design of preventive policies, indicating that at least some programming should be specifically targeted and designed for this age group.

The youngest age group provides a direct contrast to the oldest age group examined – individuals 60 years and older. There is concern that an increasing number of older adults may be experiencing problems related to their gambling. Casinos specifically target older adults, offering inexpensive bus trips and other incentives. Older adults face a unique set of factors that may place them at greater risk of developing gambling problems, including loneliness, fixed incomes, and vulnerability resulting from post-retirement inactivity (Fessler, 1996). There is also concern that gambling problems may be more difficult to identify because of increased isolation from co-workers, friends and family.

The results from this study show that older adults, 60 years and older, are the least likely age group to have gambling-related problems. Of those aged 60 or older, 2.1% are experiencing moderate to severe gambling problems. With the exception of bingo, they are the least likely age group to participate in all gambling activities. Similar to the general population, the most common gambling activities among older adults include lottery tickets, raffles and slots in a casino. At the same time, it is important to remember that the current gambling patterns among older adults may not reflect the next generation, who may have very different beliefs and attitudes about gambling. As the proportion of elderly in the population of Ontario continues to increase, there is a need to stay abreast of their potential gambling problems. It should be noted in this regard that a special report on gambling among the elderly based on data from this survey is being prepared by the Responsible Gaming Council of Ontario and the Canadian Centre on Substance Abuse with funding support from the Ontario Problem Gambling Institute (Wiebe, forthcoming).

Another dimension examined was the role of the family. Individuals with moderate to severe gambling problems are more likely than others to have someone in their family with a gambling problem and to be negatively impacted by others' gambling.

This has implications for prevention and treatment, indicating a need to target not only the gambler, but also his or her family situation. It also indicates a need for future research to examine the role of family history in the development of gambling problems.

A major finding of this study is that gambling problems are clearly related to poor health. Those with gambling-related problems are more likely than others to receive medical care for stress, have a worse health status and feel seriously depressed. Individuals with severe gambling problems are also the most likely gambling group to have considered suicide as a result of their gambling. Without longitudinal data, one cannot be certain of the causal priority between gambling problems and ill health. Gambling problems may cause health problems, or they may be the result of health status. For instance, a gambling problem may cause stress or it may be the result of using gambling to relieve stress caused from other circumstances. Most likely, it is a combination of the two: in some cases the relationship occurs because gambling causes a health problem and in other situations the gambling problem results from a health problem. The relationship between gambling and health problems highlights the need for prospective studies that are able to untangle causal patterns. This information would be invaluable to the development of strategies designed to prevent and treat gambling problems.

A particular emphasis of this study was the examination of substance use and gambling. Overall, gamblers are more likely than non-gamblers to use psychoactive substances. Generally, the greater the involvement in gambling problems, the higher the use of alcohol, tobacco and illicit drugs. Moderate to severe problem gamblers are consistently more likely than non-problem gamblers to report drinking, smoking or using illicit drugs. It is particularly noteworthy that one in eight (12%) of those with severe gambling problems used ecstasy in the past year.

However, there are some notable differences between moderate and severe problem gamblers in the use of psychoactive substances. Although severe problem gamblers are more likely to use ecstasy and heroin/LSD/other psychedelics, those

reporting moderate gambling problems report similar levels of smoking and higher levels of drinking and certain types of illicit drug use. The average number of alcoholic drinks consumed on one occasion peaks among those with moderate gambling problems and then declines among those with severe gambling problems. Current cocaine and marijuana/hashish use also peaks with moderate problems, and then declines among those experiencing severe gambling problems. These findings may indicate that some of the respondents with severe gambling problems may be forced to curtail or reduce their use of psychoactive substances for health, economic or other reasons.

The linkage between gambling abuse and substance abuse may also be in part due to the manner in which certain individuals respond to stress and painful events. Gambling and gambling problems are related to having an urge to gamble as a means of coping with painful events. Problem gamblers are also the most likely to drink or use illicit drugs as a means of coping with painful events. However, it is the gamblers with moderate problems rather than those with the most severe problems who are most prone to drink or use illicit drugs as a coping mechanism. On the other hand, the more severe problem gamblers are more likely than moderately severe problem gamblers to have an urge to gamble in reaction to a painful event. This may explain in part why those with the most severe gambling problems have similar or lower rates of use for alcohol, tobacco and some illicit drugs when compared with those with less severe gambling problems.

Nonetheless, the overall pattern is that problem gamblers are more likely to be involved in the use of alcohol, tobacco and illicit drugs. There is also a strong relationship between gambling problems and reporting an alcohol or drug problem. Whereas 9% of non-problem gamblers felt that they had an alcohol or drug problem, the corresponding rate for those with the most severe problems was 24%. Therefore, one in four individuals with severe gambling problems also feel that they have an alcohol or drug problem. Gambling and substance abuse are clearly distinct phenomena – three-quarters of those with severe gambling problems do not report concurrent alcohol or drug problems. However, the finding that a substantial and disproportionate percentage of severe problem gamblers feel that they have an alcohol or drug problem highlights the

need to screen clients seeking treatment for alcohol or drug problems for gambling problems and to screen clients in gambling treatment programs for alcohol and drug problems.

Taken together, these findings have potentially important implications for interventions aimed at preventing or dealing with gambling problems in Ontario. First and foremost, it is found that there are a significant number of Ontarians who experience moderate or severe problems resulting from their gambling. If these findings are correct, counselling and other services are currently required for approximately 340,000 persons. If future surveys confirm that there is an upward trend in the number of problem gamblers, there will be a need for continued expansion of service provision.

This survey also has implications for the targeting of interventions. One of the surprising findings has been the relatively high rates of gambling problems among young adults. Those between the ages of 18 and 24 have high participation rates for most forms of gambling. Contrary to popular belief, they are even the most likely to gamble at bingo. Young adults are almost twice as likely as others to develop a moderate or severe gambling problem.

Elderly persons (age 60 or older) are less likely to engage in most forms of gambling and they have significantly lower rates of moderate or severe gambling problems. However, these findings should not be cause for complacency regarding the problems of gambling among the elderly. The findings indicate that there are still thousands of elderly Ontarians who experience significant gambling problems. While less common than among younger adults, gambling problems among the elderly are often exacerbated by social isolation and concurrent health problems. Furthermore, the values and gambling behaviour of succeeding generations of elderly persons may not be as restrained as the current generation.

The study also has implications for the study of underlying determinants of gambling problems. For example, a striking finding is that many Ontarians have mistaken

beliefs concerning randomness and probabilities while gambling, falsely thinking that the result of one event (e.g., a roll of the dice or spin of a roulette wheel) is influenced by prior events, or that they can increase their chances of winning by using a betting system. This points to the need for prevention programming that addresses such false beliefs and provides gamblers with valid information on their true chances of winning. A long-term strategy in this regard would be to enhance mathematical curricula in schools to include more practical examples of gambling situations as a means for teaching probability and statistics.

Finally, the finding that gambling problems and substance abuse are closely connected has implications for the detection of problems and the design of interventions. Clients in gambling counselling and treatment programs should be screened for alcohol and drug problems, and persons presenting with alcohol and drug problems should be screened for gambling problems. The potential for combined treatment of both gambling and substance abuse should be explored. In any case, it is likely that better results will occur if treatment specialists are aware of concurrent problems.

While the results of this study do have immediate implications for the targeting and design of interventions aimed at preventing or reducing gambling problems in Ontario, the real value of this study is that it provides baseline data for the evaluation of future trends. It is expected that these findings will be used in combination with those from future studies to establish trends in gambling behaviour and gambling problems, and to better understand the underlying determinants of gambling problems. The long-term goal is to develop a sufficient body of knowledge to facilitate ongoing assessment of the effectiveness of policies and programs aimed at preventing and dealing with gambling problems.

REFERENCES

- Cambell, C.S., & Lowman, J.** (eds.), 1988, *Gambling in Canada: Golden Goose or Trojan Horse?* A report from the First National Symposium on Lotteries and Gambling. Simon Fraser University, B.C.
- Canadian Gaming News**, April 2001, *CAW keeps the pressure building*.
- CFCG/Insight Canada**, 1993, *Prevalence of Problem & Pathological Gambling in Ontario Using the South Oaks Gambling Screen*. Ontario: Insight Canada Research.
- Culleton, R.P.**, 1989, The prevalence of pathological gambling: A look at methods. *Journals of Gambling Behaviour* 5(1): 22-41.
- Ferris, J. & Stirpe, T.**, 1995, *Gambling in Ontario: A Report from a General Population Survey on Gambling-Related Problems and Opinions*. Ontario: Addiction Research Foundation.
- Ferris, J., & Wynne, H.**, 2001, *The Canadian Problem Gambling Index: Final Report*. Canadian Centre on Substance Abuse.
- Fessler, J.**, 1996, Gambling away the golden years. *Wisconsin Medical Journal*, 95: 18-619.
- Gemini Research**, 1994, *Social Gaming and Problem Gambling in British Columbia*. Report to the British Columbia Lottery Corporation.
- Ladouceur, R.**, 1996, The prevalence of pathological gambling in Canada. *Journal of Gambling Studies* 12(2): 129-143.
- Shaffer, H., & Hall, M., & Vender Bilt, J.**, 1997, *Estimating the Prevalence of Disordered Gambling Behaviour in the United States and Canada: A Meta-analysis*. Boston, Massachusetts: Harvard Medical School Division on Addictions.

APPENDIX A
QUESTIONNAIRE

VIEWPOINTS RESEARCH (N = 5000)**LD CODE: 4350**

INTERVIEWER: _ _ _ _

PHONE: (_ _ _) - _ _ _ - _ _ _ _

GENDER: Male..... 1

Female 2

(1) Hi, my name is (first & last) and I'm calling from Viewpoints Research. We are a professional public opinion research company and today we're calling a random sample of 5,000 Ontario residents on behalf of the Canadian Centre on Substance Abuse and the Canadian Foundation on Compulsive Gambling. These two organizations are conducting a study on the gambling activities and attitudes of adult Ontarians and we would like to include your views. For the purposes of this study we would like to speak to the person living in your household who is 18 or over, and whose birthday will come next. Would that be you?

IF NO, ASK TO SPEAK TO THE PERSON WHO DOES MEET THE REQUIREMENTS. IF THE PERSON WHO MEETS THE REQUIREMENTS IS NOT AT HOME, ASK FOR ANY PERSON WHO IS 18 OR OVER. IF NO ONE PRESENTLY AT HOME QUALIFIES, ARRANGE A TIME TO CALL BACK.

(2) Some of the survey questions may be sensitive. The survey will ask you questions about:

- The types of gambling activities you participate in, and the amount of time and money spent on gambling
- Any problems you have experienced from your own or someone else's gambling
- Use of alcohol and other drugs
- Your background such as level of education, marital status
- Your general well-being

(3) The study will provide important information on the nature of gambling among Ontarians and related service needs. In order to provide more in-depth information on issues related to gambling, a small number of respondents (3%) will be contacted in a couple of months for another telephone interview. If you are one of the respondents who is contacted for another interview, you may choose not to participate at that time.

(4) If you want further information on this study, you may call a toll free number (1-888-391-1111).

(5) The survey will take approximately 20 minutes. You can quit the survey at any time, or refuse to answer any question. All of your answers will remain confidential; you will not be identified in any report that may arise from this study. Only the researchers on this project will have access to all of the information collected. If the data is shared with other researchers in the future, all identifiers would be removed.

(6) Would you be willing to participate?

DO NOT ASK Q1. START AT Q2.

Q1 In the past year, have you gambled, for example by buying a lottery or raffle ticket, betting on horse races or bingo, playing a slot machine or video lottery terminal in a casino or elsewhere, playing other games in a casino, betting on a sports event, playing cards or other games for money or bet on the Internet?

- Yes 1
 No 2 **GOTO Q964**
 Don't know 3
 Refused 4

Q2 In the past 12 months, how often did you spend money on Lottery tickets like the 649, Super 7, Pick 3 or POGO? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q6**
(DO NOT READ)
 I do not gamble 6 **GOTO Q6**
 Don't know 7
 Refused 8 **GOTO Q6**

Q3 On a typical occasion when you spend money on a lottery ticket, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- \$
 Don't know 2
 Refused 3

Q4 On a typical occasion when you spend money on a lottery ticket, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Wins \$
 Don't know 2
 Refused 3

Q5 On a typical occasion when you spend money on a lottery ticket, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Loses \$
 Don't know 2
 Refused 3

Q6 In the past 12 months, how often did you spend money on instant win or scratch tickets like break open, pull tab or Nevada strips? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q10**
(DO NOT READ)
 I do not gamble 6 **GOTO Q10**
 Don't know 7
 Refused 8 **GOTO Q10**

Q7 On a typical occasion when you spend money on such instant win or scratch tickets, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- \$
 Don't know 2
 Refused 3

Q8 On a typical occasion when you spend money on such instant win or scratch tickets, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Wins \$
 Don't know 2
 Refused 3

Q9 On a typical occasion when you spend money on such instant win or scratch tickets, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Loses \$
 Don't know 2
 Refused 3

Q10 In the past 12 months, how often did you bet or spend money on raffles or fundraising tickets? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q14**
(DO NOT READ)
 I do not gamble 6 **GOTO Q14**
 Don't know 7
 Refused 8 **GOTO Q14**

Q11 On a typical occasion when you spend money on raffles or fundraising tickets, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused3

Q12 On a typical occasion when you spend money on raffles or fundraising tickets, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____.....
 Don't know.....2
 Refused3

Q13 On a typical occasion when you spend money on raffles or fundraising tickets, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____.....
 Don't know.....2
 Refused3

Q14 In the past 12 months, how often did you bet or spend money on horse races (i.e. live at the track or off track)? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO Q18**
(DO NOT READ)
 I do not gamble6 **GOTO Q18**
 Don't know7
 Refused8 **GOTO Q18**

Q15 On a typical occasion when you spend money on horse races, how much money do you risk (not including winnings)? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused3

Q16 On a typical occasion when you spend money on horse races, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____.....
 Don't know.....2
 Refused3

Q17 On a typical occasion when you spend money on horse races, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____.....
 Don't know.....2
 Refused3

Q18 In the past 12 months, how often did you bet or spend money on bingo? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO PREAMBLE BEFORE Q22**

(DO NOT READ)

I do not gamble.....6 **GOTO PREAMBLE BEFORE Q22**
 Don't know.....7
 Refused8 **GOTO PREAMBLE BEFORE Q22**

Q19 On a typical occasion when you spend money on bingo, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____...
 Don't know.....2
 Refused3

Q20 On a typical occasion when you spend money on bingo, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____...
 Don't know.....2
 Refused3

Q21 On a typical occasion when you spend money on bingo, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____...
 Don't know.....2
 Refused3

I would like to ask you whether you have bet on coin slot machines or other electronic gambling machines such as video lottery terminals in casinos. Video Lottery Terminals or "VLTs" refer to gambling machines where coins are not dispersed.

Q22 In the past 12 months, how often did you bet or spend money on coin slot machines or video lottery terminals in a casino? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q26**
(DO NOT READ)
 I do not gamble 6 **GOTO Q26**
 Don't know 7
 Refused 8 **GOTO Q26**

Q23 On a typical occasion when you spend money on coin slot machines or video lottery terminals in a casino, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- \$
 Don't know 2
 Refused 3

Q24 On a typical occasion when you spend money on coin slot machines or video lottery terminals in a casino, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Wins \$
 Don't know 2
 Refused 3

Q25 On a typical occasion when you spend money on coin slot machines or video lottery terminals in a casino, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Loses \$
 Don't know 2
 Refused 3

Q26 In the past 12 months, how often did you bet or spend money on games other than slot machines in a casino such as poker, blackjack, roulette or keno? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q30**
(DO NOT READ)
 I do not gamble 6 **GOTO Q30**
 Don't know 7
 Refused 8 **GOTO Q30**

Q27 On a typical occasion when you spend money on games other than slot machines in a casino such as poker, blackjack, roulette or keno, how much money do you spend, not

including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused.....3

Q28 On a typical occasion when you spend money on games other than slot machines in a casino such as poker, blackjack, roulette or keno, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____
 Don't know.....2
 Refused.....3

Q29 On a typical occasion when you spend money on games other than slot machines in a casino such as poker, blackjack, roulette or keno, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____
 Don't know.....2
 Refused.....3

Q30 In the past 12 months, how often did you bet or spend money on coin slot machines or video lottery terminals other than at casinos? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO Q34**
(DO NOT READ)
 I do not gamble6 **GOTO Q34**
 Don't know.....7
 Refused8 **GOTO Q34**

Q31 On a typical occasion when you spend money on coin slot machines or video lottery terminals other than at casinos, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused.....3

Q32 On a typical occasion when you spend money on coin slot machines or video lottery terminals **other than at casinos**, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____
 Don't know.....2
 Refused.....3

Q33 On a typical occasion when you spend money on coin slot machines or video lottery terminals **other than at casinos**, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$
 Don't know.....2
 Refused3

Q34 In the past 12 months, how often did you bet or spend money on Sport Select (e.g Pro Line, Over/Under, Point Spread)? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO Q38**
(DO NOT READ)
 I do not gamble6 **GOTO Q38**
 Don't know.....7
 Refused8 **GOTO Q38**

Q35 On a typical occasion when you spend money on Sport Select (e.g Pro Line, Over/Under, Point Spread), how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$
 Don't know.....2
 Refused3

Q36 On a typical occasion when you spend money on Sport Select (e.g Pro Line, Over/Under, Point Spread), how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$
 Don't know.....2
 Refused3

Q37 On a typical occasion when you spend money on Sport Select (e.g Pro Line, Over/Under, Point Spread), how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$
 Don't know.....2
 Refused3

Q38 In the past 12 months, how often did you bet or spend money on sports pools or the outcome of sporting events? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q42**
(DO NOT READ)
 I do not gamble 6 **GOTO Q42**
 Don't know 7
 Refused 8 **GOTO Q42**

Q39 On a typical occasion when you spend money on sports pools or the outcome of sporting events, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- \$
 Don't know 2
 Refused 3

Q40 On a typical occasion when you spend money on sports pools or the outcome of sporting events, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Wins \$
 Don't know 2
 Refused 3

Q41 On a typical occasion when you spend money on sports pools or the outcome of sporting events, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Loses \$
 Don't know 2
 Refused 3

Q42 In the past 12 months, how often did you bet or spend money on cards or board games anywhere other than at casinos (at home, friends' homes, work, card rooms, etc.)? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q46**
(DO NOT READ)
 I do not gamble 6 **GOTO Q46**
 Don't know 7
 Refused 8 **GOTO Q46**

Q43 On a typical occasion when you spend money on cards or board games anywhere other than at casinos (at home, friends' homes, work, card rooms, etc.), how much money do

you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused.....3

Q44 On a typical occasion when you spend money on cards or board games anywhere other than at casinos (at home, friends' homes, work, card rooms, etc.), how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____.....
 Don't know.....2
 Refused.....3

Q45 On a typical occasion when you spend money on cards or board games anywhere other than at casinos (at home, friends' homes, work, card rooms, etc.), how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Losses \$ _____.....
 Don't know.....2
 Refused.....3

Q46 In the past 12 months, how often did you bet or spend money on games of skill such as pool, bowling or darts? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO Q50**
(DO NOT READ)
 I do not gamble6 **GOTO Q50**
 Don't know.....7
 Refused8 **GOTO Q50**

Q47 On a typical occasion when you spend money on games of skill such as pool, bowling or darts, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused.....3

Q48 On a typical occasion when you spend money on games of skill such as pool, bowling or darts, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____.....
 Don't know.....2
 Refused.....3

Q49 On a typical occasion when you spend money on games of skill such as pool, bowling or darts, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____.....
 Don't know.....2
 Refused3

Q50 In the past 12 months, how often did you bet or spend money on arcade or video games? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO Q54**
(DO NOT READ)
 I do not gamble6 **GOTO Q54**
 Don't know.....7
 Refused8 **GOTO Q54**

Q51 On a typical occasion when you spend money on arcade or video games, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____...
 Don't know.....2
 Refused3

Q52 On a typical occasion when you spend money on arcade or video games, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____.....
 Don't know.....2
 Refused3

Q53 On a typical occasion when you spend money on arcade or video games, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____.....
 Don't know.....2
 Refused3

Q54 In the past 12 months, how often did you bet or spend money gambling on the Internet? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q58**
(DO NOT READ)
 I do not gamble 6 **GOTO Q58**
 Don't know 7
 Refused 8 **GOTO Q58**

Q55 On a typical occasion when you spend money gambling on the Internet, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- \$
 Don't know 2
 Refused 3

Q56 On a typical occasion when you spend money gambling on the Internet, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Wins \$
 Don't know 2
 Refused 3

Q57 On a typical occasion when you spend money gambling on the Internet, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

- Loses \$
 Don't know 2
 Refused 3

Q58 In the past 12 months, how often did you bet or spend money gambling on sports with a bookie? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

- Daily 1
 At least once a week 2
 At least once a month 3
 Less than once a month 4
 Never 5 **GOTO Q62**
(DO NOT READ)
 I do not gamble 6 **GOTO Q62**
 Don't know 7
 Refused 8 **GOTO Q62**

Q59 On a typical occasion when you spend money gambling on sports with a bookie, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused3

Q60 On a typical occasion when you spend money gambling on sports with a bookie, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____.....
 Don't know.....2
 Refused3

Q61 On a typical occasion when you spend money gambling on sports with a bookie, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____.....
 Don't know.....2
 Refused3

Q62 In the past 12 months, how often have you made short-term speculative stock or commodity purchases such as day trading, not including long-term investments such as mutual funds or RRSPs? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO Q66**
(DO NOT READ)
 I do not gamble6 **GOTO Q66**
 Don't know.....7
 Refused8 **GOTO Q66**

Q63 On a typical occasion when you spend money on short-term speculative stock or commodity purchases, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know.....2
 Refused3

Q64 On a typical occasion when you spend money on short-term speculative stock or commodity purchases, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____.....
 Don't know.....2
 Refused3

Q65 On a typical occasion when you spend money on short-term speculative stock or commodity purchases, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$
 Don't know.....2
 Refused3

Q66 In the past 12 months, how often did you bet or spend money gambling in casinos out of province (e.g. at Las Vegas or Atlantic City or casinos in other Canadian provinces)? Would you say daily, at least once a week (but not daily), at least once a month (but not weekly), less than once a month or never?

Daily1
 At least once a week2
 At least once a month3
 Less than once a month4
 Never5 **GOTO Q70**
(DO NOT READ)
 I do not gamble6 **GOTO Q70**
 Don't know.....7
 Refused8 **GOTO Q70**

Q67 On a typical occasion when you spend money gambling in casinos out of province, how much money do you spend, not including winnings? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

\$
 Don't know.....2
 Refused3

Q68 On a typical occasion when you spend money gambling in casinos out of province, how much money do you win? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$
 Don't know.....2
 Refused3

Q69 On a typical occasion when you spend money gambling in casinos out of province, how much money do you lose? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$
 Don't know.....2
 Refused3

IF NEVER TO ALL GAMBLING OR SAID DO NOT GAMBLE TWICE GOTO Q94
--

Q70 On average, how many hours or minutes do you normally spend each month on all of these gambling activities? Please give the total amount of time spent on gambling in an average month. **IF ONLY MINUTES, ENTER 0 FOR HOURS.**

Hours _____
 Minutes _____
 More than 8 hours 3
 Don't know 4
 Refused 5

Q71 What, if any, are some of the benefits you receive from gambling? **(READ CATEGORIES, CHECK ALL THAT APPLY)**

It's an opportunity to socialize 01
 I get to be around others, decreased isolation 02
 I can forget about my problems 03
 It's exciting, it's fun 04
 It decreases my boredom 05
 I can win money 06
 Other (**specify below**) 07
(DO NOT READ)
 None 08
 Don't know 09
 Refused 10

Q72 In the past 12 months, how much money have you spent on any type of gambling, not including winnings? **(ENTER NUMBER OF DOLLARS). ROUND UP TO NEAREST DOLLAR.**

\$ _____ ...
 Don't know 2
 Refused 3

Q73 In the past 12 months, how much money have you won on all types of gambling? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Wins \$ _____
 Don't know 2
 Refused 3

Q74 In the past 12 months, how much money have you lost on all types of gambling? **ENTER NUMBER OF DOLLARS. ROUND UP TO NEAREST DOLLAR.**

Loses \$ _____
 Don't know 2
 Refused 3

Some of the next questions may not apply to you, but please try to be as accurate as possible. Thinking about the last 12 months, would you say you never, sometimes, most of the time or almost always ... **ROTATE**.

		Never	Some- times	Most of the time	Almost always	DK	REF
Q75	Bet more than you could really afford to lose?	1	2	3	4	5	6
Q76	Need to gamble with larger amounts of money to get the same feeling of excitement?	1	2	3	4	5	6
Q77	Go back another day to try to win back the money you lost?	1	2	3	4	5	6
Q78	Borrow money or sold anything to get money to gamble?	1	2	3	4	5	6
Q79	Feel that you might have a problem with gambling?	1	2	3	4	5	6
Q80	Feel gambling has caused you any health problems, including stress or anxiety?	1	2	3	4	5	6
Q81	Have people criticizing your betting or telling you that you have a gambling problem, regardless of whether or not you think it is true?	1	2	3	4	5	6
Q82	Feel your gambling has caused financial problems for you or your household?	1	2	3	4	5	6
Q83	Feel guilty about the way you gamble or what happens when you gamble?	1	2	3	4	5	6

Next, we explore some of your beliefs about gambling, as well as any early experiences you have had with gambling or betting money. For each of the following, please tell me if you strongly agree, agree, disagree or strongly disagree? **ROTATE**.

		Str Agree	Agree	Dis- agree	Str Dis- agree	DK	REF
Q84	After losing many times in a row, you are more likely to win. Do you strongly agree, agree, disagree or strongly disagree?	1	2	3	4	5	6
Q85	You could win more if you used a certain system or strategy.	1	2	3	4	5	6
Q86	Do you remember a big win when you first started gambling?						
	Yes.....	1					
	No	2					
	Don't know.....	3					
	Refused	4					

Q87 What, if any, are some of the problems you have experienced from gambling? **READ CATEGORIES AND CHECK ALL THAT APPLY**

- Income loss / debt 1
 - Relationship problems 2
 - Health problems 3
 - Work problems 4
 - Loneliness / increased isolation 5
 - Other (**specify below**) 6
 - (DO NOT READ)**
 - None 7
 - Don't know 8
 - Refused 9
-

Q88 Do you remember a big loss when you first started gambling?

- Yes 1
- No 2
- Don't know 3
- Refused 4

Q89 In the last 12 months, have you used alcohol or drugs while gambling?

- Yes 1
- No 2
- Don't know 3
- Refused 4

Q90 In the last 12 months, have you gambled while drunk or high?

- Yes 1
- No 2
- Don't know 3
- Refused 4

Q91 Have you ever engaged in petty crime or other criminal activities to support your gambling?

- Yes 1
- No 2
- Don't know 3
- Refused 4

Q92 In the last 12 months, if something painful happened in your life, did you have the urge to gamble?

- Yes (did gamble, had the urge to gamble) 1
- No 2
- Nothing painful has happened 3
- Don't know 4
- Refused 5

- Q93 Have you seriously thought about or attempted suicide as a result of your gambling?
- Yes 1
- No 2
- Don't know..... 3
- Refused 4

RESUME FOR NON GAMBLERS. GAMBLERS CONTINUE

- Q94 Have you been to a casino in the last year?
- Yes 1
- No 2 **GOTO Q96**
- Don't know..... 3 **GOTO Q96**
- Refused 4 **GOTO Q96**

- Q95 And what are the main reasons you go to a casino? **READ LIST. CIRCLE ALL MENTIONS.**

- Enjoyment of gambling 1
- To win money 2
- To watch others gamble..... 3
- Musical entertainment and shows 4
- To drink alcohol 5
- Other (**specify below**)..... 6
- (DO NOT READ)**
- Don't know..... 7
- Refused 8

-
- Q96 Has anyone in your family ever had a gambling problem?

- Yes 1
- No 2
- Don't know..... 3
- Refused 4

- Q97 I'd like to ask you some questions about cigarette smoking. Have you ever smoked cigarettes?

- Yes 1
- No 2 **GOTO Q101**
- Don't know..... 3 **GOTO Q101**
- Refused 4 **GOTO Q101**

- Q98 At the present time, do you smoke cigarettes daily, occasionally or not at all?

- Daily 1
- Occasionally 2
- Not at all 3 **GOTO Q101**
- Don't know..... 4 **GOTO Q101**
- Refused 5 **GOTO Q101**

Q99 Have you smoked at least 100 cigarettes in your life?

- Yes 1
- No 2
- Don't know..... 3
- Refused 4

Q100 How many cigarettes do you usually smoke each day? (One pack = 25 cigarettes, 1 small pack=20 cigarettes.)

- Less than one a day..... 1
- Enter number of cigarettes/ day 2
- Don't know..... 3
- Refused 4

Q101 Now I would like to ask you some questions about drinking alcohol. In these questions, when we use the word “drink” it means one 12 ounce bottle of beer or glass of draft, one five once glass of wine or one straight or mixed drink with one and a half ounces of hard liquor. During the past 12 months, have you had a drink of any alcoholic beverage?

- Yes 1 **GOTO Q103**
- No 2
- Don't know..... 3
- Refused 4 **GOTO Q103**

Q102 Did you ever have a drink of any alcoholic beverage?

- Yes 1 **GOTO Q106**
- No 2 **GOTO Q106**
- Don't know..... 3 **GOTO Q106**
- Refused 4 **GOTO Q106**

Q103 How often, if ever, did you drink alcoholic beverages during the past twelve months: Would you say it was more than once a day, about every day, four to five times a week, two to three times a week, once a week, two to three times a month, once a month or less than once a month?

- More than once a day 01
- About everyday 02
- 4 to 5 times a week 03
- 2 to 3 times a week 04
- Once a week 05
- 2 to 3 times a month 06
- Once a month..... 07
- Less than once a month 08
- Don't know..... 09
- Refused 10

Q104 On those days when you drank, approximately how many drinks did you have?

- Number of drinks/ day 1
- Don't know..... 2
- Refused 3

Q105 About how often during the past twelve months would you say you had five or more drinks at the same sitting or occasion: Would you say it was everyday, about everyday, 3 or 4 times a week, once or twice a week, 2 or 3 times a month, about once a month, 6 to 11 times a year, 1 to 5 times a year or never in the past year?

- Everyday.....01
- About everyday02
- 3 or 4 times a week.....03
- Once or twice a week04
- 2 or 3 times a month.....05
- About once a month.....06
- 6 to 11 times a year.....07
- 1 to 5 times a year.....08
- Never in the past year09
- Don't know.....10
- Refused.....11

Q106 Some people use marijuana or hash in private, with friends or in other situations. Have you ever in your lifetime used marijuana or hash?

- Yes.....1
- No2 **GOTO Q109**
- Don't know.....3 **GOTO Q109**
- Refused.....4 **GOTO Q109**

Q107 Have you used marijuana or hash in the past twelve months?

- Yes.....1
- No2 **GOTO Q109**
- Don't know.....3 **GOTO Q109**
- Refused.....4 **GOTO Q109**

Q108 How many times, if any, have you used marijuana or hash during the past twelve months: would you say more than once a day, about everyday, four to five times a week, two to three times a week, once a week, two to three times a month, once a month, less than once a month or never?

- More than once a day01
- About everyday02
- 4 to 5 times a week03
- 2 to 3 times a week04
- Once a week05
- 2 to 3 times a month06
- Once a month.....07
- Less than once a month08
- Never09
- Don't know.....10
- Refused.....11

Q109 Some people use cocaine in private, with friends or in other situations. Have you ever in your lifetime used cocaine?

Yes	1	
No	2	GOTO Q112
Don't know.....	3	GOTO Q112
Refused	4	GOTO Q112

Q110 Have you used cocaine in the past twelve months?

Yes	1	
No	2	GOTO Q112
Don't know.....	3	GOTO Q112
Refused	4	GOTO Q112

Q111 How many times, if any, have you used cocaine during the past twelve months: would you say more than once a day, about everyday, four to five times a week, two to three times a week, once a week, two to three times a month, once a month, less than once a month or never?

More than once a day	01
About everyday	02
4 to 5 times a week	03
2 to 3 times a week	04
Once a week	05
2 to 3 times a month	06
Once a month.....	07
Less than once a month	08
Never	09
Don't know.....	10
Refused	11

Q112 Some people use the drug MDMA, more commonly known as “Ecstasy”. Have you ever in your lifetime used the drug MDMA, more commonly known as “Ecstasy”?

Yes	1	
No	2	GOTO Q115
Don't know.....	3	GOTO Q115
Refused	4	GOTO Q115

Q113 Have you used the drug MDMA, more commonly known as “Ecstasy” in the past twelve months?

Yes	1	
No	2	GOTO Q115
Don't know.....	3	GOTO Q115
Refused	4	GOTO Q115

Q114 How many times, if any, have you used the drug MDMA, more commonly known as “Ecstasy” during the past twelve months: would you say more than once a day, about everyday, four to five times a week, two to three times a week, once a week, two to three times a month, once a month, less than once a month or never?

More than once a day	01
About everyday	02
4 to 5 times a week	03
2 to 3 times a week	04
Once a week	05
2 to 3 times a month	06
Once a month.....	07
Less than once a month	08
Never	09
Don't know.....	10
Refused	11

Q115 Some people use heroin, LSD or other psychodelics. Have you ever in your lifetime used heroin, LSD or other psychodelics?

Yes.....	1	
No	2	GOTO Q118
Don't know.....	3	GOTO Q118
Refused	4	GOTO Q118

Q116 Have you used heroin, LSD or other psychodelics in the past twelve months?

Yes.....	1	
No	2	GOTO Q118
Don't know.....	3	GOTO Q118
Refused	4	GOTO Q118

Q117 How many times, if any, have you used heroin, LSD or other psychodelics during the past twelve months: would you say more than once a day, about everyday, four to five times a week, two to three times a week, once a week, two to three times a month, once a month, less than once a month or never?

More than once a day	01
About everyday	02
4 to 5 times a week	03
2 to 3 times a week	04
Once a week	05
2 to 3 times a month	06
Once a month.....	07
Less than once a month	08
Never	09
Don't know.....	10
Refused	11

Q118 Has anyone in your family ever had an alcohol or drug problem?

Yes.....	1
No	2
Don't know.....	3
Refused	4

Q119 Have you ever felt you might have an alcohol or drug problem?

- Yes 1
- No 2
- Don't know..... 3
- Refused 4

Q120 If you or someone close to you had a gambling problem, who might you go to for help? **READ CATEGORIES AND CIRCLE ALL THAT APPLY**

- Family 01
- Friend..... 02
- Family doctor..... 03
- Minister / priest / rabbi 04
- Social worker / psychologist / psychiatrist 05
- Gambling counselor..... 06
- Other 07

(DO NOT READ)

- No one 08
- Don't know..... 09
- Refused 10

Q121 Are you aware that there is a toll free gambling help line in Ontario?

- Yes 1
- No 2
- Don't know..... 3
- Refused 4

Q122 To your knowledge, are there gambling counseling services available in your community?

- Yes 1
- No 2
- Don't know..... 3
- Refused 4

Q123 How would you rate your current health status. **READ RESPONSES**

- Very good 1
- Good 2
- Fair..... 3
- Poor..... 4
- Very poor 5

(DO NOT READ)

- Other (**specify below**)..... 6
 - Don't know..... 7
 - Refused 8
-

Q124 In the past 12 months, if something painful happened in your life, did you have the urge to have a drink of alcohol?

- Yes (did have a drink, had an urge to drink) 1
- No 2
- Nothing painful has happened 3
- Don't know 4
- Refused 5

Q125 In the past 12 months, if something painful happened in your life, did you have the urge to use drugs or medication?

- Yes (did use/ had an urge to use drugs/ medication) 1
- No 2
- Nothing painful has happened 3
- Don't know 4
- Refused 5

Q126 In the past 12 months, have you been under a doctor's care because of physical or emotional problems brought on by stress?

- Yes 1
- No 2
- Don't know 3
- Refused 4

Q127 In the past 12 months, have you felt seriously depressed?

- Yes 1
- No 2
- Don't know 3
- Refused 4

Q128 Have you ever experienced problems as a result of someone else's gambling?

- Yes 1
- No 2
- Don't know 3
- Refused 4

Q129 How many people, if any, could you turn to for support or help if you had a serious personal problem? **ENTER NUMBER OF PEOPLE**

- Number of people _____ 1
- Don't know 2
- Refused 3

Finally, we would like to ask you some basic demographic questions. Like all your other answers, this information will be kept strictly confidential.

Z1 **RECORD GENDER (DO NOT READ)**

- Male 1
- Female 2

Z2 In what year were you born? **ENTER THE YEAR**

___ ___ ___ (before 1981)	1	GOTO Z4
1981 and after	2	GOTO Z4
Don't know.....	3	
Refused.....	4	

Z3 Instead of giving us your exact year of birth, could you please tell us to which of the following age categories you belong? **READ LIST.**

IF RESPONDENT STILL DK/ REFUSES: I understand that your age is a private matter, but could you tell me if you are 60 years or older, or if you are younger than 60. **IF SAYS 60 OR OLDER CODE AS A '5'. IF SAYS UNDER 60, CODE AS '8'.**

18 to 24.....	1
25 to 34.....	2
35 to 49.....	3
50 to 59.....	4
60 or over.....	5
Don't know.....	6
Refused	7
Under 60	8

Z4 Currently are you married, living with a partner, widowed, divorced, separated or have you never been married?

Married (incl widowed and divorced who remarried).....	1
Living with a partner	2
Widowed (not remarried)	3
Divorced or separated (not remarried)	4
Single, never married.....	5
Don't know.....	6
Refused	7

Z5 To what ethnic or cultural group did you or your ancestors belong on first coming to this country? **IF RESPONDENT IS NOT CLEAR SAY "Are you Scottish, Chinese, Greek or something else?" IF RESPONDENT SAYS CANADIAN ASK "In addition to being Canadian, to what ethnic or cultural group did you or your ancestors belong on first coming to this country?" CIRCLE ALL THAT APPLY.**

Native Indian, Inuit.....	01
Australian	02
Austrian	03
Bahamian.....	04
Bangladeshi	05
Black / African	06
Dutch / Netherlands / Holland.....	07
English / British.....	08
Canadian	09
Chilean.....	10
Chinese	11

Croatian	12
Czech	13
Danish	14
East Indian	15
El Salvadorian	16
Ethiopian	17
Finnish	18
French	19
German	20
Greek	21
Guyanese	22
Haitian	23
Hungarian	24
Inuit	25
Irish	26
Israeli	27
Italian	28
Jamaican	29
Japanese	30
Jewish	31
Korean	32
Lebanese	33
Macedonian	34
Metis	35
New Zealander	36
Nigerian	37
Norwegian	38
Pakistani	39
Philipino	40
Polish	41
Portugese	42
Russian	43
Scottish	44
Serbian	45
Sikh	46
Slovakian	47
Somalian	48
Spanish	49
Sri Lankan	50
Swedish	51
Tamil	52
Trinidadian	53
Ukrainian	54
Vietnamese	55
Welsh	56
Yugoslavian	57

Other (specify below).....	58
Don't know	59
Refused	60

Z6 What is the highest level of education you have completed?

Some high school / junior high or less	1
Completed high school	2
Some post secondary school.....	3
Completed post secondary school	4
Completed post graduate education.....	5
Don't know.....	6
Refused	7

Z7 What is your present job status? Are you employed full time, employed part time, unemployed, a student, retired or a homemaker? **IF RESPONDENT GIVES MORE THAN ONE ANSWER, RECORD THE ONE THAT APPEARS FIRST ON THE LIST.**

Employed full time (30 or more hrs/wk)	01	
Employed part time (less than 30 hrs/wk).....	02	
Unemployed	03	
Student – employed part or full time	04	
Student – not employed	05	
Retired	06	GO TO Z9
Homemaker	07	GO TO Z9
Other (specify).....	08	GO TO Z9
Don't know.....	09	GO TO Z9
Refused	10	GO TO Z9

Z8 What type of work do you currently do (or do you do when you are employed)? Job title.

Z9 Could you please tell me how much income you and other members of your household received in the year ending December 31st 1999. Please include income from all sources such as savings, pensions, rent and employment insurance as well as wages? We don't need the exact amount: could you tell me which of these broad categories it falls into.. **READ LIST.**

Less than \$20,000	01
Less than \$30,000	02
Less than \$40,000	03
Less than \$50,000	04
Less than \$60,000	05
Less than \$70,000	06
Less than \$80,000	07
Less than \$90,000	08
Less than \$100,000	09
Less than \$120,000	10
Less than \$150,000	11
\$150,000 or more.....	12
Don't know / Refused	13

Z10 How many people under the age of 18 live with you?

None	01
One	02
Two.....	03
Three.....	04
Four.....	05
Five	06
Six.....	07
Seven or more.....	08
Don't know.....	09
Refused	10

Z11 Can I just confirm that the first three digits of your postal code are ____ ____ ____

Z12 How important is religion in your life? Would you say it is very important, somewhat important, not very important or not important at all?

Very important.....	1
Somewhat important.....	2
Not very important	3
Not at all important.....	4
Don't know.....	5
Refused	6

Z13 We hope to speak to some people again. May we call you for a short follow up?

Yes.....	1	
No	2	GOTO Z15
Don't know / Refused	3	GOTO Z15

Z14 (IF YES) Can I have your first name or initials so that I make sure that it is you I speak to when I call back?

Z15 May I just confirm that your phone number is **(READ NUMBER DIALED)**
(_ _ _) _ _ _ - _ _ _ _ _

I'd like to thank-you for taking the time to participate in this survey and to advise you that my supervisor may be calling you later to verify your participation.

Endnotes:

¹ Net profit is defined as gross profit (total drop, wager or sales minus prizes) minus operating costs and commissions.

² Of the total sample, 369 individuals stated twice that they did not gamble and therefore were not asked the nine scored CPGI items. However, further analysis showed that they had indeed gambled on at least one activity in the year prior to the study. As such, they could not be classified as non-gamblers, but they also could not be classified according to a gambling level, as they were not presented with the scored questions. Therefore, analyses that examine general gambling activities among Ontarians are based on a sample size of 5,000. Analyses that examine characteristics associated with gambling level are based on a sample size of 4,631.

³ The term “bookie” generally refers to a person who takes bets illegally for commercial gain.

⁴ Nine gamblers who claimed to be non-gamblers visited a casino “to win money” in the past year. This discrepancy either indicates a response error, or an error in the way that non-gamblers were categorized.