Problem Gambling Survey 1996

- FINAL REPORT -

Submitted to: British Columbia Lottery Corporation

ANGUS REID GROUP

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EXECUTIVE SUMMARY

- The 1996 Problem Gambling Survey results suggest that there has been no substantial increase in the prevalence of problem gambling in the Province since the benchmark measurement in 1993.
  - *The proportion of current probable pathological gamblers in the 1996 Survey (1.1%) is identical to the benchmark estimate from the 1993 Survey;*
  - *The barely measurable increase in the proportion of current potential problem gamblers from the 1993 to 1996 Survey (2.4% to 2.8%) is within the range of sampling error;*
  - *There is a slight upward shift in the proportion of lifetime potential problem gamblers (from 6.0% to 8.4%) at the edge of the sample error margin, but the proportion of lifetime probable pathological gamblers shows no significant upturn from 1.8% in 1993 to 2.1% in 1996.*
- Comparisons of 1993 and !996 measurements of past year participation suggest that gambling participation is stable or declining in most categories:
  - *Past year lottery participation is up slightly, even though past week participation may have fallen off between the 1993 and 1996 surveys;*
  - *Local casino, bingo and horse track participation all show signs of weakness;*
  - *Informal gaming activities such as sports wagering or card games show measurable declines in participation between 1993 and 1996.*
  - *Recent gaming market innovations, such as BCLC Club Keno or intensified marketing by Washington state casinos, have not captured any large following in the population at large;*
  - *This weakness in gaming participation lines up with other recent survey evidence of declining consumer confidence and decreased spending for discretionary items or leisure pursuits.*

- Past year gaming participation among probable problem or pathological gamblers shows no signs of any substantial increase
  - *participation in casino gaming and bingo shows signs of falling off slightly from the levels observed in 1993, though local casino spending is up compared to 1993 levels*
  - *the slight increase noted in lifetime potential problem gambling may be an artifact of previous periods of gaming expansion or the accumulated in-migration from jurisdictions with more saturated gaming environments.*
- The appeal of BCLC lottery games among probable problem or pathological gamblers is difficult to measure with any precision because of the small subsample size - while participation in some games is slightly higher than the general population, none rival bingo or local casinos in popularity
  - *probable problem or pathological gamblers are slightly more likely than the population at large to play Scratch & Win lottery games*
  - *Club Keno or Sports Action are also slightly more popular among probable problem or pathological gamblers, but these estimates are based on only a handful of respondents*
- In summary, the 1996 survey results fail to show any evidence of an appreciable surge in gaming participation and any subsequent growth in the prevalence of problem gambling.
- The steady or declining levels of gaming participation that characterize most comparisons of 1993 and 1996 data support inferences from other BCLC research that the gaming market in the province has reached a plateau or mature phase, where participation is increasingly centred among enthusiasts.
- To the extent that the larger public withdraws from gambling activities, it is very possible that the remaining problem or compulsive gambling will seem more prominent than before.
- More than any other activity, local casinos appear to be an increasingly likely focus for the individuals at risk for problem gambling.

BACKGROUND AND OBJECTIVES

PROBLEM GAMBLING RESEARCH IN B.C.

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 the entire spectrum of gaming activities in the province. When initial survey investigations revealed a degree of public concern about gambling, 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 results of the 1993 Problem Gambling Survey, as well as relevant aspects of previous social gaming research, have been detailed in an earlier document, *Social Gaming and Problem Gambling in British Columbia* (Angus Reid Group / Gemini Research, 1994).

The present research represents a smaller scale replication of the 1993 survey program to assess whether any significant changes have occurred in the prevalence of problem gambling in the province. Specific objectives include:

- *Monitoring any changes in the extent of problem gambling in British Columbia, using the same South Oaks Gambling Screen (SOGS) employed in the benchmark survey;*
- *Tracking gaming behaviour among the population at large and problem gamblers;*
- *Monitoring public perceptions of gambling problems and related gaming issues in the province, impact of new developments such as Club Keno, new cross border casino developments.*

METHODS

Questionnaire Design

The original 1993 questionnaire for the first British Columbia survey was designed to provide a comprehensive picture of gambling in the province. The questionnaire collected information about a wide range of gambling related topics, including:

- *respondents' non-gambling leisure activities*
- *psychographics, demographics and lifestyle attitudes*
- *involvement in all types of legal, illegal and out-of-province gambling.*
- *frequency of participation and spending for all types of gambling*
- *favourite gambling activities and reasons for gambling*
- *responses to the South Oaks Gambling Screen (SOGS)*

Since the objectives of the 1996 Survey were more limited, the questionnaire was cut back to the essential topics necessary to monitor problem gambling and gaming participation. Besides the battery of SOGS items and background demographic data, the survey included only gambling participation and spending items. The following chart compares the types of gambling activities tracked in the 1993 and 1996 survey questionnaires. The changes that were made to the activities list either consolidate low incidence activities (such as bookmaking on horse races, electronic bingo, etc.) or activities that are similar (such as charitable lotteries, raffles or casino nights for charity).

1993-96 Survey Gambling Participation Topics		
	1993	1996
Local casinos	☑	☑
Resort casinos	☑	☑
Washington state casinos	n/a	☑
Raffle tickets	☑	combined into one item
Fund raising events such as casino nights	☑	
BC Lottery games such as 6/49	☑	☑
Scratch & Win lottery games	☑	☑
Club Keno at BC lottery retailers	n/a	☑
Video poker, video card games	☑	VLTs added
Pinball or video arcade games	☑	☑
Electronic bingo	☑	combined into one item
Traditional paper bingo	☑	
Horse races at the track	☑	combined into one item
Horse races away from the track	☑	
Other animal events (dog races, etc.)	☑	
Cards with friends or relatives with no money at stake	☑	n/a
Cards where money is at stake	☑	combined into one item
Cards in a card room	☑	
Craps or other dice games	☑	
Sports Action lottery game	☑	☑
Sports bets with friends or co-workers	☑	combined into one item
Sports pools	☑	
Sports with a bookmaker	☑	
Pull-tabs or Nevada breakopens	☑	☑
Speculative investments	☑	☑
Betting on outcomes of games of skill (billiards, golf, bowling)	☑	☑

Several new or modified categories are included to cover recent developments, such as Club Keno introduction, VLTs (either in other jurisdictions or illegal machines in BC) or intensified marketing efforts by Washington state casinos in BC media.

Sampling Design and Margin of Error

In order to obtain a representative sample of the province of British Columbia, 1,200 interviews were completed for the 1993 study and 800 interviews for the 1996 study. Both samples mirror the geographic, gender and age distribution of the population of the province.

The margin for error for the 1993 sample of 1200 is plus or minus 2.9 percentage points at the 95% level of confidence. The corresponding margin for error for the 1996 sample of 810 is plus or minus 3.5 percentage points at the 95% level of confidence. In general, any differences between samples of 4.5 percentage points or more are statistically significant at the 95% level.

Telephone numbers for both the 1993 and 1996 surveys 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.

1996 Survey respondents were contacted by telephone between June 6 and June 15, 1996. All interviews were conducted in the Vancouver field centre by Angus Reid Group interviewers. (note: the additional 10 interviews above the originally specified sample of 800 represent pretest interviews that provided usable data - no substantive changes to the questionnaire were made before the survey proceeded into field). The benchmark 1993 Survey was fielded between October 15 and November 1, 1993.

PROBLEM GAMBLING IN BRITISH COLUMBIA, 1993-96

Despite the passage of time and changes in the gaming opportunities in the province, there is no evidence to suggest that the magnitude of problem gambling has increased to any measurable degree between 1993 and 1996. Of the two problem gambling prevalence measures (Current and Lifetime), the *Current* measure is the most relevant indicator of what is presently happening in the province. While the *Lfetime* prevalence establishes an upward bound for problem gambling (since former problem gamblers can pick up the habit again), it is inflated by a variety of past experiences that may represent one-time, non-recurring events for many individuals. Furthermore, there is no way to establish whether these problem incidents took place in B.C or in another province or country. This distinction is especially relevant in light of the high levels of migration into the province from elsewhere - lifetime prevalence estimates may have less to do with the local situation in B.C. than in other jurisdictions.

Current Prevalence, 1993-96

The 1996 Problem Gambling Survey results in the chart below suggest that the proportion of current probable *pathological* gamblers in the population (1.1%) is identical to the benchmark estimate from the 1993 Survey.

These individuals would have answered "yes" to at least five of the SOGS scale items relating to current (defined as past year) behaviour , which indicates a high probability of a current pathological gambling condition.

Current Prevalence Estimates, 1993 & 1996			
	1996 Survey	1993 Survey	*93-96 change*
No current (past year) problem	96.1%	96.5%	- 0.4
Current *problem* gambler (3-4 SOGS items)	2.8	2.4	+ 0.4
Current *pathological* gambler (5+ SOGS items)	1.1	1.1	0

The slight (0.4 percentage point) rise in potential problem gamblers is well within the range of sampling error, which suggests that there has been no appreciable increase in the proportion of respondents answering affirmatively to only three or four of the SOGS scale items.

The 1993 survey estimated that there were between 12,700 and 42,100 current probable pathological gamblers and between 38,100 and 81,300 current problem gamblers in the province. Since the current percentage estimates do not deviate significantly from those recorded in 1993, these population estimates are only subject to minor upward revision to take adult population growth into account.

Lifetime Prevalence, 1993-96

There is a slight upward shift in the proportion of lifetime potential problem gamblers (from 6.0% to 8.4%) at the edge of the sample error margin, but the proportion of lifetime probable pathological gamblers shows no significant upturn from 1.8% in 1993 to 2.1% in 1996.

Lifetime Prevalence Estimates, 1993 & 1996

	1996 Survey	1993 Survey	*93-96 change*
No lifetime (ever) problem	89.5 %	92.2 %	- 2.7
Lifetime problem gambler (3-4 SOGS items)	8.4	6	+ 2.4
Lifetime pathological gambler (5+ SOGS items)	2.1	1.8	0.3

While this directional movement of lifetime problem gambling could be troublesome, it could also reflect changes in population composition as much as gambling behaviour. This small rise may be only an artifact of earlier gaming expansion - as time passes and the population ages, the proportion with some previous episode of excessive gaming will increase, since more people than ever before have had a chance to experiment with more forms of gaming. Alternatively, this rise could also reflect the cumulative effect of in-migration from jurisdictions with more saturated gaming environments, such as the other provinces that have VLTs or major provincial casino developments. Some proportion of new arrivals from the East will have gambled to excess but not resumed the practice since moving to BC.

GAMBLING CONTEXT IN BRITISH COLUMBIA

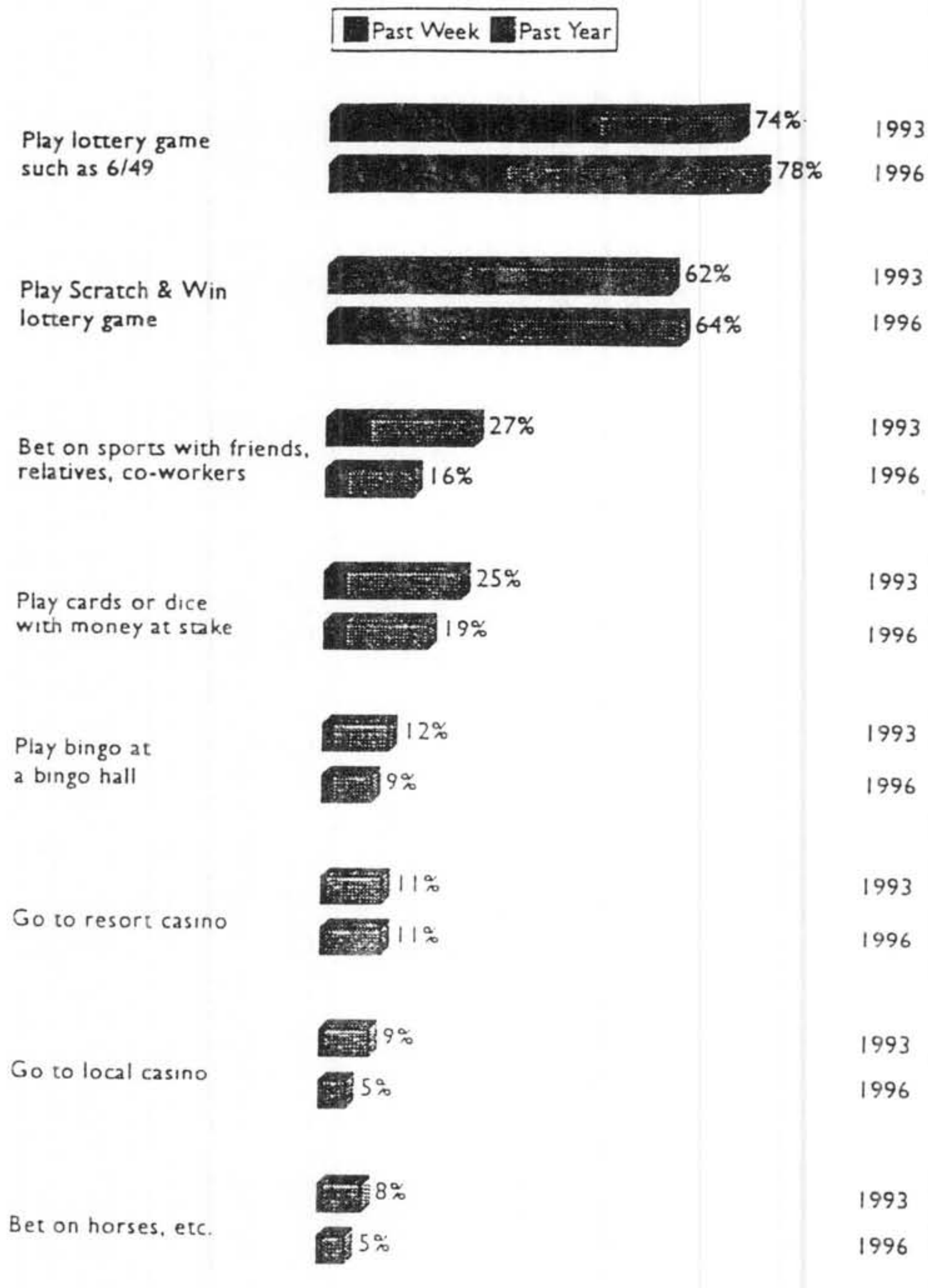
Current Gambling Participation, 1993-96

The chart on the following page presents a comparison of the most popular organized gaming activities that were monitored on both the 1993 and 1996 surveys. Minor activities that only involved two or three percent of respondents in any given year have been omitted from the graphs and tables showing overall trends, since there are not enough respondents to demonstrate any statistically meaningful differences between the survey points. These activities are included in the 1996 detailed tables accompanying this report.

On a past year basis, lottery participation for 6/49 is up marginally (4 percentage points, which is a statistically significant difference, 19 times out of 20) but shows weakness on a past week basis. This suggests that players may have been drawn into the game on an intermittent basis but that regular participation (which would show up on the past week measure) is soft. This could reflect the effects of the large number of jackpot rolls in the previous year which may have enticed more casual or infrequent players into the game.

1993 vs. 1996 Gambling Participation in British Columbia

Base: Total Sample



Other gaming activities show steady or declining proportions of past year participation. This trend is in line with inferences from other survey sources which suggest that British Columbia consumers are gripped by the same degree of anxiety about the economy as their counterparts in the rest of Canada and North America. Their response in other categories has been a slowdown in discretionary spending, in either actual terms or reported intentions. It is not too surprising that gaming expenditures (apart from an occasional dollar lottery ticket that promises easy riches) have fallen off. This is most noticeable in card playing for money, sports pools, horse tracks and local casinos which represent easy sacrifices for many consumers who are making an effort to cut back on non-essentials. Resort casinos still draw to a minority, but these activities also represent vacation destinations as much as gaming venues for those who can still afford an occasional escape. The drop in sports pool participation may be a function of last year's disappointing showing by local and national teams - with mostly American teams competing for the Stanley Cup, Grey Cup and World Series instead of the strong Canadian presence from a few years ago, there was probably less interest and less motivation to put a few dollars on the outcome of the season's major events.

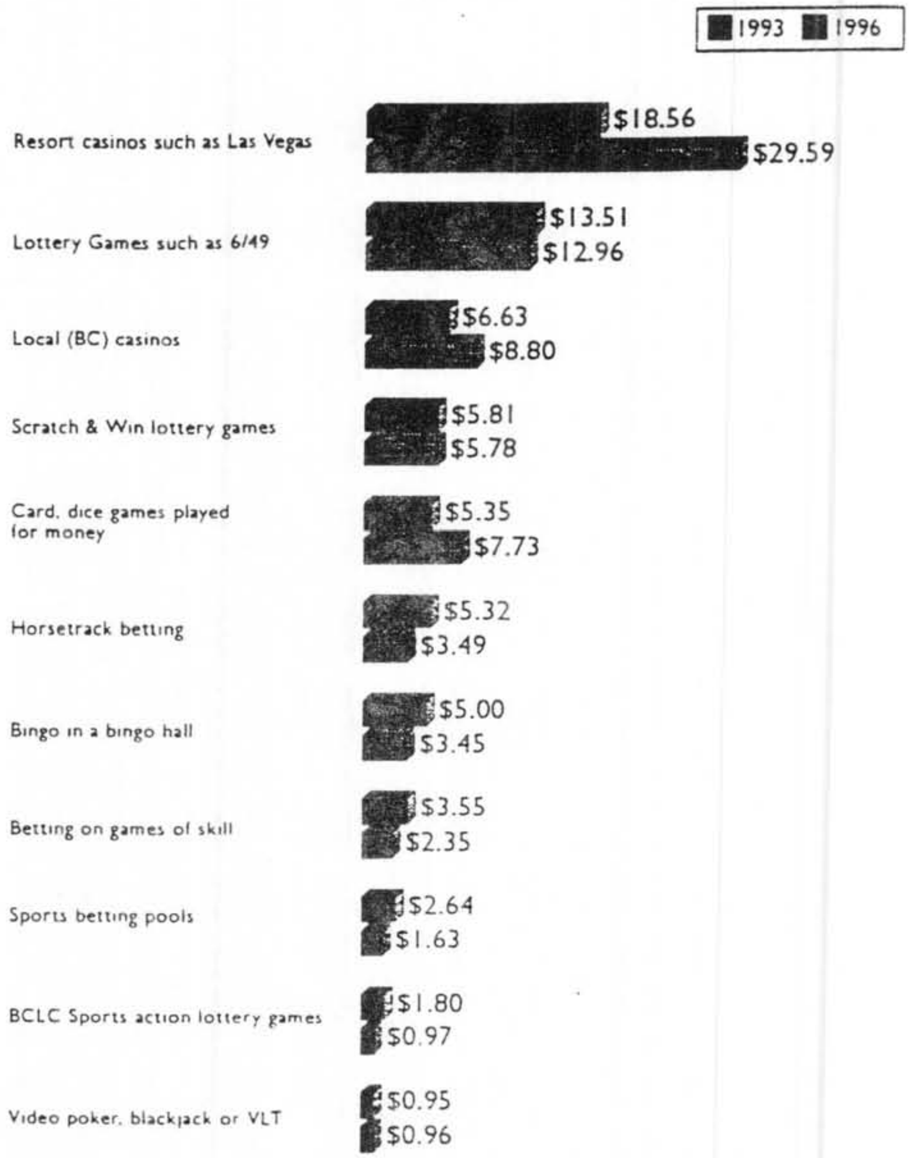
Expenditures on Gambling, 1993-96

The per capita spending results show a slightly different picture from participation incidence. Resort casinos show higher per capita spending, despite the flat incidence of participation in the preceding graph. Local casinos show another surge in spending even though there is evidence of less frequent participation overall, while card and dice game spending shows signs of going up even though participation incidence looks lower.

This is a sign that money is still flowing in to these gaming activities, either from more devoted players or from other activities where participation and spending levels have shown signs of falling off. Increased spending on some of these activities possibly reflects the effects of substitution - for instance, bingo or horsetrack enthusiasts may have taken up cards as an alternative, or local casinos may have been substituted for a more costly excursion to Las Vegas or Reno.

Despite the concerns that have surfaced in the press about illegal VLT machines in the province, there is no survey evidence of any surge in spending - adding a reference to video slot machines in the item about video cardgames failed to reveal any substantial surge in participation or spending. Similarly, average spending on other informal gaming such as betting on games of skill has not shown any increase - if anything, the evidence suggests that this type of gambling is steady or declining.

Respondents' Estimates of "Typical" Monthly Spending on Most Popular Gaming Activities - Per Capita Averages
Bases Vary



Participation and spending in most of the newer forms of gaming that have been introduced since the last Problem Gambling Survey in 1993 show no evidence of any substantial surge of interest. Detailed discussion about participation in some of these new activities (Club Keno or Washington state casinos) would be speculative, since the base sizes for even past year participation is too small (3%-4% of the sample or just under 50 respondents) for any precision:

New Gaming Activities			
	Participation:		per capita monthly spending
	past yr	past wk	
Washington state casinos	4%	> 1%	$1.75
BCLC Club Keno at lottery retailers	3%	1%	$1.71
Charitable hospital lottery tickets, raffles, casino nights	38%	2%	$5.40

Charitable hospital lottery and raffle participation is much more widespread, however. Past year incidence is just under half that for popular BC Lottery games, while per capita estimates of average monthly spending is in the same range as spending on BCLC Scratch & Win games ($5.40 versus $5.78) and far behind 6/49 per capita estimates ($5.40 versus $12.96). This suggests that events sponsored by local hospitals or charities are capable of drawing an appreciable share of gaming expenditures in the province, since they often involve ticket prices that are the equivalent of several weeks of average lottery wagering.

Overall, the 1996 survey results do not show any signs of any surge in gambling participation in the province. If anything, the results suggest that reported gaming incidence and expenditures are trending downwards in line with overall consumer retrenchments in discretionary or leisure spending.

Paradoxically, the casino category shows some signs of revenue growth at thesame that most other categories of gaming activities show signs of stable or declining consumer appeal. This may very likely be part of an ongoing market evolution, where interest wanes among the general public and expenditures increasingly reflect a narrower base of enthusiasts whose spending is concentrated in more sophisticated venues such as casinos. These trends are probably accelerated by the appearance of aggressive casino marketing and advertising strategies that target the "hot" money segment of the population.

PROBLEM AND NON-PROBLEM GAMBLER COMPARISONS

Demographic Profiles

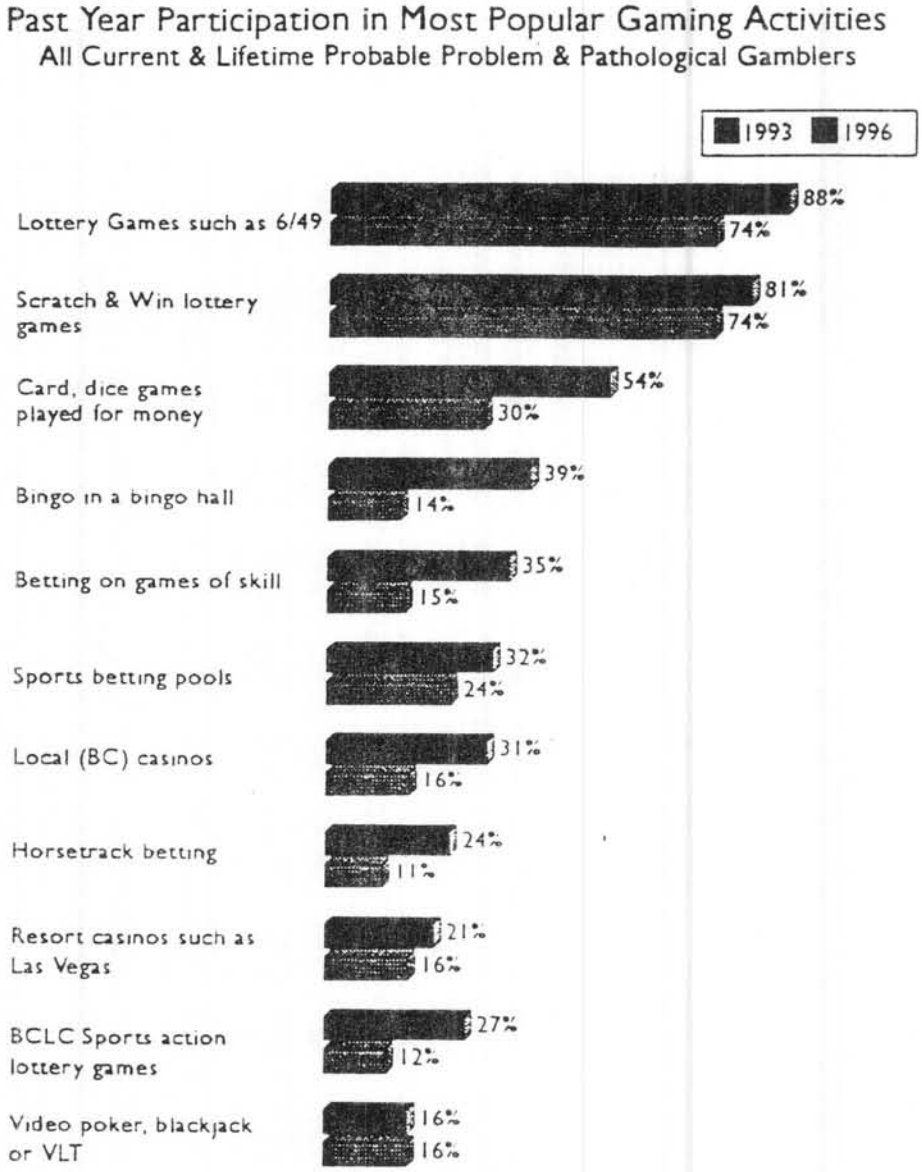
Although problem gamblers exist at all social and economic strata, the 1993 Benchmark Survey established that there was a slight degree of concentration among some identifiable groups, notably males of non-European ancestry with lower levels of education and household income. Comparison of lifetime problem and pathological gamblers between the 1993 and 1994 Surveys suggests that this generalization is still accurate:

Comparison of Key Demographic Traits for Total Population and Lifetime Probable Problem & Pathological Gamblers				
	1993		1996	
	Total (1200)	Lifetime Probables (94)*	Total (810)	Lifetime Probables (85)*
Male	45%	55%	45%	59%
Non-European ancestry	19%	32%	19%	32%
Not married	44%	55%	43%	47%
Less than HS education	13%	13%	12%	19%
HH income under $25,000	26%	19%	21%	24%
Unemployed	4%	9%	4%	6%
* *caution - small base sizes*				

While the total sample traits are virtually the same (except for a slight decrease in the proportion of lower income households over time), the lifetime problem gambler groups show signs of becoming even more marginalized - the proportion of lower income households and less educated respondents is slightly higher in 1996 compared to 1993. The small number of lifetime problem and pathological gamblers makes precise comparisons over time subject to large sampling errors. Subsequent tables that look at gaming participation have been enhanced by recomputation of participation and spending estimates to take into account not only lifetime but also current probable problem and pathological gamblers.

Gambling Participation

The 1996 Survey findings of declining participation in most gaming activities in the population at large is matched by even larger drop-offs among problem gamblers:

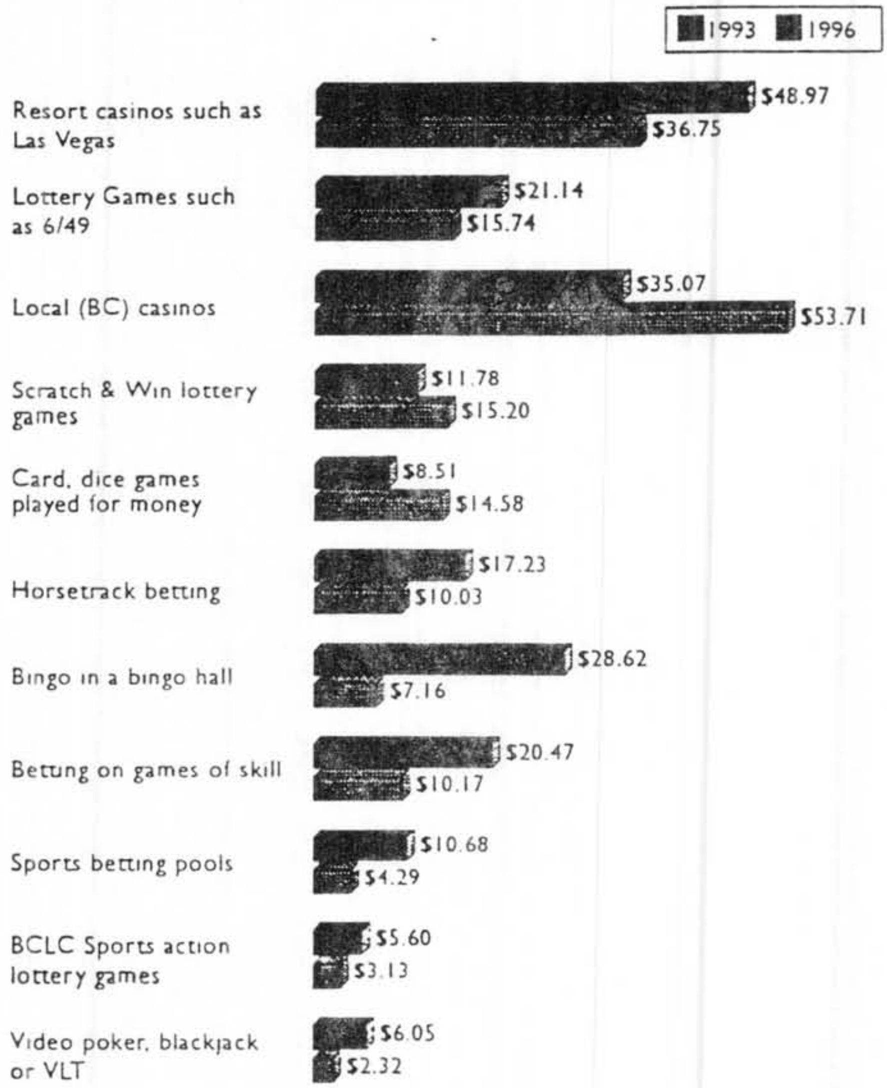


While problem gamblers' incidence of participation in gaming activities is still much higher than the population at large (see full tabulations in Appendix A), they still show evidence of some substantial declines from 1993 to 1996. The at-risk population of current and lifetime problem and pathological gamblers appears more extreme in every respect, including their capacity to withdraw from different gaming varieties over the space of a few years. This could be the result of boredom or other forms of burnout - in a recessionary environment, problem gamblers may find themselves "tapped out" in an even shorter time than the general public.

Gambling Expenditures

The patterns of differences in expenditures between 1993 and 1996 tend to be more complex among probable problem and pathological gamblers:

Respondents' Estimates of "Typical" Monthly Spending on Most Popular Gaming Activities - Per Capita Averages
All Current & Lifetime Probable Problem & Pathological Gamblers

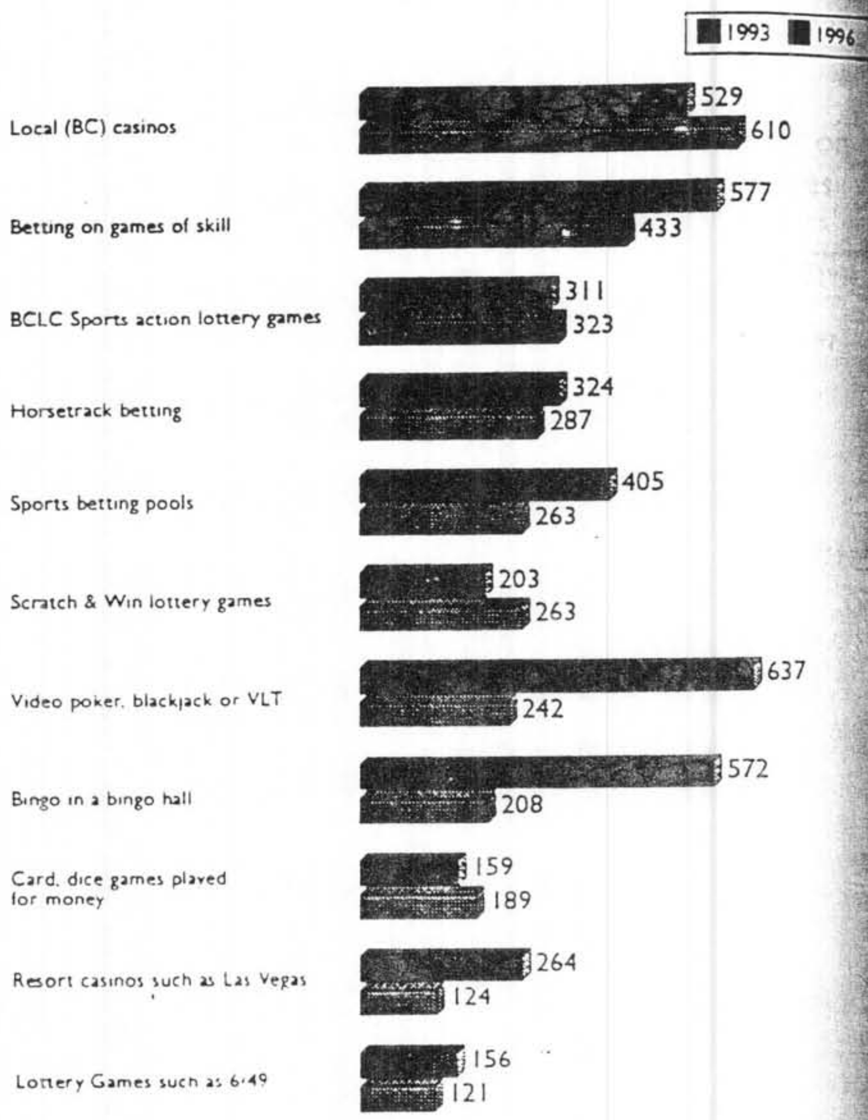


While the total sample showed an increase in spending on resort casinos, the gambler subpopulation shows a sharp drop in resort casino spending that is offset by an equally sharp surge in local casino spending, as well as small increases in Scratch & Win lottery games and card or dice games. Local casinos now draw by far the largest sum of money from this group - card games and scratch tickets account for much smaller sums, even though they are slightly more in favour than they were in the last survey.

Another way of monitoring the differences between the population at large and the group consisting of current and lifetime problem or pathological gamblers is to compute an Expenditure Index for each of the popular gaming activities by dividing the probable problem and pathological gamblers' spending estimates by the total per capita spending estimates for each activity. This exercise demonstrates that problem or pathological gamblers spend up to six times as much on "hard" gambling activities such as local casinos as the population at large (note the following graph that shows an Index value in the range of 500-600 in each survey year). Their spending is much less extreme for other activities such as card games or lottery games such as 6/49 (Index under 200 or less than double the spending). Scratch & Win lottery games fall in between these extremes.

Comparing these Index estimates between 1993 and 1996, however, shows that the difference between problem gamblers and the rest of the population has fallen off dramatically for some categories, especially bingo and video poker, blackjack or VLTs. Neither of these activities have as much attraction for problem gambler dollars as they did in 1993. Local casinos consistently show the greatest spending differential between the population at large and

Index of "Typical" Monthly Spending
Total Sample Compared to All Current and Lifetime Probable Problem & Pathological Gamblers



the potential problem gambler population. These venues exercise an in creasingly strong pull on the latter's gambling dollars that conspicuous overshadows the attraction of most other gaming activities.

CONCLUSIONS

Summary of Findings

The 1996 Problem Gambling Survey results suggest that there has been no substantial increase in the prevalence of problem gambling in the Province since the benchmark measurement in 1993. The proportion of current probable pathological gamblers is identical to the benchmark estimate, while the slight shift in the potential problem gambler proportion is within the range of sampling error. The 1993-96 increase in the proportion of lifetime potential problem gamblers (from 6.0% to 8.4%) is at the edge of the sample error margin, but the proportion of lifetime probable pathological gamblers shows no significant upturn from 1.8% in 1993 to 2.1% in 1996.

The slight increase noted in lifetime potential problem gambling may be an artifact of previous periods of gaming expansion or the cumulative effect of in-migration from jurisdictions with more saturated gaming environments. Other Canadian provinces have gone beyond BC in allowing extensive rollout of VLTs or major provincial casino developments such as those in Montreal or Windsor. It is not unrealistic to expect that some proportion of new arrivals from the East will have gambled to excess in these venues but not resumed since moving to BC.

Gambling participation in BC is stable or declining in most categories, with lottery participation showing strength on an annual basis even though past week participation may have fallen off between the 1993 and 1996 surveys. Local casino, bingo and horse track participation show signs of weakness in terms of the general population's interest. Less formalized gaming activities such as sports wagering or card games also show measurable declines in participation between 1993 and 1996. This weakness in gaming participation lines up with other recent survey evidence of declining consumer confidence and decreased spending for discretionary items or leisure pursuits.

Recent gaming market innovations, such as BCLC Club Keno or intensified marketing by Washington state casinos, have not captured any large following in the population at large. However, the hospital charity lotteries are strong draws on both past year participation and per capita spending bases.

Past year gaming participation among probable problem or pathological gamblers is also showing signs of softer demand in some organized gaming categories such as bingo or horse track betting. Participation in BCLC *Club Keno* or *Sports Action* is higher in this group than the general population, but neither of these new products have overtaken other more established gaming activities in popularity. While the small representation of problem gamblers in survey makes it hazardous to estimate their participation in specific activities with a high degree of precision, the survey results nonetheless fail to show evidence of disproportionate clustering of problem gamblers in any activities (with the possible exception of casino gaming- but base sizes are too small to draw reliable conclusions).

The steady or declining levels of gaming participation that characterize most comparisons of 1993 and 1996 data support inferences from other BCLC research that the gaming market in the province has reached a plateau or mature phase, where participation is increasingly centred among enthusiasts. This core player group also includes the at-risk population identified from their pattern of responses to the SOGS battery. This group show signs of being increasingly drawn to the local casino scene. While there is no evidence of a major surge in the size of this market, there is evidence that spending in these establishments may be on the increase as interest in other gaming activities weakens.

Implications for the Future

The results summarized above clearly demonstrate that problem or excessive gambling in the province has not gone away, even though there is no sign of any appreciable increase in the categories identified from the SOGS responses. Paradoxically, this may create more public anxiety rather than less. To the extent that the general public withdraws from participation in gaming (either from boredom or thrift), the presence of problem gamblers may become more prominent or noticeable. However, this is more likely to impact the casino industry than other forms of gaming, since the problem gambler segment shows signs of gravitating toward casinos in preference to other organized gaming. This is not surprising, since the casino environment probably offers more excitement and fulfillment than other less intense gaming environments.

Lotteries do not appear to have drawn any large share of problem gamblers, with the possible exception of Instant games and Sports Action. These attract more participation and spending, but they do not come close to matching the appeal of casinos. The present BCLC Keno game at lottery retailers does not yet have enough of a following to track or profile with any confidence on a general population survey, but it does not appear to show any immediate signs of being played exclusively by problem gamblers in its rollout phase.

As in 1993, the primary attractor to individuals who match the SOGS profile of a current or lifetime problem gambler is the local casino. Problem and pathological gamblers are consistently more prevalent among patrons of this type of establishment. Other organized gaming venues, such as horse tracks or bingo halls, have lower prevalence rates. Lottery players, by contrast, resemble the population at large. Tracking these trends over time is complicated by the declining participation in non-lottery organized gaming, but the most likely problem spot is the local casino. (Summary prevalence charts for these organized gaming activities are included as an Appendix to this report, subject to some caution in interpretation because of small base sizes). Based on these results, the local casino industry is more likely to emerge as the focal point of any public concern about problem gambling in the province.

APPENDIX A:

SUPPLEMENTAL TABLES COMPARING GAMBLING PARTICIPATION IN 1993-96 ACTIVITIES

1993-96 Gaming Participation: Regular, Occasional or Rarely		
	1993	1996
Local casinos	19	12
Resort casinos	34	32
Washington state casinos	N/A	7
Raffle tickets	88	66
Fund raising events such as casino nights	38	
BC Lottery games such as 6/49	83	84
Scratch & Win lottery games	73	77
Club Keno at BC lottery retailers	N/A	9
Video poker, video card games	19	17
Pinball or video arcade games	10	8
Electronic bingo	5	27
Traditional paper bingo	31	
Horse races at the track	26	23
Horse races away from the track	6	
Other animal events (dog races, etc.)	4	
Cards with friends or relatives with no money at stake	85	N/A
Cards where money is at stake	43	35
Cards in a card room	10	
Craps or other dice games	16	
Sports Action lottery game	35	13
Sports bets with friends or co-workers	3	38
Sports pools	36	
Sports with a bookmaker	38	
Pull-tabs or Nevada breakopens	30	40
Speculative investments	38	29
Betting on outcomes of games of skill (billiards, golf, bowling)	30	22

1993-96 Gaming Participation: Past Year		
	1993	1996
Local casinos	9	5
Resort casinos	11	11
Washington state casinos	N/A	4
Raffle tickets	70	38
Fund raising events such as casino nights	11	
BC Lottery games such as 6/49	74	78
Scratch & Win lottery games	62	64
Club Keno at BC lottery retailers	N/A	3
Video poker, video card games	6	7
Pinball or video arcade games	3	1
Electronic bingo	2	9
Traditional paper bingo	12	
Horse races at the track	8	5
Horse races away from the track	2	
Other animal events (dog races, etc.)	1	
Cards with friends or relatives with no money at stake	69	N/A
Cards where money is at stake	25	19
Cards in a card room	3	
Craps or other dice games	8	
Sports Action lottery game	8	6
Sports bets with friends or co-workers	27	16
Sports pools	15	
Sports with a bookmaker	1	
Pull-tabs or Nevada breakopens	25	21
Speculative investments	17	11
Betting on outcomes of games of skill (billiards, golf, bowling)	17	10

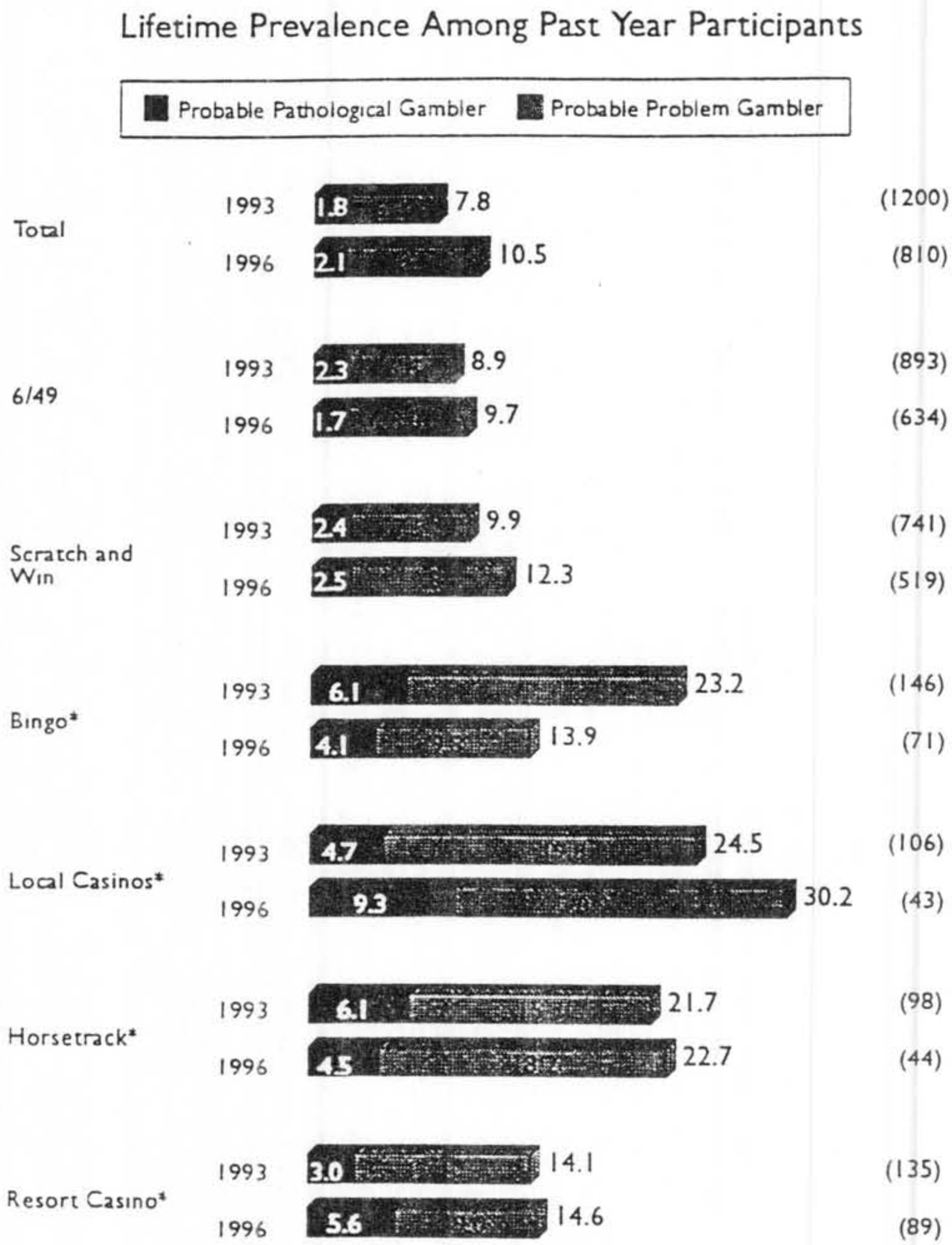
1993-96 Gaming Participation: Past Week		
	1993	1996
Local casinos	6	>1
Resort casinos	1	>1
Washington state casinos	N/A	>1
Raffle tickets	11	2
Fund raising events such as casino nights	1	
BC Lottery games such as 6/49	49	32
Scratch & Win lottery games	25	19
Club Keno at BC lottery retailers	N/A	1
Video poker, video card games	1	1
Pinball or video arcade games	1	>1
Electronic bingo	0.1	2
Traditional paper bingo	2	
Horse races at the track	1	1
Horse races away from the track	>1	
Other animal events (dog races, etc.)	>1	
Cards with friends or relatives with no money at stake	16	N/A
Cards where money is at stake	4	4
Cards in a card room	1	
Craps or other dice games	1	
Sports Action lottery game	2	>1
Sports bets with friends or co-workers	8	4
Sports pools	4	
Sports with a bookmaker	>1	
Pull-tabs or Nevada breakopens	4	3
Speculative investments	3	2
Betting on outcomes of games of skill (billiards, golf, bowling)	4	3

Past Year Participation in Most Popular Gaming Activities						
	Total Sample Comparisons			All Current + Lifetime Problem & Pathological		
	1993 (1200)	1996 (810)	1993-96 change	1993 (136)	1996 (117)	1993-96 change
Lottery Games such as 6/49	74%	78%	(+) 4	88%	74%	(-) 14
Scratch & Win lottery games	62%	64%	(+) 2	81%	74%	(-) 7
Card.dice games played for $	25%	19%	(-) 6	54%	30%	(-) 24
Bingo in a bingo hall	12%	9%	(-) 3	39%	14%	(-) 25
Betting on games of skill	17%	10%	(-) 7	35%	15%	(-) 20
Sports betting pools	27%	16%	(-) 11	32%	24%	(-) 8
Local (BC) casinos	9%	5%	(-) 4	31%	16%	(-) 15
Horsetrack betting	8%	5%	(-) 3	24%	11%	(-) 13
Resort casinos such as Las Vegas	11%	11%	n/c	21%	16%	(-) 5
BCLC Sports Action lottery game	8%	6%	(-) 2	27%	12%	(-) 15
Video poker, blackjack or VLT	6%	7%	(-) 1	16%	16%	n/c

Respondents' Estimates of "Typical" Monthly Spending on Most Popular Gaming Activities - Per Capita Averages						
	Total Sample Comparisons			All Current + Lifetime Problem & Pathological		
	1993 (1200)	1996 (810)	1993-96 change	1993 (136)	1996 (117)	1993-96 change
Resort casinos such as Las Vegas	$18.56	$29.59	$11.03	$48.97	$36.75	-$12.22
Lottery Games such as 6/49	$13.51	$12.96	-$0.55	$21.14	$15.74	-$5.40
Local (BC) casinos	$6.63	$8.80	$2.17	$35.07	$53.71	$18.64
Scratch & Win lottery games	$5.81	$5.78	-$0.03	$11.78	$15.2	$3.42
Card.dice games played for $	$5.35	$7.73	$2.38	$8.51	$14.58	$6.07
Horsetrack betting	$5.32	$3.49	-$1.83	$17.23	$10.03	-$7.20
Bingo in a bingo hall	$5.00	$3.45	-$1.55	$28.62	$7.16	-$21.46
Betting on games of skill	$3.55	$2.35	-$1.20	$20.47	$10.17	-$10.30
Sports betting pools	$2.64	$1.63	-$1.01	$10.68	$4.29	-$6.39
BCLC Sports Action lottery game	$1.80	$0.97	-$0.83	$5.60	$3.13	-$2.47
Video poker, blackjack or VLT	$0.95	$0.96	$0.01	$6.05	$2.32	-$3.73

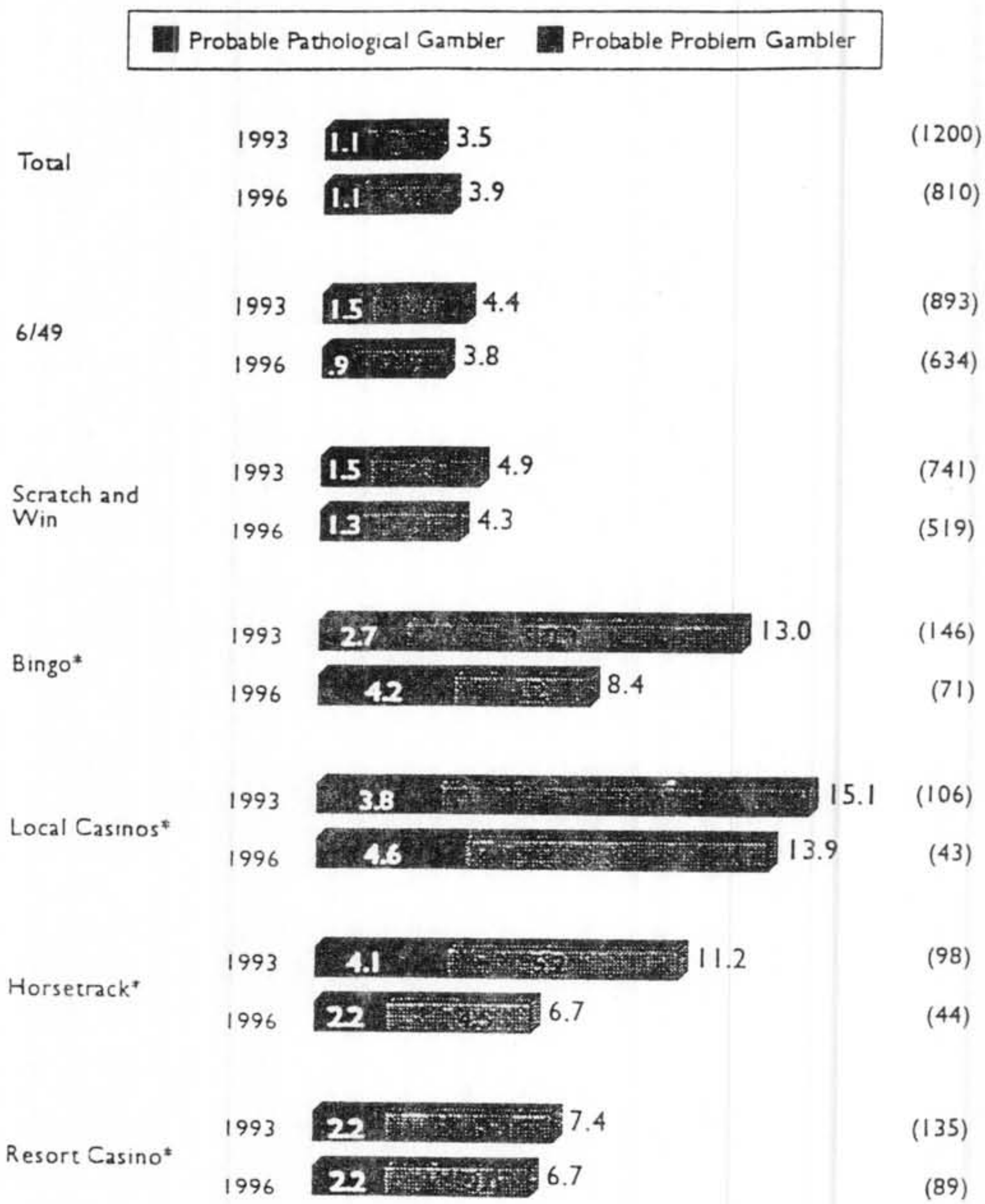
APPENDIX B:

Problem Gambling Prevalence Among Past Year Participants



*Caution - small base sizes

Current Prevalence Among Past Year Participants



*Caution - small base sizes

APPENDIX C:

Problem Gambling Assessment and the South Oaks Gambling Screen (SOGS)

Measurements of Problem Gambling Prevalence in Other Jurisdictions

The surveys in British Columbia build 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 counselors in order to minimize 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 (Laundergan, Schaefer, Eckhoff & Pirie 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).

Appendix D:

1996 Problem Gambling Survey - CATI Questionnaire

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	☐ 1 - CONTINUE
I'll get him/her	☐ 2 - REPEAT INTRO
Not available	☐ 3 - ARRANGE CALLBACK

Our survey today is about some of the ways people might spend their leisure time...

1-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

Go to a local casino in BC
Go to a casino in Washington state
Go to a resort casino such as Las Vegas or on a cruise ship
Play lottery games such as 6/49 or BC/49
Play Scratch & Win lottery games
Play Club Keno at a local lottery retailer
Play the Sports Action lottery game
Play breakopens or pulltabs in a bar or nightclub
Buy charitable hospital lottery tickets, raffle tickets or go to a casino night for charitable fund raising
Play video poker, other video card games or video slot machines
Play bingo at a bingo hall or at Starship Bingo
Bet on animal events such as horse races, dog races or cockfights

Play cards for money, dice games or shoot craps with friends, relatives or in a card room
Participate in a sports betting pool with friends, relatives, co-workers or a bookie
Bet on a game of skill such as billiards, golf or bowling that you were playing
Make speculative investments
Bet on pinball, arcade or video games

RESPONSE SET :
Regularly
Occasionally
Rarely
Never

1-A)18/19/20: Have you participated in any other activities like these where you bet or wager money on the outcome? ACCEPT UP TO THREE - FOR EACH, ASK : Do you participate frequently, occasionally or rarely ?
IF "REGULARLY", "OCCASIONALLY", OR "RARELY" PARTICIPATES IN AN ACTIVITY, ASK QUESTIONS 1-B), 1-C) , 1-D) AND 1-E):

1-B) Have you participated in this activity in the past year? IF NO, SKIP TO 1-D
1-C) Have you participated in this activity in the past week?
1-D) Approximately how much do you spend on (NAME OF ACTIVITY) each time you play?
1-E) Approximately how much do you spend on (NAME OF ACTIVITY) in a typical month?

GET BEST ESTIMATE IN DOLLARS FOR 1D/E

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 QUESTIONS 2 - 25, IF THE RESPONDENT ANSWERS "NEVER" OR "NO" TO PART A, SKIP TO NEXT QUESTION PART A. OTHERWISE, ASK PART B.

RESPONSE SET FOR QUESTIONS 2-3:

Never
Some of the time
Most of the time
Every time
Don't Know
No Response

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.

2A) 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:

2B) How often have you done this in the past year?

3A) Have you ever claimed to be winning money from these activities when in fact you lost?

3B) How often have you done this in the past year?

RESPONSE SET FOR QUESTIONS 4-24, 27, 30-31:

Yes
No
Don't Know
No Response

4A) Have you ever spent more time or money gambling than you intended?
4B) Have you done this in the past year?

5A) Have people ever criticised your gambling?
5B) Have people ever criticised your gambling in the past year?

6A) Have you ever felt guilty about the way you gamble or about what happens when you gamble?
6B) Have you felt this way in the past year?

7A) Have you ever felt that you would like to stop gambling, but didn't think that you could?
7B) Have you felt this way in the past year?

8A) 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?
8B) Have you done so in the past year?

9A) Have you ever argued with people you live with over how you handle money?

10A) Have these arguments ever centred on your gambling?
10B) Have you had any of these arguments in the past year?

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

11A) Have you ever missed time from work or school due to gambling?
11B) Have you missed time from work or school in the past year due to gambling?

12A) Have you ever borrowed from someone and not paid them back as a result of your gambling?
12B) Have you done so in the past year?

13A) Have you ever borrowed from household money?
13B) Have you borrowed from household money in the past year?

14A) Have you ever borrowed money from your spouse or partner?
14B) Have you borrowed money from your spouse or partner in the past year?

15A) Have you borrowed from other relatives or in-laws?
15B) Have you borrowed from other relatives or in-laws in the past year?

16A) Have you ever gotten loans from banks, loan companies or credit unions?
16B) Have you gotten loans from banks, loan companies or credit unions in the past year?

17A) Have you ever made cash withdrawals on credit cards to get money to gamble or pay gambling debts? (Does not include instant cash cards)
17B) Have you mad cash withdrawals on credit cards in the past year?

18A) Have you ever gotten loans from loan sharks to gamble or pay gambling debts?
18B) Have you gotten loans from loan sharks in the past year?

19A) Have you ever cashed in stocks, bonds or other securities to finance gambling?
19B) Have you cashed in stocks, bonds or other securities in the past year?

20A) Have you ever sold personal or family property to gamble or pay gambling debts?
20B) Have you sold personal or family property to gamble or pay gambling debts in the past year?

21A) Have you ever borrowed from your checking account by writing checks that bounced to get money for gambling or to pay gambling debts?
21B) Have you borrowed from your checking account by writing checks that bounced in the past year?

22A) Have you ever had a credit line with a casino or bookie?
22B) Have you had a credit line with a casino or bookie in the past year?

23A) Do you feel that you have ever had a problem with betting money or gambling?
23B) Do you feel that you have had a problem with betting money or gambling in the past year?

24A) Do you feel that either of your parents has ever had a problem with betting money or gambling?

25) How old were you when you first started gambling? __________ years old

26) What type of gambling was that?

ACCEPT UP TO THREE RESPONSES

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

28) How old were you when that happened? ____years old

29) What types of gambling were you doing when that happened?

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

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

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

Married
Widowed
Divorced
Separated
Never married

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

_____ persons.

34) How many under the age of 18? _______ persons.

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

Elementary or some high school
High school graduate
Some college or vocational, technical or trade school
University degree
Graduate study or degree
Refused

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

Working full-time
Working part-time
Going to school
Keeping house
Disabled
Retired
Unemployed
Refused

37) What kind of work do you normally do?

Farming / agricultural
Mining
Logging / forestry
Fishing
Retail services
Other services
Professional / technical
Manager / proprietor
Skilled, craftsperson
Semi-skilled, operative
Labourer
Student
Refused or no answer

38) In what year were you born? 19_______

39) Which of the following categories included your total household income last year?

Under $15,000
$15,001 to $25,000
$25,001 to $35,000
$35,001 to $50,000
$50,001 to $80,000
Over $80,000
Refused
Don't know

40) 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)

European
East Indian/ Pakistani
Native Canadian / Aboriginal
East Asian (Chinese/Japanese/Vietnamese/etc)
Middle Eastern (Arab/Persian/Turkish/Palestinian/etc)
African
Other

DK

41) In what city or district do you live?________________________________

42) What is your postal code? V_ _ _ _ _

43) RESPONDENT SEX (DON'T ASK)

Male
Female
Cannot tell

TELEPHONE NUMBER: (___ ___ ___) ___ ___ ___ - ___ ___ ___ ___

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

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