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**SOCIAL GAMING AND
PROBLEM GAMBLING
IN BRITISH COLUMBIA**

**Report To The
British Columbia Lottery Corporation**

Gemini Research

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* Note: Alberta results should be regarded as confidential until their public release

EXECUTIVE SUMMARY

Background & Objectives

As part of its research program to monitor the role of gambling in the life of the province, the British Columbia Lottery Corporation initiated and funded a survey program to investigate public attitudes toward social gaming and identify the perceived and actual extent of problem gambling.

The Social Gaming Survey was conducted by the Angus Reid Group to investigate the following areas:

- Public perceptions of problem gambling;
- Attitudes toward principal social gaming institutions (lotteries, bingo, casinos and horse tracks) and their relationships to problem gambling.

The Problem Gambling Survey was undertaken jointly by Gemini Research and the Angus Reid Group. The survey was designed in consultation with a planning committee representing the B.C. Lottery Corporation, the Public Gaming Branch of the Ministry of the Attorney General, and interested members of the academic and professional community. The survey had the following goals:

- Develop precise survey estimates of the prevalence of problem gambling in the adult population of British Columbia;
- Establish benchmark prevalence levels for comparing with other jurisdictions and over time;
- Identify the demographic, social and behavioural characteristics of problem gamblers;
- Survey public awareness of treatment alternatives for pathological gamblers.

Methods

Social Gaming

The survey was conducted among a representative sample of 1200 British Columbia adults using random digit telephone interview procedures. Interviewing took place between July 15 and August 13, 1993. The average interview lasted 27 minutes and included the following topics:

- Nature of problem gambling;
- Personal knowledge of problem gambling incidents;
- Estimates of proportions of players with gambling problems for lotteries, casinos, bingo and horse track betting.

Problem Gambling

The survey was conducted among a representative sample of 1200 adults using random digit telephone interview procedures. Interviewing was conducted between October 15 and November 1, 1993 by professional interviewers at the Angus Reid Group. The average interview lasted 29 minutes and covered the following topics:

- Lifetime and current gambling behaviour;
- Responses to the revised South Oaks Gambling Screen (SOGS-R), a survey tool designed to identify individuals with gambling problems;
- demographic and lifestyle indicators;
- awareness of treatment alternatives for gamblers in the province.

Summary of Key Findings

Gambling experience of some form is almost universal among the adult population of British Columbia:

- 97% of adults at some time have participated in a gambling or wagering activity, ranging from charity raffles, lotteries, or card games to bingo, horsetrack betting or casino games;
- Nearly two out of three British Columbians currently participate in some form of gambling on a weekly basis;
- Casino games account for the largest share of gambling expenditures, reflecting large sums spent by a small segment of the population; lottery games are second in overall spending as a result of small expenditures by a large proportion of the populace.

Responses to SOGS-R items pertaining to past year gambling problems reveals a current overall prevalence rate of 3.5% in the province: 2.4% of the population is currently in the problem gambling category while 1.8% fall in the probable pathological category.

Survey responses to the lifetime SOGS-R items indicate that 7.8% of British Columbians have experienced a gambling problem during their lifetime: 6.0% can be classified as problem gamblers, while 1.8% score high enough to be classified as probable pathological gamblers.

The survey estimates of problem gambling prevalence in British Columbia are lower than unreleased survey estimates for Alberta but higher than previous survey estimates in Washington State.

- Differences between B.C. and Alberta are most pronounced for current problem and probable pathological gambling (3.5% in B.C. versus 5.4% in Alberta).
- B.C. and Alberta also differ substantially in the proportion of lifetime problem gamblers who report no current problems - 57% of lifetime problem gamblers in B.C. report no past year gambling problems compared to only 36% in Alberta.

The Social Gaming Survey revealed that problem gambling is an issue of some concern in the province:

- British Columbians are most likely to think of problem gambling in terms of an addiction or disease; their second most likely consideration involves the financial consequences for losing gamblers;
- Approximately one in five adults have personal knowledge of a problem gambling incident among their friends, family or acquaintances;
- The respondents in the Social Gaming Survey did not differentiate between lotteries and other forms of gaming (bingo, casino, horse betting) in terms of their association with problem gambling; nearly a third of respondents estimated that over 10% of players in each gaming category are addicted or spend excessively.

In contrast to the public perceptions identified in the Social Gaming Survey, the Problem Gambling Survey found a substantial degree of variation between different gaming activities and their association with problem gambling:

- Lottery players do not differ greatly from the population at large in terms of problem gambling prevalence;
- Bingo players and casino players have the highest prevalence rates of gambling problems, followed by horse track bettors.

Problem gamblers in British Columbia differ significantly from social gamblers in their gambling behaviours:

- While problem gamblers are not significantly more likely to be regular players of lottery games such as 6/49, they are more likely to be regular Scratch & Win players, sports bettors, and bingo or card players; problem gamblers are also more likely to buy break-opens, raffle tickets or bet on games of skill.
- Problem gamblers show dramatically higher reported expenditures on a number of gambling activities, especially resort casinos, local casinos, horsetrack betting, bingo playing, and sports wagering.

Problem gamblers also show significant differences from the general population in their demographic traits:

- Problem gamblers are much more likely than the general population to be under 30 years of age.
- Problem gamblers in B.C. are significantly more likely to be of non-European ancestry.
- Problem gamblers are somewhat more likely to be unmarried and/or unemployed than the general population in the province.

Implications

Combining the present survey results with the most recent census data, we estimate there are between 12,700 and 42,100 current probable pathological gamblers in British Columbia; assuming that half of these eventually seek assistance, treatment will need to be provided for a minimum of 6,000 cases.

Bingo, casino and horse track bettors represent the most at risk gaming segments for problem gambling behaviours.

INTRODUCTION: THE SOCIAL COSTS OF PROBLEM GAMBLING

Definition of Problem and Pathological Gambling

Most people are social gamblers. They gamble for entertainment and typically do not risk more than they can afford to lose. If they should "chase" their losses to get even, they do so briefly; there is none of the long-term chasing or progression of the pathological gambler.

A variety of terms have been used to describe people whose gambling causes problems in their personal and vocational lives. The term typically employed by lay audiences is *compulsive gambler*. However, the term *compulsive* implies that the individual is engaged in an activity that is not enjoyable. Since, at least initially, gambling can be quite enjoyable even for those who later develop problems, the term *compulsive gambling* is considered something of a misnomer (Moran 1970).

The term *problem gambling* is used by many lay and professional audiences to indicate all of the patterns of gambling behaviour that compromise, disrupt or damage personal, family or vocational pursuits and is intended to include *pathological gambling* as one end of a continuum of gambling involvement (Lesieur & Rosenthal 1991). Among British and Australian researchers and treatment professionals, the term *excessive gambling* is preferred and is also intended to encompass degrees along a continuum of gambling involvement (Dickerson 1993).

Recent changes have been made to the psychiatric criteria for pathological gambling in order to incorporate empirical research that links pathological gambling to other addictive disorders like alcohol and drug dependence. *The essential features of the pathological gambling are a continuous or periodic loss of control over gambling; a progression, in frequency and in amount wagered, in the preoccupation with gambling and in obtaining monies with which to gamble; and a continuation of the behaviour despite adverse consequences* (American Psychiatric Association, in press). This is essentially the definition of an addiction.

The latest diagnostic criteria require an individual to meet five of ten criteria to be diagnosed as a pathological gambler: progression and preoccupation, tolerance, withdrawal, loss of control, escape, chasing, lies and deception, family and job disruption, financial bailout and illegal acts (Lesieur & Rosenthal 1991).

The Costs of Pathological Gambling

There are few systematic studies of the financial or social impact of pathological gambling in North America. However, based on what is known about pathological gamblers in treatment and/or attending Gamblers Anonymous, the following statements can be made:

Cost to the Individual. By the time he or she seeks treatment, a pathological gambler has incurred substantial financial debts and, as a result, has often withdrawn from work activities as well as from family and social life. As these relationships and activities deteriorate, there is a depression secondary to the guilt, shame, and helplessness over mounting problems. One out of five pathological gamblers attempts suicide (Custer & Custer 1978; Lesieur & Blume 1991; Livingston 1974; McCormick et al 1984; Moran 1969). This rate is higher than that for other addictive disorders and second only to rates for certain depressive conditions, schizophrenia, and a few hereditary neurological disorders.

There may be an exacerbation of other mental disorders, such as manic depressive illness, alcoholism and substance dependence, anxiety states, and various personality disorders. Pathological gamblers typically are at risk for a number of stress-related physical illnesses. Hypertension and heart disease are common.

Cost to the Family: There are multiple effects on the family, the most obvious of which are lack of financial support, neglect, and divorce. Pathological gamblers provoke a reactive form of violence in their spouses, 37% of whom have physically abused their children, while becoming more depressed themselves (Lorenz 1981). The spouse of the male pathological gambler is three times more likely than her counterpart in the general population to attempt suicide (Lorenz & Shuttlesworth 1983). There is also a high rate of stress-related physical illnesses in the spouse, notably hypertension, headaches, gastrointestinal disturbances, and backaches, which are eight times more common than in the general population (Lorenz & Yaffee 1986, 1988).

The children of pathological gamblers do worse in school than their peers, are more apt to have alcohol, drug, gambling or eating disorder problems and are more likely to be depressed. They attempt suicide twice as often as their classmates (Jacobs 1989; Lesieur & Rothschild 1989).

Cost to Society: Addictive disorders such as alcoholism, substance dependence and pathological gambling are major causes of illness, disability and premature death in the United States and Canada. The monetary burden on society of the most serious consequences of these disorders can be estimated although some of the consequences, such as pain, suffering and family disruption, are not quantifiable.

In the work place, gambling problems eventually lower productivity and cause inefficiency, absenteeism and theft. Research on Gamblers Anonymous members and on individuals entering treatment support these findings although further research is needed to determine with the costs of pathological gambling in the work place more precisely (Lesieur 1984, 1993).

The criminal justice system can be severely affected by pathological gambling. Studies have shown that two out of three pathological gamblers commit illegal acts in order to pay gambling related debts and/or to continue gambling. Such acts typically are turned to out of desperation and occur late in the disorder (Brown 1987; Lesieur 1984; Rosenthal & Lorenz 1992). Some crimes committed by pathological gamblers involve violence or armed robbery, but most are non-violent crimes against property. Many involve embezzlement or fraud. A survey of Gamblers Anonymous members found that 47% had engaged in insurance fraud or thefts where insurance companies had to pay the victims. Pathological gamblers engage in an estimated \$1.3 billion in insurance-related fraud per year (Lesieur & Puig 1987).

The number of prison inmates who have gambling problems appears to be much greater than that of the general population. In a study of prisoners (Lesieur 1987; Lesieur & Klein 1985), 30% were classified as probable pathological gamblers, and an additional 28% of the females and 23% of the males could be considered problem gamblers. The cost of arrest, prosecution, imprisonment and parole must also be figured into the total cost of problem and pathological gambling to society.

Some costs may be even harder to measure. For example, one out of four pathological gamblers was involved in an automobile accident during the most desperate phase of their gambling. Almost half were speeding on their way to or from a gambling venue. Some of the more serious

accidents were due to gamblers falling asleep behind the wheel after periods of prolonged play. Others may have been covert suicide attempts (Lesieur & Puig 1987).

Pathological Gamblers in the General Population

Recent studies in Alberta and New Zealand provide important additional information about the costs of pathological gambling in the general population. These two studies were conducted in two phases. The first phase was a prevalence survey of gambling and problem gambling in the general population similar to the study in British Columbia. The second phase involved face-to-face interviews with individuals identified as problem and probable pathological gamblers in the general population.

Most pathological gamblers in the general population began gambling before the age of 10. Male pathological gamblers tended to be involved in games that involve an element of skill while female pathological gamblers tended to begin gambling later in life and to be involved in games that are based on luck and chance. While most gamblers in the general population maintain a consistent level of involvement in gambling over a period of years, pathological gamblers report fluctuations in their gambling over time. For these individuals, their gambling tends to intensify during periods of stress.

An important difference between regular gamblers and pathological gamblers is their ability to tolerate losses. Regular gamblers do not report going back to try to recoup their money on a frequent basis. The majority of pathological gamblers report that they often return to gambling to get back money they lost and approximately one-third of these individuals report that they have gambled in order to win money to pay off debts.

Pathological gamblers are far more likely than regular gamblers to report experiencing dissociative states in conjunction with their gambling. Approximately half of the pathological gamblers in the general population report experiencing a trance-like state of consciousness while gambling. While regular gamblers may experience some mood changes when they lose money gambling, pathological gamblers are more likely to experience clinically significant levels of depression. Approximately half of the pathological gamblers in the general population report that they have considered suicide.

Pathological gamblers in the general population report often gambling until all of their money is gone. When they run out of money, they report going to bank machines to obtain more money, borrowing from friends and lending institutions to pay gambling debts, delaying debt payments or paying in instalments, going without car and household insurance and having their utilities shut off. These individuals report gambling with funds from unemployment insurance and welfare agencies, gambling with grocery money and selling household goods to get money to gamble. They also report stealing credit cards and bouncing checks in order to get money to gamble.

Nearly three-quarters of the pathological gamblers in the general population have experienced stress-related medical conditions, including ulcers, colitis, high blood pressure, migraines, alcohol and drug abuse, nervous breakdowns and depression. Most of these pathological gamblers are heavy cigarette smokers and about half of them are dangerously heavy alcohol consumers. These individuals are substantially more likely than regular gamblers to use illicit drugs.

In terms of the wider impacts of pathological gambling, more than half of the pathological gamblers in the general population are separated, divorced or single parents. Impacts of pathological gambling on job performance are also evident. While regular gamblers report that gambling has little

or no impact on their job performance, one-fifth of the pathological gamblers in the general population note that gambling often interferes with their job performance. Although gambling may be on their minds, pathological gamblers in fact do not talk about it much to co-workers for fear of drawing attention to themselves.

On the basis of the studies in Alberta and New Zealand, there are several risk factors that are clearly associated with the development of severe gambling-related problems. These are:

- gambling at an early age;
- a preference for continuous forms of gambling such as video gaming machines, bingo, casino games, horse racing, instant lottery games, pull-tabs and sports wagering;
- greater frequency, duration and intensity of gambling involvement;
- different reasons for involvement in gambling than regular gamblers; and
- a tendency to get upset when losing, "go on tilt" and lose control over money management and gaming strategies.

BACKGROUND AND OBJECTIVES:

SOCIAL GAMING AND PROBLEM GAMBLING RESEARCH IN BRITISH COLUMBIA

To aid the B.C. Lottery Corporation's strategic planning and marketing process, the Angus Reid Group began in early 1993 a program of survey research to investigate public attitudes toward social gaming activities in the province. *Social gaming* in this context referred to the range of legal gaming activities besides lotteries that involve an element of sociability or group participation. At the time of the research, the main forms of social gaming in the province were lotteries, local casinos, horse track betting and bingo.

Among the primary concerns of the social gaming research were the following areas of investigation:

- ☐ Determine public awareness of problem gambling in British Columbia, including perceptions of activities responsible for problems, personal knowledge of problem gambling incidents and estimates of proportions of the population having problems with social gaming activities;
- ☐ Establish benchmark levels of public perceptions of benefits and drawbacks of social gaming activities, perceived extent of gambling problems;
- ☐ Monitor public perceptions of gaming regulatory agencies and charitable groups receiving revenues;
- ☐ Develop a psychographic profile of social gaming participants.

This investigation of social gaming attitudes uncovered a considerable degree of public concern about the extent of excessive or problem gambling in the province. All four of the principal varieties of social gaming in the province were associated to some degree with gambling problems by the public.

In order to address these public concerns about gambling problems, it was necessary to have data on the actual prevalence of gambling problems in the province. However, no large-scale investigations of the prevalence of pathological gambling had ever been carried out in British Columbia.

To meet this need the B.C. Lottery Corporation requested the Angus Reid Group to work with an international authority on problem gambling, Dr. Rachel Volberg of Gemini Research, to design a research program to survey the actual extent of problem or pathological gambling in the province.

The Angus Reid Group convened a meeting of experts to serve as an advisory group in planning a problem gambling survey program for the province. The planning session was held on September 7, 1993 at the Angus Reid Group offices in Vancouver and included the following participants:

Mr. Guy Simonis	President, B.C. Lottery Corporation
Mr. Bruce McLeod	Manager, Research & Development, B.C. Lottery Corporation
Ms. Jill Davidson	Board Member, B.C. Lottery Corporation
Mr. Steve Letts	Executive Director, Public Gaming Branch B.C. Attorney General
Mr. Greg Scriver	President, Scriver Consultants
Mr. Colin Campbell	Ph.D. Candidate, Criminology, Simon Fraser University
Dr. Rachel Volberg	President, Gemini Research
Dr. Angus Reid	President, Angus Reid Group
Dr. Gus Schattenberg	Project Director, Angus Reid Group

The group participants agreed to serve as advisors to the project and solicit input from other interested parties in the province. The meeting identified the following overall objectives for the problem gambling survey program:

- ☐ Develop precise survey estimates of pathological gambling in the adult population of British Columbia, using the same clinical standards employed in similar surveys undertaken in other jurisdictions;
- ☐ Establish benchmark incidence levels for comparing with other jurisdictions and for monitoring trends over time;
- ☐ Identify the demographic, psychographic and behavioural characteristics of problem gamblers;
- ☐ Estimate the level of expenditures by problem gamblers;
- ☐ Survey public awareness of treatment alternatives for pathological gamblers;
- ☐ Initiate planning for subsequent research into problem gambling among adolescents and youth, ethnic minorities or women

The group agreed to review survey questionnaires developed by the Angus Reid Group and Gemini Research and meet to review the findings of the planned survey program. (Mr. Campbell declined to participate in these subsequent activities, in part because of his heavy commitments in planning and organising an upcoming symposium on gambling in Canada).

The results of the Problem Gambling Survey as well as relevant aspects of the previous Social Gaming Survey are detailed in the remainder of this document.

METHODS

Social Gaming Survey

Questionnaire Design

The content of the survey included questions about general awareness and participation in social gaming activities, perceptions of the nature of problem gambling, and personal experience with personal gambling incidents among family, friends or acquaintances. A section of more detailed questions asked specifically about the advantages and disadvantages of each of the main varieties of social gaming (lotteries, casinos, bingo and horse track betting) and the respondent's estimates of proportion of players that were either addicted or spending too much on each activity.

Data Collection and Analysis

The survey was conducted with a representative sample of 1200 British Columbia adults over the age of 19 between July 15 and August 13, 1993. The sampling was carried out by random digit dialling (RDD) telephone procedures to ensure a random selection of households in the province. The resulting survey statistics have a maximum error of plus/minus 2.9 percentage points, 19 times out of 20. All interviews were conducted by professional interviewers in the Angus Reid Group field centres in Vancouver and Winnipeg. Interviews lasted an average of 27 minutes.

Coding and tabulations were completed by Angus Reid Group staff at the central facilities in Winnipeg. Cross tabulations and multivariate analyses were carried out using SPSS-PC and proprietary programs.

Problem Gambling Survey

Measurements of Problem Gambling Prevalence in Other Jurisdictions

The survey in British Columbia builds on work carried out in the United States, Canada and New Zealand. All but two of the prevalence surveys of problem and pathological gambling carried out in the United States have used the South Oaks Gambling Screen (Lesieur & Blume 1987). Prevalence surveys using this screen have been completed in California, Connecticut, Iowa, Maryland, Massachusetts, New Jersey and New York (Volberg 1991, 1993a; Volberg & Steadman 1988, 1989, 1992) as well as in Quebec (Ladouceur 1993).

Prevalence surveys using a revised and expanded version of the same screen have recently been completed in Montana, North Dakota, South Dakota, Texas and Washington State (Volberg 1992, 1993b; Volberg & Stuefen 1991; Wallisch 1993), in the Canadian provinces of Alberta, Manitoba and New Brunswick (Baseline Market Research 1992; Criterion Research Corporation 1993; Smith, Volberg & Wynne 1993) and in New Zealand (Abbott & Volberg 1991, 1992).

Development of the South Oaks Gambling Screen

The South Oaks Gambling Screen is a 20-item scale based on the diagnostic criteria for pathological gambling (American Psychiatric Association 1980). In developing the screen, a large pool of variables was subjected to discriminant analysis. The results of this analysis were cross-tabulated with assessments of independent counsellors in order to minimise the number of false-negative and false-positive cases. A score of 3 or 4 on the screen identifies a respondent as a *problem gambler* while a score of 5 or more identifies a respondent as a *probable pathological gambler*.

Weighted items on the South Oaks Gambling Screen include hiding evidence of gambling, spending more time or money gambling than intended, arguing with family members over gambling and borrowing money to gamble or to pay gambling debts. The South Oaks Gambling Screen has been found valid and reliable in distinguishing pathological gamblers among hospital workers, university students, prison inmates and inpatients in alcohol and substance abuse treatment programs (Lesieur & Blume 1987; Lesieur, Blume & Zoppa 1986; Lesieur & Klein 1985).

More recent surveys have used a revised version of the questionnaire used in earlier surveys. In revising the questionnaire, the preliminary section was expanded to collect more detailed information about gambling frequency and estimated expenditures in the general population. In addition, the weighted items of the South Oaks Gambling Screen were expanded to assess both lifetime and current prevalence of problem and pathological gambling. This revised version of the SOGS has been designated SOGS-R (Abbott & Volberg 1992) to distinguish it from the original version used in earlier surveys (SOGS) and from a modified version of the SOGS (SOGS-M) that was used in a survey in Minnesota (Laudergan, Schaefer, Eckhoff & Pine 1990).

To determine if these changes had any impact on reported prevalence rates, the SOGS-R was tested in Iowa where an earlier prevalence survey had been carried out. The difference in the prevalence rates for these two surveys was 0.1% (Volberg & Stuefen 1991).

Questionnaire Design

The questionnaire for the British Columbia survey was composed of several major sections. The first section of the questionnaire collected information about respondents' leisure activities and assessed psychographic and lifestyle characteristics of the respondents.

The next section included questions about 24 different types of gambling. Involvement in all types of legal, illegal and out-of-province gambling was assessed. For each type of gambling, respondents were asked whether they had participated in this type of gambling on a rare, occasional or regular basis, whether they had tried it in the past year, and whether they participated once a week or more in this type of gambling. The different types of gambling included:

- Local casinos
- Resort casinos
- Raffle tickets
- Fund raising events such as casino nights
- BC Lottery 6/49
- Scratch & Win lottery games
- Video poker or other video card games
- Arcade video games
- Electronic bingo
- Traditional paper bingo
- Horse races at the track
- Horse races away from the track
- Other animal events (dog races, cockfights)
- Cards with friends or relatives with no money at stake
- Cards where money is at stake
- Cards in a card room
- Craps or other dice games
- Sports with friends or co-workers
- Sports pools
- Sports Action lottery game
- Sports with a bookmaker
- Pull-tabs or Nevada breakopens
- Speculative investments
- Games of skill (billiards, golf, bowling)

The next section of the questionnaire was composed of the lifetime and current South Oaks Gambling Screen items and the final section of the questionnaire included questions about the demographic characteristics of each respondent. A copy of the questionnaire is included in Appendix A.

Sampling Design

In order to obtain a representative sample of the province of British Columbia, 1,200 interviews were completed for this study. The sample mirrors the geographic distribution of the population of the province.

Telephone numbers were generated from a database maintained by the Angus Reid Group. This database contains 196,00 banks of 100 8-digit numbers in Canada. The British Columbia sample numbers were generated from the British Columbia banks in the database with the last two digits of the telephone numbers randomly generated. Survey respondents were contacted by telephone between October 15 and November 1, 1993. All interviews were conducted in the Vancouver or Winnipeg offices of the Angus Reid Group and were completed by trained interviewers under supervised conditions.

Each questionnaire took an average of 29 minutes to complete. The margin for error for this sample is plus or minus 2.9% at the 95% level of confidence.

In order to assess the accuracy of the findings based on this survey, it is important to determine how representative the sample is of the general population of the province. To determine representativeness, the demographics of the sample were compared with demographic information from Statistics Canada. This analysis showed that the sample from British Columbia is representative in terms of gender, age and marital status.

Response Rates

Response rates for problem gambling surveys range from 76% in Iowa to 50% in Alberta. The response rate in the British Columbia survey was 25% which is lower than the range of response rates for other similar surveys. 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. In addition, the response rate in British Columbia almost certainly reflects substantial polling fatigue among the general population as a result of numerous political surveys that accompanied the Canadian Federal election which took place while the survey was in field.

In order to determine whether the low response rate in this survey affected the results, the Angus Reid Group recontacted 200 individuals who refused to complete the interview and administered a shortened version of the questionnaire that included the key problem gambling and demographic items. The additional interviews determined that there were no substantial differences in the demographic characteristics or gambling involvement between individuals who refused to participate and those who did participate. This outcome supports the conclusion that the present survey is representative of the population of the province. Key responses from the Problem Gambling Survey and the follow-up survey with refusers are included in Appendix B.

GAMBLING IN BRITISH COLUMBIA

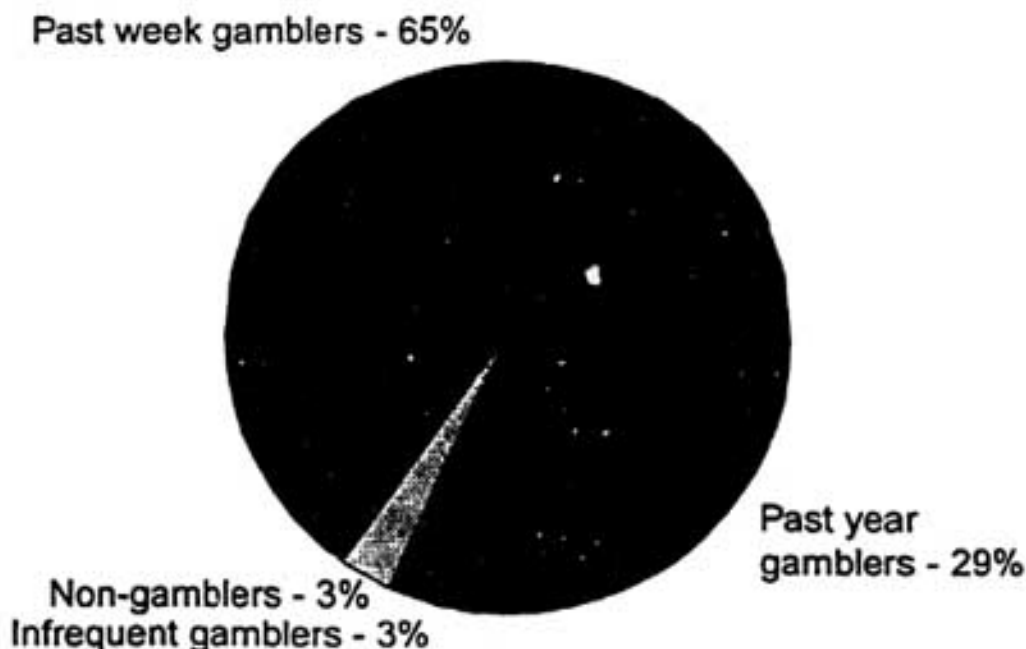
In this section, we present information about the scope and magnitude of gambling among the general population in British Columbia. Chi-square analysis was used to test for statistical significance. In order to adjust for the large number of statistical tests conducted, p-values smaller than .01 are considered *statistically significant*, while p-values at the more conventional .05 level are considered *somewhat significant*.

In reading the tables presented in this report, asterisks in the right-hand column of each table indicate that *one* of the figures in that row is significantly or somewhat different from other figures in the same row.

Gambling in the General Population

In every recent survey of gambling participation, the great majority of the respondents state that they have participated in one or more of the gambling activities included in the questionnaire. The proportion of respondents who have ever gambled ranges from 82% in North Dakota to 93% in Alberta. In British Columbia, 97% of the sample of adults in the general population stated that they had ever tried one or more of the types of wagering included in the survey. This does not include individuals who had played card games with friends or relatives but with no money at stake. If these respondents were included, the lifetime gambling participation rate in British Columbia would increase to 98%.

GRAPH 1. GAMBLING IN BRITISH COLUMBIA



Partly because gambling is so popular in British Columbia, respondents who gambled and those who had not are similar in terms of gender, age, ethnicity and marital status as well as education and employment status. Respondents who never gambled are significantly more likely to have annual household income under \$25,000 than respondents who had gambled.

TABLE 1
Demographic Characteristics of
Gamblers and Non-Gamblers

Demographics	Gamblers (N=1,163)	Non-Gamblers (N=37)
Under 30	27%	19%
Non-European ancestry	20%	16%
Not Married	45%	46%
Male	45%	46%
HH Income Under \$25,000	27%	48%**
Less than HS	13%	11%
Unemployed	4%	11%

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

The similarity between gamblers and non-gamblers in British Columbia contrasts with the substantial differences between gamblers and non-gamblers in most other North American jurisdictions. In other jurisdictions, gamblers are significantly more likely than non-gamblers to be male, under the age of 30, to have graduated from high school and to have annual household incomes over \$25,000.

The mainstream character of gambling in British Columbia partly stems from its comparatively long presence as a legal activity. As the following table indicates, most of the principal forms of gambling have been legitimate for two decades or more. This is a major contrast with other North American jurisdictions where various gambling prohibitions have been effect until very recently:

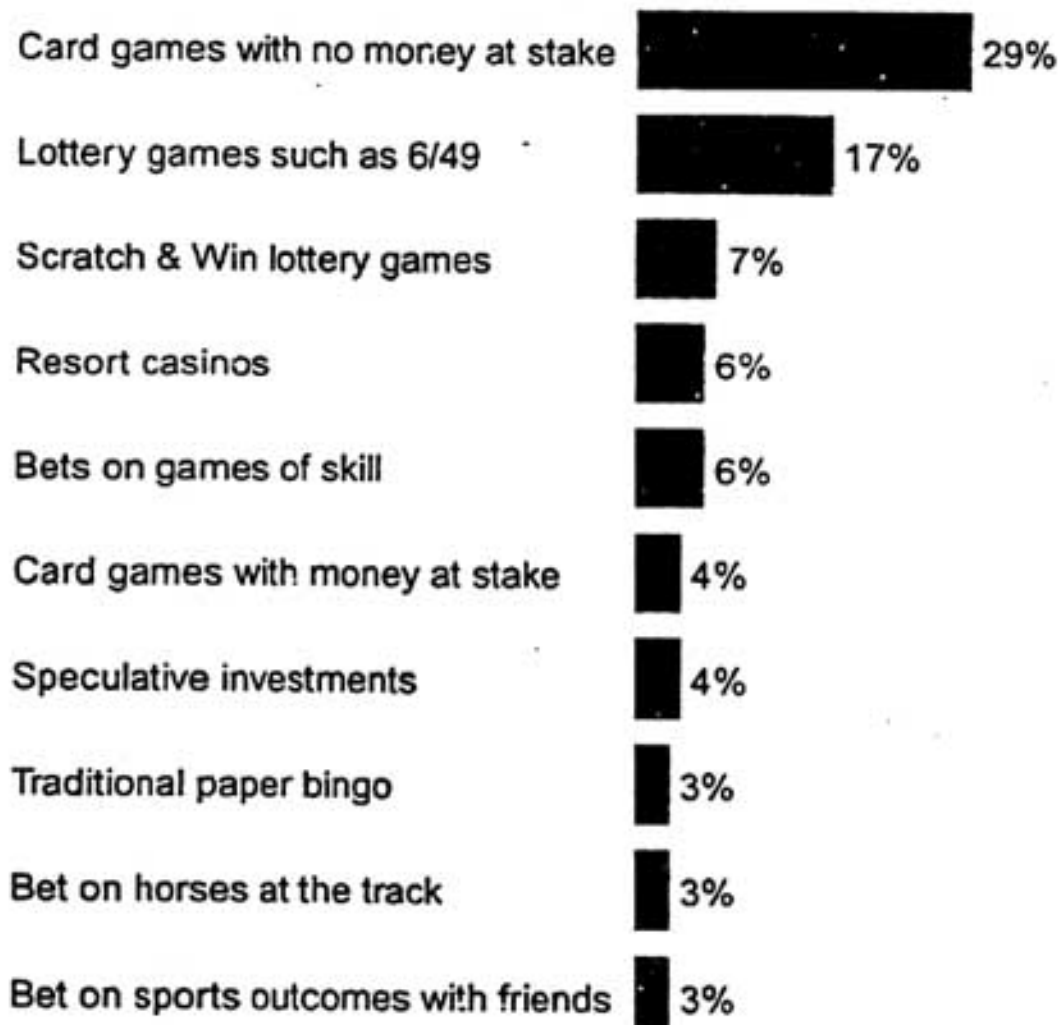
TABLE 2
Availability Of Principal Forms
Of Legal Gambling In B.C.

Bingo	1970 to present
Lotteries	1970 - 1985 (WCLF) 1985 to present (BCLC)
Casinos	1970 to present
Card Playing (In card rooms/social clubs)	1987 to present
Horse Racing	Origins indeterminate, sometime prior to 1970

Favourite Gambling Activities

When asked to identify their favourite type of gambling, 30% of the respondents who gambled indicated that playing card games with friends or relatives with no money at stake was their favourite type of gambling. Lottery games, including 6/49 and Scratch & Win, were identified by 25% of the respondents who ever gambled as their favourite type of gambling. Charitable gambling, including raffle tickets and fund-raising events, as well as games of skill were identified by 7% of respondents who ever gambled as their favourite type of gambling. Sports wagering, including wagers with friends, in sports pools, on the B.C. Lottery's Sports Action and with a bookmaker, was also identified by 7% of respondents as their favourite type of gambling.

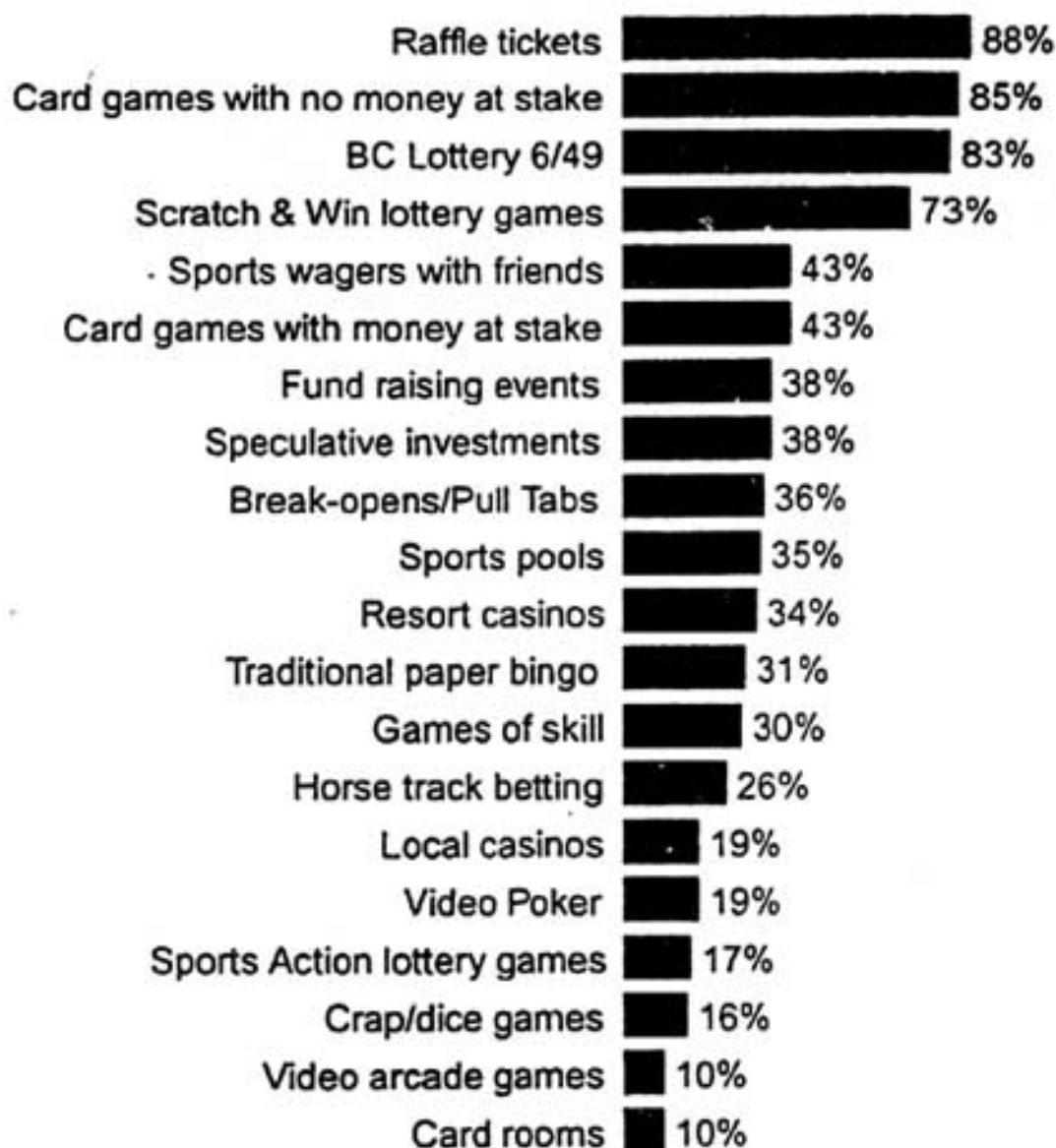
GRAPH 2. FAVOURITE GAMBLING ACTIVITIES



Lifetime Participation

In terms of participation, the most popular types of gambling in British Columbia are buying raffle tickets, playing card games with no money at stake, and purchasing 6/49 and Scratch & Win lottery tickets. Less popular types of gambling in British Columbia include wagering on card games for money, participating in fund-raising events, wagering on speculative investments and pull-tabs, wagering on sports pools, bingo and games of skill and gambling at resort casinos. Lifetime participation rates are much lower for all other types of gambling.

GRAPH 3. LIFETIME GAMBLING PARTICIPATION IN BRITISH COLUMBIA



Current Gambling Participation

To analyse gambling involvement in the general population, it is useful to distinguish respondents by their different levels of gambling participation. To analyse gambling involvement in British Columbia, we divided the respondents into four groups:

non-gamblers who have never participated in any type of gambling except card games with no money at stake (3% of the sample);

infrequent gamblers who have participated in one or more types of gambling but not in the past year (3% of the sample);

past-year gamblers who have participated in one or more types of gambling in the past year but not on a weekly basis (29% of the sample); and

weekly gamblers who participate in one or more types of gambling on a weekly basis (65% of the sample).

The proportion of non-gamblers in other North American jurisdictions ranges from 18% in North Dakota to 7% in Alberta. The proportion of weekly gamblers in other North American jurisdictions ranges from 13% in North Dakota to 40% in Alberta. It is clear from these participation rates that British Columbia respondents are enthusiastic gamblers. As noted above, the presence of several forms of legalised gambling in the province for the preceding two decades has helped make gambling very much of a mainstream activity compared to its more marginal status in some other parts of North America.

The following graph summarises weekly versus past year participation in the main gambling activities.

GRAPH 4. CURRENT GAMBLING PARTICIPATION IN BRITISH COLUMBIA



In contrast to other jurisdictions, there are few significant differences between infrequent, past-year and weekly gamblers in British Columbia. Table 3 shows that past-year and weekly gamblers are slightly more likely than infrequent gamblers to be male, married, and to have annual household incomes over \$25,000. Weekly and past-year gamblers are also slightly more likely than infrequent gamblers to be non-Caucasian. Weekly and past-year gamblers are slightly less likely than infrequent gamblers to be under the age of 30.

Table 3 also shows that the mean number of gambling activities which weekly, past-year and infrequent gamblers have ever tried differs significantly. More detailed analysis shows that the majority of infrequent gamblers (68%) have never tried more than four types of gambling while 34% of weekly gamblers have tried 10 or more types of gambling.

TABLE 3
Gambling Involvement in British Columbia

	Infrequent (N=41)	Past Year (N=344)	Weekly (N=778)
Demographics			
Under 30	31%	27%	27%
Non-European ancestry	13%	17%	22%
Not Married	54%	44%	45%
Male	42%	44%	46%
Less than HS	10%	11%	14%
Annual HH Under \$25,000	34%	29%	25%*
Mean Number of Activities	4.2	5.5	8.3**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

As in other jurisdictions, different types of gambling in British Columbia appeal to very different groups of players. There are significant differences in the demographics of non-gamblers, infrequent gamblers, past-year gamblers and weekly gamblers for nearly every type of wagering done by British Columbia respondents. Differences in the gambling involvement of different demographic groups in British Columbia are summarised below. Detailed information on the demographic characteristics of participants in each type of gambling is provided in Appendix C.

Gender is an important predictor of many types of gambling. While women are more likely to play Scratch & Win and bingo and to have ever bought raffle tickets, men are more likely to wager regularly on most other types of gambling. Men are significantly more likely than women to wager weekly and in the past year on fund raising events, video arcade games, on horse races at the track, on card games with money at stake, and on sports. Men are also more likely than women to wager regularly on speculative investments and on games of skill.

Age is another important predictor of participation in many types of gambling. Individuals under the age of 30 are significantly more likely than older individuals to have gambled recently on a variety of types of gambling. Those under 30 are significantly more likely than older individuals to have been to local casino in past year, to have bought raffle tickets, to have played BC Lottery 6/49 and Scratch & Win as well as video poker and other video arcade games. Those under 30 are significantly more likely than older individuals to be weekly card game players, whether or not money is at stake and to have played dice games in the past year. Individuals under the age of 30 are also significantly more likely than older individuals to have wagered on sports, pull-tabs and on games of skill in the past year. Individuals over the age of 30 are more likely to have been to a resort casino and to have wagered on speculative investments than younger individuals.

In contrast to other jurisdictions, gambling in British Columbia does not appear to be closely associated with ethnicity. The only significant difference between ethnic groups in British Columbia is that persons of European ancestry are somewhat less likely than those of non-European ancestry to have ever played BC Lottery 6/49.

Like age, marital status is also associated with involvement in different types of gambling. In general, individuals who have never married or who are separated or divorced do more gambling than individuals who are married. Unmarried respondents are significantly more likely than married respondents to have been to a local casino in the past year and to have wagered on video arcade games, dice games and games of skill. Unmarried individuals are significantly more likely than married respondents to have played cards, whether or not money was at stake, and to have wagered on sports with friends and co-workers on a weekly basis. Married respondents are significantly more likely than unmarried respondents to have been to a resort casino.

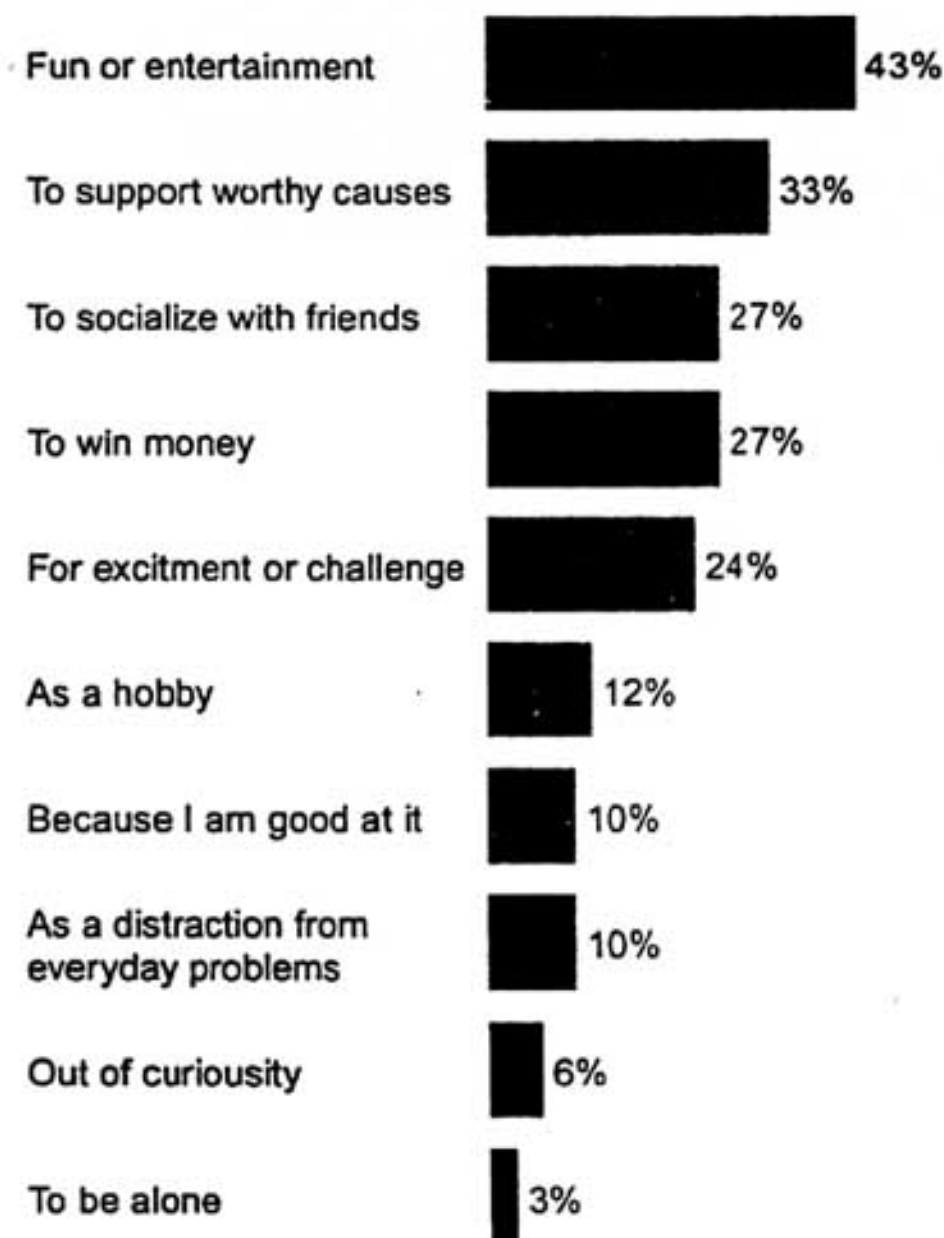
Respondents with less than a high school education are significantly more likely than respondents who have graduated from high school to wager regularly on fund raising events, on Scratch & Win and on bingo. These respondents are also significantly more likely to wager regularly on card games with money at stake. Respondents who have graduated from high school are significantly more likely than respondents with less education to wager regularly on sports with friends and co-workers.

Respondents with annual household incomes under \$25,000 are less likely to wager regularly on many types of gambling than respondents with higher household incomes. Those with lower household incomes are significantly more likely than respondents with higher income to participate weekly in fund raising events and to play bingo as well as card games with no money at stake. These respondents are significantly less likely than respondents with higher income to purchase raffle tickets or participate in BC Lottery 6/49. Respondents with household incomes over \$25,000 are significantly more likely than other respondents to have been to resort casino, to have wagered on sports with friends or in sports pools on a regular basis and to have wagered on speculative investments. Interestingly, unemployed respondents are significantly more likely than employed respondents to have wagered in the past year on horse races at an off-track facility.

Reasons for Gambling

Respondents who ever gambled were asked to indicate the importance of different reasons for gambling. Graph 5 shows that respondents were most likely to agree that fun and entertainment were extremely important or very important reasons for gambling. Respondents were least likely to agree that curiosity and wishing to be alone were extremely important or very important reasons for gambling.

GRAPH 5. REASONS FOR GAMBLING
% Rating Each Extremely/Very Important



The importance of reasons for gambling differs significantly by the gender, age, ethnicity, education, marital status and income of respondents in British Columbia. For example, men are more likely than women to say that excitement and challenge are extremely or very important reasons to gamble. Women, respondents over the age of 30 and respondents who have not graduated from high school are most likely to say that supporting worthy causes is an extremely or very important reason to gamble.

Respondents under the age of 30 are more likely than older respondents to say that socialising, excitement and challenge, and fun and entertainment are extremely or very important reasons to gamble. These respondents are also more likely than older respondents to indicate that they gamble because they are good at it. Respondents of non-European ancestry are more likely than other respondents to say that excitement and challenge and to be alone are extremely or very important reasons to gamble. These respondents are also more likely to say that they gamble as a hobby.

Respondents who have not graduated from high school are most likely to say that gambling as a hobby and as a distraction are extremely or very important reasons to gamble. Respondents who have graduated from high school are more likely than those who have not to say that entertainment is an extremely or very important reason to gamble as are unmarried respondents. Unemployed respondents and those with annual household incomes under \$25,000 are most likely to say that distraction is an extremely or very important reason to gamble.

The importance of reasons for gambling also differs by the types of gambling favoured by respondents. For example, respondents who say that raffles and fund raising events are their favourite types of gambling are most likely to say that support of worthy causes is an extremely or very important reason to gamble while respondents who say that lottery games are their favourite type of gambling are most likely to say that winning money is an extremely or very important reason to gamble.

Respondents who say that bingo is their favourite type of gambling are most likely to say that gambling for fun or entertainment, to socialise with friends, as a distraction from everyday problems and to be alone are extremely or very important reasons to gamble. Respondents who say that card games are their favourite type of gambling are most likely to say that socialising with friends is an extremely or very important reason to gamble. These respondents are also more likely than others to say that they gamble as a hobby and because they are good at it. Respondents whose favourite type of wagering is sports are most likely to say that excitement and challenge is an extremely or very important reason to gamble. These respondents are just as likely as card players to say that they gamble because they are good at it.

Other Elements of Gambling Involvement

When asked about the usual amount of time that they spent gambling, 50% of respondents who gamble say that they spend between 1 and 5 hours gambling per session. Just over a third of respondents who gamble (36%) say that they usually spend less than an hour gambling per session while 14% of respondents who gamble say that they usually spend 6 or more hours gambling per session.

Respondents who gamble are most likely to do so with friends and co-workers or on their own. While 33% of respondents who gamble say that they do so with friends and co-workers, 25% say that they gamble alone. Respondents who gamble are also likely to do so with family members.

Respondents are most likely to indicate that the largest amount they ever spent on gambling was under \$100. One-third of the respondents who gamble (33%) report spending between \$10 and \$100, one-fifth of the respondents who gamble (22%) report spending between \$1 and \$10, and 28% of these respondents report that the largest amount they ever spent on their favourite type of gambling was less than \$1. In contrast, 7% of respondents who gamble report that the largest amount they ever spent on their favourite type of gambling was over \$1,000.

Expenditures on Gambling

In the British Columbia survey, two types of information about gambling expenditures were collected. For each type of gambling that respondents had tried in the past year, they were asked about the average amount they spent on that activity each time they played. For each type of gambling tried in the past year, respondents were also asked to estimate the amount they spent on that activity in a typical month. To maintain comparability with information from other Canadian jurisdictions, the focus in this section will be on respondents' estimates of amounts they spend on different types of gambling in a typical month.

Reported estimates of expenditures obtained in this survey are based on recollection and self-report. These estimates do not include amounts spent on gambling in British Columbia by non-residents and tourists. These data on reported expenditures are best suited for analysing the relative importance of different types of gambling in the general population rather than for ascertaining absolute spending levels on different types of wagering.

Adjustments to Expenditures. One adjustment made in calculating the reported total monthly expenditure on gambling for British Columbia was to exclude expenditures on speculative investments from the calculation. Amounts spent on speculative investments constituted 64% of the unadjusted total monthly expenditure. Speculative investments reflect large amounts of money spent by a relatively small number of respondents. In British Columbia, 4% of the respondents spend more than \$1,000 per month on this type of wagering.

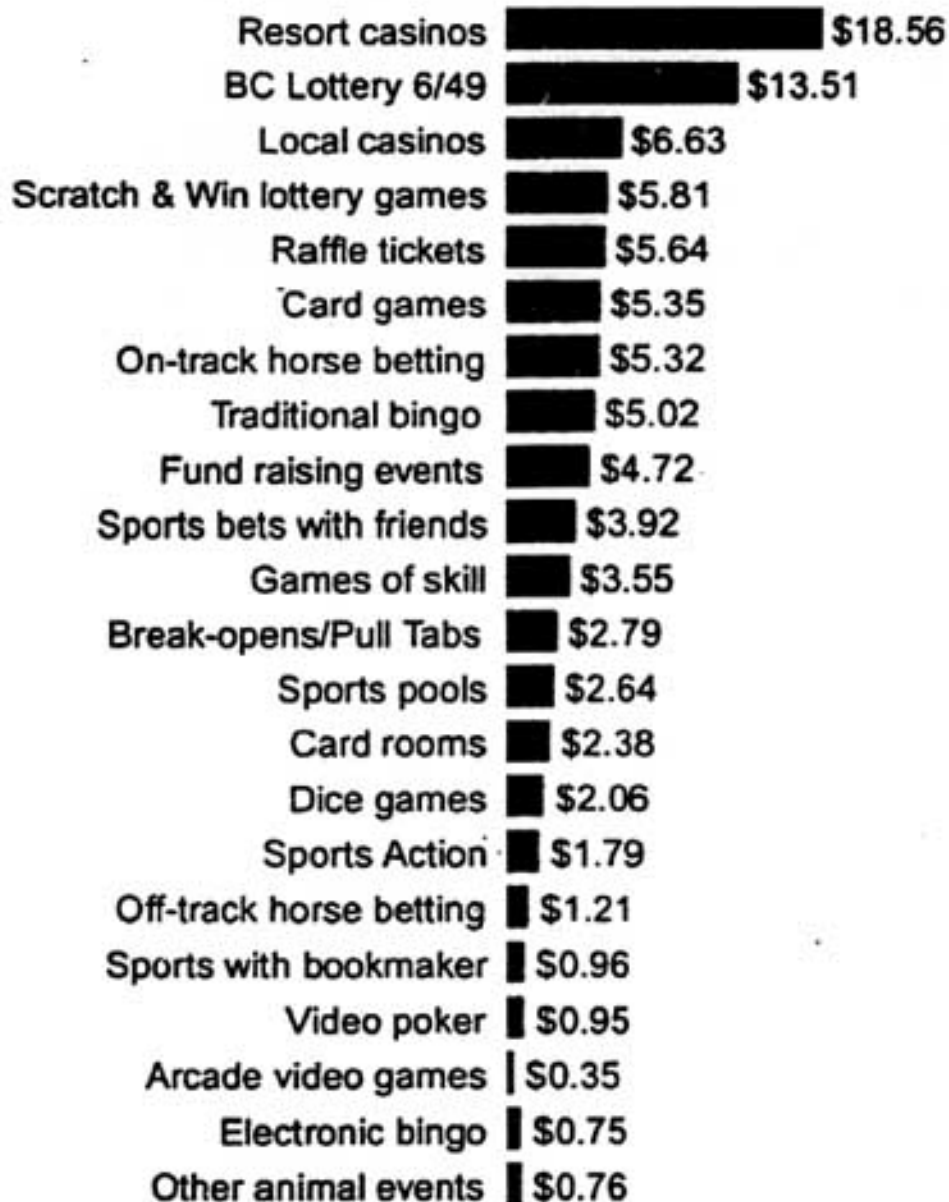
Speculative investments are not universally regarded as a gambling activity. Excluding amounts spent on speculative investments was done in order to more clearly explicate the relative gambling expenditures of the majority of British Columbia respondents. This adjustment was also made in order to allow for comparisons of expenditure data from other American and Canadian jurisdictions.

Variations in Expenditures. In contrast to gambling participation, reported monthly gambling expenditures vary with the gender of the respondent. Men report spending nearly twice as much money on gambling (\$126 per month) as women (\$68 per month). In contrast to other jurisdictions, there are no other significant differences between demographic groups in reported monthly expenditures.

When asked about average spending per gambling session, there are substantial differences between respondents in terms of gender, age and income. For example, men report spending an average of \$244 per gambling session compared to \$110 for women. Respondents over the age of 30 report spending \$187 per gambling session in contrast to \$128 for respondents under the age of 30. Finally, respondents with annual household incomes over \$25,000 report spending an average of \$205 per gambling session compared to \$97 for respondents with annual household incomes under \$25,000.

The following chart shows the per capita monthly expenditures on a per capita and per player basis for all of the types of gambling included in this survey except speculative investments and card games with friend and relatives for no money. Resort casinos account for the largest proportion of gambling dollars, even though participation is limited to a small segment of the population. Lottery games are in second place.

**GRAPH 6. PER CAPITA MONTHLY
GAMBLING EXPENDITURES
(Base: B.C. Adult Population)**



It is also interesting to compare reported expenditures on gambling with reported expenditures for respondents who have wagered on different types of gambling in the past year (e.g. Past-Year Gamblers). In Table 4, the first column displays reported monthly expenditures among individuals who have participated in specific types of gambling during the past year. The second column presents the preceding per capita estimates based on the total adult population.

TABLE 4
Average Monthly Expenditures for
All Respondents and for Past-Year Gamblers

Type of Gambling Activity	General Population (N=1,200)	Past-Year Gamblers (N varies)
Resort Casinos	\$18.56	\$106.39
BC Lottery 6/49	\$13.51	\$17.85
Local Casinos	\$6.63	\$55.44
Scratch & Win Lottery Games	\$5.81	\$9.05
Raffle Tickets	\$5.64	\$7.55
Card Games	\$5.35	\$12.89
Horse Races (on-track)	\$5.32	\$49.48
Fund Raising Events	\$4.72	\$24.79
Sports w/Friends	\$3.92	\$13.04
Games of Skill	\$3.55	\$18.69
Pull-tabs	\$2.79	\$9.68
Sports Pools	\$2.64	\$13.59
Card Rooms	\$2.38	\$69.08
Dice Games	\$2.06	\$11.89
Sports Action	\$1.79	\$20.24
Horse Races (off-track)	\$1.21	\$58.50
Sports w/Bookmaker	\$0.96	\$85.38
Video Poker	\$0.95	\$8.73
Arcade Video Games	\$0.35	\$6.77
Electronic Bingo	\$0.75	\$43.47
Other Animal Events	\$0.76	\$14.13

Table 3 shows that while average reported expenditures for most types of gambling are quite low, expenditures among past-year gamblers can be much higher. The differences in reported expenditures are highest for respondents who have wagered in the past year at resort casinos, on sports with a bookmaker, and on card games in a card room. The differences in reported expenditures are lowest for respondents who have wagered in the past year on raffles, Scratch & Win and on BC Lottery 6/49.

We noted above that information about gambling expenditures per session was collected in British Columbia in addition to information about gambling expenditures per month. As with estimates of monthly expenditures, expenditures per session for most types of gambling are quite low. However, expenditures per session among past-year gamblers can be much higher. Differences between the total sample and respondents who had wagered in the past year in expenditures per session are greatest for resort casinos and for card games in a card room. Differences between the total sample and respondents who had wagered in the past year in expenditures per session are also substantial for wagering on sports with a bookmaker, for wagering at local casinos and for wagering on horse races away from the track. As with monthly expenditures, differences in expenditures per session are lowest for raffles, Scratch & Win and BC Lottery 6/49.

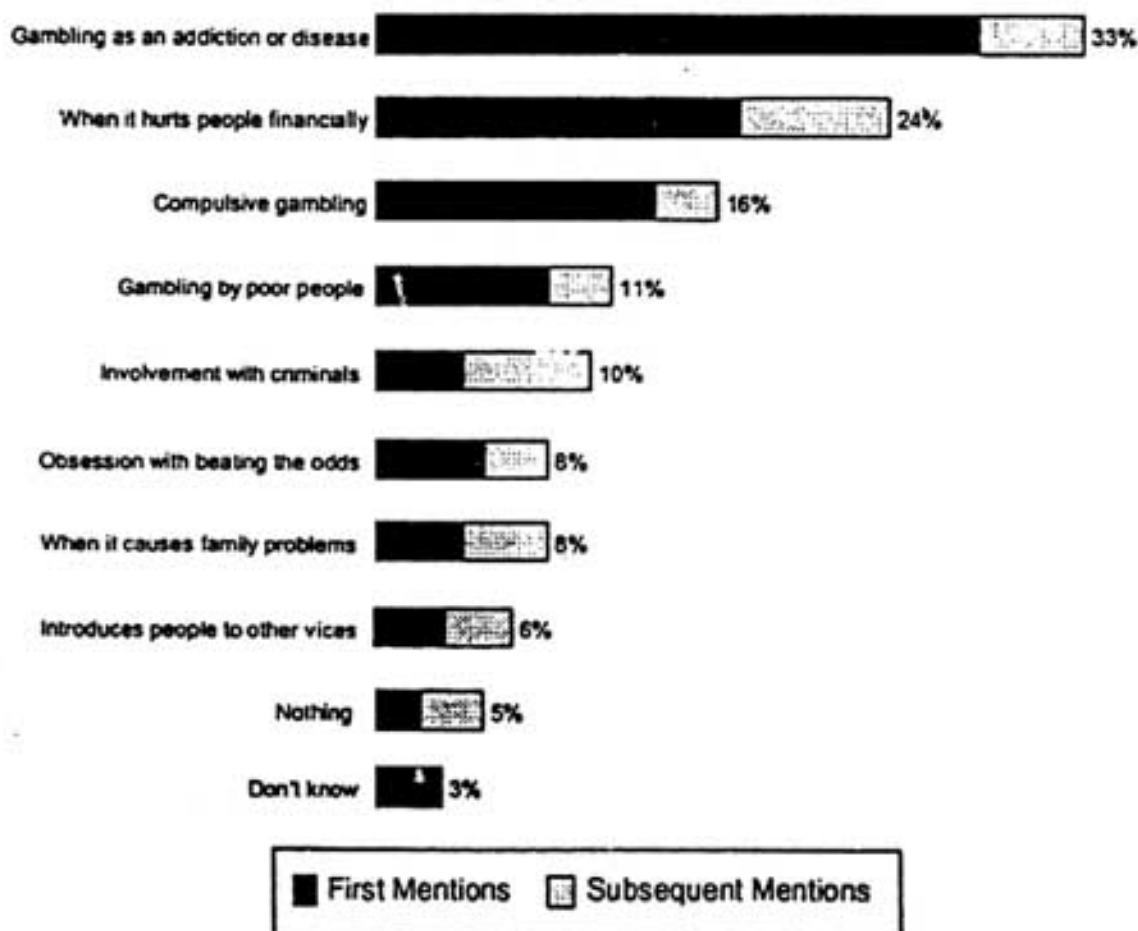
Finally, it is instructive to compare expenditures on different types of gambling in terms of the amounts that respondents estimate they spend on a monthly basis. For example, while expenditures on BC Lottery 6/49 are high, just over half of these expenditures are in amounts of less than \$10. In contrast, while expenditures on wagering at local casinos are also high, nearly a quarter of these expenditures are in amounts over \$50.

PUBLIC PERCEPTION OF PROBLEM GAMBLING

Before reporting the actual prevalence of problem gambling in British Columbia, it is important to examine public perceptions of the nature and extent of the problem. While the Problem Gambling Survey did not explore this area, the Angus Reid Group had surveyed these issues as part of a related project only three months before the survey. Consequently, the data from the previous Social Gaming Survey can provide valuable insights into public awareness and understanding of the problem in a time frame close to that of the Problem Gambling Survey.

The next four charts depict the key findings of the Social Gaming Survey concerning problem gambling in the province. The public understanding of the term "problem gambling" was assessed by an open ended query into the meaning of the phrase. Results are reported in the following below:

GRAPH 7. "PROBLEM GAMBLING"
WHAT COMES TO MIND FIRST?
(Base: Total Sample)



Several important inferences follow from the data. First, the public tends to view problem gambling as a variety of addiction or disease (33%) or a compulsive (16%) or obsessive (8%) disorder. While the public may not appreciate the fine distinctions that professionals make between these terms, the important point is the widespread acceptance of the idea that problem gambling is a sickness. There is little evidence that the public views this problem in moralistic terms as a vice or character weakness. Consequently, therapeutic programs to treat problem gamblers are likely to be perceived as a public health measures rather than moral crusades.

Besides the disease aspects of problem gambling, the public also shows concern about other financial and social ramifications. Almost one in four British Columbians associate problem gambling with financial harm from losses. Other concerns focus on family problems or involvement with criminals or other categories of vice.

When asked specifically about their personal knowledge or involvement with problem gambling incidents, 18% of respondents claimed to be aware of some incident involving family, friends or acquaintances:

GRAPH 8
AWARE OF ANY INCIDENTS OF "PROBLEM GAMBLING"
INVOLVING FAMILY, FRIENDS OR ACQUAINTANCES
(Base: Total Sample)



NATURE OF "PROBLEM GAMBLING" INCIDENTS
(Base: Aware of Incident)



Nearly half (42%) of the respondents recalling an incident mentioned the monetary consequences of problem gambling.

In line with these financial concerns, we also asked respondents if they knew someone they considered to spend more than they could afford on gambling. Slightly more (26%) claimed to know someone in this situation. When asked which of four kinds of gambling this excessive spending involved, the largest proportion named lotteries (51%) or bingo (44%) followed by horsetracks (29%) and casinos (27%):

GRAPH 9

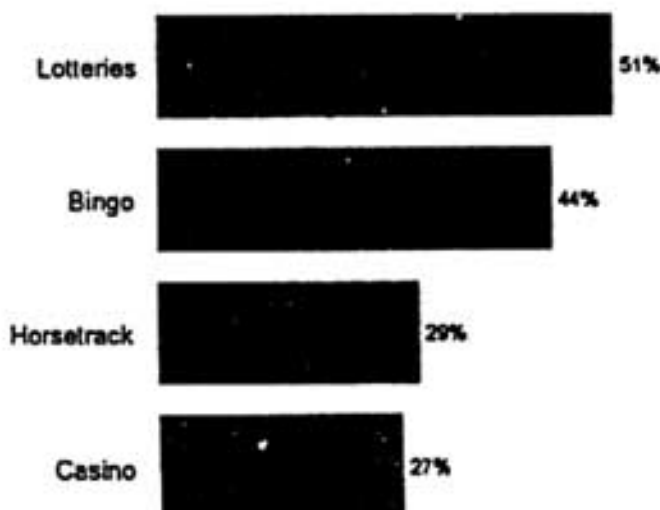
RESPONDENTS KNOWING ANYONE THAT SPENDS
MORE THAN THEY CAN AFFORD ON GAMBLING
(Base: Total Sample)

Know anyone:



WHAT THEY SPEND ON
(Base: Know Problem Spender)

Spends on:



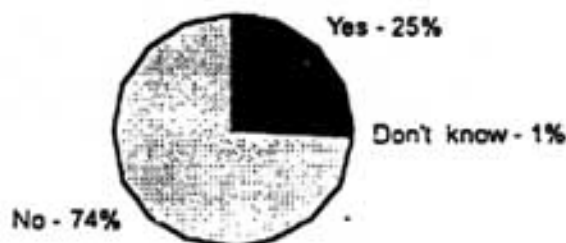
We also asked whether respondents knew anyone they would consider either a compulsive gambler or a gambling addict. A similar proportion (25%) indicated they knew someone in this condition. When asked which of the four main types of gambling were associated with this addiction, virtually the same proportion named bingo (42%), lotteries, horsetrack betting or casinos (41%).

GRAPH 10

RESPONDENTS KNOWING ANYONE THEY WOULD CONSIDER A "COMPULSIVE GAMBLER" OR ADDICTED TO GAMBLING

(Base: Total Sample)

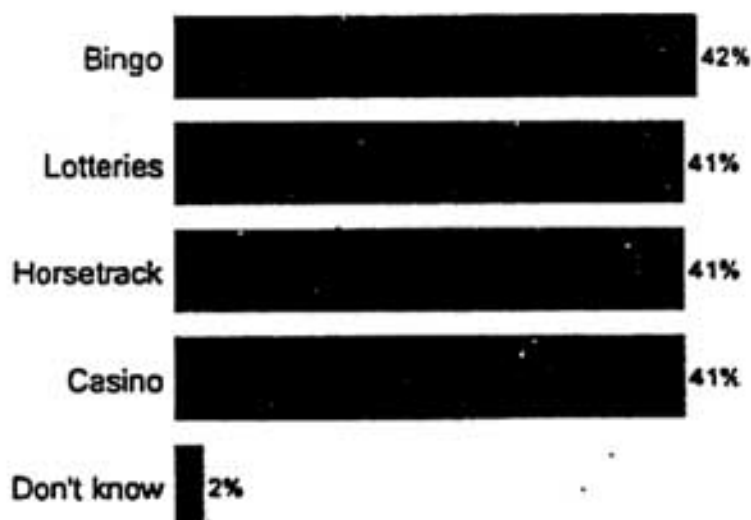
Know anyone:



GAME ADDICTION

(Base: Know Gambling Addict)

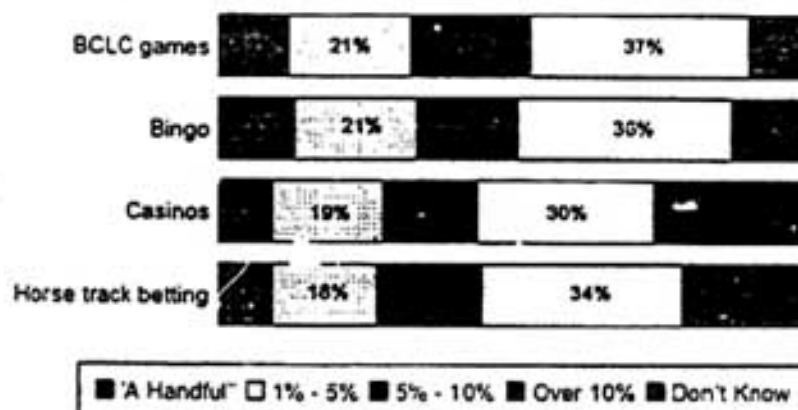
Addicted to:



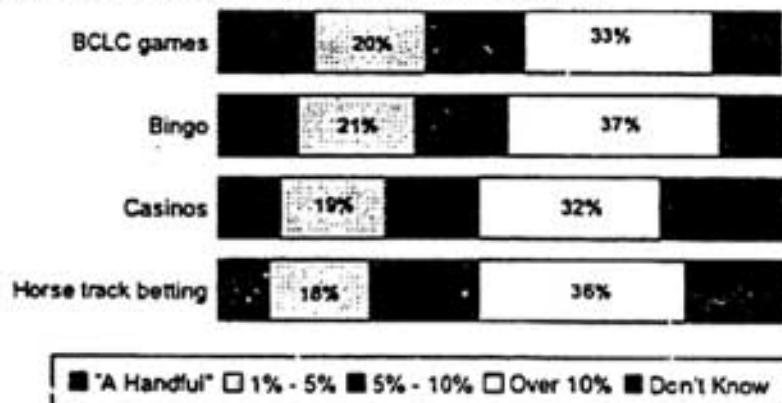
To complement these reports of personal experience with problem gambling or excessive spending on gambling activities, we asked respondents to estimate how what proportion of players spent too much or were addicted to lotteries, bingo, casinos or horsetrack betting. The charts below report these estimates:

GRAPH 11
ESTIMATES OF PROBLEM GAMBLING IN B.C.
(Base: Total Sample)

PERCENTAGE OF PLAYERS SPENDING MORE THAN THEY CAN AFFORD:



PERCENTAGE OF PLAYERS WHO ARE ADDICTED:



Note that approximately a third of respondents feel that over 10% of player are addicted or spend too much on the games. More important, there is very little differentiation in the public mind between the four main types of organised legal gambling in the province and the proportion of players who have problems.

These results are extremely important in the context of the present survey because they show that the public has what turns out to be an inflated perception of the magnitude of the overall problem gambling problem in the province. While the public understanding of the nature of the problem is relatively sophisticated in its acceptance of gambling as an addictive disorder, public estimates of prevalence substantially overshoot the results of the present survey.

This misperception is especially pronounced in the case of lotteries, which are thrown together with casinos, bingo and horsetrack betting. Because lotteries have a high profile among gaming activities, they can become a "lightning rod" that serves as a target for any public criticism or concern about gambling in the province. The wide distribution, advertising and publicity surrounding lottery games has the effect of drawing attention away from other gaming institutions.

In this climate the public fails to discriminate between different gambling activities and their respective attraction to problem gamblers. The current survey indicates that problem gambling tends to be more concentrated in some types of gambling activities than others. The next section of the report presents these findings in depth.

PROBLEM AND PATHOLOGICAL GAMBLING IN BRITISH COLUMBIA

In the section on Methods, we outlined the development of the South Oaks Gambling Screen in detail. Following established criteria for discriminating between non-problem gamblers and individuals with moderate to severe gambling problems (Lesieur & Blume 1987), British Columbia respondents' scores on the lifetime and current South Oaks Gambling Screen items were tallied. In accordance with these criteria, prevalence rates were calculated as follows:

lifetime problem gamblers are those respondents who score 3 or 4 points on the lifetime SOGS items;

lifetime probable pathological gamblers are those respondents who score 5 or more points on the lifetime SOGS items;

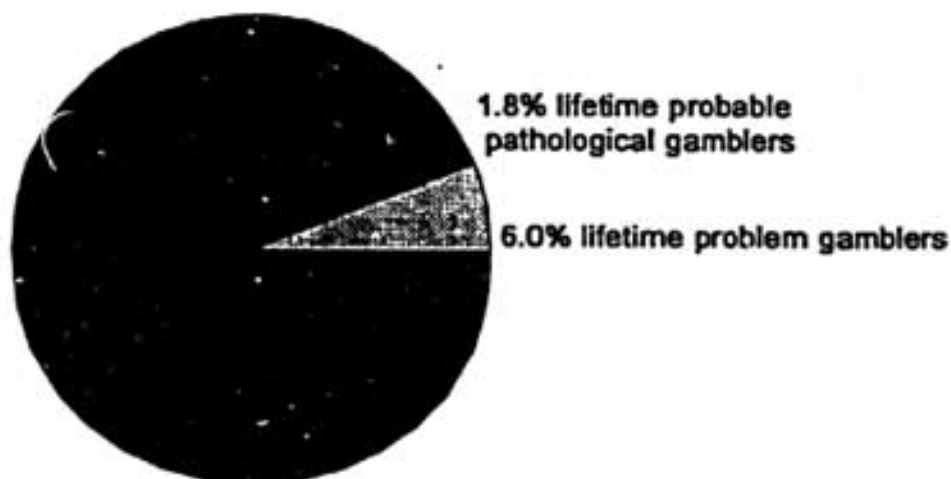
current problem gamblers are those respondents who score 3 or 4 points on the current SOGS items; and

current probable pathological gamblers are those respondents who score 5 or more points on the current SOGS items.

Lifetime prevalence data are most useful for identifying the characteristics of individuals in the general population at greatest risk for experiencing problems related to their gambling involvement. Current prevalence data are most useful for assessing rates of change in gambling problems and pathology over time, both for individuals and in the general population. The focus of this report will therefore be on lifetime problem and probable pathological gamblers. In future reports, it will be important to focus on current problem and probable pathological gamblers.

Lifetime Prevalence

GRAPH 12. LIFETIME PROBLEM GAMBLING
PREVALENCE IN BRITISH COLUMBIA



Among British Columbia respondents, 6.0% of the sample scored as lifetime problem gamblers and 1.8% of the sample scored as lifetime probable pathological gamblers. Overall, the lifetime prevalence rate of problem and probable pathological gambling in British Columbia is 7.8% of the adult population.

According to the 1991 census, the population aged 18 and over in British Columbia is 2,493,105 individuals. Based on these figures, we estimate that between 116,200 and 183,000 British Columbia residents aged 18 and over can be classified as lifetime problem gamblers. In addition, we estimate that between 26,200 and 63,600 British Columbia residents aged 18 and over can be classified as lifetime probable pathological gamblers.

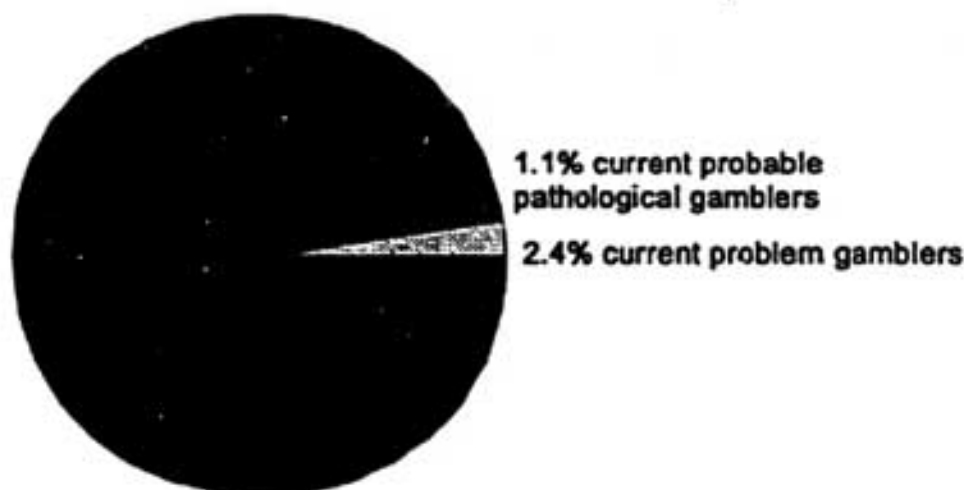
TABLE 5
Comparing Lifetime Problem Gamblers
with the General Population

Demographics	Non-Problem Respondents (N=1,106)	Problem & Pathological Demographics (N=94)
Male	45%	55%*
Under 30	26%	41%**
Non-European ancestry	19%	32%**
Not Married	44%	55%
Less than HS	13%	19%
HH Income Under \$25,000	26%	36%
Unemployed	4%	9%*

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

Table 5 shows that there are significant differences between respondents who scored as lifetime problem or probable pathological gamblers and the larger sample from British Columbia. Lifetime problem and probable pathological gamblers in British Columbia are significantly more likely than the general population to be non-Caucasian and under the age of 30. Lifetime problem and probable pathological gamblers in British Columbia are somewhat more likely than the general population to be male, unmarried and unemployed.

Current Prevalence**GRAPH 13. CURRENT PROBLEM GAMBLING
PREVALENCE IN BRITISH COLUMBIA**

Among British Columbia respondents, 2.4% of the sample scored as current problem gamblers and 1.1% of the sample scored as current probable pathological gamblers. Overall, the current prevalence rate of problem and probable pathological gambling in British Columbia is 3.5% of the adult population.

Based on these figures, we estimate that between 38,100 and 81,300 British Columbia residents aged 18 and over can be classified as current problem gamblers. In addition, we estimate that between 12,700 and 42,100 British Columbia residents aged 18 and over can be classified as current probable pathological gamblers.

Table 6 shows that the differences between respondents who scored as lifetime problem or probable pathological gamblers and the larger sample from British Columbia hold true for current problem and probable pathological gamblers. Current problem and probable pathological gamblers in British Columbia are significantly more likely than the larger sample to be of non-European ancestry and under the age of 30. These respondents are somewhat more likely to be unmarried and unemployed than the larger sample. It is interesting to note that the difference between the larger sample and current problem and probable pathological gamblers in terms of gender is not significant.

TABLE 6
Comparing Current Problem Gamblers
with the General Population

	Non-Problem Respondents	Problem & Pathological Gamblers
Demographics	(N=1,158)	(N=42)
Male	45%	50%
Under 30	26%	54%**
Non-European ancestry	19%	38%**
Not Married	44%	60%*
Less than HS	13%	19%
HH Income Under \$25,000	27%	40%
Unemployed	4%	12%*

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

As in other jurisdictions, a substantial proportion of the British Columbia respondents who score as lifetime problem or probable pathological gamblers do not score as having a current problem or pathology. The difference between lifetime and current problem and pathological gamblers represents individuals who have experienced gambling-related problems at some time in their lives but have managed to overcome these difficulties. This proportion ranges from 36% in Alberta to 52% in South Dakota (where a 6-month rather than a 12-month measure of current prevalence was used). In British Columbia, 57% of lifetime problem and probable pathological gamblers do not score as having a current problem or pathology.

COMPARING BRITISH COLUMBIA WITH OTHER JURISDICTIONS

This section focuses on comparisons of British Columbia with two contiguous jurisdictions where similar studies of gambling and problem gambling in the general population have been carried out. In the following discussion, we focus first on differences in the demographics of the general population samples from British Columbia, Alberta and Washington State. We will then examine differences in gambling involvement in the general population across these jurisdictions. Finally, we will focus on comparisons of problem and probable pathological gamblers in these jurisdictions.

(Note: at this writing the Alberta results have not yet been made public. This information should be treated as confidential.)

In reporting on household income in the general population and among problem and probable pathological gamblers across these jurisdictions, we have not made corrections for differences in United States and Canadian currencies. This is because the relevant comparison in each jurisdiction is to the rest of the sample from that jurisdiction rather than to other jurisdictions.

In reading the tables in this section, we remind readers that asterisks in the far right column indicate that *one* of the figures in that row is significantly or somewhat different from other figures in the same row.

Comparing Problem Gamblers Across Jurisdictions

The following table summarises the current prevalence of problem gambling in British Columbia, Alberta and Washington State.

While British Columbia has the highest gambling participation levels, its prevalence of problem gambling is substantially lower than Alberta. The difference is most pronounced for rates of current problem and pathological gambling, where the 5.4% rate in Alberta overshadows the 3.5% British Columbia and 2.8% Washington rates.

Also noteworthy is the variation in the proportions of lifetime problem gamblers who have no current problem. British Columbia is substantially higher than the other jurisdictions in this regard, suggesting a high number of "spontaneous remissions" where problem gamblers have regained control. The rate is lowest in Alberta, indicating that there is a high proportion of lifetime problem gamblers who still engage in problematic behaviours.

TABLE 7
Comparison of Lifetime and Current
Problem Gambling Across Jurisdictions

Gambling Participation	British Columbia (N=1,200)	Alberta* (N=1,803)	Washington State (N=1,502)
Lifetime Gambling Participation	97%	93%	91%
Lifetime Problem & Probable Pathological Gamblers	7.8	8.5	5.1
Current Problem & Probable Pathological Gamblers	3.5	5.4	2.8
Lifetime Problem Or Pathological Gamblers With No Current Problem	57	36	49

* Confidential - results not yet released

Comparing Demographics Across Jurisdictions

To compare gambling involvement and prevalence rates of problem and probable pathological gambling in British Columbia with those in Alberta and Washington State, it is important to note differences in the demographics of respondents in these jurisdictions.

TABLE 8
Demographic Characteristics of General Population Samples
in Surveys of Problem Gambling

Demographics	British Columbia (N=1,200)	Alberta (N=1,803)	Washington State (N=1,502)
Male	45%	46%	49%
Under 30	27%	26%	19%**
Non-European ancestry	20%	7%	10%**
Not Married	45%	38%	40%**
Less than HS	13%	14%	14%
HH Income Under \$25,000	27%	20%	30%**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

Table 8 shows that respondents from British Columbia and Alberta are significantly more likely to be under the age of 30 than respondents from Washington State. Respondents from British Columbia are significantly more likely to be of non-European ancestry and unmarried than respondents from Alberta or Washington State. Finally, respondents from British Columbia and Washington State are significantly more likely to have low annual household incomes than respondents from Alberta.

Comparing Gambling Involvement Across Jurisdictions

Comparisons of gambling involvement across jurisdictions can be difficult because of the many different types of gambling available in different jurisdictions. All three jurisdictions have substantial amounts of legal gambling, including horse racing, lotteries, bingo, charitable gaming and casinos.

While the present situations are similar in many respects, current prevalence rates partly reflect the different social and regulatory environments in the three jurisdictions.

Analysis of the demographics of respondents who ever gambled in each jurisdiction shows that there are no significant differences among gamblers in these jurisdictions in terms of gender or education. As we saw in comparing the demographics of the general population samples, respondents from Alberta and British Columbia who ever gambled are significantly more likely to be under the age of 30, of non-European ancestry and unmarried than respondents in Washington State.

The following table compares lifetime gambling involvement among respondents in British Columbia, Alberta and Washington State.

TABLE 9
Lifetime Gambling Involvement
Across Jurisdictions

Types of Gambling	British Columbia (N=1,200)	Alberta (N=1,803)	Washington State (N=1,502)
Instant Lottery Games	73%	72%	65%**
Other Lottery Games	83%	78%	65%**
Sports Lottery Game	17%	9%	**
Pull-tabs	36%	27%	32%**
Charitable Games	90%	71%	56%**
Bingo	32%	28%	21%**
Gaming Machines	24%	34%	57%**
Cards/Dice	50%	45%	48%**
Sports	51%	44%	42%**
Horse Races	27%	22%	37%**
Speculative Investments	38%	28%	11%**
Games of Skill	30%	15%	**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

This table shows that there are significant differences in gambling involvement in the three jurisdictions for most types of gambling. Respondents from Washington State are significantly less likely to have ever played instant as well as other lottery games and significantly more likely to have wagered on horse races and gaming machines than respondents from the two Canadian provinces. Respondents from British Columbia are significantly more likely to have wagered on charitable events, bingo, sports events and speculative investments than respondents from the other two jurisdictions. Respondents from British Columbia are also significantly more likely than respondents from Alberta to have wagered on the sports lottery game and on games of skill. Questions about wagering on games of skill were omitted from the survey in Washington State.

Demographics of Problem Gamblers

There are significant differences between the general population and those who score as lifetime problem or probable pathological gamblers in all of the jurisdictions where prevalence surveys of problem and pathological gambling have been carried out. In British Columbia, problem and probable pathological gamblers are significantly more likely to be under the age of 30 and of non-European ancestry than the general population. In Alberta, problem and probable pathological gamblers are significantly more likely to be male, under the age of 30, unmarried and of non-European ancestry. These individuals are also significantly less likely to have graduated from high school and to have annual household incomes over \$25,000 than the general population. In Washington State, problem and probable pathological gamblers are significantly more likely to be male, under the age of 30, of non-European ancestry and unmarried than the general population.

In the discussion that follows, differences between the general population and lifetime problem and pathological gamblers in terms of demographics and gambling involvement are highlighted.

To compare the demographics of problem and probable pathological gamblers across jurisdictions, respondents who scored as lifetime problem gamblers were combined with those who scored as lifetime probable pathological gamblers. As with earlier analyses in this report, this approach is based on the importance of determining differences between respondents without gambling problems and respondents with moderate to severe gambling problems.

TABLE 10
Demographic Characteristics of
Problem and Probable Pathological Gamblers

Demographics	British Columbia (N=94)	Alberta (N=154)	Washington State (N=76)
Male	55%	62%	63%
Under 30	31%	40%	36%
Non-European ancestry	32%	14%	18% ^{**}
Not Married	55%	48%	59%
Less than HS	19%	29%	21%
HH Income Under \$25,000	36%	28%	38%

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

We have already noted that there are significant demographic differences between lifetime problem and probable pathological gamblers and the general population in every jurisdiction where similar surveys have been conducted. However, there are few significant demographic differences between problem and probable pathological gamblers from different jurisdictions. When problem and probable pathological gamblers are compared across British Columbia, Alberta and Washington State, the only significant difference is that problem and probable pathological gamblers from British Columbia are significantly more likely to be of non-European ancestry than those from Alberta or Washington State.

Gambling Involvement of Problem Gamblers

As with gambling involvement in the general population, data on involvement in gambling activities by lifetime problem and pathological gamblers have been collapsed into categories that can be matched across jurisdictions.

The following table shows that there are no significant differences among problem and probable pathological gamblers in these three jurisdictions in their lifetime involvement in wagering on card and dice games and in purchases of instant lottery tickets. Problem and probable pathological gamblers in British Columbia are somewhat more likely to have ever purchased other lottery products and to have played bingo than problem and probable pathological gamblers in Alberta or Washington State. Problem and probable pathological gamblers in British Columbia are significantly more likely to have ever wagered on charitable events and on speculative investments than problem and probable pathological gamblers in Alberta or Washington State.

Problem and probable pathological gamblers in Alberta are significantly less likely than those in British Columbia or Washington State to have ever wagered on sports events. Problem and probable pathological gamblers in Washington State are significantly more likely than those in Alberta or British Columbia to have ever purchased pull-tabs, wagered on gaming machines and wagered on horse races.

TABLE 11
Lifetime Gambling Involvement
of Problem and Probable Pathological Gamblers

Types of Gambling	British Columbia (N=94)	Alberta (N=154)	Washington State (N=76)
Instant Lottery Games	85%	88%	83%
Other Lottery Games	94%	83%	88%*
Sports Lottery Game	37%	25%	*
Pull-tabs	55%	40%	68%**
Charitable Games	89%	71%	68%**
Bingo	59%	46%	38%*
Gaming Machines	42%	53%	78%**
Cards/Dice	80%	67%	76%
Sports	77%	53%	74%**
Horse Racing	43%	35%	57%**
Speculative Investments	47%	33%	20%**
Games of Skill	56%	37%	**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

A better understanding of the reasons for the different patterns of gambling participation among problem and pathological gamblers as well as in the general population across different jurisdictions would require alternative research approaches, such as participant-observation or in-depth interviewing techniques. Such research would be invaluable in understanding the interaction between the availability of different types of gambling, socio-cultural patterns that may affect gambling participation, and the psychological factors that may contribute to problematic gambling involvement.

COMPARING PROBLEM AND NON-PROBLEM GAMBLERS IN BRITISH COLUMBIA

To understand the relationship between gambling involvement and problem gambling in British Columbia, it is important to compare problem and probable pathological gamblers with respondents who have gambled without problems. In this section, we compare the characteristics of respondents who have ever gambled with those who scored as lifetime problem and probable pathological gamblers.

In the following discussion, respondents who scored as lifetime problem gamblers were combined with those who scored as lifetime probable pathological gamblers. This approach is based on significant differences between these two groups and the larger sample as well as on the importance of determining differences between respondents without gambling problems and those with moderate to severe gambling problems.

Gambling Participation

Since problem and probable pathological gamblers are demographically heterogeneous, it is useful to focus on specific behaviours exhibited by individuals who experience problems related to their gambling regardless of their sex, age, ethnicity or income. Research in Australia and Canada suggests that behavioural correlates of problem gambling include weekly gambling, regular heavy losses and involvement with continuous forms of gambling (Dickerson 1993; Ladouceur, Gaboury, Dumont & Rochette 1988). Continuous forms of gambling, characterised by rapid cycles of stake, play and determination, include many of the types of games recently legalised in British Columbia including video gaming machines, casino games, instant lottery games, pull-tabs and sports wagering.

As in other jurisdictions, problem and probable pathological gamblers in British Columbia are significantly more likely than non-problem gamblers to be involved in one or more types of gambling on a weekly basis. In British Columbia, 86% of respondents who score as lifetime problem or probable pathological gamblers participate weekly in one or more type of gambling compared to 63% of respondents who have ever gambled.

Table 12 shows differences in weekly involvement in different types of wagering by respondents who gamble without experiencing problems and by those who score as lifetime problem or probable pathological gamblers. Only those types of gambling for which weekly participation among non-problem as well as problem and probable pathological gamblers was higher than 1% are shown.

TABLE 12
Weekly Gambling Involvement
of Non-Problem and Problem Gamblers

	Non-Problem Gamblers (N=1,069)	Problem & Pathological Gamblers (N=94)
Games Played Weekly		
BC Lottery 6/49	50%	61%
Scratch & Win Lottery Games	24%	43%**
Cards w/Friends (no \$ at stake)	15%	32%**
Raffle Tickets	12%	18%
Sports w/Friends	8%	13%
Pull-tabs	4%	15%**
Games of Skill	4%	14%*
Card Games	4%	13%
Sports Pools	4%	5%
Speculative Investments	3%	2%
Traditional Bingo	2%	9%
Sports Action	2%	4%

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

Table 12 shows that problem and probable pathological gamblers in British Columbia are significantly more likely than non-problem gamblers to gamble weekly on Scratch & Win and pull-tabs. These respondents are also significantly more likely to be involved on a weekly basis in card games with friends or relatives with no money at stake. Problem and probable pathological gamblers in British Columbia are somewhat more likely than non-problem gamblers to wager frequently on games of skill.

In considering the relationship between gambling involvement and problem gambling, it is important to note that some types of gambling are not regularly available. In British Columbia, questions about gambling involvement were framed slightly differently than in similar surveys in other jurisdictions. In British Columbia, respondents were first asked if they wagered regularly, occasionally, rarely or never on each type of gambling. For each type of gambling that respondents had ever done, they were then asked about past year and weekly involvement.

While some types of gambling are not available on a weekly basis, respondents may nevertheless engage in these activities on a regular basis. For example, respondents may regularly spend vacations at a resort casino although they do not wager at resort casinos on a weekly basis. Table 13 shows differences in regular involvement in different types of wagering by non-problem and problem gamblers. Only those types of gambling for which regular participation among non-problem as well as problem and probable pathological gamblers was higher than 1% are shown.

TABLE 13
Regular Gambling Involvement
of Non-Problem and Problem Gamblers

	Non-Problem Gamblers (N=1,069)	Problem & Pathological Gamblers (N=94)
Games Played Weekly		
BC Lottery 6/49	33%	39%
Cards w/Friends (no \$ at stake)	18%	27%*
Scratch & Win Lottery Games	16%	30%**
Raffle Tickets	15%	23%*
Sports w/Friends	4%	12%**
Card Games	3%	7%*
Sports Action	3%	3%
Sports Pools	3%	7%**
Pull-tabs	3%	6%*
Games of Skill	3%	**
Speculative Investments	2%	2%
Traditional Bingo	1%	13%**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

As Table 12 shows in relation to weekly involvement in gambling, Table 13 shows that problem and probable pathological gamblers in British Columbia are significantly more likely than non-problem gamblers to gamble regularly on Scratch & Win. Table 13 shows that problem and probable pathological gamblers are also significantly more likely than non-problem gamblers to wager regularly on traditional bingo, games of skill, on sports events with friends and co-workers and on sports pools.

Gambling Expenditures

Given the correlation between gambling problems and regular heavy losses, it is important to compare gambling expenditures of non-problem gamblers with those with moderate to severe gambling-related problems. Table 14 shows that reported monthly expenditures on gambling are significantly higher among problem and probable pathological gamblers than among non-problem gamblers for casino gambling (both local and at resorts), for wagering on horse races at the track, at fund raising events and at traditional bingo games. Expenditures are also significantly higher among problem and probable pathological gamblers for wagering on sports events with friends and co-workers, on pull-tabs and on games of skill. Expenditures on the provincial lottery's Sports Action game are somewhat higher among problem and probable pathological gamblers than among non-problem gamblers.

TABLE 14
Average Monthly Gambling Expenditures
of Problem and Non-Problem Gamblers

Type of Gambling Activity	Non-Problem Gamblers (N=1,069)	Problem & Pathological Gamblers (N=114)
Resort Casinos	15.27	63.26**
BC Lottery 6/49	13.36	20.48
Raffle Tickets	5.62	8.00
Scratch & Win Lottery Games	5.59	10.57
Card Games	5.27	8.38
Local Casinos	4.98	28.06**
Horse Races (on-track)	4.21	20.05**
Fund Raising Events	4.05	14.23**
Traditional Bingo	3.53	23.91**
Sports w/Friends	3.53	9.85**
Sports Pools	2.52	5.13
Pull-tabs	2.48	7.46**
Games of Skill	2.42	17.82**
Card Rooms	2.23	5.00
Dice Games	1.78	5.96
Sports Action	1.57	4.94*
Total Monthly Expenditures on Gambling	82.26	272.79**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

Table 14 only shows those types of gambling for which expenditures among non-problem gamblers were higher than \$1.00. Expenditures are significantly higher among problem and probable pathological gamblers than among non-problem gamblers for several types of gambling where expenditures among non-problem gamblers were less than \$1, including video poker, arcade video games and electronic bingo. The total of monthly expenditures on gambling among problem and non-problem gamblers also differs significantly.

On the basis of statistically significant differences in regular involvement and reported monthly expenditures, the types of gambling in British Columbia most closely associated with problem and pathological gambling are wagering on sports with friends and co-workers and wagering on traditional bingo games. Wagering on games of skill is also closely associated with problem and pathological gambling in British Columbia.

Although the group sizes are small, analysis shows that male and female problem and probable pathological gamblers in British Columbia have distinct patterns of involvement in gambling. Women problem and probable pathological gamblers are significantly more likely than men to have ever wagered on Scratch & Win, video poker and bingo. Problem and probable pathological gamblers under the age of 30 are significantly more likely than older problem gamblers to have ever wagered on arcade video games and on games of skill.

The financial consequences of problem gambling can be devastating. A hint of these consequences appears if we look at the differences in the role of gambling expenditures in the household budgets of problem and non-problem gamblers.

The following table presents a rough estimate of the percentage of household income allocated to gambling derived by dividing total monthly expenditures on all forms of gambling by estimated monthly income (based on the annual income data collected in the demographic questions).

TABLE 15
Gambling Expenditures as % of Household Income:
Problem Vs. Non-Problem Gamblers

	Problem Gamblers	Non-Problem Gamblers
Base:	(94)	(1106)
None	3	22
Less than 1%	22	44
1-2%	27	20
3-4%	13	6
5-9%	15	4
10% or greater	20	4

Not only do problem gamblers devote relatively more of their income to gambling, but these expenditures exceed 10% in one out of five cases. While this represents an individual decision of how to allocate income, spending at this level has consequences for other household members and the ability to allocate income in other areas.

Other Significant Differences

Beyond differences in gambling involvement and expenditures, there are other significant differences between respondents who have ever gambled and those who score as problem and probable pathological gamblers in British Columbia that are worthy of note. Table 16 shows that the mean age at which problem and probable pathological gamblers started gambling is significantly lower than the mean age at which non-problem gamblers started.

Table 16 also shows that lifetime problem and probable pathological gamblers are significantly more likely than non-problem gamblers to have ever felt that they had a problem with gambling, to have felt nervous about their gambling and to feel that one or the other of their parents had a gambling problem. Problem and probable pathological gamblers are significantly more likely than non-problem gamblers to indicate that a typical gambling session lasts for 3 or more hours. Finally, problem and probable pathological gamblers are significantly more likely than non-problem gamblers to have wagered \$1,000 or more in a single day.

TABLE 16
Other Significant Differences Between
Problem and Non-Problem Gamblers

Type of Gambling Activity	Non-Problem Gamblers (N=1,069)	Problem & Pathological Gamblers (N=94)
Mean age started gambling	21	17**
Ever felt you had a problem?	<1%	17%
Ever felt nervous about gambling	9%	34%
Parent ever had problem w/gambling	3%	**
Typical gambling session 3 or more hours	34%	56%**
Wagered \$1,000 + in one day	6%	11%**
Gamble w/friends, co-workers, others	35%	**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

These differences relate to personal feelings about gambling, to perceptions about gambling problems in the family, and to the time and resources devoted to gambling by problem and non-problem gamblers. Table 17 shows that, in addition to these differences, problem and probable pathological gamblers differ significantly from non-problem gamblers in their motivations for gambling.

TABLE 17
Reasons for Gambling Among
Problem and Non-Problem Gamblers

Reasons for Gambling	Non-Problem Gamblers (N=1,069)	Problem & Pathological Gamblers (N=94)
For fun or entertainment	42	62**
To support worthy causes	33	37
To win money	25	42**
For excitement or challenge	22	46**
Out of curiosity	6	4
To socialise	27	38**
As a hobby	10	28**
Because I am good at it	9	23**
As a distraction from everyday problems	9	18**
To be alone	2	10**

* Somewhat significant ($p \leq .05$)

** Statistically significant ($p \leq .01$)

Table 17 shows that problem and probable pathological gamblers are significantly more likely than non-problem gamblers to agree that fun and entertainment, winning money, excitement and challenge, and socialising are extremely or very important reasons to gamble. Problem and probable pathological gamblers are also significantly more likely than non-problem gamblers to agree that gambling is extremely or very important to them as a hobby, as a distraction from everyday problems and as a means to be alone.

In the Introduction, we noted that there are several risk factors associated with the development of gambling-related problems. It is clear from the foregoing discussion that problem and probable pathological gamblers in British Columbia fit this profile clearly. These individuals are significantly more likely to have started gambling earlier in life; they clearly prefer the continuous types of gambling available in the province; their reasons for gambling are substantially different from the reasons given by non-problem gamblers; and their weekly involvement and monthly expenditures are all substantially higher than those of non-problem gamblers in the general population.

Gambling Activities Closely Linked to Problem Gambling

The preceding results have important implications for the social gaming institutions in British Columbia. From the results of the Social Gaming Survey reported earlier, the public makes few major distinctions between the four main social gaming institutions in terms of their attraction to problem gamblers. In the public view, there is very little differentiation between lotteries, casinos, bingo and horse track betting in terms of the proportion of players who have developed gambling problems or begun to spend in excess.

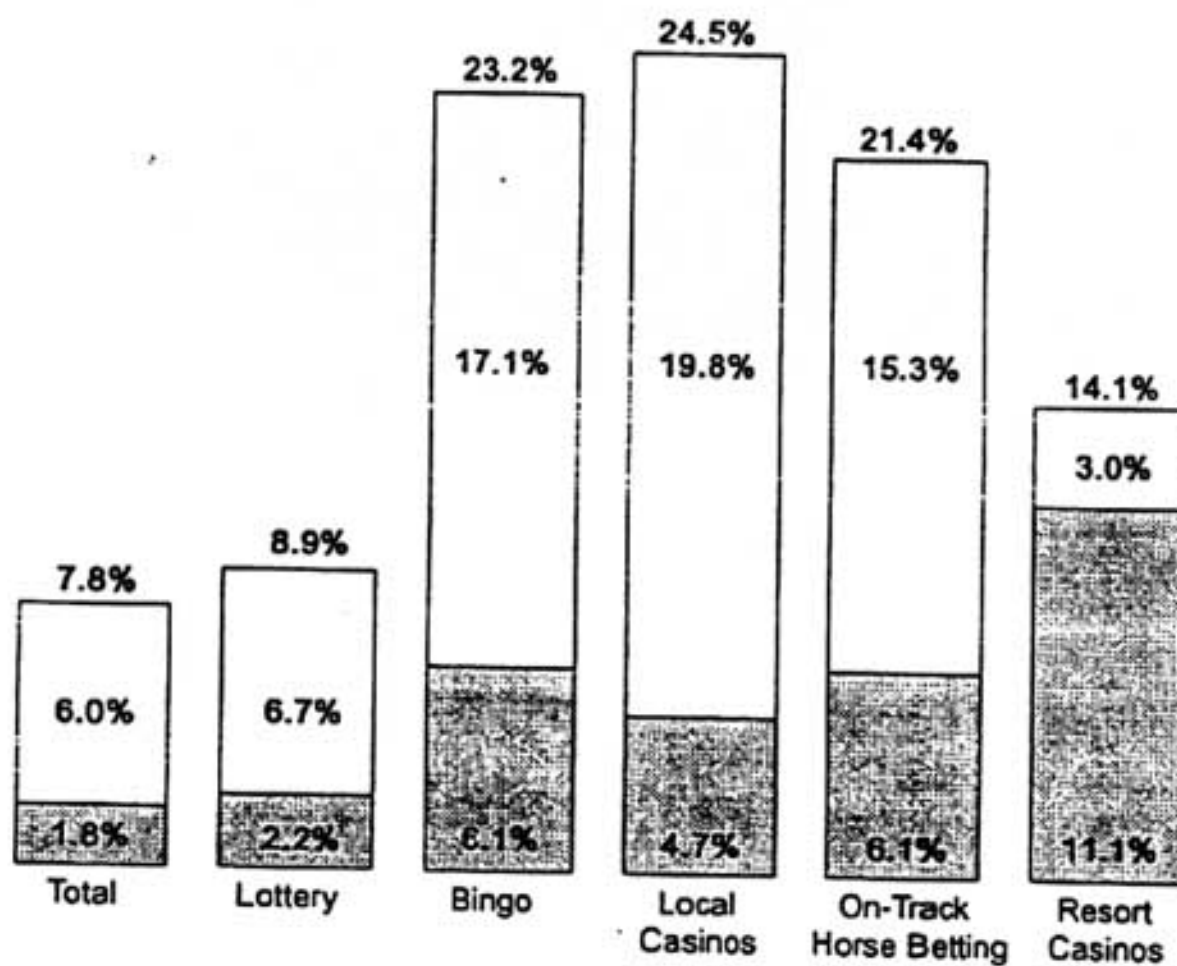
An analysis of Problem Gambling Survey data reveals that there are marked differences between different gambling activities and the patterns of expenditure and prevalence of problem gambling. The table below reports expenditure profiles by past year participants in lottery games, traditional bingo, local casino game, and on-track horse betting. While lottery players do not diverge significantly from the public at large in the proportion of household allocated to gambling, participants in the other three activities show expenditure patterns that strongly recall those of problem gamblers noted in the previous section.

TABLE 18
Total Gambling Expenditures As % Of Household Income:
Expenditure Profiles By Past Year Participants

	Total (1200)	Any Lottery (969)	Traditional Bingo (146)	Local Casino (135)	On-Track Horse Betting (98)	Resort Casinos (135)
Base:	(1200)	(969)	(146)	(135)	(98)	(135)
None	20	10	4	5	5	5
Less Than 1%	43	47	21	19	23	36
1-2%	20	24	21	29	35	24
3-4%	7	8	16	16	14	13
5-9%	5	6	21	13	10	6
10% Or Greater	5	6	18	18	12	16

This connection becomes more pronounced when we look at the actual prevalence of problem gambling among participants in each activity. Compared to the population at large, there is an exceptionally high incidence of lifetime problem and problem pathological gamblers among participants in bingo, casinos and on-track horse betting. Lottery players, by contrast, are only slightly higher than the total population in the proportion of players who fall in to the problem category. These patterns are summarised in the following graph:

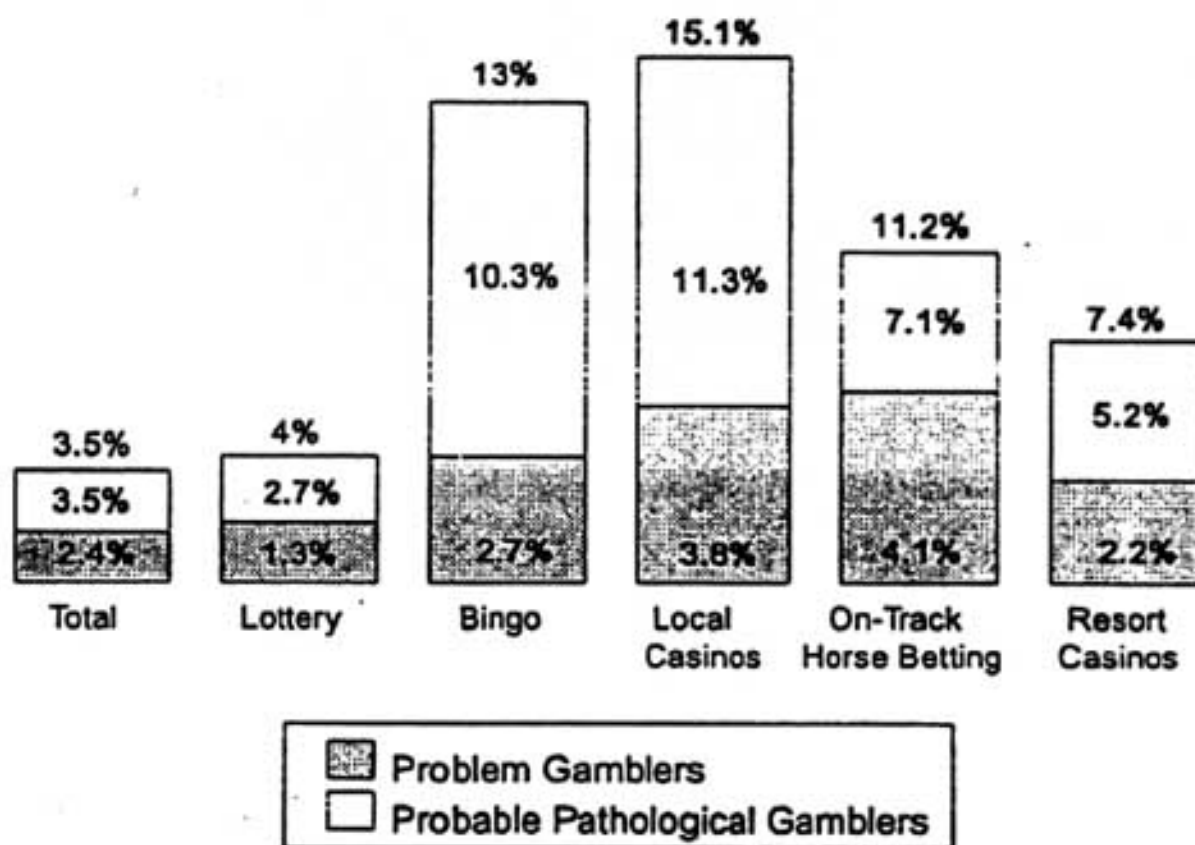
**GRAPH 14. LIFETIME PREVALENCE
AMONG PARTICIPANTS**



□ Problem Gamblers
▨ Probable Pathological Gamblers

Similar patterns appear for the current prevalence of problem and probable pathological gamblers:

**GRAPH 14. CURRENT PREVALENCE
AMONG PARTICIPANTS**



These patterns suggest that the public's perception of similar proportions of problem gambling among participants in the different activities is unfounded. Contrary to this assumption, there is a substantial disparity between lotteries and other forms of legal gambling in the province. Any effort to address the most serious pockets of problem gambling in the province would need to identify local casinos, bingo or horse racing as first priorities. A focus on participants in these types of activities would be a more efficient means of reaching the problem population than a lottery based program. While lottery participants do include both social and problem gamblers, lottery players closely resemble the population at large.

Lottery Games and Problem Gamblers

Within lottery games, there are nonetheless a few areas where there may be a special attraction to problem gamblers. The following table reports total gambling expenditures as a proportion of household income. While players of the main lottery game categories (6/49, Scratch & Win) closely resemble the total population in their spending patterns, there is a noticeable deviation among break-open players and Sports Action.

TABLE 19
Total Gambling Expenditures As % Of Household Income:
Expenditure Profiles By Lottery Game Participants

	Any Lottery	6/49	Scratch & Win	Sports Action	Break Opens
Base:	(969)	(893)	(741)	(96)	(303)
None	10	8	7	3	4
Less Than 1%	47	47	43	20	36
1-2%	24	25	25	35	28
3-4%	8	8	9	15	11
5-9%	6	6	7	13	10
10% Or Greater	6	6	8	15	10

This suggests that games of this type may be more appealing to problem gamblers than other lottery offerings. The actual prevalence patterns of problem gamblers in the next table line up with the preceding observations.

TABLE 20
Problem Gambling And Lottery Play

	Any Lottery	6/49	Scratch & Win	Sports Action	Break Opens
Base:	(969)	(893)	(741)	(96)	(303)
Lifetime:					
Problem Gambler	6.7	6.6	7.6	16.7	12.2
Probable Pathological Gambler	2.2	2.4	2.4	8.3	1.9
Current:					
Problem Gambler	2.8	2.9	3.4	7.3	5.3
Probable Pathological Gambler	1.3	1.5	1.5	6.3	0.7

Again, the connection is most pronounced with Sports Action. This may reflect either or both of two factors that make it especially appealing to problem gamblers. First, the game has an obvious crossover appeal to participants in other varieties of sports wagering which attract a substantial number of problem gamblers. Second, the game is a relatively new introduction which would have great appeal to problem gamblers who are inclined to be among the first to try any new gambling option.

Public Awareness of Treatment Alternatives for Problem Gamblers

The preceding sections have shown that the British Columbia public has begun to acquire a degree of awareness of problem gambling in the province. In approximately one out of four instances, this awareness is linked to personal knowledge of gamblers who are perceived as addicted or spending beyond their means. Awareness of problem gambling is not matched by widespread familiarity with treatment options for problem gamblers.

The following table shows the responses to a survey question asking respondents where they would tell a problem gambler to go for help. The largest category of responses fall into the "Don't Know" category, suggesting that half the population does not have any idea of what treatment alternatives are available in the province.

GRAPH 21
Sources Of Help For
Problem Gamblers In British Columbia

Where would you tell someone with a gambling problem to go for help?	Lifetime Problem Gambler	Non Problem Gambler
Base:	(94)	(1106)
Gamblers Anonymous	20	26
Counsellor, Psychologist Or Other Professional	17	12
Priest/Minister	2	2
Family Doctor	5	2
Talk With Friends, Family	4	1
Alcohol Or Drug Treatment Centre	2	1
Other	7	5
Don't Know	49	55

Where respondents do have an idea of where they would tell someone to seek help, the largest single category is Gamblers Anonymous (26%), followed by professional counsellors or psychologists (12%). Alcohol or drug treatment centres (1%) or family doctors (2%) received very few mentions, as did traditional sources of moral guidance such as priests or ministers (2%). These patterns suggest that the public is more inclined to expect specialised treatment for gamblers rather than view the problem as one that can be dealt with by the existing medical or drug and alcohol addiction treatment establishment.

Compared to the population at large, problem gamblers were not dramatically different in where they would suggest someone should go for treatment. Problem gamblers were slightly less likely to mention Gamblers Anonymous, possibly because acknowledgement of this group may undermine any ongoing denial processes.

In terms of paying for the treatment, respondents favoured different alternatives shown in the table below. The "Don't Know" responses again were the most frequent (23%) response, suggesting that this is an issue that has not yet received much consideration from a large part of the populace.

TABLE 22
Payment For Gambling Treatment

How would treatment be paid for in the province?	Lifetime Problem Gamblers	Non Problem Population
Base:	(94)	(1106)
Lottery And Gaming Revenues Should Fund Treatment	23	27
Patients Pay Themselves	23	28
Part Of Provincial Health Coverage, Medicare	19	17
Other	4	5
Don't Know	30	23

The largest blocs of responses show a division between those favouring funding from lottery and gaming revenues (27%) and patients paying for the treatment themselves (28%). Another large bloc (17%) would have problem gambling treatment covered under existing health insurance programs. Combining the responses of those who favoured funding from gaming revenues with those who expected treatment to come from standard health coverage, nearly half (44%) of the population expects public funds from some source to cover the cost of treatment.

CONCLUSIONS

Gambling represents an extremely popular range of activities in British Columbia. The vast majority of the adult population has participated in one or more types of gambling in their lifetime. This gambling generates substantial revenues for the provincial government, charities and other organisations in the province on an annual basis. While the majority of British Columbians participate in legal gambling activities in a responsible way and experience few negative consequences, the results of this study indicate that there are substantial social, economic and health concerns associated with legal gambling in British Columbia.

Summary of Findings

To summarise the findings from this survey on gambling involvement and problem gambling in the general population: the general population in British Columbia are enthusiastic gamblers with the great majority having tried at least one type of gambling. Individuals with low annual household incomes are the only group significantly less likely to gamble than other groups in the general population. Favourite types of gambling in British Columbia are playing card games with no money at stake and purchasing lottery tickets.

As in other jurisdictions, gender is an important predictor of gambling involvement in British Columbia. Men in British Columbia prefer games with element of skill while women are more likely to wager on games dominated by luck. While overall participation rates are comparatively low for resort and local casinos, bingo and horsetrack betting, these areas show substantial differences in expenditures between social gamblers and problem gamblers.

The lifetime and current prevalence rates of problem and probable pathological gambling in British Columbia are higher than many other jurisdictions where similar surveys have been conducted, but lower than the adjacent province of Alberta. As in other jurisdictions, a substantial proportion of the British Columbia respondents who score as lifetime problem or probable pathological gamblers do not score as having a current problem or pathology. Problem and probable pathological gamblers in British Columbia are significantly more likely than non-problem gamblers to gamble weekly on Scratch & Win and pull-tabs. However, on the basis of both involvement and expenditures, the types of gambling in British Columbia most closely associated with problem and pathological gambling are casino games, wagering on sports, games of skill and bingo.

In terms of organised gaming activities, the problem gambling prevalence rates were substantially higher among casino, bingo and horse track players than lottery players.

Implications for the Future

Based on the results of this study, we believe that the introduction of new types of gambling in the province should be implemented carefully in order to minimise probable increases in problem gambling prevalence rates. Gambling problems are most likely to occur among a high risk population of young, unemployed minority men with lower than average education and income. Casino, bingo and horse track betting appear to be especially attractive to problem gamblers.

To conclude, like many other jurisdictions, British Columbia has legalised numerous types of gambling in the last two decades. The data from this survey indicate that significant numbers of the residents of British Columbia participate in these as well as other types of gambling, that they find gambling entertaining and enjoyable, and that they spend moderate amounts of money on gambling. While British Columbia clearly benefits from the gambling involvement of its citizens, the results of this survey indicate that there are significant costs associated with gambling involvement among British Columbians. The public is already concerned about these problems. Their estimates of the extent of problems among participants in social gaming activities is higher than what was revealed on the present survey.

The data presented here provide a benchmark for future assessments of gambling involvement and problem and pathological gambling in British Columbia. These data also provide a foundation for policy making and planning for services for individuals who experience difficulties related to their involvement in gambling. Consideration should be given to educating British Columbians about the potential problems associated with gambling, to providing treatment services for those individuals who experience problems related to their gambling, and to ensuring that adequate and continuing funds for such efforts are made available. There is already a high degree of expectation among the public that a portion of gaming revenues or health care budgets should be allocated to gambling treatment. In the future, it will be important for everyone concerned about and involved with legalised gambling in British Columbia to work together to develop ways to help those individuals who encounter problems related to their gambling.

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APPENDIX A

Questionnaire for the British Columbia Survey on Gambling and Problem Gambling

Problem Gambling Survey - Final Questionnaire

October 15, 1993

Hello, this is _____ from the Angus Reid Group, a national public opinion and polling firm. We are conducting a survey and I would like a few minutes of your time to answer some questions.

May I speak with someone in your household who is at least 18 years of age and who most recently celebrated a birthday?

Speaking
I'll get him/her
Not available

1 - CONTINUE
2 - REPEAT INTRO
3 - ARRANGE CALLBACK

REPEAT INTRO IF NECESSARY FOR DIFFERENT HOUSEHOLD MEMBER

1) Part of our survey today is about how people in British Columbia spend their leisure time. What types of leisure time activities do you enjoy most? **CHECK ALL THAT APPLY**

- a) watching television
- b) socializing or visiting with friends/relatives
- c) socializing in bars, clubs
- d) reading
- e) attending cinema/renting videos
- f) spectator sports such as football, hockey
- g) participating in sports activities such as golf, tennis, softball
- h) casino, bingo, horse races or other betting activities
- i) attending theatre, symphony, museum or other cultural activities
- j) gardening
- k) camping, hunting, fishing, bird watching or other outdoor activities
- l) dining out
- m) traveling
- n) craft hobby such as woodworking, sewing, model building, etc.
- m) collecting antiques, stamps, coins, etc
- n) other SPECIFY

2) Here are some general descriptions of how different people approach life. Each statement describes an approach to life. Please tell me how you feel about each statement on a scale of 1 to 7 where "1" means you disagree totally and "7" means you agree completely.

ROTATE START

- a) I'm not getting along too well right now; times used to be better.
- b) I believe in traditional values that have stood the test of time like family, religion, and saving for a rainy day.

- c) I enjoy introducing a small element of danger into my life.
- d) I don't like to buy anything new until I've seen it used successfully by others.
- e) It's very important for me to feel part of a group.
- f) Life should be enjoyed as much as possible today without worrying about the future.
- g) I believe in the saying, nothing ventured, nothing gained, and that's why I like to take risks.
- h) Most nights of the week I'm out at a social event of some sort.
- i) Overall, I think I'm happier than most people I know.
- j) Whether or not you make it in life is determined mostly by luck
- k) I often feel left out of decisions that affect me
- l) It's important to have long term goals and stick to them, even if that means sacrificing some things today.
- m) I like to win, and enjoy the feeling that I have beaten the rest of the world.
- n) I often dream about what I would do and how I would like it if I were rich.
- o) I believe in fate; some things are destined to happen.
- p) Certain numbers and sequences of numbers have special significance and power.
- q) I enjoy a challenge; pitting myself against the odds.
- r) I thrive on excitement and thrills
- s) One dollar is not much money; I wouldn't be concerned if I lost it.
- t) Winning something is an indication that fortune is smiling on me.
- u) I pay close attention to what successful people are doing
- v) TV is a major form of entertainment for me

3- A) I want to read you a list of some types of entertainment and other activities that may or may not involve betting or wagering money on the outcome. When I read each activity, tell me if you have ever participated in that activity *regularly*, that is, several times a month or more often; *occasionally*, or several times throughout the year; *rarely*, meaning only a few times; or *never*, meaning you have never tried the activity. ROTATE START

- a) go to a local casino
- b) go to a resort casino such as Las Vegas or a cruise ship
- c) buy a ticket in a raffle
- d) go to a casino night or similar fund raising event for an organisation
- e) play a lottery game such as 6/49
- f) play a Scratch and Win lottery game
- g) play video poker or other video card games
- h) bet on pinball, arcade or video games
- i) play electronic bingo such as at Starship Bingo
- j) play traditional paper bingo in a bingo hall
- k) bet on horses at the track
- l) bet on horses away from the track
- m) bet on other kinds of animal events, such as dog races or cockfights
- n) play cards with friends or relatives with no money at stake
- o) play cards where money is at stake
- p) play cards in a card room

- q) shoot craps or play other dice games
- r) bet on sports outcomes with friends, relatives or co-workers
- s) participate in a sports betting pool
- t) play Sports Action lottery game
- u) bet on sports through a bookmaker or bookie
- w) buy pulltabs or breakopens in a bar or nightclub
- x) make speculative investments
- y) bet on a game of skill such as billiards, golf, or bowling that you were playing

Have you participated in any other activities like these where you bet or wager money on the outcome? SPECIFY

aa) _____

bb) _____

cc) _____ IF ANY MENTIONED, ASK: Do you participate regularly, occasionally or rarely?

IF "REGULARLY" "OCCASIONALLY" OR "RARELY" PARTICIPATES IN AN ACTIVITY. ASK:

3-B) Have you participated in this activity in the past year? IF NO GO TO Q 3-D.E

3-C) Have you participated in this activity in the past week?

3-D) What would you say is the average amount you spend on (NAME OF ACTIVITY) each time you play?

3-E) Approximately how much do you spend on (NAME OF ACTIVITY) in a typical month?

REPEAT Q 3B-E FOR ALL OTHER ACTIVITIES DESIGNATED AS REGULARLY, OCCASIONALLY OR RARELY

3-F) Which one of the activities we discussed would you say is your favourite?

IF "NO FAVOURITE" AS RESPONSE, ACCEPT AND ASK:

Which of these activities, then, do you participate in most often?

4-A) When you participate in your favourite (most frequent) of these activities, how long do you play?

- | | |
|--------------------|---|
| less than 1 hour | 1 |
| 1-2 hours | 2 |
| 3-5 hours | 3 |
| 6-12 hours | 4 |
| more than 12 hours | 5 |

4-B) When you participate in your favourite (most frequent) of these activities, do you usually do so :
alone
with your spouse or partner
with other family members
with friends or coworkers
with some other individual or group SPECIFY:

4-C) What is the largest amount of money you have ever spent on this activity at one time?

\$1 or less	1
\$1-\$9	2
\$10-\$99	3
\$100-\$999	4
\$1,000 - \$9,999	5
\$10,000 or more	6

5) Here are some reasons why people say they participate in the types of activities we have been discussing. After each one, tell me if this reason is extremely important, very important, somewhat important, slightly important, or not at all important for you : ROTATE START

- a) In order to socialize
- b) For excitement or as a challenge
- c) As a hobby
- d) To win money
- e) To support worthy causes
- f) Out of curiosity
- g) For entertainment or fun
- h) To distract yourself from everyday problems

Any other reason? SPECIFY

The next set of questions is part of a standard measurement scale which has been used in Canada in surveys similar to this one. There are no right or wrong answers to the questions that follow. We want to know what your experiences have been. Please try to be as accurate as possible in your answers and remember that all this information is anonymous.

FOR Q6 TO Q29, IF THE RESPONDENT ANSWERS "NEVER" OR "NO" TO PART A, SKIP TO NEXT A. OTHERWISE, ASK PART B.

IF INTERVIEWER ENCOUNTERS DIFFICULTIES WITH RESPONDENTS IN COMPLETING THIS SECTION:

We realise that these questions may not apply to everyone, but we do need answers to all of the questions. It will only take a few more minutes.

6-A) When you participate in the gambling activities we have discussed, how often do you go back another day to win back money you lost? Is it:

1. Never 2. Some of the time 3. Most of the time 4. Every time 5. DK 6. NR

6-B) How often have you done this in the past year?

1. Never 2. Some of the time 3. Most of the time 4. Every time 5. DK 6. NR

7-A) Have you ever claimed to be winning money from these activities when in fact you lost?

1. Never 2. Some of the time 3. Most of the time 4. Every time 5. DK 6. NR

7-B) How often have you done this in the past year?

1. Never 2. Some of the time 3. Most of the time 4. Every time 5. DK 6. NR

8-A) Have you ever spent more time or money gambling than you intended?

1. Yes 2. No 3. DK 4. NR

8-B) Have you done this in the past year?

1. Yes 2. No 3. DK 4. NR

9-A) Have people ever criticised your gambling?

1. Yes 2. No 3. DK 4. NR

9-B) Have people criticised your gambling in the past year?

1. Yes 2. No 3. DK 4. NR

10-A) Have you ever felt guilty about the way you gamble or about what happens when you gamble?

1. Yes 2. No 3. DK 4. NR

10-B) Have you felt this way in the past year?

1. Yes 2. No 3. DK 4. NR

11-A) Have you ever felt that you would like to stop gambling, but didn't think that you could?

1. Yes 2. No 3. DK 4. NR

11-B) Have you felt this way in the past year?

1. Yes 2. No 3. DK 4. NR

12-A) Have you ever hidden betting slips, lottery tickets, gambling money or other signs of gambling from your spouse or partner, children, or other important people in your life?

1. Yes 2. No 3. DK 4. NR

12-B) Have you done so in the past year?

1. Yes 2. No 3. DK 4. NR

13) Have you ever argued with people you live with over how you handle money?

1. Yes 2. No 3. DK 4. NR

14-A) Have these arguments ever centred on your gambling?

1. Yes 2. No 3. DK 4. NR

14-B) Have you had any of these arguments in the past year?

1. Yes 2. No 3. DK 4. NR

We are almost through this section of questions. Please remember that all this information is anonymous.

15-A) Have you ever missed time from work or school due to gambling?

1. Yes 2. No 3. DK 4. NR

15-B) Have you missed time from work or school in the past year due to gambling?

1. Yes 2. No 3. DK 4. NR

16-A) Have you ever borrowed from someone and not paid them back as a result of your gambling?

1. Yes 2. No 3. DK 4. NR

16-B) Have you done so in the past year?

1. Yes 2. No 3. DK 4. NR

17-A) Have you ever borrowed from household money?

1. Yes 2. No 3. DK 4. NR

17-B) Have you borrowed from household money in the past year?

1. Yes 2. No 3. DK 4. NR

18-A) Have you ever borrowed money from your spouse or partner?

1. Yes 2. No 3. DK 4. NR

18-B) Have you borrowed money from your spouse or partner in the past year?

1. Yes 2. No 3. DK 4. NR

19-A) Have you ever borrowed from other relatives or in-laws?

1. Yes 2. No 3. DK 4. NR

19-B) Have you borrowed from other relatives or in-laws in the past year?

1. Yes 2. No 3. DK 4. NR

20-A) Have you ever gotten loans from banks, loan companies or credit unions?

1. Yes 2. No 3. DK 4. NR

20-B) Have you gotten loans from banks, loan companies or credit unions in the past year?

1. Yes 2. No 3. DK 4. NR

21-A) Have you ever made cash withdrawals on credit cards to get money to gamble or pay gambling debts? (Does not include instant cash cards)

1. Yes 2. No 3. DK 4. NR

21-B) Have you made cash withdrawals in the past year?

1. Yes 2. No 3. DK 4. NR

22-A) Have you ever gotten loans from loan sharks to gamble or pay gambling debts?

1. Yes 2. No 3. DK 4. NR

22-B) Have you gotten loans from loan sharks in the past year?

1. Yes 2. No 3. DK 4. NR

23) Have you ever cashed in stocks, bonds or other securities to finance gambling?

1. Yes 2. No 3. DK 4. NR

24) Have you cashed in stocks, bonds or other securities in the past year?

1. Yes 2. No 3. DK 4. NR

25-A) Have you ever sold personal or family property to gamble or pay gambling debts?

1. Yes 2. No 3. DK 4. NR

25-B) Have you sold personal or family property to gamble or pay gambling debts in the past year?

1. Yes 2. No 3. DK 4. NR

26) Have you ever borrowed from your checking account by writing checks that bounced to get money for gambling or to pay gambling debts?

1. Yes 2. No 3. DK 4. NR

27) Have you borrowed from your checking account by writing checks that bounced in the past year?

1. Yes 2. No 3. DK 4. NR

28-A) Have you ever had a credit line with a casino or bookie?

1. Yes 2. No 3. DK 4. NR

28-B) Have you had a credit line with a casino or bookie in the past year?

1. Yes 2. No 3. DK 4. NR

29-A) Do you feel that you have ever had a problem with betting money or gambling?

1. Yes 2. No 3. DK 4. NR

29-B) Do you feel that you have had a problem with betting money or gambling in the past year?

1. Yes 2. No 3. DK 4. NR

30) Do you feel that either of your parents has ever had a problem with betting money or gambling?

1. Yes 2. No 3. DK 4. NR

31) How old were you when you first started gambling?

32-34) What type of gambling was that?

TAKE UP TO THREE ANSWERS

35) Was there any time when the amount you were gambling made you nervous?

1. Yes 2. No 3. DK 4. NR

36) How old were you when that happened?

37-39) What types of gambling were you doing when that happened?

40) Have you ever been in trouble with the law because of activities related to gambling?

41) Have you ever desired or sought treatment to help you stop gambling?

1. Yes 2. No 3. DK 4. NR

42) What type of treatment was that?

1. Gamblers Anonymous
2. Psychologist
3. Psychiatrist
4. Other counsellor
5. Minister or priest
6. Other - SPECIFY

43) If you knew someone with a gambling problem who wanted help, where would you tell them to look in B.C.?

RECORD FIRST MENTION, THEN ASK:

Anything else?

44) To the best of your knowledge, how would treatment for compulsive gambling be paid for in the province?

Part of provincial health coverage 1

Patients pay themselves 2

Supplemental insurance 3

Other SPECIFY

45) Are you currently married, widowed, divorced, separated, or have you never been married?

1. Married, common-law, co-habitation
2. Widowed
3. Divorced
4. Separated
5. Never married
6. Refused

46) Including yourself, how many people over the age of 18 live in your household?

47) How many under the age of 18?

48) What is the highest level of education you have completed?

1. Elementary or some high school
2. High school graduate
3. Some college or vocational, technical or trade school
4. University degree
5. Graduate study or degree
6. Refused

49) Last week, were you working full-time, part-time, going to school, keeping house, or something else?

1. Working full-time
2. Working part-time
3. Going to school
4. Keeping house
5. Disabled
6. Retired
7. Unemployed
8. Refused

50) What kind of work do you normally do?

1. Farming/agricultural
2. Mining
3. Logging/forestry
4. Fishing
5. Retail services
6. Other services
7. Professional/technical
8. Manager/proprietor
9. Skilled,craftsperson
10. Semi-skilled,operative
11. Labourer
12. Student
99. Refused or no answer

51) In what year were you born?

52) We are all Canadians, but our ancestors came from all over the world. What is your ethnic background? (PROBE FOR PRIMARY ETHNIC GROUP IF POSSIBLE)

1. European
2. East Indian/Pakistani
3. Native Canadian/Aboriginal
4. East Asian (Chinese/Japanese/Vietnamese/etc)
5. Middle Eastern (Arab/Persian/Turkish/Palestinian/etc)
6. African
7. Other
9. DK

53) Which of the following best describes your current religious preference?

1. Protestant
2. Catholic
3. Jewish
4. Muslim
5. Other
6. None
7. DK

54) Which of the following categories includes your total household income last year?

1. Under \$15,000
2. \$15,001 to \$25,000
3. \$25,001 to \$35,000
4. \$35,001 to \$50,000
5. \$50,001 to \$80,000
6. Over \$80,000
8. refused
9. DK

55) In what city or district do you live?

56) What is your complete postal code?

57) RESPONDENT SEX (DON'T ASK)

1. Male
2. Female
3. Cannot tell

That was the last question. Thank you very much for your time and cooperation.

APPENDIX B

Comparison of Survey Respondents and Refusers

Appendix B

COMPARISON OF SURVEY RESPONDENTS & REFUSERS

Overview

As described earlier, the response rate for the Problem Gambling Survey at 25% was approximately half the expected rate. The Survey went into field in the period immediately preceding the 1993 Canadian Federal Election when polling activity was at a high level, particularly in British Columbia where there were several hotly contested ridings. We suspect this may have had a suppressant effect on the willingness of British Columbia residents to participate in surveys.

To allow this "polling fatigue" factor to dissipate, we waited until January 6 before recontacting a random sample drawn from the households that had refused to participate in the earlier survey. Using the same field procedures and a shortened version of the Problem Gambling Survey, Angus Reid Group field staff obtained a response rate of 47% among the refusers that was nearly double that of the original survey.

Comparison of Respondent and Refuser Demographics

The following set of tabulations compares the key demographic traits of Problem Gambling Survey respondents with those of the refusers who were subsequently recontacted a month later. The two groups are virtually identical in terms of gender, but the refuser group slightly under represents the youngest age group and over represents the oldest age group. To the extent that these recontacts are representative of refuser households, it would appear that the main difference is at the extremes of the age continuum. The sample demographics are actually more representative of the British Columbia population than the follow-up sample of refusers.

This age difference is probably behind the small differences that appear in the next tables reporting income, education, and marital status. In keeping with the cluster of older respondents among refusers, there is a slight over representation of refusers in the upper income (and refusal) group as well as the lower educational attainment grouping; refusers are also slightly under represented in the never married group. These differences are characteristic of older populations which reflect the more limited educational opportunities available to older age cohorts as well as their higher incomes resulting from the accumulation of lifetime earnings and investments.

Small differences also appear between respondents and refusers in their gambling participation. The refusers are slightly more likely to go to resort casinos and bet on horses (both activities which tend to skew older) but are slightly less likely to take part in other activities.

KEY DEMOGRAPHIC TRAITS & GAMBLING PARTICIPATION

Respondent sex:

	Problem Gambling Survey (1200)	Recontacts with Refusers (200)
Male	46%	47%
Female	54	53

Respondent age:

	Problem Gambling Survey (1200)	Recontacts with Refusers (200)
18-28	23%	11%
29-38	25	24
39-48	20	20
49-58	13	10
59-68	9	15
69+	9	21

Respondent income:

	Problem Gambling Survey (1200)	Recontacts with Refusers (200)
Under \$15,000	10%	10%
\$15,001 to \$25,000	15	12
\$25,001 to \$35,000	16	12
\$35,001 to \$50,000	21	19
Over \$50,000	29	32
refused	9	10
DK	*	5

Respondent educational attainment:

	Problem Gambling Survey (1200)	Recontacts with Refusers (200)
Elementary or some high school	13%	20%
High school graduate	26	29
Some college or vocational, technical or trade school ..	33	31
University degree	21	13
Graduate study or degree ..	7	6
Refused	*	1

Respondent marital status:

	Problem Gambling Survey (1200)	Recontacts with Refusers (200)
Married, common-law, co-habitation	55%	62%
Divorced, separated, widowed	18	18
Never married	26	19
Refused	*	1

Participation in selected gambling activities:

	Problem Gambling Survey (1200)	Recontacts with Refusers (200)
go to a local casino	19%	10%
go to a resort casino such as Las Vegas or a cruise ship	34	41
buy a ticket in a raffle	88	80
play a lottery game such as 6/49	83	79
play a Scratch and Win lottery game	73	66
bet on horses at the track	26	32
bet on horses away from the track	6	3
play traditional paper bingo in a bingo hall	31	28
play cards where money is at stake	43	28
bet on sports outcomes with friends, relatives or co-workers	43	27
buy pulltabs or breakopens in a bar or nightclub	36	24

Comparison of Respondent and Refuser Gambling Screen Results

The final tabulation shows responses to the key South Oaks Gambling Screen items used to calculate the prevalence rates of problem and probable pathological gamblers. Note that the overall pattern of responses is quite close. Where a small discrepancy appears (e.g. on the items concerning chasing losses and the item about spending more time or money than intended, the differences cancel each other out).

RESPONSES TO KEY SOUTH OAKS GAMBLING SCREEN ITEMS:

	Problem Gambling Survey (1200)	Recontacts with Refusers (200)
When you participate in the gambling activities we have discussed, how often do you go back another day to win back money you lost? Is it never, some of the time, most of the time, or every time? (% "some of the time/most of the time/every time")	19	29
Have you ever claimed to be winning money from these activities when in fact you lost? (% "yes")	5	2
Have you ever spent more time or money gambling than you intended? (% "yes")	29	12
Have people ever criticised your gambling? (% "yes")	6	5
Have you ever felt guilty about the way you gamble or about what happens when you gamble? (% "yes")	7	2
Have you ever felt that you would like to stop gambling, but didn't think that you could? (% "yes")	2	1
Have you ever hidden betting slips, lottery tickets, gambling money or other signs of gambling from your spouse or partner, children, or other important people in your life? (% "yes")	2	2
Have you ever argued with people you live with over how you handle money? (% "yes")	23	13
Have these arguments ever centred on your gambling? (% "yes")	2	4
Do you feel that you have ever had a problem with betting money or gambling? (% "yes")	1	1

Given the lack of any large or consistent differences on the SOGS-R items between the survey sample and the refusers, the lower than anticipated response rate did not introduce any serious distortions into the survey estimates of problem gambling. The Problem Gambling Survey estimates of gaming participation and expenditures also closely matched current market survey data on lottery and competitive gaming categories. We therefore conclude that the survey data present an accurate baseline estimate of the current prevalence of problem gambling in the province.

APPENDIX C

Demographic Profiles of Gambling Participants

Local Casinos. Weekly players at local casinos are significantly more likely to be over the age of 30 than the general population. Weekly and past year players at local casinos are significantly less likely to be married than the general population and somewhat more likely to be non-Caucasian and to have annual household incomes under \$25,000.

BRITISH COLUMBIA

TABLE A
Demographic Profile By Participation Level
Local Casinos

	Overall (1200)	Weekly (6)	Past-Year (100)	Infrequent (124)	Never (970)	
Female	55%	33%	43%	57%	56%	
Male	45%	67%	57%	43%	44%	
Under 30	27%	17%	44%	25%	25%	**
Over 30	73%	83%	56%	75%	75%	
White	80%	67%	72%	75%	82%	*
Nonwhite	20%	33%	28%	25%	18%	
Less than HS	13%	---	10%	12%	14%	
HS Grad	87%	100%	90%	88%	86%	
Married	55%	33%	41%	52%	57%	**
Not Married	45%	67%	59%	48%	43%	
HH > 25,000	73%	100%	84%	72%	72%	*
HH < 25,000	27%	---	16%	28%	28%	
Unemployed	5%	---	5%	5%	5%	
Employed	95%	100%	95%	95%	95%	

Resort Casinos. Respondents who have wagered at resort casinos are significantly more likely to be over the age of 30 and married than the general population. These respondents are also significantly more likely to have annual household incomes over \$25,000.

BRITISH COLUMBIA

TABLE B
Demographic Profile By Participation Level
Resort Casinos

	Overall (1200)	Weekly (6)	Past-Year (129)	Infrequent (272)	Never (793)	
Female	55%	67%	52%	54%	55%	
Male	45%	33%	48%	46%	45%	
Under 30	27%	—	16%	14%	33%	**
Over 30	73%	100%	84%	86%	67%	
White	80%	67%	85%	81%	79%	
Nonwhite	20%	33%	15%	19%	21%	
Less than HS	13%	—	13%	9%	15%	
HS Grad	87%	100%	87%	91%	85%	
Married	55%	83%	67%	61%	51%	**
Not Married	45%	17%	33%	39%	49%	
HH > 25,000	73%	100%	88%	81%	68%	**
HH < 25,000	27%	—	12%	19%	32%	
Unemployed	5%	—	3%	4%	5%	
Employed	95%	100%	97%	96%	95%	

Raffle Tickets. Respondents who have ever bought raffle tickets are significantly more likely to be women than the general population. Respondents who purchase raffle tickets infrequently are significantly more likely to be under the age of 30 and to have annual household incomes under \$25,000 than the general population. Respondents who have ever bought raffle tickets are somewhat less likely to have graduated from high school than the general population. Respondents who have purchase raffle tickets weekly or in the past year are somewhat more likely to be married than the general population.

BRITISH COLUMBIA

TABLE C
Demographic Profile By Participation Level
Raffle Tickets

	Overall (1200)	Weekly (133)	Past-Year (708)	Infrequent (217)	Never (142)	
Female	55%	57%	58%	51%	41%	**
Male	45%	43%	42%	49%	59%	
Under 30	27%	21%	25%	35%	28%	**
Over 30	73%	79%	75%	65%	72%	
White	80%	85%	81%	79%	73%	
Nonwhite	20%	15%	19%	21%	27%	
Less than HS	13%	18%	12%	16%	7%	*
HS Grad	87%	82%	88%	84%	93%	
Married	55%	59%	58%	48%	49%	*
Not Married	45%	41%	42%	52%	51%	
HH > 25,000	73%	72%	78%	64%	62%	**
HH < 25,000	27%	28%	22%	36%	38%	
Unemployed	5%	6%	4%	3%	9%	
Employed	95%	94%	96%	97%	91%	

Fund Raising Events. Respondents who have waged at fund raising events in the past year are significantly more likely to be men than the general population. These respondents are also significantly more likely to have graduated from high school than the general population. Respondents who have waged at fund raising events infrequently and in the past year are significantly more likely to have annual household incomes over \$25,000 than the general population.

BRITISH COLUMBIA

TABLE D
Demographic Profile By Participation Level
Fund Raising Events

	Overall (1200)	Weekly (6)	Past-Year (127)	Infrequent (324)	Never (743)	
Female	55%	17%	42%	56%	57%	**
Male	45%	83%	58%	44%	43%	
Under 30	27%	17%	30%	28%	26%	
Over 30	73%	83%	70%	72%	74%	
White	80%	83%	81%	81%	80%	
Nonwhite	20%	17%	19%	19%	20%	
Less than HS	13%	17%	6%	10%	15%	**
HS Grad	87%	83%	94%	90%	85%	
Married	55%	33%	50%	57%	55%	
Not Married	45%	67%	50%	43%	45%	
HH > 25,000	73%	60%	81%	79%	69%	**
HH < 25,000	27%	40%	19%	21%	31%	
Unemployed	5%	---	5%	4%	5%	
Employed	95%	100%	95%	96%	95%	

649 Lottery Game. Respondents who purchase 649 tickets on a weekly basis are significantly more likely to be over the age of 30 than the general population while those who purchase 649 tickets infrequently are significantly more likely to be under the age of 30. Respondents who have ever purchased 649 tickets are significantly more likely to be Caucasian than the general population. Respondents who purchase 649 tickets infrequently are significantly less likely to be married and to have annual household incomes over \$25,000 than the general population.

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TABLE E
Demographic Profile By Participation Level
649 Lottery Game

	Overall (1200)	Weekly (593)	Past-Year (300)	Infrequent (107)	Never (200)	
Female	55%	53%	59%	58%	53%	
Male	45%	47%	41%	42%	47%	
Under 30	27%	20%	36%	37%	30%	**
Over 30	73%	80%	64%	63%	70%	
White	80%	77%	83%	82%	86%	**
Nonwhite	20%	23%	17%	18%	14%	
Less than HS	13%	15%	11%	13%	10%	
HS Grad	87%	85%	89%	87%	90%	
Married	55%	59%	52%	40%	55%	**
Not Married	45%	41%	48%	60%	45%	
HH > 25,000	73%	78%	67%	62%	73%	**
HH < 25,000	27%	22%	33%	38%	27%	
Unemployed	5%	4%	6%	3%	5%	
Employed	95%	96%	94%	97%	95%	

Instant Lottery Games. Respondents who have ever purchased instant lottery tickets are significantly more likely to be men than the general population while those who purchase such tickets weekly are more likely to be women than the general population. Respondents who have ever purchased instant lottery tickets are significantly more likely to be over the age of 30 than the general population. Respondents who purchase instant lottery tickets weekly are somewhat less likely to have graduated from high school than the general population.

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TABLE F
Demographic Profile By Participation Level
Instant Lottery Games

	Overall (1200)	Weekly (297)	Past-Year (444)	Infrequent (136)	Never (323)	
Female	55%	64%	58%	52%	43%	**
Male	45%	36%	42%	48%	57%	
Under 30	27%	28%	31%	25%	20%	**
Over 30	73%	72%	69%	75%	80%	
White	80%	78%	80%	81%	83%	
Nonwhite	20%	22%	20%	19%	17%	
Less than HS	13%	18%	11%	14%	11%	*
HS Grad	87%	82%	89%	86%	89%	
Married	55%	57%	55%	48%	56%	
Not Married	45%	43%	45%	52%	44%	
HH > 25,000	73%	71%	74%	69%	75%	
HH < 25,000	27%	29%	26%	31%	25%	
Unemployed	5%	3%	6%	4%	5%	
Employed	95%	97%	94%	96%	95%	

Video Poker or Video Gaming Machines. Respondents who have wagered on video poker machines infrequently or in the past year are significantly more likely to be over the age of 30 than the general population while those who wager on video poker weekly are significantly more likely to be under the age of 30 than the general population.

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TABLE G
Demographic Profile By Participation Level
Video Poker or Video Gaming Machines

	Overall (1200)	Weekly (17)	Past-Year (60)	Infrequent (153)	Never (970)	
Female	55%	47%	48%	54%	55%	
Male	45%	53%	52%	46%	45%	
Under 30	27%	18%	46%	35%	25%	**
Over 30	73%	82%	54%	65%	75%	
White	80%	82%	85%	76%	81%	
Nonwhite	20%	18%	15%	24%	19%	
Less than HS	13%	6%	10%	17%	13%	
HS Grad	87%	94%	90%	83%	87%	
Married	55%	59%	47%	50%	56%	
Not Married	45%	41%	53%	50%	44%	
HH > 25,000	73%	80%	80%	69%	73%	
HH < 25,000	27%	20%	20%	31%	27%	
Unemployed	5%	—	5%	3%	5%	
Employed	95%	100%	95%	97%	95%	

Arcade Video Games. Respondents who wager on arcade video games are significantly more likely to be male, under the age of 30 and unmarried than the general population. These respondents are somewhat more likely to have graduated from high school than the general population.

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TABLE H
Demographic Profile By Participation Level
Arcade Video Games

	Overall (1200)	Weekly (9)	Past-Year (30)	Infrequent (80)	Never (1081)	
Female	55%	44%	27%	49%	56%	**
Male	45%	56%	73%	51%	44%	
Under 30	27%	67%	67%	48%	24%	**
Over 30	73%	33%	33%	52%	76%	
White	80%	50%	77%	80%	81%	
Nonwhite	20%	50%	23%	20%	19%	
Less than HS	13%	11%	7%	4%	14%	*
HS Grad	87%	89%	93%	96%	86%	
Married	55%	22%	33%	36%	57%	**
Not Married	45%	78%	67%	64%	43%	
HH > 25,000	73%	63%	72%	78%	73%	
HH < 25,000	27%	37%	28%	22%	27%	
Unemployed	5%	---	---	9%	5%	
Employed	95%	100%	100%	91%	95%	

Electronic Bingo. There are very few respondents who wager on electronic bingo. However, among these respondents, those who have wagered on electronic bingo infrequently or in the past year are somewhat more likely to be under the age of 30 and to be non-Caucasian than the general population. Weekly players are significantly less likely to have graduated from high school than the general population while weekly and infrequent players are significantly more likely to have annual household incomes under \$25,000.

BRITISH COLUMBIA

TABLE I
Demographic Profile By Participation Level
Electronic Bingo

	Overall (1200)	Weekly (5)	Past-Year (14)	Infrequent (40)	Never (1141)	
Female	55%	80%	64%	40%	55%	
Male	45%	20%	36%	60%	45%	
Under 30	27%	20%	57%	33%	26%	*
Over 30	73%	80%	43%	67%	74%	
White	80%	60%	57%	73%	81%	*
Nonwhite	20%	40%	43%	27%	19%	
Less than HS	13%	60%	—	10%	13%	**
HS Grad	87%	40%	100%	90%	87%	
Married	55%	40%	57%	43%	56%	
Not Married	45%	60%	43%	57%	44%	
HH > 25,000	73%	20%	83%	62%	73%	**
HH < 25,000	27%	80%	17%	38%	27%	
Unemployed	5%	—	—	3%	5%	
Employed	95%	100%	100%	97%	95%	

Traditional Bingo. Bingo players are significantly more likely to be women than the general population. Weekly and past year bingo players are significantly less likely to have graduated from high school and to have annual household incomes over \$25,000 than the general population.

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TABLE J
Demographic Profile By Participation Level
Traditional Bingo

	Overall (1200)	Weekly (25)	Past-Year (117)	Infrequent (218)	Never (823)	
Female	55%	92%	65%	60%	51%	**
Male	45%	8%	35%	40%	49%	
Under 30	27%	32%	35%	24%	26%	
Over 30	73%	68%	65%	76%	74%	
White	80%	88%	79%	80%	80%	
Nonwhite	20%	12%	21%	20%	20%	
Less than HS	13%	42%	19%	12%	12%	**
HS Grad	87%	58%	81%	88%	88%	
Married	55%	50%	50%	56%	56%	
Not Married	45%	50%	50%	44%	44%	
HH > 25,000	73%	39%	60%	74%	75%	**
HH < 25,000	27%	61%	40%	26%	25%	
Unemployed	5%	4%	7%	6%	4%	
Employed	95%	96%	93%	94%	96%	

Horse Races at the Track. Respondents who wager weekly or in the past year at the track are significantly more likely to be male than the general population. Respondents who wager infrequently at the track are somewhat more likely to have graduated from high school than the general population. Respondents who wager weekly at the track are somewhat more likely to be unemployed than the general population.

BRITISH COLUMBIA

TABLE K
Demographic Profile By Participation Level
Horse Races at the Track

	Overall (1200)	Weekly (9)	Past-Year (89)	Infrequent (209)	Never (893)	
Female	55%	44%	39%	59%	55%	**
Male	45%	56%	61%	41%	45%	
Under 30	27%	22%	30%	21%	28%	
Over 30	73%	78%	70%	79%	72%	
White	80%	78%	78%	80%	80%	
Nonwhite	20%	22%	22%	20%	20%	
Less than HS	13%	11%	13%	7%	15%	*
HS Grad	87%	89%	87%	93%	85%	
Married	55%	67%	55%	59%	54%	
Not Married	45%	33%	45%	41%	46%	
HH > 25,000	73%	88%	79%	78%	71%	
HH < 25,000	27%	12%	21%	22%	29%	
Unemployed	5%	22%	2%	3%	5%	*
Employed	95%	78%	98%	97%	95%	

Horse Races Away from the Track. Respondents who wager weekly or have wagered in the past year on horse races at off-track facilities are significantly less likely to be employed than the general population.

BRITISH COLUMBIA

TABLE L
Demographic Profile By Participation Level
Horse Races Away from the Track

	Overall (1200)	Weekly (3)	Past-Year (17)	Infrequent (53)	Never (1127)
Female	55%	33%	29%	53%	55%
Male	45%	67%	71%	47%	45%
Under 30	27%	---	24%	29%	27%
Over 30	73%	100%	76%	71%	73%
White	80%	100%	100%	83%	80%
Nonwhite	20%	---	---	17%	20%
Less than HS	13%	33%	6%	9%	13%
HS Grad	87%	67%	94%	91%	87%
Married	55%	67%	47%	50%	56%
Not Married	45%	33%	53%	50%	44%
HH > 25,000	73%	100%	88%	78%	72%
HH < 25,000	27%	---	12%	22%	28%
Unemployed	5%	33%	24%	---	4%
Employed	95%	67%	76%	100%	96%

**

Other Animal Events. There are so few individuals who admit to wagering on cockfights, dogfights and other animal events that no differences attain statistical significance. Those respondents who do admit to such wagering are slightly more likely to be male than the general population.

BRITISH COLUMBIA

TABLE M
Demographic Profile by Participation Level
Other Animal Events

	Overall (1200)	Weekly (-)	Past-Year (8)	Infrequent (45)	Never (1147)
Female	55%	---	25%	44%	55%
Male	45%	---	75%	56%	45%
Under 30	27%	---	38%	24%	27%
Over 30	73%	---	62%	76%	73%
White	80%	---	88%	80%	80%
Nonwhite	20%	---	12%	20%	20%
Less than HS	13%	---	13%	9%	13%
HS Grad	87%	---	87%	91%	87%
Married	55%	---	63%	56%	55%
Not Married	45%	---	37%	44%	45%
HH > 25,000	73%	---	57%	83%	73%
HH < 25,000	27%	---	43%	17%	27%
Unemployed	5%	---	---	7%	5%
Employed	95%	---	100%	93%	95%

Card Games with No Money at Stake. Respondents who wager weekly on card games with friends and family with no money at stake are significantly more likely to be under the age of 30 than the general population. These respondents are significantly less likely to be married and significantly more likely to have annual household incomes under \$25,000 than the general population.

BRITISH COLUMBIA

TABLE N
Demographic Profile By Participation Level
Cards with Friends and Family
No Money at Stake

	Overall (1200)	Weekly (190)	Past-Year (641)	Infrequent (184)	Never (185)	
Female	55%	55%	52%	58%	58%	
Male	45%	45%	48%	42%	42%	
Under 30	27%	38%	30%	16%	14%	**
Over 30	73%	62%	70%	84%	86%	
White	80%	79%	80%	79%	85%	
Nonwhite	20%	21%	20%	21%	15%	
Less than HS	13%	17%	11%	14%	14%	
HS Grad	87%	83%	89%	86%	86%	
Married	55%	47%	54%	65%	58%	**
Not Married	45%	53%	46%	35%	42%	
HH > 25,000	73%	64%	77%	68%	75%	**
HH < 25,000	27%	36%	23%	32%	25%	
Unemployed	5%	7%	5%	3%	4%	
Employed	95%	93%	95%	97%	96%	

Card Games with Money at Stake. Respondents who wager on card games with friends for money are significantly more likely to be men than the general population. Respondents who wager weekly and those who have wagered on card games for money in the past year are significantly more likely to be under the age of 30 and unmarried than the general population. Respondents who wager weekly on card games for money are significantly less likely to have graduated from high school than the general population.

BRITISH COLUMBIA

TABLE O
Demographic Profile By Participation Level
Cards with Money at Stake

	Overall (1200)	Weekly (53)	Past-Year (249)	Infrequent (218)	Never (680)	
Female	55%	40%	47%	49%	60%	**
Male	45%	60%	53%	51%	40%	
Under 30	27%	39%	40%	23%	22%	**
Over 30	73%	61%	60%	77%	78%	
White	80%	81%	82%	81%	80%	
Nonwhite	20%	19%	18%	18%	20%	
Less than HS	13%	23%	8%	14%	14%	**
HS Grad	87%	77%	82%	86%	86%	
Married	55%	47%	46%	55%	59%	**
Not Married	45%	53%	54%	45%	41%	
HH > 25,000	73%	63%	79%	74%	71%	
HH < 25,000	27%	37%	21%	26%	29%	
Unemployed	5%	8%	5%	6%	4%	
Employed	95%	92%	95%	94%	96%	

Cards at Card Room. Respondents who wager infrequently at card rooms are somewhat more likely to be male than the general population. Respondents who do any wagering at card rooms are significantly less likely to be married than the general population.

BRITISH COLUMBIA

TABLE P
Demographic Profile By Participation Level
Cards at Card Room

	Overall (1200)	Weekly (8)	Past-Year (29)	Infrequent (78)	Never (1085)	
Female	55%	50%	52%	40%	56%	*
Male	45%	50%	48%	60%	44%	
Under 30	27%	14%	38%	27%	27%	
Over 30	73%	86%	62%	73%	73%	
White	80%	75%	79%	82%	80%	
Nonwhite	20%	25%	21%	18%	20%	
Less than HS	13%	13%	3%	10%	14%	
HS Grad	87%	87%	97%	90%	86%	
Married	55%	38%	28%	45%	57%	**
Not Married	45%	62%	72%	55%	43%	
HH > 25,000	73%	57%	77%	75%	73%	
HH < 25,000	27%	43%	23%	25%	27%	
Unemployed	5%	—	7%	3%	5%	
Employed	95%	100%	93%	97%	95%	

Craps or Other Dice Games. Respondents who wager on dice games are significantly more likely to be under the age of 30 than the general population. Respondents who wager weekly or have wagered in the past year on dice games are significantly less likely to be married than the general population.

BRITISH COLUMBIA

TABLE Q
Demographic Profile By Participation Level
Craps or Other Dice Games

	Overall (1200)	Weekly (9)	Past-Year (85)	Infrequent (99)	Never (1007)	
Female	55%	78%	62%	53%	54%	
Male	45%	22%	38%	47%	46%	
Under 30	27%	44%	47%	35%	24%	**
Over 30	73%	56%	53%	65%	76%	
White	80%	75%	81%	81%	80%	
Nonwhite	20%	25%	19%	19%	20%	
Less than HS	13%	22%	11%	14%	13%	
HS Grad	87%	78%	89%	86%	87%	
Married	55%	25%	41%	54%	57%	**
Not Married	45%	75%	59%	46%	43%	
HH > 25,000	73%	71%	68%	67%	74%	
HH < 25,000	27%	29%	32%	33%	26%	
Unemployed	5%	22%	5%	3%	5%	
Employed	95%	78%	95%	97%	95%	

Sports Events with Friends or Co-workers. Respondents who have ever wagered on sports events with friends or co-workers are significantly more likely to be men than the general population. Respondents who wager weekly or have wagered in the past year on sports with friends are significantly more likely to be unmarried, under the age of 30 and to have graduated from high school than the general population. Respondents who have wagered on sports with friends in the past year are significantly more likely to have annual household incomes over \$25,000 than the general population.

BRITISH COLUMBIA

TABLE R
Demographic Profile By Participation Level
Sports Events with Friends or Co-workers

	Overall (1200)	Weekly (98)	Past-Year (221)	Infrequent (202)	Never (679)	
Female	55%	38%	35%	52%	64%	**
Male	45%	62%	65%	48%	36%	
Under 30	27%	46%	36%	21%	23%	**
Over 30	73%	54%	64%	79%	77%	
White	80%	80%	81%	80%	80%	
Nonwhite	20%	20%	19%	20%	20%	
Less than HS	13%	5%	9%	16%	15%	**
HS Grad	87%	95%	91%	84%	85%	
Married	55%	32%	49%	63%	58%	**
Not Married	45%	68%	51%	37%	42%	
HH > 25,000	73%	74%	83%	74%	69%	**
HH < 25,000	27%	26%	17%	26%	31%	
Unemployed	5%	4%	5%	5%	4%	
Employed	95%	96%	95%	95%	96%	

Sports Pools. Like those who wager on sports with friends, respondents who wager on sports pools are significantly more likely to be men and to have annual household incomes over \$25,000 than the general population. Respondents who wager weekly or have wagered in the past year on sports pools are significantly more likely to be under the age of 30 than the general population. These respondents are somewhat less likely to be married than the general population.

BRITISH COLUMBIA

TABLE R
Demographic Profile By Participation Level
Sports Pools

	Overall (1200)	Weekly (47)	Past-Year (132)	Infrequent (242)	Never (779)	
Female	55%	26%	36%	48%	62%	**
Male	45%	74%	64%	52%	38%	
Under 30	27%	45%	40%	24%	24%	**
Over 30	73%	55%	60%	76%	76%	
White	80%	81%	81%	81%	80%	
Nonwhite	20%	19%	19%	19%	20%	
Less than HS	13%	9%	7%	12%	15%	
HS Grad	87%	91%	93%	88%	85%	
Married	55%	38%	52%	59%	56%	*
Not Married	45%	62%	48%	41%	44%	
HH > 25,000	73%	78%	89%	82%	67%	**
HH < 25,000	27%	22%	11%	18%	33%	
Unemployed	5%	4%	5%	5%	4%	
Employed	95%	96%	95%	95%	96%	

Sports Action Lottery Game. Respondents who wager on Sports Action are significantly more likely to be men than the general population. Respondents who wager weekly or have wagered in the past year on Sports Action are significantly more likely to be under the age of 30 and somewhat less likely to be married than the general population.

BRITISH COLUMBIA

TABLE S
Demographic Profile By Participation Level
Sports Action Lottery Game

	Overall (1200)	Weekly (22)	Past-Year (74)	Infrequent (112)	Never (992)	
Female	55%	---	30%	51%	58%	**
Male	45%	100%	70%	49%	42%	
Under 30	27%	59%	45%	27%	25%	**
Over 30	73%	41%	55%	73%	75%	
White	80%	82%	73%	77%	81%	
Nonwhite	20%	18%	27%	23%	19%	
Less than HS	13%	9%	5%	15%	14%	
HS Grad	87%	91%	95%	85%	86%	
Married	55%	27%	47%	54%	57%	*
Not Married	45%	73%	53%	46%	43%	
HH > 25,000	73%	82%	83%	71%	72%	
HH < 25,000	27%	18%	17%	29%	28%	
Unemployed	5%	5%	3%	7%	4%	
Employed	95%	95%	97%	93%	96%	

Sports with a Bookmaker. Like cockfights and dogfights, few respondents admit to wagering on sports with a bookmaker. Those respondents who admit to this type of gambling are significantly more likely to be men than the general population.

BRITISH COLUMBIA

TABLE T
Demographic Profile By Participation Level
Sports with a Bookmaker

	Overall (1200)	Weekly (2)	Past-Year (11)	Infrequent (28)	Never (1159)
Female	55%	---	9%	39%	56%
Male	45%	100%	91%	61%	44%
Under 30	27%	50%	27%	39%	26%
Over 30	73%	50%	73%	61%	74%
White	80%	100%	64%	78%	80%
Nonwhite	20%	---	36%	22%	20%
Less than HS	13%	---	9%	18%	13%
HS Grad	87%	100%	91%	82%	87%
Married	55%	---	64%	43%	55%
Not Married	45%	100%	36%	57%	45%
HH > 25,000	73%	100%	100%	72%	73%
HH < 25,000	27%	---	---	28%	27%
Unemployed	5%	---	9%	14%	4%
Employed	95%	100%	91%	86%	96%

**

Pull-tabs or Nevada Breakopens. Respondents who wager weekly or have wagered in the past year on pull-tabs are significantly more likely to be under the age of 30 than the general population.

BRITISH COLUMBIA

TABLE U
Demographic Profile By Participation Level
Pull-tabs or Nevada Breakopens

	Overall (1200)	Weekly (53)	Past-Year (250)	Infrequent (134)	Never (763)
Female	55%	51%	59%	48%	55%
Male	45%	49%	41%	52%	45%
Under 30	27%	43%	37%	23%	23%
Over 30	73%	57%	63%	77%	77%
White	80%	77%	84%	81%	79%
Nonwhite	20%	23%	16%	19%	21%
Less than HS	13%	15%	14%	17%	12%
HS Grad	87%	85%	86%	83%	88%
Married	55%	43%	51%	60%	57%
Not Married	45%	57%	49%	40%	43%
HH > 25,000	73%	76%	73%	74%	72%
HH < 25,000	27%	24%	27%	26%	28%
Unemployed	5%	9%	4%	6%	4%
Employed	95%	91%	96%	94%	96%

Speculative Investments. Respondents who wager on speculative investments are significantly more likely to be men and over the age of 30 than the general population. These respondents are also significantly more likely to have annual household incomes over \$25,000 than the general population. Respondents who have wagered on speculative investments infrequently or in the past year are somewhat more likely to be married than the general population.

BRITISH COLUMBIA

TABLE V
Demographic Profile By Participation Level
Speculative Investments

	Overall (1200)	Weekly (37)	Past-Year (166)	Infrequent (255)	Never (742)	
Female	55%	32%	42%	47%	61%	**
Male	45%	68%	58%	53%	39%	
Under 30	27%	25%	21%	19%	31%	**
Over 30	73%	75%	79%	81%	69%	
White	80%	86%	84%	82%	79%	
Nonwhite	20%	14%	16%	18%	21%	
Less than HS	13%	6%	11%	10%	15%	
HS Grad	87%	94%	89%	90%	85%	
Married	55%	49%	60%	62%	52%	*
Not Married	45%	51%	40%	38%	48%	
HH > 25,000	73%	94%	86%	84%	65%	**
HH < 25,000	27%	6%	14%	16%	35%	
Unemployed	5%	8%	4%	5%	4%	
Employed	95%	92%	96%	95%	96%	

Games of Skill. Respondents who wager on games of skill are significantly more likely to be men than the general population. Respondents who wager weekly or have wagered in the past year on games of skill are significantly more likely to be under the age of 30 and unmarried than the general population. Respondents who wager weekly on games of skill are somewhat less likely to have graduated from high school than the general population.

BRITISH COLUMBIA

TABLE W
Demographic Profile By Participation Level
Games of Skill

	Overall (1200)	Weekly (50)	Past-Year (156)	Infrequent (158)	Never (836)	
Female	55%	26%	26%	45%	63%	**
Male	45%	74%	74%	55%	37%	
Under 30	27%	47%	45%	26%	22%	**
Over 30	73%	53%	55%	74%	78%	
White	80%	72%	83%	76%	81%	
Nonwhite	20%	28%	17%	24%	19%	
Less than HS	13%	18%	6%	12%	14%	*
HS Grad	87%	82%	94%	88%	86%	
Married	55%	38%	39%	59%	59%	**
Not Married	45%	62%	61%	41%	41%	
HH > 25,000	73%	70%	80%	76%	71%	
HH < 25,000	27%	30%	20%	24%	29%	
Unemployed	5%	8%	5%	6%	4%	
Employed	95%	92%	95%	94%	96%	