

**PLAY NOW, PAY LATER: LEGALIZED INTERNET
GAMBLING IN BRITISH COLUMBIA**

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Abstract

This study examines the provincial government's decision to expand online gambling services. In particular, the research identifies ways to decrease the problem gambling prevalence rate in British Columbia. Currently, BC has one of the highest problem gambling prevalence rates in Canada. The British Columbia Lottery Corporation is one of only two lottery corporations in Canada to launch online gambling, a power given to the provinces after brokering a deal with the federal government in 1985. With the increase in online gambling options, and a rise in the weekly deposit limit, the problem gambling prevalence rate could worsen. Using a case study analysis, this capstone looks at the best practices available to combat problem gambling. Incorporating the findings from the case study analysis, I propose several policy options, and evaluate them with four criteria. This process identifies changing deposit limits combined with a new research centre as the best way to help lower the problem gambling prevalence rate in British Columbia.

Keywords: problem gambling; addiction; internet; prevalence rate

Subject Terms: Problem Gambling; Problem Gambling – Prevalence Rate – British Columbia; Internet Gambling – British Columbia; Addiction – British Columbia

Executive Summary

In August 2009, the British Columbia government announced a decision to expand its newly-created online gambling scheme in 2010. PlayNow, once only offering a minimal selection of games and low deposit limit of \$120 per week, was changed in favour of a \$9999 per week deposit limit and an increase in the number of games. These changes only increase the fear of negative externalities associated with increased problem gambling, including health risks, financial problems, criminal behaviour, and a number of other costs to society. Studies have shown that problem gambling among internet users can develop much quicker than at land-based venues. The change in policy also shows the desire of the BC government to capture some of the \$87 million that is lost to offshore gambling websites each year. Currently, British Columbia, one of only two jurisdictions in Canada to launch legalized online gambling, has one of the highest rates of problem gambling in the country. BC also spends the lowest percentage of gambling revenue on problem gambling among Canadian provinces.

With BC already having a high prevalence rate of problem gamblers, this research looks at why British Columbians are more susceptible to gambling addiction than people in other jurisdictions. To determine policy options for BC, a case study analysis is used to examine best practices among countries that offer legalized internet gambling. Each case is analyzed based on important characteristics found to reduce the prevalence rate of problem gambling. The findings show several gaps in BC's attempt to lower the prevalence rate of problem gambling: underdevelopment of research and information services, a highly diversified population, and a high online spending limit.

Using the findings from the case study analysis as well as relevant literature, the following policy alternatives are proposed for BC:

- 1) *Culturally-Sensitive Treatment Plan*: Treatment programs designed specifically to meet the needs, unique problems, and concerns of immigrants. This plan helps immigrants understand problem gambling while taking into consideration the different cultural values that exist.
- 2) *Increase Treatment Awareness*: This plan starts with an educational program for those in the treatment sector on how to best use the available services to treat gamblers. The second part of this plan involves a campaign to educate the public about the services that exist, specifically targeting internet gamblers.
- 3) *Research and Lower Limits*: This option begins by lowering the deposit limits to \$1000/week, with gamblers being able to raise their limits based on financial means. A research centre is also created to look at internet gambling, collaborate with other jurisdictions and facilitate cooperation between relevant stakeholders.
- 4) *Prohibit Legalized Gambling*: This option involves abolishing all legalized gambling in BC, including land-based casinos, community gaming centres, retailers, and online gambling in order to reduce the negative externalities associated with gambling.

These options are then analyzed based on four criteria: cost, stakeholder acceptability, effectiveness, and transitional equity. The option that scores the highest is *Research and Lower Limits*. I conclude that this option be implemented immediately to both lower the weekly online deposit limit, and advance research to help reduce the number of problem gamblers in BC.

Dedication

To my parents and little sister. You taught me well, and without you, none of this would have been possible.

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Glossary

ALC	Atlantic Lottery Corporation
BC	British Columbia
BCGC	British Columbia Gaming Commission
BCLC	British Columbia Lottery Corporation
CPGI	Canadian Problem Gambling Index
EU	European Union
GPDR	Gaming Proceeds Distribution Regulation
MRSCC	Moral and Social Reform of Canada
RAY	Raha automaattiyhdistys
SOGS	South Oaks Gambling Screen
VLT	Video Lottery Terminal

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1: Introduction

The recent decision by the British Columbia government to add more online gambling options and significantly raise the amount of money provincial residents can wager online highlights one of the many new and interesting revenue opportunities that have come to rest in front of the government. Online gambling, where consumers can remain anonymous, and no longer have to leave the friendly confines of their homes to wager money, has grown ever since the internet boom in the late 1990s. However, with this new convenience comes a policy problem, which is that the expansion of internet gambling in BC poses a risk of residents developing gambling problems. This capstone will look at this problem, in addition to reasons that British Columbians are more susceptible to gambling addiction than people in other jurisdictions. Social problems can also result from internet gambling; criminal behaviour, family dysfunction, underage gambling, and a variety of health issues. Studies have shown that online gamblers are much more likely to become problem gamblers than those who gamble offline (Williams and Wood, 2007a). Without the responsible gambling practices that exist in land-based casinos, combined with the convenience of the internet, online gambling in British Columbia has the potential to exacerbate a serious problem.

Internet gambling has typically been an area where federal and provincial governments have spent very little time and energy developing a legalized market. This has left little known and unreliable offshore companies as the only option for those inclined to gamble online. In British Columbia this situation is experiencing a change. Over the past several years, the British Columbia Lottery Corporation (BCLC) has operated its PlayNow website with some minor gambling availability and a low weekly deposit limit of \$120/week. Now, in the midst of an economic downturn, the government has reversed its stance on internet gambling. The

government has decided to make changes to its online gambling scheme. These changes introduce more games and a new deposit limit of \$9999/week to BCLC's online gaming centre (British Columbia Lottery Corporation, 2009a). In 2006, the CEO of the Canadian Gaming Association, Bill Rutsey, argued that internet gambling was taking \$500 million per year out of Canada (Igelman, 2007). The government has decided to take advantage of this potential revenue source, and compete with offshore companies.

This study will start with a comprehensive literature review. This review incorporates the background section, which will begin with a description of what gambling is, and how it has evolved. Sections pertaining to the history of gambling in Canada and BC will follow. The background will conclude by looking at the current situation in British Columbia and the costs of gambling.

Next, I will look at the policy problem of this paper, in addition to the main stakeholders. I will also examine the policy objectives to consider, both short and long term. I will then conduct case study analysis as my primary methodology. This will involve looking at three successful cases: Atlantic Canada, Finland, and the Australian state of Victoria. A brief analysis of these cases will show why they have been successful, and the characteristics they possess that BC may lack. The secondary methodology will involve taking the most pertinent characteristics from the case study analysis and conducting further analysis.

To conclude, I will use the information gathered to create policy options for BC. Evaluation of these options is based on four criteria that have been developed for internet gambling in British Columbia. This paper will finish with a recommendation for British Columbia, based on the results of the evaluation.

2: Gambling

This section outlines where gambling originated from, when internet gambling emerged, and what legal online options are available in British Columbia (BC).

2.1 The Evolution of Gambling

There are many definitions for ‘gambling.’ In a broad sense, any scenario that involves looking at chance, risk, or speculation is a form of gambling.¹ Through this definition, it can be argued that we are all gamblers. Gambling seems unavoidable, as all of us have dealt with some sort of risk at one point in our lives (Reith, 1999). Gambling in its purest form has been around since ancient times. As far back as 1420, lotteries were used to fund public projects in Europe (British Columbia Lottery Corporation, 2009a). Prior to the seventeenth century, many considered random events as a sign of the gods revealing a sacred message. One of the earliest known gambling events took place between Poseidon, Zeus and Hades. Greek mythology states that these three divided the world (heaven, sea, and hell) by playing a dice game. Gambling has also played a role in history. For example, in 1020 A.D., King Olaf of Norway and King Olaf of Sweden rolled dice to settle a territorial dispute.

More narrowly defined, gambling involves playing a game for something of material value, or to wager on an uncertain outcome (BC Ministry of Public Safety and Solicitor General, 2008). In this capstone, I am focusing on this definition. Almost every culture has some history of gambling. Very few cultures never gambled; most notably some native Australians, Pacific Islanders, and natives from remote parts of India, North America and South America. Despite

¹ Unless otherwise stated the information in 2.1 comes from Schwartz (2006).

these rare cases, gambling has existed throughout history, slowly making its way to all corners of the world.

Some of the most well known games originate from ancient history. The Chinese have a long history of gambling, inventing card games for example. Although its origin is contested, the version of roulette that is played today has its roots in late-eighteenth century France. The French are noted pioneers in several areas, as they hold claim to blackjack's emergence in the eighteenth century. Although there are too many different gambling inventions to mention, a recent one is the slot machine. This invention was conceived in San Francisco, after gambling came to North America. Based on an invention from the late nineteenth century, it was adapted by Charles Fey and Associates to become something similar to today's slot machines. The slot machine soon became a gambling staple all over the world.

According to the American Gaming Association (2009), the modern history and evolution of gambling has its roots in the United States. Immediately after gaining independence, gambling helped fund government activities and building projects in the 13 colonies. These activities took the form of lotteries conducted by prominent individuals such as Benjamin Franklin and George Washington. However, during the 19th century gambling became too widespread, and was outlawed for several decades. It was not until 1931, when casino gambling became legal in Nevada, that the industry really took off in North America. Since that time, Nevada (Las Vegas in particular) has become the gambling hub of North America. It is in Las Vegas that gambling has become glamorized, and made to seem almost surreal. The next section looks the history of internet gambling, the newest form of gambling.

2.2 Internet Gambling: A World of Possibilities

When expansion of the internet began in the 1990s, it soon became apparent that this could be a new avenue for gambling.² However, it was not the creation of the internet that was solely responsible for gambling's rise in popularity, other factors played a vital role in its proliferation. First was the creation of gambling software. This is necessary for both casino games, and other types of wagering, such as sports betting. Second, are the encrypted communication protocols that allow safe and secure money transactions. Third, a safe residence providing tax leniency is important for those looking to offer online gambling services. A preferred location is one with low taxes and fees, low levels of law enforcement, and favourable gambling legislation. Some of the first jurisdictions to license online gambling were located in favourable locations in the Caribbean and Central America. With these criteria in mind, the first wager placed at an online casino occurred in 1996, at a casino based in Antigua.

As many saw the opportunity for large revenue streams with little capital and operating costs involved, expansion quickly materialized. Even though at the beginning most of the new casinos based themselves out of the Caribbean and Central America, soon several online casinos began operating out of the United Kingdom, Finland, Australia, and some specific areas of Canada. In Canada, internet gambling operations have taken place primarily within the Kahnawake Mohawk Territory, an area that considers itself independent from Canada, and thus not functioning within the laws of the country. Located south of Montréal, the Reserve established, in 1996, the Kahnawake Gaming Commission. The purpose of this commission is to regulate gambling on the reserve. The gaming commission granted Mohawk Internet Technologies a gaming license in order to run an online casino (MacKay, 2004). In turn, Mohawk Internet Technologies has now granted client provider authorization to more than 100 gambling

² Williams and Wood (2007a) provides most of the information for this section as it is a broad overview of internet gambling.

licensees. Both the Attorney General of Canada and Loto Québec continue to argue the legality of this casino, despite the fact that no charge has formally been filed (Igelman, 2007).

Internet gambling has slowly grown throughout the world. In 1996, 15 internet websites accepted online wagers. This increased to 200 in 1997, and 1800 in 2002. Today, there are over 2000 gambling websites available on the internet. Similarly, profits grew exponentially. In 2000, revenues were an estimated US\$2.2 billion. By 2008, they had soared to an estimated US\$21 billion (American Gaming Association, 2010).

Internet sites can be separated into offshore companies, and those licensed by governments. Offshore companies own and operate the majority of the over 2000 gambling websites available on the internet. For the most part land-based casinos have resisted starting online casinos, or collaborating with current online companies. They are hesitant largely because of the uncertainty surrounding the legal status of internet gambling. There are some notable exceptions in the United Kingdom and Australia. However, predominantly, companies have decided to wait and see how internet gambling evolves, and if it becomes legalized in their home countries. Today, several jurisdictions have granted land-based gambling companies the authority to provide online gambling. Among these jurisdictions are some of the provinces of Canada. Both the Atlantic Lottery Corporation (ALC) and the British Columbia Lottery Corporation (BCLC) provide a wide variety of online gambling services.

3: The History of Gambling in Canada

In this section, I cover the history of gambling in Canada and British Columbia with an emphasis on the separation of powers between the federal and provincial governments.

3.1 Federal Control

Gambling in Canada had no defined legal framework until the adoption of a criminal code.³ The 1892 Criminal Code of Canada, for primarily ethical and moral reasons, outlawed nearly all forms of gambling. However, there was doubt over the legality of on-track horseracing, and because of this uncertainty, it was allowed to operate with little interference from law enforcement. Off-track gambling, although outlawed, was enforced loosely and arbitrarily. The continued leniency shown by law enforcement led to an increase in gambling, and eventually widespread public concerns and debate over the future of gambling. Regardless of public sentiment, gambling continued to make its presence felt in Canadian society until 1907, when the Moral and Social Reform Council of Canada (MSRCC) decided to launch a formal protest against gambling. This movement, composed of primarily protestant groups, wanted to eliminate gambling on moral grounds. Yet, by this time, gambling had gained a small foothold in Canadian society. In particular, horseracing became a popular pastime for wealthy businessmen who also owned and bred horses for economic profit. Many other Canadians were also noted for frequenting race tracks for betting purposes.

In the early 20th century, a Special Committee of the House of Commons (1909-1910) and a Royal Commission (1919-1920) convened with the objective of analyzing the legal status of gambling in Canada. One of the major supporting arguments presented was that the abolition

³ Unless otherwise stated, this section is based on Campbell and Smith (2003), and Stevens (2002).

of horseracing would negatively affect Canada's chance of supplying Great Britain with military and commercial horses. The British military had used roughly 800,000 horses in the Boer War, and many argued that it was Canada's obligation to help replenish this stock. Racetrack promoters argued that the eradication of horseracing would bring a more dangerous illegal element to the underground betting scene, while at the same time driving away many Canadians who now saw gambling as a form of entertainment. The underlying theme throughout the debate was that legalized gambling provided an opportunity for racing promoters to make a lot of money.

The anti-gambling proponents, led by the MRSCC, looked at the morality of gambling, the financial ruin it caused, and the fact that it represented an unethical way to make money, as it did not involve hard work. However, they did not consider gambling a disease, because it was not thought of in that way at the turn of the 20th century. Today, those who campaign on behalf of anti-gambling groups often cite gambling as a disease as a primary argument. Despite these protests, pro-gambling proponents prevailed. They did not receive any further concessions towards legalized gambling, but they had accomplished their goal of maintaining the status quo.

By the mid 1920s, gambling became well established. No longer were critics lobbying for its eradication, as their voices fell relatively silent. Lobbying efforts were starting to pick up from those looking to expand legal gambling activities. In 1925, the lobbying efforts of agricultural exhibitions and fairs were rewarded by a Criminal Code amendment permitting games of chance at these venues during yearly fairs. Soon carnivals and fairs throughout the prairies were offering games of chance. Much like previous proponents, those who argued in favour of allowing games of chance pointed to the greater good for society, including increased attendance and the chance to promote local agricultural products.

Gambling continued without much change until 1954, when a Joint Committee of the House of Commons assembled to discuss the laws pertaining to lotteries in Canada. Similar to earlier debates, it was the church groups, led by the Canadian Council of Churches, which

opposed expansion of legalized gambling. Because of the large number of illegal gambling operations (i.e. bingo, raffles) running in Canada, and because these operations used the resulting revenue to fund charities and other projects benefiting local communities, the Joint Committee proposed that the federal government introduce legal clarification about which games of chance were allowed. It also advocated that there be no provincial lottery schemes in Canada. Despite these recommendations, the most important outcome of the Joint Committee was that the government became more aware of gambling activities taking place within the Canadian borders. This knowledge culminated in the 1969 amendment to the Criminal Code that would forever change the nature of gambling regulation in Canada.

3.2 Provincial Control

Provincial control emanates from the historical 1969 amendment to the Criminal Code of Canada.⁴ This amendment contained a provision allowing provinces to conduct lottery schemes. Less than 10 years later, each province had begun operating its own lottery scheme. Some provinces even allowed fairs and exhibitions to conduct casino-style games such as blackjack and roulette on specially designated days. The success of these games was not overlooked, especially in Western Canada where several charitable organizations were permitted to operate casinos with the public good in mind.

With lottery tickets, several forms of casino gambling, and horseracing all thriving throughout the 1970s, gambling became even more of a mainstay in the Canadian society. In 1985, the federal government handed over full control of gambling operations to the provinces in exchange for \$100 million and a small amount of yearly provincial revenues. The \$100 million went towards funding the 1988 Calgary Olympics, while the yearly dues for each province are calculated based on provincial lottery sales. In 2009, the federal government received \$8.3 million from British Columbia (British Columbia Lottery Corporation, 2009b). Electronic

⁴ This section is based on Campbell et al. (2005) unless otherwise stated.

gambling also became legal, laying the groundwork for internet gambling. Electronic gambling first took the form of video lottery terminals (VLTs) that all provinces except British Columbia and Ontario were operating by 1994. In the early 1990s, provinces also began to operate casinos as Crown Corporations.⁵ In a short time, the provinces had managed to break free from the constraints imposed by the federal government. They were now offering a wide variety of gambling operations, and showing financial success.

With the introduction of the internet has come a completely new set of gambling opportunities for Canadians. Although there is no provision in the Criminal Code to regulate Canadians who gamble offshore, many have done so. With the loss of revenues to offshore sites, as well as decreased revenues at land-based casinos, several provinces have felt that now is the time to operate a legal online gambling scheme. Both the Atlantic Lottery Corporation and the British Columbia Lottery Corporation opened online gambling websites in 2004 (Campbell and Smith, 2003). These sites require very little expenditure to operate, and have been successful to the point that British Columbia is now conducting further expansion, paving the way for other provinces to follow.

To conclude, Canada's history with legalized gambling has demonstrated little legal progress until 1969. After control was handed to the provinces, many new forms and schemes were legalized. Today, legalized gambling operates at a level that could not have been envisioned 50 years ago, with provinces being the primary financial beneficiaries. There were already concerns about gambling in the early part of the 20th century, and today they have shifted to the role of the internet, and to the potential costs and benefits of further expansion (Campbell and Smith, 2003).

⁵ Crown Corporations are public entities formed by provincial governments to pursue economic and social gains through the open market (British Columbia Lottery Corporation, 2009a).

3.3 Legalized Gambling in British Columbia

Soon after the 1969 transfer of jurisdiction, British Columbia began to sell lottery tickets.⁶ It subsequently introduced a licensing process for non-profit organizations looking to raise revenue through gambling schemes. These groups were primarily charities and religious groups, and the gambling they were concerned with was mostly bingo, raffles and charitable casinos. Throughout the 1970s, British Columbia's licensing system remained a simple operation and the Ministry of the Attorney General was given sole authority to issue gambling licenses.

In 1974, the province passed the Lottery Act, which created an agency to manage provincial lotteries and assume responsibility for non-profit gambling licenses. By the 1980s, the charitable casino industry had become a major source of revenue for the province as the licensing fees were generating substantial amounts of money. The number of licenses kept rising throughout the 1980s, until a concern for organized crime prompted the government to cut back the number of licenses it was issuing.

In 1985, the British Columbia Lottery Corporation (BCLC) was formed to oversee provincial gambling operations. Prior to the creation of the BCLC, British Columbia had been in an administrative partnership with the Western provinces. In 1987, the British Columbia Gaming Commission (BCGC) was created as an independent body to administer British Columbia's charitable gambling operations. The Commission ensured that charitable, non-profit organizations received a fair share of gambling revenues. It had two primary tasks: to issue licenses, and to help with the distribution of gambling revenue to non-profit organizations. The BCGC adopted a very liberal definition of what constituted a religious or charitable organization, and thus distributed a large quantity of gambling licenses. The major stipulation was that an organization be non-profit, and that its purpose be charitable or religious. There were also several requirements for a volunteer component, and a stipulation that no funds be used for personal or organizational profit.

⁶ Information from this section comes from Campbell (2000a) and Campbell (2000b).

The BCGC helped the BCLC in determining which organizations received licenses, and how much access to gambling revenue these non-profit groups would have (BC Gaming Commission, 1994).

It was not until 1997 that any significant regulation was established to distribute gambling revenues to non-profit organizations. The Gaming Proceeds Distribution Regulation (GPDR) included a trust agreement between the BC Charitable Gaming Fund, the provincial government, and the British Columbia Lottery Corporation, who agreed to set a formula to share revenue from bingo and casino gambling with a certain proportion of this revenue guaranteed to go to charities. However, revenue generated from *destination casinos* was not approved (in the agreement) to be shared with the non-profit sector.⁷ This stipulation effectively cut out the non-profit sector from one of the largest sources of gambling revenue. Part of this regulation also established a 10% government fee on charitable gambling revenue. Many charitable organizations felt that the government was confiscating some of the revenue previously destined for the non-profit sector, and thus filed a petition in BC Supreme Court. The court agreed with the plaintiffs, and the GPDR was deemed invalid.

The government reacted with a drastic change in policy. The BC Supreme Court ruling led to the end of charitable gambling licenses, with authority over casino gambling turned over to the BCLC. Today, gambling in British Columbia is regulated under the 2002 Gaming Control Act. The main change in this act is that selling lottery products to underage individuals or allowing these people to participate in gambling activities becomes a statutory offence (BC Gaming Control Act, 2002). Instead of partnerships with non-profit groups, BCLC today collaborates with private organizations to manage casino operations. Gambling revenues are now re-distributed to charitable organizations through a grant system. Additionally, with British Columbia lagging behind several provinces in net gambling revenue (due largely to not using

⁷ Destination casinos are not only gambling venues, but also provide accommodation and entertainment services.

video lottery terminals), the issue of gambling expansion has been met with enthusiasm towards opening a number of new casinos. This enthusiasm comes primarily from the provincial government, which has often ignored complaints from both municipal governments and the public to facilitate expansion. In 1996, despite objection from the city of Vancouver, the province added gambling games (i.e. Keno) into bars and pubs. Since the late 1990s, the province has expanded not only the number of venues, but has also increased betting limits, allowed casinos to stay open longer, and added alcohol to *destination casinos*, an option that was previously prohibited (Seelig and Seelig, 1998). Today, these increases combined with the expansion of gambling facilities benefit those within the government not for any personal reason, but because these moves help the political party in charge by generating revenue that is necessary at a time when the provincial government is facing a \$1.7 billion deficit (Shaw, 2010). With cuts in so many areas taking place over the past few years, and the government's political capital shrinking since the landslide victory of 2001, there is a need to maintain public services and support. Of the money the BC government receives from gambling revenues, a large portion goes to charities, local governments, health care, and education (British Columbia Lottery Corporation, 2009a).

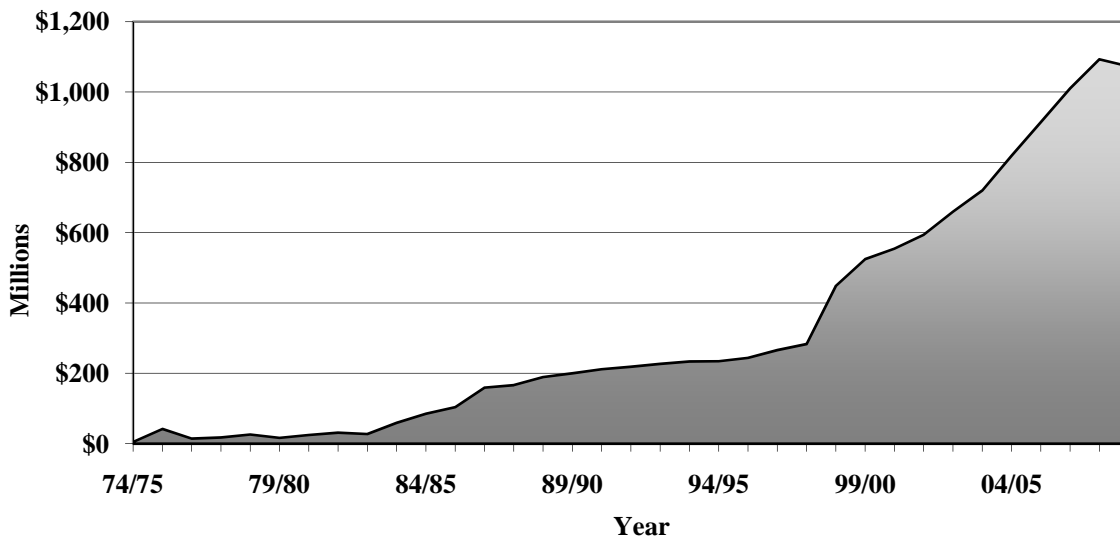
The expansionist interests come at a time when public displeasure towards gambling is quite high in BC. In the latest gambling prevalence study, only 10% of respondents agreed that the effects of legalized gambling on society are good. Meanwhile, 43% said it was bad. The rest of the respondents were either unsure or thought that gambling had equally good and bad effects on society. Of those who said legalized gambling was bad, 60% were non-gamblers, and thus without any gambling problems (BC Ministry of Public Safety and Solicitor General, 2008).

3.4 Gambling Revenue in British Columbia

Since the late 1990s, casinos have opened all over the province, generating record gambling revenues. Net revenues for the 2009/10 fiscal year have been forecasted to be \$1.12 billion, with \$171 million being re-distributed to local governments and charities (BC Ministry of

Finance, 2009; Shaw, 2010).⁸ Net gambling revenue in British Columbia has grown rapidly over the past 35 years, as is shown in Figure 1.

Figure 1: Net Gambling Income to BC Government (1974-2009)



Source: British Columbia Lottery Corporation, 2009a.

Net income is calculated by taking the total gambling revenue and subtracting all expenditures as well as the amount due to the Government of Canada. Revenues remained modest until 1982/83 when they started an ascent that would last until 1990. This first jump in revenue coincided with the rise in the number of charity casino licenses being issued. In 1998, after the BCLC partnership with private investors began, an even larger increase in revenue took place. Recently, revenue has increased at an even larger rate. Since BCLC’s PlayNow website emerged in 2004, net income to the BC government has risen by 49%.⁹ Although Figure 1 shows significant gains over the past 35 years, revenues have peaked since the launch of PlayNow, with BCLC showing a smaller net

⁸ Net revenue re-distributed to local governments and charities was originally forecasted to be \$239 million (BC Ministry of Finance, 2009).

⁹ This percentage increase is calculated by taking the net income in 2008/09 and subtracting the income earned in 2003/04, and then dividing by the net income in 2003/04.

income in 2008/09 than the previous year. Furthermore, BCLC did not meet its target for net revenue in 2008/09 (British Columbia Lottery Corporation, 2009a).

Lotteries and casinos, the two mainstays in BCLC's gambling portfolio, have also shown similar results. Table 1 shows the net income for lotteries and casinos for the past 11 years. This does not include community gaming centres, as those were a more recent creation, and they do not feature all of the same selection of games as other casinos.

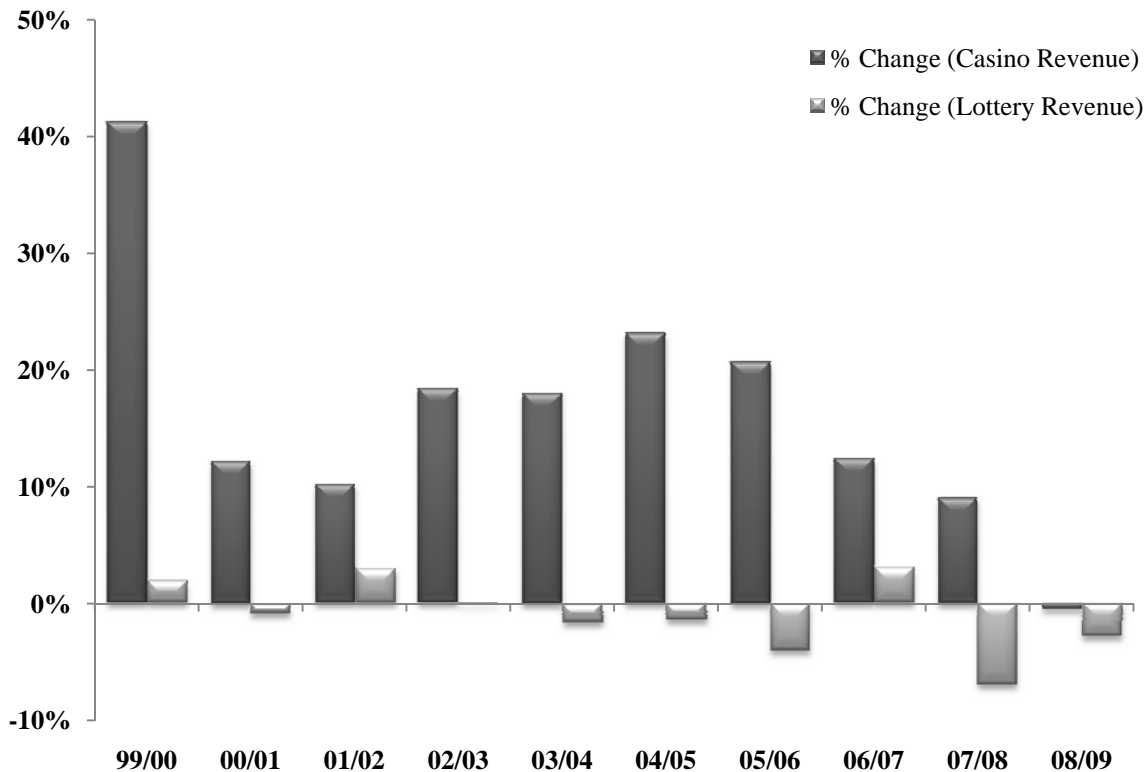
Table 1: Net Income for Lotteries and Casinos (1998/99 - 2008/09)

Year	Net Income: Lotteries (millions)	Net Income: Casinos (millions)
98/99	\$282.46	\$171.50
99/00	\$287.81	\$242.28
00/01	\$285.39	\$271.76
01/02	\$293.83	\$299.47
02/03	\$293.55	\$354.62
03/04	\$288.92	\$418.33
04/05	\$284.74	\$515.34
05/06	\$273.28	\$621.64
06/07	\$281.65	\$698.56
07/08	\$262.02	\$761.77
08/09	\$254.49	\$758.12

Source: British Columbia Lottery Corporation, 2009a.

Lottery revenue has declined over the past 11 years, peaking in 2003/04, just prior to the launch of PlayNow. With the exception of 2006/07, it has been in steady decline since PlayNow came into existence. Casinos, on the other hand, have experienced significant growth over the past 11 years. With the creation of more destination casinos in the Lower Mainland, revenue has increased to a plateau of \$761.77 million in 2007/08. Casinos did not experience much of a reduction in revenue when PlayNow opened, but have shown decline in 2008/09. Figure 2 shows the percentage increase/decline of both forms of gambling over the past 11 years. The percentage increase/decline is calculated by taking the base year's revenue, subtracting the previous year's revenue, then dividing by the previous year's revenue.

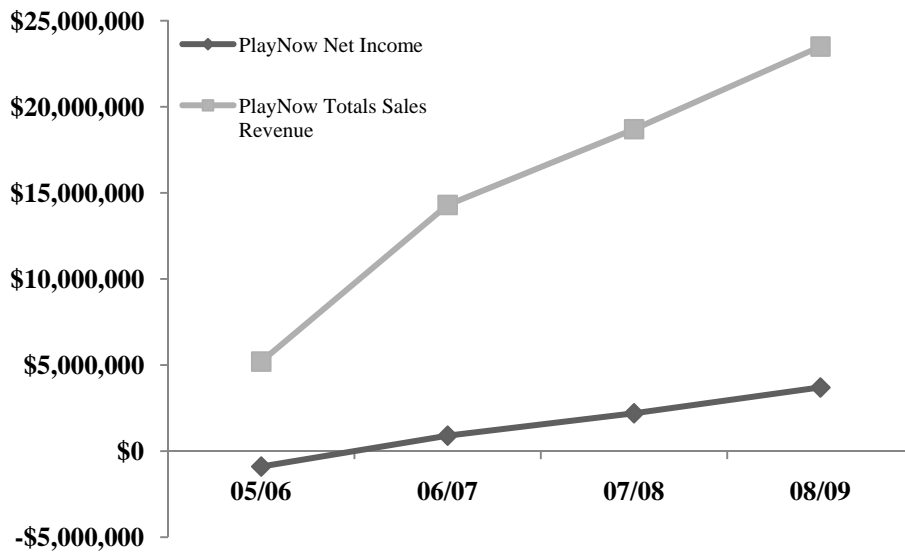
Figure 2: Percentage Change in Casino and Lottery Revenue (1999/00 - 2008/09)



Source: British Columbia Lottery Corporation, 2009a

This figure further illustrates the fact that casino revenues have enjoyed considerable growth as opposed to lottery revenues. Casino revenues increased drastically after the beginning of the private-public partnership between BCLC and casino shareholders. Between 2002/03 and 2005/06, casinos thrived, taking advantage of the poker boom, the creation of more bigger destination casinos, and having these casinos placed in dense urban areas (British Columbia Lottery Corporation, 2009a). Since 2006/07, revenues have increased at a slower pace, finally declining in 2008/09. When looking at the brief history of PlayNow, the fall in casino revenue is partially offset by the recent increase in internet gambling revenue. Figure 3 shows the short history of PlayNow, and how while eGaming initially incurred some large start-up costs, it has picked up momentum over the past several years.

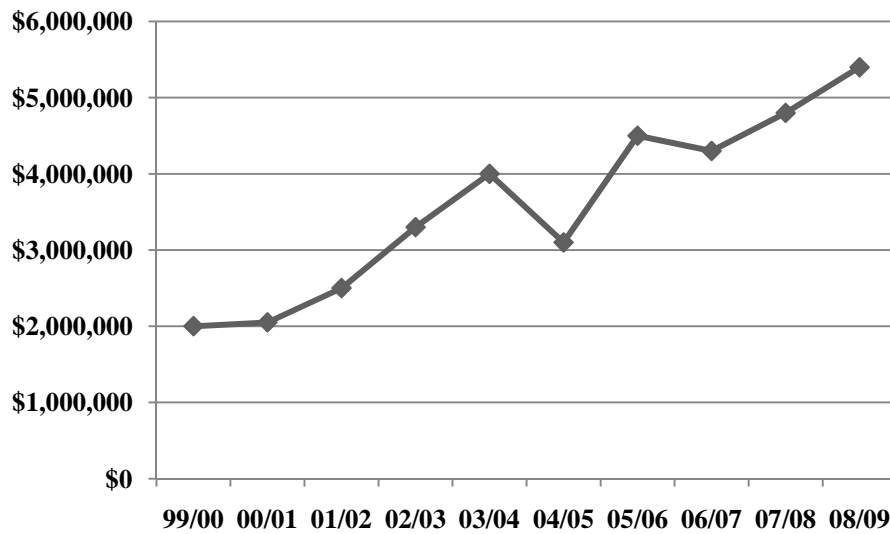
Figure 3: PlayNow Net Income and Total Sales Revenue (2005/06 – 2008/09)



Source: British Columbia Lottery Corporation, 2009a.

Total sales have gone up from \$5.2 million in 2005/06 to \$23.5 million in 2008/09, still below the 2008/09 target of \$28 million (British Columbia Lottery Corporation, 2009a). Net revenue has also increased at a steady rate, from the initial deficit to \$3.7 million in 2008/09. With games constantly being added, PlayNow's revenue targets have risen considerably over the past several years. Overall, as indicated best in Figure 1, government revenue has gone up substantially over the past decade. However, as Figure 4 shows, the amount of money directed towards problem gambling has not increased at the same rate. With more options and more gambling revenue generated by the province, the amount of money spent on problem gambling has not gone up, sometimes even going down.

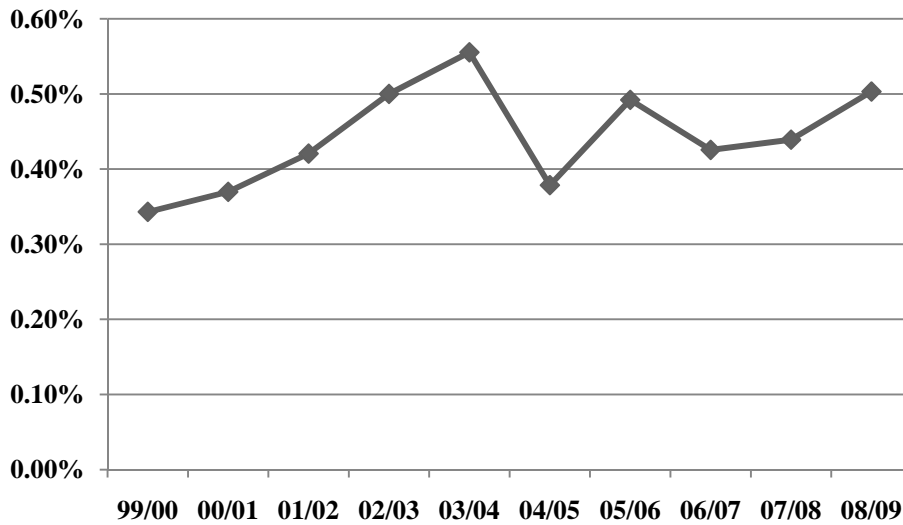
Figure 4: Amount of Government Revenue Directed Towards Problem Gambling



Source: British Columbia Lottery Corporation (2009a), Canadian Partnership for Responsible Gambling (2009).

In addition to these statistics, the budget for 2009/10 has been set even lower, at \$4.6 million (Kines, 2009). While revenue increased for 10 years prior to 2008/09, the amount allocated towards problem gambling programs did not follow the same path. Initially, it was a paltry \$2 million, slowly rising after the budget increased to \$4 million in 2000/01. Despite BC having one of the highest gambling prevalence rates, the full problem gambling budget was often not spent. In 2004/05, after PlayNow launched, the amount spent on problem gambling actually decreased. Eventually, spending did rise to \$5.4 million in 2008/09. While moderate progress has been made, the 2009/10 budget is smaller than previous years. Figure 5 shows the percentage of provincial government revenue that has been spent on problem gambling.

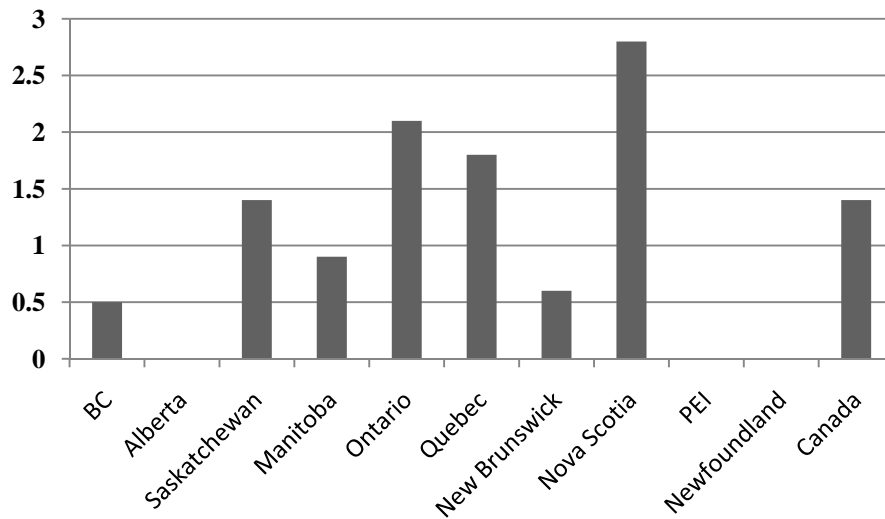
Figure 5: Percentage of BC's Net Gambling Income Spent on Problem Gambling (1999/00 - 2008/09)



Source: British Columbia Lottery Corporation (2009a), Canadian Partnership for Responsible Gambling (2009).

While BCLC revenue has increased over the years, the percentage of provincial net gambling income spent on problem gambling has fluctuated at a low level. Prior to the launch of PlayNow, the government was spending over 0.5% per year on problem gambling. However, after the launch, spending declined to below 0.5% for every year. In relation to other provinces, British Columbia is near the bottom when it comes to spending on problem gambling. Of the 10 years documented in Figure 5, not even one featured spending above 1%, something other provinces have done on a regular basis. Figure 6 shows the percentage of government gambling revenue distributed towards problem gambling in 2007/08. Data was not available for Alberta, Newfoundland and Prince Edward Island.

Figure 6: Percentage of Government Gambling Revenue Distributed to Problem Gambling (2007/08)



Source: Canadian Partnership for Responsible Gambling, 2009.

Figure 6 shows that BC sits last among the 7 provinces where data was found, in addition to being well below the national average of 1.4%. This is despite the fact that BC is fourth in total gambling revenue, behind Alberta, Ontario, and Québec (Canadian Partnership for Responsible Gambling, 2009). Nova Scotia leads the way at 2.8%. The two provinces with the largest total gambling revenue (Québec and Ontario) both spend more than three times the amount that BC spends. The only province that spends anywhere near the low level of British Columbia is New Brunswick, a province with zero land-based casinos (ProblemGambling.ca, 2009).

3.5 The Different Forms of Gambling in British Columbia

The four areas where gambling exists in British Columbia are land-based casinos, community gambling centres, various retailers, and online.¹⁰ In British Columbia, there are currently 17 land-based casinos, eight of which are located in the Lower Mainland. Several of these casinos can also be classified as *destination casinos*, where gambling is part of an

¹⁰ All of the information provided for this section comes from the British Columbia Lottery Corporation (2009a). For a full list of offered games, see Tables 9 to 11 in Appendix A.

entertainment package, which often includes theatres, restaurants and overnight accommodations. The stronghold of the casino industry is slot machines, but there are also a wide variety of table games such as blackjack, baccarat and roulette. Finally, land-based casinos also offer poker and non-traditional poker.¹¹ Availability of games varies by location.

BCLC has also created a smaller, more community-oriented version of its casinos. There are 27 *Chances Gaming* centres in British Columbia. These are split into 14 bingo halls and 13 community gaming centres. They are essentially small casinos located in smaller communities around British Columbia. While game selection varies by location, *Chances Gaming* offers bingo, slot machines, electronic instant win, electronic blackjack, and a racebook.

There are also BCLC retailers in various locations, such as malls, convenience stores, and pubs. They offer a wide variety of games, in addition to the convenience of being able to play in locations that consumers often visit. There are a number of different games that retailers offer based on location. These include all the lottery games available, including Lotto 6/49 and BC/49. Social establishments even offer Pacific Hold'em and Knockout 21, where players receive a poker or blackjack lottery ticket to play against an animated computer player. These places also offer Keno, a more established game in BC. There are also games that both retailers and social establishments offer, such as pulltabs and sports betting. Finally, in light of the 2010 Olympic Winter Games, newer games under the category of Sports Funder have emerged, providing revenue to Canadian athletes.

Finally, the internet is becoming the best means for BCLC to combine as many of their gambling services as possible, with added convenience. The majority of the games available online are games that are also available through one of the other three means. No longer does someone have to drive to a retail outlet to purchase a lottery ticket. If a customer does not have enough time to play SportsAction at a BCLC retailer, they can do so from the confines of home. If someone does not wish to spend money at a local bar or pub, but wishes to play a game like

¹¹ For a full list of offered games, see Tables 9-11 in Appendix A.

Pacific Hold'em, this option is now possible. PlayNow also offers games that are difficult to offer at retailers or casinos. These games include Monopoly, Boggle, and a host of other interactive games.¹²

The range of games at these four locations varies due to the characteristics of the venues themselves. At the land-based casinos, there is no need to offer computer terminals with online games, as patrons who come to casinos are often not interested in gambling online. The *Chances Gaming* centres offer a smaller version of the land-based casinos to small towns in markets that are too small to host a full casino. These centres offer games with lower operating costs than land-based casinos. With locations close to all major commercial centres, the retailers offer an option for those who do not wish to play quick games online, or those who want a shorter gambling experience. They specialize in quick games such as lottery games, scratch and win tickets, or sports betting.

Finally, the internet encompasses the largest range of games to help BCLC's cost-efficiency when providing gambling options. BCLC is currently one of the least cost-efficient provincial lottery corporations in Canada, due largely to the fact they do not offer video lottery terminals (VLTs). According to recent data, Alberta leads the way in cost-efficiency, as government net profit is 70.7% of gross revenue (Azmir, 2005).¹³ Alberta, although not offering internet gambling, depends a lot on video lottery terminals in addition to its casino and lottery gambling. It is the only Western Canadian province to depend heavily on both VLTs and slot machines. Because they are less labour intensive than other types of gambling, electronic and online gambling are more cost-efficient for the government to operate. It is cost-efficient for BCLC to offer as many online games as possible, in addition to the fact that the internet has allowed for a wide variety of games to be developed, because the cost is so small (Azmir, 2005). BCLC's new proposal includes offering games such as blackjack, roulette and poker online

¹² See Table 11 for a full list of the interactive games that are available online.

¹³ Gross revenue is calculated by taking the total gambling sales and subtracting expenses related to gambling regulation, advertising, administration, and commissions.

(British Columbia Lottery Corporation, 2009a). These games require high labour and operating costs at a land-based casino.

To summarize, gambling in British Columbia was a virtual non-issue until the landmark 1969 amendment to the Criminal Code of Canada. Since then, gambling has steadily grown in the province. With the help of technology and infrastructure, gambling in British Columbia has proliferated since the 1970s, when it was but a small part of the economy. A framework is in place to ensure that the government, financial stakeholders and the non-profit sector benefit from increased gambling revenues. However, with the recent economic downturn, there is considerable pressure to boost the BC economy without raising taxes. Gambling presents a way to accomplish this goal. One of the most viable options is to expand online gambling, where revenue is generated more cost-efficiently, with less overhead cost. The offshore market is a perfect example of the financial gains that are possible with online expansion. PlayNow users' deposit limits have increased, while more gambling options will soon be available. The next section looks at some of the most important social costs of internet gambling.

4: The Risks and Costs of Gambling

This section looks at the various risks associated with traditional and internet gambling, and their costs to society. These risks take on added importance when looking at the percentage of total gambling revenue that is generated by problem gamblers. For example, in Ontario it was estimated that problem gamblers (4.8% of the population) accounted for 36% of gambling revenue (Williams and Wood, 2007b).¹⁴ By comparing the costs with the benefits discussed earlier, the situation facing British Columbia becomes clearer.

4.1 Traditional Gambling

There are many risks associated with traditional gambling that lead to costs for the individual. The most well-known consequence of gambling is addiction. Gambling addiction, also known as problem gambling, can develop for many reasons. For example, stress, desire to win back lost money, the thrill of the action, and escape of problems. No matter the reason, gambling addiction is known to interfere with work, school, physical health, mental health, personal finances, and relationships with others (Centre for Addiction and Mental Health, 2010).

Another set of risks associated with traditional gambling involve medical problems for gamblers. In the 2008 British Columbia Gambling Prevalence Study, less than 1% of respondents said they were given medical care due to mental or emotional problems caused by gambling (BC Ministry of Public Safety and Solicitor General, 2008). Despite the perceived lack of medical problems in British Columbia, there is a long history of medical problems resulting from problem gambling. A large body of literature indicates that problem gambling is associated with

¹⁴ For a list of other studies showing the percentage of revenue derived from problem gamblers, see Table 14 in Appendix C.

psychological and family problems. Petry (2006) using the 2005 National Epidemiological Survey of Alcohol and Related Conditions, controlling for demographic characteristics, finds that problem gambling is associated with many psychological health disorders. Some of the most often noted disorders are stress, circulatory disease and gastrointestinal disease. In general, it is found that people who are problem gamblers are in worse health than those who do not have a gambling problem (Petry, 2006).¹⁵

4.2 Internet Gambling

In addition to exacerbating several problems that are already prevalent in society, internet gambling has added new costs. According to the British Columbia Problem Gambling Prevalence Study (2008), internet gambling was associated with 29% of problem gamblers, more than double casino gambling (12%). Addiction has increased with the invention of internet gambling. With better technology, gambling can be conducted quickly and more cost-efficiently for the company. For example, to deal a hand of blackjack online takes only a fraction of the time as in a land-based casino, resulting in more revenue per online table.

There are also several risks exclusively associated with the internet. The isolated and sedentary nature of the internet, as compared to the lively social atmosphere in casinos, presents a greater harm to those susceptible to problem gambling. Many problem gamblers prefer to play in isolation, which puts them at a higher risk of exacerbating their problems (MacKay, 2004). Some critics argue that the lack of loud noises, bright lights, and excitement in internet gambling may deter people from playing online. However, with newer internet gambling technology and software, online games are starting to incorporate these aspects of land-based gambling. In many jurisdictions, attendance at various gambling addiction meetings has gone up since the proliferation of internet gambling. This increase has been attributed to internet gambling, as a

¹⁵ The other risks associated with traditional gambling are listed in section 4.3 and 4.4.

large percentage of people have indicated addiction to online gambling as the reason for their attendance (MacKay, 2004).

Finally, keeping adolescents away from internet gambling also poses a threat that is difficult to safeguard against (MacKay, 2004). Adolescents represent the age group with the largest internet use in society. In a 2006 study, researchers found that 99% of Canadian youth age 9-17 reported using the internet. Of those adolescents, the majority viewed pop-up advertisements for gambling websites (Derevensky et. al., 2006). Many minors access free play websites operated by gambling organizations. These free play sites increase the desire for adolescents to gamble online for real money (Williams and Wood, 2007a). With the anonymity that comes from the internet, minors are able to sign up with gambling organizations by using false identifications. Also, because gambling on the internet often involves a sedentary and isolated lifestyle, the health risks mentioned earlier may occur more easily (Petry, 2006).

4.3 Risks and Costs to Society

A significant risk to society comes from the criminal element. The criminal element is comprised of not only the gamblers and other users looking for financial gain, but also the providers. Beginning with the internet users, the most common forms of criminal activity due to gambling are fraud, embezzlement, forgery and stolen goods (Grinols, 2004).¹⁶ Organized crime is also suspected of moving into online gambling. Gambling on the internet has the potential to provide an easy opportunity for money laundering. Because of the anonymity of the internet, fluidity of funds, the invention of e-money, and the use of encryption software, tracing these criminals is very difficult. The speed, high volume of traffic, and world-wide nature all make the internet a viable option for criminals looking to launder money (MacKay, 2004). Organized crime also has other means of affecting internet gambling. One way is by threatening to hack the

¹⁶ All monetary estimates conducted by Grinols (2004) are based on the average of several studies that have been conducted. These costs are expressed in 2003 dollars using the Consumer Price Index for urban consumers.

websites of gambling organizations. Criminals demand money, and if their extortion demands are not met, they follow through with their threats. Another scheme involves re-directing internet users to similar-looking gambling websites that are run by criminals. Users login, and have their passwords stolen by the criminals, who then re-direct the users back to the original site with little suspicion of criminal activity (Ferentzy and Turner, 2009).

Providers are also known for exhibiting unlawful behaviour. Without stringent industry regulations, supervision, and an enforcement mechanism to prevent cheating, many organizations have acted in an unlawful manner. It is also difficult for players and governments to seek justice, because many of these online organizations are based in jurisdictions with very few regulations (Williams and Wood, 2007a). Security concerns are always present, especially with regards to personal information that these organizations require prior to allowing an individual to open an account. There is the risk of hackers penetrating these websites to steal financial or personal information about players.

There is also the risk of providers collecting information on their clients, in order to target weaknesses. Providers have been known to collect information on when someone likes to play, how much is wagered, and how long each gambling session lasts. This information can be used by companies to adapt games to a client's interests, or to share this information with other companies. As part of the provincial government, and a respected organization that is fully regulated, BCLC provides the safety and security that is unavailable in the offshore market. BCLC takes matters of privacy very seriously, and will help protect players against unauthorized use of their accounts, in addition to ensuring that players are able to claim their prizes (British Columbia Lottery Corporation, 2009a). These are privileges that are difficult to guarantee in the offshore market, as a player has more legal recourse against a provincial government than an unregulated offshore gambling company.

When evaluating criminal risks to society, measurement is expressed in several ways. First, whatever is stolen is considered a social cost to the public. This can be expressed

monetarily, and represents the biggest risk. However, there is also the mental distress suffered by the victims of crime. This is more difficult to measure, but nevertheless exists (Grinols, 2004). Excluding mental distress, Grinols (2004) estimates the average costs due to criminal activity to be \$3,591 per pathological gambler.

Another risk to society comes from business and employment losses. These losses can come from lost productivity due to reduced performance, and increased concentration on gambling activities. This lost productivity can go even further and lead to employees taking sick days to pursue gambling, taking longer breaks at work to gamble, and leaving early from their jobs in order to gamble. These, in addition to employee embezzlement, can all result in employees getting fired. It has been reported that between 21%-36% of gamblers in treatment have lost a job due to gambling problems (Grinols, 2004). There is also the issue of *directly unproductive profitseeking*, in which gamblers are undertaking activities that are socially unproductive, and do not produce goods and services. Someone who gambles instead of having a job reduces social output by the lost output he would have produced at work. This risk is also associated to *abused dollars*, a term used to describe lost gambling money acquired from people through dishonesty or deceit (Grinols, 2004). Grinols (2004) estimates the costs of business and employment losses to be \$2,358 per pathological gambler.

Suicide presents a risk that is difficult to track, because of limited information. Some people have other addictions prior to gambling, and these may cause suicide. Also, not all suicides are recorded as such, with different jurisdictions using diverse criteria to classify a death as a suicide. Studies show that gamblers consider and commit suicide at higher rates than other people. Statistics in the United States show 15%-24% of Gamblers Anonymous visitors and hospitalized severe problem gamblers have attempted suicide. This rate is several times higher than the general public (Grinols, 2004).

Finally, there are risks associated with potential detriment to families. These risks include costs for divorce and separation, as well as personal anguish associated with these potential

occurrences. There is further physical and psychological damage that may result from physical abuse, abuse towards children, neglecting children, and other stress-related problems. The National Gambling Impact Study Commission finds that 53.5% of severe problem gamblers in the United States have been divorced, while only 18.2% of non-gamblers have been divorced (Grinols, 2004). Grinols (2004) estimates the average costs associated with family problems to be \$62 per pathological gambler.

Because BCLC is a Crown Corporation that acts on behalf of the provincial government, there are several costs borne by society due to traditional and internet gambling. When gambling problems occur, public funds are often used to combat the consequences in such areas as counselling, health care, and law enforcement. Some estimate that these costs can potentially outweigh gains from gambling by a 3:1 ratio (Grinols, 2004).¹⁷

Underage gambling is something that is easily preventable at land-based casinos. Casinos are required to check the identification of their patrons at the door. Failure to do so can result in fine, suspension of license, or even closure. The policy is designed to keep underage individuals away from the casino, even if they only wish to observe gambling activities. Protecting minors from gambling addiction involves keeping them from even observing gambling activities. This is accomplished with a high rate of success at land-based casinos, where personnel are constantly patrolling the gambling premises. Protecting minors is important to shield them from negative influences at an age when they are highly susceptible. Studies have shown that early exposure to gambling increases the risk of developing gambling addiction. Some of the highest gambling rates are shown by those in high school or post-secondary education (MacKay, 2004). Combating under-age gambling is a more daunting task online. New and up to date technology is necessary to combat not only underage gamblers, but others looking to subvert the rules. The costs to

¹⁷ All monetary estimates conducted by Grinols (2004) are based on the average of several studies that have been conducted. These costs are expressed in 2003 dollars using the Consumer Price Index for urban consumers.

society include treating underage problem gamblers, law enforcement costs for those who develop criminal problems from underage gambling, and the regulatory costs of monitoring gambling establishments so that underage gamblers are not allowed to participate. Furthermore, if youth are becoming addicted to gambling, this will negatively affect their educational outcomes, and their futures in society.

Bankruptcy is another cost that taxpayers often bear in the form of legal costs, bill-collection costs, and unpaid loans to gamblers. Bankruptcy has been linked to gambling by many studies. In Wisconsin, it was found that one in ten bankruptcies was related to gambling problems. In Minneapolis, a 1995 study on bankruptcies found that 52% of those who filed had lost money gambling, with the average amount being \$22 thousand. A research company in New Jersey has estimated that 2.5%-10% of bankruptcy filings in the United States are related to gambling (Grinols, 2004). Grinols (2004) estimates the average social cost of bankruptcy to be \$251 per pathological gambler.

Additionally, there are the costs of illness (especially if problems are untreated), reflected by the health care system and counselling services. Statistics show that the majority of British Columbians (54%) do not know that there are free counselling services available. The public cost of running these counselling services is CDN\$100 per visit, not including other potential costs such as translation, transportation for client, and outreach. The cost of holding group sessions is even lower per person (BC Partnership for Responsible Gambling, 2010). Depending on the number of counselling sessions needed for a problem gambler, these costs have the potential to be much smaller than the costs to society if the problem gambler goes untreated. These costs, in addition to unemployment insurance, are costs that society must pay for gamblers' problems (Grinols, 2004). Grinols (2004) estimates the average cost of illness and social services to be \$1188 per pathological gambler.

These potential costs are further increased for people who go through the health care system because of a gambling problem. Of those who did gamble in BC, less than 1% used the services of a doctor due to gambling-related problems (Ministry of Public Safety and Solicitor General, 2008). It is estimated that the arrest of a problem gambler costs roughly US\$960 per person. The estimated lifetime cost is US\$5,100. The health care costs of a problem gambler are estimated to be US\$750 higher than the normal person, while the average mental health cost per problem gambler is US\$350 (Basham and White, 2002). BC Ministry of Public Safety and Solicitor General (2008) estimates that at a 4.6% rate of problem gambling, 159,000 British Columbians are problem gamblers. If only 1% (1590 problem gamblers) is using the services available, 99% (157,410 problem gamblers) are at risk of incurring these extra health care costs. Adding the mental health costs and the added health care costs would equal an extra \$1100 per person. For 157,410 people to incur these costs, not realizing the services that are available, equates to an added health care cost of US\$173,151,000 over the lifespan of these people.¹⁸ While these costs are less than the societal costs of other addictions, such as smoking and alcohol abuse, they can be avoided with better problem gambling strategies (Basham and White, 2002).

These statistics are to be kept in mind when evaluating the costs to society of maintaining these services. In 2008/09, BCLC diverted \$5.4 million to problem gambling. Despite expanding the number of online games and the weekly deposit limit, a decision was made to decrease the problem gambling budget to \$4.6 million in 2009/10 (Kines, 2009). BC is spending a smaller percentage of its gambling revenue on problem gambling (0.5%) than all other provinces that had this data available (Canadian Partnership for Responsible Gambling, 2009). Spending up to the national average (1.4%) in the 2008/09 year would require only \$15,023,862.¹⁹ This represents an

¹⁸ This is only an estimate, and does not mean that every problem gambler needs medical attention.

¹⁹ This is calculated by multiplying the national average (1.4%) by 2008/09 gambling revenue (\$1,073,133,000).

increase of less than \$10 million, when much more money is at risk when it comes to social risks and costs of problem gambling.

Nevertheless, British Columbia is going to make online gambling policy more lenient, and risk increasing one of the highest problem gambling rates in Canada. With so few people knowing about these services, and so few using the medical system, there is less of a demand to increase services to help problem gamblers. Of course, this may be more of a façade, as there are problem gamblers who do not know of proper treatment, or who just do not want to seek it. This is an issue that I will explore when looking at case studies from around the world. BCLC also contributes a percentage of profits to a health care fund. In 2000, this amounted to \$143.5 million. This number was \$147.3 million in 2009 (Ministry of Public Safety and Solicitor General, 2008). While the contribution is adequate, it would be much better if the money were not needed to help the very people who are indirectly contributing to this fund through their gambling losses.

5: Policy Problem and Stakeholders

My policy question in this capstone is why are British Columbians more susceptible to gambling addiction than people in other jurisdictions? With a problem gambling prevalence rate of 4.6%, too many people in BC have gambling problems. This policy question takes on added importance when applied to the reality of gambling in British Columbia, which involves an increase in internet gambling options and online deposit limits. Internet gambling, if properly regulated, can be a more convenient way for citizens to engage in a form of leisure. It can provide entertainment much in the same way that watching a sporting event entertains people. Knowing that the government is keeping a close eye on a potential vice is something that allows many citizens to feel more comfortable when partaking in internet gambling. With the recent economic downturn, pressure and opportunity have combined to change BCLC's policy regarding internet gambling. Increasing the weekly deposit limit from \$120 to \$9999, and looking to expand the number of available online games only heightens the debate over the government's internet gambling monopoly.

The expansion of internet gambling in BC will likely lead to higher revenues for the government, but poses a risk of residents developing gambling problems. Social problems can also result from internet gambling; criminal behaviour, family dysfunction, underage gambling, and a variety of health issues. Studies have also shown that online gamblers are much more likely to become problem gamblers than those who gamble offline. Without the responsible gaming practices that exist in land-based casinos, combined with the convenience of the internet, online gambling in British Columbia has the potential to exacerbate an ongoing problem. British Columbia is taking the lead in Canada, trying to reclaim some of the money that is lost to offshore gambling companies each year. Meanwhile, other provinces and stakeholders are

looking on attentively. When dealing with this problem, there are a number of key stakeholders to consider.

- **BC Government:** The overall net income is a major revenue stream for the government. This represents a substantial amount of potential revenue that expects to increase over the next few years (Ministry of Housing and Social Development, 2008). With British Columbians already spending roughly \$87 million per year gambling online, the government is looking to keep some of this money in the province (British Columbia Lottery Corporation, 2009a). The government is also responsible for treating problem gamblers.
- **Land-Based Casinos:** The private-public partnership in charge of land-based casinos features private shareholders who only care about how much money their land-based casinos earn. They may look at the online changes as encroachment on their territory, and a move that will reduce the number of patrons in their casinos.

In addition to these major stakeholders, several minor stakeholders also stand to gain or lose based on policy changes in the government's online gambling monopoly.

- **Charities & Local Governments:** BCLC previously allocated over 20% of its revenue to charities and local governments (Ministry of Housing and Social Development, 2008). However, due to cuts, this projects to be roughly \$171 million in 2009/10 (Shaw, 2010). With a larger share of revenues, these charities and local governments could potentially benefit, although there is no guarantee that this will happen. Charities who benefit from these revenues vary depending on need and other allocation decisions.
- **Federal Government of Canada:** After legally handing over control of all provincial gambling operations to the provinces in 1985, the government of Canada made a deal with all of the provinces (through the Interprovincial Lottery Corporation) to receive a

- percentage of gambling revenue. With an increase in BCLC revenue, the federal government looks to benefit as well.
- ***Gamblers/Families of Gamblers:*** For the most part, gamblers see the development of online gambling as a more convenient gambling option. One group representing gamblers is the Canadian Gaming Association (CGA). While some of their advocates are content about the new gambling options in British Columbia, they are concerned about the level of security and regulation (Canadian Gaming Association, 2009). Conversely, when gamblers develop problems, they often negatively affect those closest to them. Whether it is a medical disorder, negative attitude, or less time at spent with family, family members feel the brunt of losing.
 - ***Support Groups:*** Some of the biggest support groups in British Columbia are Gamblers Anonymous, BC Partnership for Responsible Gambling, and BC Problem Gambling Help Line. The limited time and resources of these groups will become even more scarce if the number of problem gamblers increases.
 - ***Offshore Casinos:*** They are currently illegal in British Columbia. They feel discouraged by a new competitor, but they are a helpless stakeholder. In addition to being illegal, British Columbia represents only a small portion of their overall revenue. They are more concerned about other provinces in Canada following BCLC's example. Having to compete throughout Canada would pose a much more serious threat to their revenue.
 - ***Law Enforcement:*** With more casino options, more criminals are likely to emerge, taxing the already busy law enforcement sector. Law enforcement will be likely to voice some concerns over the criminal element prospering in BC.
 - ***Citizens of British Columbia:*** They exert their influence in the decision making process by forcing politicians to listen when they are displeased by problem gambling, and the public costs associated with it.

6: Methodology

In order to identify the best practices around the world, I use a case study analysis as my primary methodology. I analyze each case by using important characteristics found in the literature, and determine the factors most important to reduce the problem gambler prevalence rate in British Columbia. The secondary methodology further examines the most important characteristics found in the primary methodology to help with the development of policy options.

Section 6.1 justifies the choice of the cases studied for best practices (i.e. Atlantic Canada, Finland, and the Australian state of Victoria), while section 6.2 outlines the characteristics used to draw conclusions about best practices.

6.1 Case Choices

Atlantic Canada, Finland, and the Australian state of Victoria have all used some form of licensed internet gambling. While they differ substantially they are selected based on one major criterion: a lower prevalence of problem gamblers than British Columbia. Table 2 shows the most recent results for all three jurisdictions, including the prevalence test used. The two prevalence tests utilized are the South Oaks Gambling Screen (SOGS) and the Canadian Problem Gambling Index (CPGI). The SOGS, created in 1987 in the United States, is a 16 question survey that places greater emphasis on the financial impact of gambling. There are 20 scored items, all equally weighted, requiring a yes (=1) or no (=0) answer. A score of five or more indicates a problem pathological gambler, while a score of 3-4 indicates a moderate problem gambler.²⁰ The 20 scored items are listed in Table 12 in Appendix B. Used in more than 50 jurisdictions, the SOGS has been criticized for not taking into account aspects of electronic gambling, not specifically

²⁰ A problem pathological gambler is similar to a severe problem gambler, the term used in this capstone.

targeting pathological gamblers, and being culturally-insensitive (BC Ministry of Public Safety and Solicitor General, 2008).

The CPGI places a greater emphasis on social and environmental factors, and is designed for use across the general public, as opposed to the SOGS which is designed primarily for clinical settings. The CPGI looks at gambling involvement, problem gambling behaviour, adverse consequences of gambling, and correlates of problem gambling. There are 31 questions that look at social and environmental factors, although only 9 items are scored. These items are listed in Table 13 in Appendix B. Possible answers to these 9 questions are never (=0), sometimes (=1), most of the time (=2) and almost always (=3). The scores are tabulate, with those receiving a CPGI score of 8+ classified as severe problem gamblers, and those scoring 3-7 designated moderate problem gamblers. The maximum score is 27 (Young and Stevens, 2008). The sample size for the CPGI is random, covering everyone in the population; and not just gamblers.

There are also several limitations to the CPGI and SOGS. One is a self-reporting bias, where respondents over estimate or under estimate their gambling problems for reasons such as social desirability (how they will be perceived by society), or because they are unaware of their problems in the first place. There is also a potential recall bias, where due to wording or memory, respondents place greater emphasis on events that happened more recently. Another limitation comes from income-related questions, where imperfect numbers are collected for household income, and the number of household residents is not determined, calling into question the magnitude of these numbers (Chipman et. al., 2007). There is also the potential that problem gamblers are underrepresented in the sample, as these surveys are often administered by telephone.²¹ A problem gambler is less likely to be available by phone, either because the phone has been disconnected, nobody is home, the person is in treatment, or the person is in jail (Williams and Wood, 2007b).

²¹ The BC Problem Gambling Prevalence Study was administered by telephone (BC Ministry of Public Safety and Solicitor General, 2008).

Table 2: Problem Gambling Prevalence Rates

Country	Jurisdiction	Year of Most Recent Prevalence Test	Type of Prevalence Test	Problem Gambler Prevalence Rate	Moderate Problem Gambler Prevalence Rate	Severe Problem Gambler Prevalence Rate
Canada (Atlantic Canada)	New Brunswick	2001	CPGI	3.2%	1.8%	1.4%
	Nova Scotia	2007	CPGI	2.5%	1.6%	0.9%
	Prince Edward Island	2005	CPGI	1.6%	0.7%	0.9%
	Newfoundland and Labrador	2009	CPGI	2.4%	1.7%	0.7%
Finland	Entire Country	2007	SOGS	3.1%	2.1% (3-4)	1.0% (5+)
Australia	Victoria	2005	CPGI	1.9%	0.9%	1.0%
		2005	SOGS	2.1%	1.1% (3-4)	1.1% (5+)
Canada	British Columbia	2008	CPGI	4.6%	3.7%	0.9%

Source: Department of Health and Community Services (2009); Doiron (2006); Nova Scotia Health Promotion and Protection (2007); New Brunswick Department of Health and Wellness (2001); Finland Ministry of Social Affairs and Health (2007); Gambling Research Panel (2004); BC Ministry of Public Safety and Solicitor General (2008)

While the Atlantic Lottery Corporation is grouped into one organization for the purpose of online gambling, prevalence studies are conducted on a provincial basis. In Table 2, all provinces have a much smaller problem gambling prevalence rate than British Columbia. Prince Edward Island leads the way with a rate nearly 1/3 the size of BC. New Brunswick has the largest problem in Atlantic Canada, but it is 1.2% lower than BC. Other jurisdictions use the SOGS, and show problem gambling prevalence rates significantly lower than BC. When the CPGI is applied to Victoria, the problem gambling prevalence rate is less than half that of BC.

The biggest difference is with moderate problem gamblers. More than 80% of British Columbia's problem gamblers are categorized as moderate problem gamblers, meaning they show traits of problem gambling and may be at risk if they are gambling frequently. This is also a group that may or may not have already felt some of the negative consequences of gambling (Ferris and Wynne, 2001). When it comes to severe problem gamblers, British Columbia does not

differ much from other jurisdictions. Hence, Finland, Atlantic Lottery Corporation, and the Australian state of Victoria overall perform better than British Columbia.

In addition to a lower prevalence rate, there are other reasons for selecting these cases. Atlantic Canada presents a very comparable history to that of British Columbia. The ALC was established in 1976 to serve the gambling needs of residents in the four provinces (Atlantic Lottery Corporation, 2009). It was the first lottery corporation in North America to open a website, i.e., PlaySphere. It is also the only other lottery corporation in Canada to run online gambling. The ALC was the first Canadian lottery corporation to offer licensed online wagering in 2004, shortly before British Columbia. The Atlantic Lottery Corporation provides one of the best comparisons with BCLC because both operate under the same federal legislation, both schemes were launched in the same year, and both offer similar games, including sports betting, lottery tickets, and bingo (Atlantic Lottery Corporation, 2009).

Although Finland does not operate under a regional framework, it shows similarities with British Columbia. Like BC, Finland only permits one license holder to operate and Finland's 2002 Act on Gaming allows different license holders to have a monopoly in each gambling category. Companies do not have to be from Finland, but all three license holders are domestic. Finland also represents a European market with similar demographic characteristics to British Columbia. With a population of 5,326,314 it is similar to BC's population of 4,455,207 (Statistics Finland, 2010; British Columbia Government, 2010). Finland also has a comparable GDP per capita to British Columbia. Finally, Finland offers many of the same online games as BCLC, including sports betting, lottery tickets, and bingo (Williams and Wood, 2007a).

The Australian state of Victoria is a similar level of jurisdiction as BC. It serves as one of the best examples of internet gambling in Australia, holding a much smaller prevalence rate than the national average. However, unlike other case studies, there is no government monopoly over internet gambling. In Australia, there are 18 licensed online gambling operators who are permitted to service foreigners only. Online gambling is allowed in Australia, as long as patrons

do not access companies based in Australia (Department of Parliamentary Services, 2007).²² The population of the state of Victoria (5,313,823) is nearly identical to Finland, and moderately close to that of BC, while the amount of internet gambling done in Victoria is among the highest in Australia. (Australian Bureau of Statistics, 2010)

6.2 Characteristics for Evaluation

The literature review and an examination of the prevalence studies are used to identify the most important and pertinent characteristics for comparison between jurisdictions. These jurisdictions are then evaluated based on the 13 characteristics listed in Table 3.

Table 3: Predictors of Gambling Prevalence

Category	Characteristic	Measure
Demographic	Unmarried Population	What is the percentage of single people?
	Gender	What is the male/female breakdown among those who have gambled in the past 12 months?
	Unemployment rate	How high is the unemployment rate?
	Student Population	What percentage of the population do university students represent?
	Indigenous Population	What percentage of population is indigenous?
Gambling Laws	Age Limit to Gamble	What (if any) age limit to gamble exists?
	Time Limit on Gambling	Is there a time limit imposed on online gambling?
	Online Spending Limits	Are there spending limits for the legalized online gambling options?
	Online Gambling Options	How many legal online options are available?
Social Characteristics	Support Services	Does each jurisdiction have strong information/help/counselling/research services?
	Strong History of Immigration	Is there a history of immigration in the jurisdiction?
	Alcohol and Drug Laws/Prohibition	What are the rules regarding alcohol and drugs? How strict are the laws?
	Attitude Towards Gambling as a Problem	Does the public feel that gambling is a problem?

²² States and territories have the right to create their specific legislation, but not all have taken advantage of this right (Williams and Wood, 2007a).

The first category is demographic characteristics.²³ The first characteristic is the unmarried population. The number of single residents has been proven to be a determining factor of the number of people who develop gambling problems. Married people are likely to have children who require significant financial investment. Having more than half the population married means that many residents are too busy with married life, and have their money tied up with their families, and less opportunities to gamble online. For this study, anyone who is not currently married is used for this category, including divorcees, widows, and people separated. Because the age to marry is between 18-19 years in all jurisdictions, there is no advantage for any particular area. There is also the gender breakdown of the gamblers to consider: Men have been more prone to gambling than women, and have consequently been more likely to develop gambling problems. When looking at internet gambling, the disparity is even greater, as 82.4% of Canadian internet gamblers are male. Next, the unemployment rate measures the availability of time to gamble and possibly a depressed or anxious state of mind. Unemployed people can sometimes have other problems (i.e. mental, financial) that can contribute to more gambling (Nova Scotia Health Promotion and Protection, 2007). Finally, students and indigenous populations are both prone to gambling problems, with extra emphasis placed on indigenous people in Canada. For students, I use the number of university students in each jurisdiction as university students are known to have some of the highest internet gambling rates among age groups (ProblemGambling.ca, 2010). In a study by Huang and Boyer (2007), youth in Canada, tested with the CPGI, showed a problem gambling prevalence rate of 2.22, higher than the national average among Canadians over the age of 24 (1.92). The youth in this study showed a non-problem gambler rate of 55%, while Canadians over the age of 24 showed a much higher rate (74%). Aboriginals are also known for having higher prevalence rates than non-aboriginals (ProblemGambling.ca, 2010). In a study by Wardman et. al. (2001), aboriginal adults in various communities scored severe problem

²³ Unless otherwise stated, the information for 6.2 comes from Johansson et. al. (2006), Wood and Williams (2009), BC Ministry of Public Safety and Solicitor General (2008).

gambling prevalence rates between 6.6%-22%. Among youth, the rates were often within the same range. Every case in Table 2 has a severe prevalence rate of less than 1.5%, showing how much greater problem gambling impacts aboriginal communities.

The second category of characteristics deals with gambling laws, with the age limit to gamble first. Limiting youth's involvement through an age limit and proper security measures helps reduce the problem gambling prevalence rate (MacKay, 2004). It is also suggested by many scholars that a time limit on gambling would help limit the number of problem gamblers, and could provide a means for players to realize how long they have played (Gambling Research Panel, 2004). A deposit limit also helps to curb online gambling amongst individuals (Atlantic Lottery Corporation, 2009). Because monetary tracking is easy online, a deposit limit is likely to be more effective than at a land-based casino where transactions are so difficult to track that criminals often use the setting to launder money. Lastly, the number of legalized gambling options available is also a characteristic for evaluation. With more games, and more places to gamble, it is easier to subvert other rules such as deposit limits. For this characteristic, the number of online options does not include offshore gambling corporations.

Finally, social characteristics have been found to impact gambling prevalence. First are the problem gambling services provided in each jurisdiction. It is not enough to try and stop gamblers before they develop addictions, there must be means to combat those addictions. For this characteristic, the four main areas are: help services, support services, information services, and research (Canadian Partnership for Responsible Gambling, 2009). Next, immigration status is also of importance, as studies have shown that many new gamblers are not born in their countries of residence. Many of the newer generation of gamblers are immigrants from Asia, although attention to all immigrants must be paid (Wood and Williams, 2009). There are also alcohol and drug laws to consider when examining problem gambling rates. Not only are people under the influence of drugs and alcohol found to gamble more, but they tend to gamble more erratically and with less of an ability to know how much they are losing, or when to quit. Lastly, there is the

attitude towards gambling. If residents are found to be unhappy or intolerant of gambling in their jurisdictions, there are often fewer gambling options and fewer people overindulging in gambling. Attitude towards gambling will be specified further in the analysis.

There were many other variables that were mentioned at one point or another in the literature. However, they were only briefly mentioned, discounted by other literary works, or incorporated into other characteristics. The next section examines how case studies have addressed the 13 characteristics for evaluation.

7: Case Study Evaluation

This section evaluates each case study using the characteristics described in the previous section. The results for all three jurisdictions are in Table 4, at the end of this section.

7.1 Atlantic Canada

The Atlantic Lottery Corporation includes the provinces of New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador.²⁴ Because Atlantic Canada is composed of four provinces, all of which have their own statistics, each province is evaluated separately. In some cases, numbers can be added to form a statistic for the entire jurisdiction. Because each province holds a monopoly, and they have joined together for online purposes, the ALC holds a monopoly on legalized online gambling in Atlantic Canada.

Starting with the demographic characteristics, the percentage of single people in Atlantic Canada is 49%, roughly the same as BC (51%). The gender division shows that the percentage of gamblers who are female is 46-47% in every province except Prince Edward Island (54% women). This shows a fairly even split, with no gender dominating the gambling field. The only cause for concern is the 2009 Newfoundland and Labrador Gambling Prevalence Study, the only one to feature a gender breakdown of PlaySphere use (60% men; Newfoundland and Labrador Department of Health and Community Services, 2009). All four Atlantic Provinces have unemployment rates higher than British Columbia, showing that a weak Maritime economy is not leading to a large problem gambling prevalence rate. These provinces are some of the poorest in Canada, especially when income is considered. The student population of Atlantic Canada is 3.70%, more than a full percentage point higher than British Columbia (2.52%). Atlantic Canada

²⁴ Unless otherwise stated, the information for 7.1 comes from Statistics Canada, 2010.

is led by Nova Scotia, which has 4.44% of its population enrolled in a university. Although students may not account for the difference, the aboriginal population might. In Atlantic Canada, the aboriginal population is only 2.88%, compared to British Columbia at 4.48%.

Next, there are gambling laws to consider. In all four Atlantic Provinces, nobody under the age of 19 may gamble online or at a land-based venue. Verifying age is difficult online, where PlaySphere customers must have their age and place of residency verified. If it is found that a player is under the age of 19, his or her account is immediately suspended and all prizes forfeited (Atlantic Lottery Corporation, 2010). In terms of limiting the time spent gambling online, the Atlantic Lottery has no set limit. However, the Atlantic Lottery Corporation has placed a limit on the amount players can deposit into their online accounts and each player is only allowed one online account. PlaySphere allows customers to set their own weekly deposit limits, with a maximum of \$1000 per week (Atlantic Lottery Corporation, 2010). Finally, with regards to the number of legalized online options available to consumers, only PlaySphere is allowed to conduct online gambling. With a monopoly, consumers are restricted in their legal options, as PlaySphere only offers certain games, including sports betting, bingo, lottery tickets, poker and some interactive games (Atlantic Lottery Corporation, 2010).

One area where Atlantic Canada has shown innovation and willingness to spend money is in support services. All four provinces have well-functioning help services in the form of help lines. In particular, Nova Scotia has an online version of its helpline (Canadian Centre on Substance Abuse, 2010). All four provinces also have support services, with Newfoundland and Labrador hosting two recovery centres for gambling addicts (Western Health, 2010). In terms of research, Nova Scotia has recently spent significant money in this field. In 2007/08, the province spent \$0.60 per capita on research, compared to only \$0.08 in BC (Canadian Partnership for Responsible Gambling, 2009). Finally, although not all provinces partake, there are several information programs that make the region a Canadian leader in this field. New Brunswick has recently featured anti-gambling television advertisements (New Brunswick Department of Health

and Wellness, 2010). In 2007, Nova Scotia tried to combat the fact that few problem gamblers are using the services in Atlantic Canada by introducing the Yellow Flag Campaign. This campaign, based largely on television and radio advertisements, was targeted towards 19-34 year olds (Nova Scotia Health Promotion and Protection, 2007). Subsequent research found that this campaign had a strong effect increasing overall awareness of programs, and in reducing the gambling prevalence among this age group, including a significant drop in the amount of internet gambling in the province (Nova Scotia Health Promotion and Protection, 2007). The campaign showed that Nova Scotia, spending almost 2.8% of government revenue on problem gambling, was willing to spend almost six times more than British Columbia (Canadian Partnership for Responsible Gambling, 2009). In addition to provincial programs, the Atlantic Lottery Corporation has its own responsible gambling strategy which includes information, self-assessment tools, and services for those who feel they have a problem (Atlantic Lottery Corporation, 2010).

Immigration is also a consideration when looking at internet gambling prevalence. Recently, federal policy has kept its immigration level at around 250,000 people per year, and few are choosing to settle in Atlantic Canada. All four provinces have immigrant populations that are less than 5% of the total provincial population. Others, such as Ontario (26%) and Québec (11%) have much higher percentages (Citizenship and Immigration Canada, 2010; Statistics Canada, 2010). The final characteristic to consider is alcohol and drug law in Atlantic Canada. Provincial legislation in all four provinces has set the minimum drinking age at 19. When it comes to drugs, federal law takes a prohibitionist stance towards illicit drugs. The only area Canada is some-what lenient is towards marijuana, where punishment is smaller than for other illicit drugs (Public Safety Canada, 2010).²⁵

²⁵ In Canada, illicit drugs fall under federal jurisdiction, while alcohol and tobacco fall under provincial jurisdiction (Centre for Addictions Research of BC, 2009).

7.2 Finland

Finland presents a different type of monopoly, where through the 2001 Lotteries Act the country allows three different companies the right to operate unchallenged in different gambling areas. Veikkhaus holds the license for lotteries and sports betting, and has opened up business online and through mobile phones. Fintoto has done the same in the horse racing category. Raha automaattiyhdistys (RAY) holds the license for casino games and slot machines, but the Act on Gaming does not permit them to be offered online (Meyer et. al., 2009). Recently, based on a government report, and on the online capabilities developed by RAY, the company plans to go online in the near future (RAY, 2009). This will mean that all three companies have an online presence, but that no other company is allowed to intrude on this monopoly. Finland represents a European market that has a larger online presence per capita than Canada and one where online gambling has been looked upon more favourably. Finland has one of the highest rates of gambling in the European Union (Meyer et. al., 2009).

There is a large percentage of unmarried people in Finland (i.e., 62%; Statistics Finland, 2010). With a problem gambling prevalence rate 2/3 the size of BC, Finland is showing that marital status is not a determining factor. The Finnish gambling population is 46% female (Finland Ministry of Social Affairs and Health, 2007). Recent data places Finland's unemployment rate at 8.5%, lower than the European average (Finland Ministry of Employment and the Economy, 2010). Furthermore, Finland's 3.08% student population is higher than that of British Columbia, showing that a higher student population is making less of a difference when looking at the smaller problem gambling prevalence rate than BC (Statistics Finland, 2010). Finally, the aboriginal population in Finland is nearly non-existent, with only the Sami people qualifying at 0.1% (CIA, 2010).

In Finland there are different age limits depending on the type of gambling activity. A person needs to be 15 years old to play games at several of the retail outlets and 18 to gamble on the internet. The fact that gambling starts at such an early age has made the issue of youth

gambling particularly problematic (Peluri, 2010). Finland has an online time limit on gambling, but it is up to the client to set this limit. This is less effective than a hard limit set by the provider, but is nonetheless a step in the right direction. Also, online gambling is legally restricted to residents of the national jurisdiction. However, there are multiple online outlets to choose. Each outlet holds a monopoly on a type of gambling, issued for 5 years at a time by the Finnish government (Meyer et. al., 2009). Recently, the country has come under pressure from the European Gaming and Betting Association for its gambling monopoly. It is argued that Finnish laws permitting a monopoly are in violation with European Union (EU) regulations which permit the free movement of services within the EU. Finland has not heeded to this pressure, arguing instead that a monopoly is needed to maintain control of problem gambling (Williams and Wood, 2007a).

Addiction help starts with the national helpline (Peluri) which also offers help services online, and is funded by all three of the gambling monopolies as well as the government (Meyer et. al., 2009). Another problem gambling service comes from the recently formed National Institute for Health and Welfare, where not only are support services provided, but research is being conducted on problem gambling, and new preventive services are being created (Finland National Institute for Health and Welfare, 2010). Finland also has a national research centre for gambling (Stakes). Finland boasts substance abuse clinics (A-clinics) where gamblers are treated, in addition to the two centres for inpatient care (Meyer et. al., 2009). In Finland, helping those addicted to online gambling is a fairly high priority. Statistics have shown a sharp increase in internet-related gambling problems over the past few years, and helping those addicted to internet gambling and online poker has become a high priority. Peluri has gone from taking zero calls pertaining to internet poker in 2004 to receiving 57 in the first half of 2008 alone. Other online forms of gambling are also showing increases in prevalence over the same four year span (Peluri, 2010).

Finland does not have a strong history of taking in immigrants. In 2008, Finland only accepted 29,114 immigrants, compared to 26,029 the year before. The 2008 immigrant total population of 218,626 represents only 4% of the total Finnish population for 2008. Asian immigrants, a high risk group for gambling problems, represent roughly 1% of all immigrants (Statistics Finland, 2010). Without a high number of immigrants, administering problem gambling services becomes less complicated than if there were different languages and cultures to deal with (Raylu and Oei, 2004). In terms of drug and alcohol laws, a person must be 18 years old to consume alcohol. Drugs are prohibited under Chapter 50 of the Finnish Penal Code. Most drug offences are treated the same, in terms of penalties. However, there may be leniency in a case involving the use or possession of a small amount of drugs. This leniency can range from a fine to 6 months in jail (Addiction Link Finland, 2010). Finally, despite a more conducive environment towards internet gambling, people in Finland do feel that it should be curbed as 63% of respondents in the last Finnish gambling prevalence study agreed that gambling is a serious problem (Finland Ministry of Social Affairs and Health, 2007). This number has increased by 13% from the last gambling prevalence study.

7.3 Victoria, Australia

Australia is more of a free market when it comes to internet gambling licenses and operation. There is much looser regulation of the internet gambling market. Online gambling in Australia is regulated federally by the Interactive Gambling Act of 2001 (Williams and Wood, 2007a). There are many gambling companies based in Australia, but these domestic companies are not allowed to offer their services to Australians.

In Victoria, 60% of the population is unmarried, representing a relatively high rate (Australian Bureau of Statistics, 2010). When looking at the gender division, Victoria shows 47% of gamblers being female. Turning to the economy, Victoria has a low unemployment rate of 6.3%, lower than any other case study examined in this paper. Within Australia, however, this is

one of the highest unemployment rates, roughly half a percent above the national average (Victoria Liberal Party, 2009). This is largely due to job losses in the manufacturing sector. Victoria also has a high percentage of students, at 4.03%. Finally, the indigenous population of Victoria is 0.6% of the state's population. This represents a small number for Australia, where the national rate of indigenous population is roughly 2.5% (Australian Bureau of Statistics, 2010).

In Victoria, as in the rest of Australia, the minimum age for gambling is 18. This includes all forms of gambling, online or land-based (Victoria Legal Aid, 2010). There is no time limit to gamble online, or at land-based venues. Furthermore, there is no spending limit online. In Victoria, where there are many online options and much less government regulation, the issue of spending and time limits are left to the private sector. Furthermore, Australian online gambling sites are not available to residents of Australia, so there is little incentive for companies to stop people from gambling (Australia Office of Legislative Drafting and Publishing, 2008). A spending limit would only hurt the revenues of the gambling companies, and thus one does not exist. It is a state issue to regulate online gambling websites. In Victoria, there are 5 online companies that are licensed (CasinoCity, 2010).

Victoria has made several support service changes in recent years that have put it ahead of most other Australian states. It has 24 hour help lines and state-run gambling services that provide both counselling and help over the phone. There is also a network of community help organizations that are available to assist gamblers throughout the state. Victoria is part of a large research centre (Gambling Research Australia) that tackles gambling nationally. Within this centre there is extensive research devoted to the jurisdiction of Victoria (Gambling Research Australia, 2010). Television advertisements have also helped create awareness for programs. In the most recent prevalence study, 87.4% of gamblers with self-assessed problems found out about help services through advertising on television (Gambling Research Panel, 2004). Despite possessing all four addiction service characteristics, the issue of internet gambling is not at the forefront of the government's strategy. This is coming after prevalence study respondents showed

a greater tolerance (31.7% in favour) towards internet gambling than ever before (Gambling Research Panel, 2004).

Australia has a strong history of immigration, accepting upwards of 300,000 immigrants per year. Many of these settle in Victoria, as the state has a population that is made up of roughly 25% immigrants. Also, Victoria has a population that is 7.8% Asian (Australian Bureau of Statistics, 2010). Under state legislation, the minimum age to consume alcohol in Victoria is 18, although those over the age of 16 may do so at home and in the presence of a parent or guardian (Victoria Legal Aid, 2010). Illicit drug offences are also prohibited under state legislation, with marijuana offences being treated more lightly than others.²⁶ In some cases, the law permits police to give first time drug users a warning. Otherwise, use of a drug carries a fine and/or up to one year in prison, while drug trafficking can carry a much larger fine and jail sentence. When it comes to drug trafficking, the law punishes those under the age of 18 much more than others (Victoria Legal Aid, 2010). Finally, in the most recent gambling prevalence study, 85.1% of Victorians agreed that gambling is a serious problem in Victoria. The same respondents also feel that gambling is too widely and easily accessible (Gambling Research Panel, 2004).

7.4 Comparison

This section analyzes the findings of the case studies, as summarized in Table 4. First, it looks at the factors that are common to all jurisdictions, and thus likely to be responsible for lowering the problem gambling prevalence rate. Second, British Columbia's performance compared to the other jurisdictions is examined to identify policy targets.

²⁶ In Australia, both federal and state laws regulate drugs. If there is no state law for a particular drug, then federal law applies.

Table 4: Evaluation of Characteristics

Category	Characteristic	Atlantic Canada	Finland	Victoria, Australia
Demographic	Unmarried Population	49%	62%	60%
	Gender	NFLD = 47% female NS = 47% female PEI = 54% female NB = 46% female	46% female	47% female
	Unemployment Rate	8.9-15.5% (2009)	8.5% (2009)	6.3% (2009)
	Student Population	3.70%	3.08%	4.03%
	Indigenous Population	2.88%	0.10%	0.60%
Gambling Laws	Age Limit to Gamble	Yes (19)	Yes (15 & 18)	Yes (18)
	Time Limit on Gambling	No	Yes (self-imposed)	No
	Online Spending Limits	Yes (\$1000/week)	N/A	No
	Online Gambling Options	1	3	5
Social Characteristics	Support Services	4 (Help, Counselling, Information, Research)	3 (Help, Counselling, Research)	4 (Help, Counselling, Information, Research)
	Strong History of Immigration	No	No	Yes
	Alcohol and Drug Laws/Prohibition	Yes	Yes	Yes
	Attitude Towards Gambling as a Problem	N/A	Yes (Moderate)	Yes (Strong)

There are several factors that are common to all 3 jurisdictions. First, all three cases have an age limit to gamble, although it ranges from 15-19 depending on jurisdiction and type of gambling activity. Finland is the most liberal, allowing some forms of gambling at age 15, while Atlantic Canada is the most restrictive with a minimum age of 19. The gender of gamblers is also similar in all three cases. The only anomaly lies in Prince Edward Island, a province that represents only 6% of the total Atlantic Canada population (Statistics Canada, 2010). All three cases also feature strict drug and alcohol laws. Finally, all cases have support services for

problem gamblers. All jurisdictions feature strong help, counselling, and research components, while both Atlantic Canada and Australia have information campaigns.²⁷

There are also factors common for two of the three jurisdictions. The student population is similar in Atlantic Canada and Victoria. Finland and Atlantic Canada also share a weak history of immigration. Included in this factor is that both jurisdictions also have small Asian immigrant populations. Although there was no full data available in Atlantic Canada, both Finland and Victoria show that people see gambling as a problem. The strongest sentiments are felt in Victoria, where an overwhelming majority (85.1%) feels that gambling is bad. Both Finland and Victoria also have very small indigenous populations, sparing resources that would otherwise be needed to deal with the specific cultural values that indigenous populations possess. Finally, both Finland and Victoria have large unmarried populations, especially when compared to Atlantic Canada. Next, I evaluate BC's performance, as summarized in Table 5.²⁸

²⁷ Due to language difficulties, it is unknown whether Finland has an information campaign. This study will assume that Finland does not.

²⁸ Unless otherwise stated, the information pertaining to British Columbia in 7.4 comes from Statistics Canada, 2010.

Table 5: Evaluation of Characteristics for BC

Category	Characteristic	British Columbia	Number of Similar Case Studies to BC
Demographic	Unmarried Population	51%	1
	Gender	55% female	0
	Unemployment Rate	7.8% (2009)	1
	Student Population	2.52%	0
	Indigenous Population	4.48%	0
Gambling Laws	Age Limit to Gamble	Yes (19)	3
	Time Limit on Gambling	No	2
	Online Spending Limits	Yes (\$9999/week)	1
	Online Gambling Options	1	1
Social Characteristics	Support Services	2 (help, counselling)	0
	Strong History of Immigration	Yes	1
	Alcohol and Drug Laws/Prohibition	Yes	3
	Attitude Towards Gambling as a Problem	Yes (Moderate)	2

The comparison of British Columbia with the other cases shows several similarities among the characteristics. Like other cases, BC has an age limit to gamble online or at land-based casinos. Along with Atlantic Canada, this age limit represents the highest among cases studied. Combined with BC's low university student population, the drawn conclusion is that youth gambling is not as big a threat in BC as other jurisdictions. In addition, British Columbians have shown a negative attitude towards gambling, similar to other cases where information was available. Public attitude is moderately in favour of curbing gambling, as 43% believe it has a bad impact on society, 10% believe it has good impact, and 45% believe it has equally good and bad impacts (BC Ministry of Public Safety and Solicitor General, 2008).²⁹

Also similar to others is the lack of a time limit for gamblers. The time limit feature has gone unused by all cases except Finland, where it used loosely by allowing the user to set a time

²⁹ The remaining 2% did not know when answering the question.

limit if desired. Because legalized online gambling is still evolving, this feature may not make an appearance for a long time. The counselling services help corroborate this point, as all cases have services, but few deal with internet gambling. BC has yet to launch a major program aimed at internet gambling, while in Atlantic Canada, only Nova Scotia has taken any major steps, with the Yellow Flag Campaign (outlined in section 7.1). BC's support services are like most in that there is a helpline and counselling services. However, unlike others, BC does not have strong informational or research components. There is an information campaign (Game Sense), but it does not specifically target internet users. There is also a research component, but it only spends \$0.08 per capita, and is much lower than other jurisdictions (Canadian Partnership for Responsible Gambling, 2009). The final characteristic that is similar to all regions is the stringent alcohol and drug laws. While all three have shown some leniency, there may be cause for concern because of BC's history of being more lenient than most places. In BC, 21% of gamblers drank or used drugs while gambling, compared to 15% in New Brunswick, and 30% in Victoria (BC Ministry of Public Safety and Solicitor General, 2008; Newfoundland and Labrador Department of Health and Community Services, 2009; Gambling Research Panel, 2004).³⁰

BC shares several characteristics with one other jurisdiction. It has the same level of unmarried population as Atlantic Canada. Both Finland and Victoria show higher rates of unmarried population, despite having lower prevalence rates than BC. This shows that the number of unmarried people is not making a big impact on problem gambling. Unemployment is another characteristic that appears to make little difference, as BC has a lower rate than every Atlantic province, as well as Finland. In some parts of Atlantic Canada this rate is almost double that of BC.

While the ALC also has an online deposit limit just like BC, the BCLC limit is significantly higher, at \$9999/week. This recent shift in policy to allow such a high deposit limit

³⁰ No data was available for all of the other jurisdictions.

may be a problem in waiting, although because it a recent policy development, no data currently exists to prove its importance in BC. Finally, BC boasts only one legalized online gambling option, much like Atlantic Canada, but different from Finland and Victoria. All regions have a state-run monopoly, which poses a conflict of interests concerning treatment services, as the same governmental body is promoting gambling and treatment at the same time.

Gender is a characteristic where literature dictates that males are more prone to gambling problems than females. The 55% rate of female gamblers is significantly higher than all other jurisdictions, but that does not mean there is less of a gambling problem. Females are showing that problem gambling in BC is gender neutral. Conversely, two characteristics that put BC at risk are the strong history of immigration and indigenous population base. Immigrants, with different cultural values, are much more prominent in BC than other jurisdictions (except Victoria). In terms of aboriginals, BC stands alone with a very high rate. These two groups, and their distinct systems of values and beliefs, may be a concern in BC.

The case study analysis presents several gaps for British Columbia to make changes to reduce the gambling prevalence rate, while targeting internet gambling. From these opportunities come policy targets that can help direct subsequent policy options (section 8).

- 1) There is underdevelopment of both research and information services. This will first and foremost involve a greater financial investment from the government. It will also involve public education, as many people are unaware of the risks of gambling and treatment available for problem gamblers.
- 2) BC has a highly diversified population. With different languages and cultures, services need to be adapted to reach those who may not be reached by the current campaign. Aboriginals also need to be looked at for their own distinct cultural values that may contribute to problem gambling.

- 3) The online limit should be a focus, as \$9999/week represents a substantial increase over the previous amount (\$120/week), and is ten times greater than the only other legalized internet gambling option in Canada (PlaySphere).
- 4) Gender is a potential problem, as BC has a high prevalence rate, yet the majority of gamblers are female. This issue will not be addressed, because any changes would call for gender specific solutions.

In the next section, these targets are explored in further detail through an analysis that draws in examples from around the world. This will help determine what, if any, options are available to help the situation in British Columbia.

7.5 Study of Important Characteristics

This section looks briefly at the most important characteristics identified through the case study analysis with particular attention paid to the policy targets set out in the previous section.

7.5.1 Support Services

This section will look at the different types of services available in Canada (outside of British Columbia and Atlantic Canada).³¹ In Alberta, there has been more attention focused towards gambling research. The Alberta Gaming Research Institute, established by the Universities of Calgary, Lethbridge and Alberta, has been instrumental in looking at gambling policy issues (Alberta Gaming Research Institute, 2010). The research centre has recently approved a study looking at a cross-cultural comparison of factors relevant to gambling behaviour and mental health. The institute has several projects underway related to ethnicity and immigration. This is particularly relevant to BC, a province with so many cultures. There are also many projects devoted specifically to internet gambling. Additionally, there are experts on

³¹ Unless otherwise state, the information from section 8.2 comes from ProblemGambling.ca, 2010.

internet gambling who are part of the institute, and as such are able to promote policies through research of best practices (Alberta Gaming Research Institute, 2010).

With total gambling revenue almost \$2 billion higher than the next closest province, Ontario has all the resources to become an innovator in treatment services. In 2007/08, Ontario spent over \$37 million on problem gambling (\$2.83 per person), compared to only \$4.8 million (\$1.08 per person) spent by British Columbia (Canadian Partnership for Responsible Gambling, 2009). This allows Ontario to take the lead in several areas, one of which is developing websites to coordinate information from many jurisdictions, and to provide problem gambling information from all over the world. The Ontario Problem Gambling Helpline, in addition to offering 24 hour availability, provides an online chat feature for problem gamblers who do not want to use the phone. Ontario also boasts over 50 treatment services throughout the province. There are several publications regarding problem gambling that are distributed online and in print form by the Responsible Gambling Council. In general, where Ontario offers programs similar to British Columbia, they are more in depth due to the added resources invested in problem gambling.

7.5.2 Immigrants and Gambling

In general, there is much evidence to suggest that certain ethnic groups are more vulnerable to problem gambling than others and I pay special attention to Asian immigrants, as they have a long rich history of gambling. For example, in a gambling study of Montréal, researchers found that Chinese residents had a problem gambling prevalence rate much higher than non-Chinese (Papineau, 2005). There are several reasons for a high rate of problem gambling among immigrants. The first is cultural beliefs and values. In some cultures, taking risk and gambling are more tolerated in general. This is largely true in Asian communities. For example, dice and card games have been part of Chinese culture for so long that they have gained widespread approval in the community, and their availability at casinos draws in Chinese gamblers (Raylu and Oei, 2004).

Another factor is the cultural and ethnic beliefs regarding treatment services. Many ethnic groups are unwilling to seek help regarding gambling problems and they do not seek professional help, even if they are having problems paying their gambling debts. One of the reasons for this is that they feel ashamed. Some ethnic groups do not even consider excessive gambling a problem. Many Asians prefer to turn towards family in lieu of professional help. Additionally, many forms of gambling treatment do not take the cultural values of minorities into consideration. Literature suggests that in order to make treatment services attractive to minorities, ethnic values need to be incorporated into the treatment itself (Raylu and Oei, 2004).

There are also factors that influence these beliefs regarding gambling. The stress and isolation that come from adapting to a new country are some important differences between immigrants and non-immigrants. Worrying about housing, immigration status, money, and employment also contribute to stress. Gambling provides an escape. Without knowledge of the new society they are entering, it is even more difficult for immigrants to seek out treatment when they develop gambling problems. Some do not know that such help exists (Wong and Chan, 2007). Aboriginals share in many of the same factors that influence gambling prevalence, including stress, lack of employment, and the different nature of family life. They also have typically suffered from lack of recreational opportunities, and lack of education, which also contribute to gambling (Wardman et. al., 2001).

7.5.3 Online Spending Limits

Many of the spending limits available are voluntary in nature. This is problematic, as those with gambling problems must rely on themselves to do the right thing (Nisbet, 2005). In Australia, several problem gamblers were asked about ways to curb their gambling. Many agreed that a proper strategy to limit their spending would be an appropriate method (Nisbet, 2005). Authors also agree that imposing a strict deposit limit will not have a huge impact on overall

revenues, as the loss in deposits may be partially offset by the good publicity coming from being socially responsible (Broda et. al., 2008).

This is one area where there may be something to learn from offshore companies. One study done on an offshore gambling company examined the company's policy of having a deposit limit. The deposit limit was €1000 (roughly CDN\$1400) per 24 hour period, and €5000 (roughly CDN\$7000) per 30 day period. Note that the monthly limit for this study was almost six times smaller than BCLC's new policy of CDN\$9999/week. Also different, this company allowed users to increase their deposit limits only if they were winning, or if they could show proof of exceptional financial resources. Alternately, the users could also lower their deposit limits if they wished. If a user tried to deposit more than the limit, the deposit was denied and a notification sent to that user. Over the course of 2 years, only 0.3% of users tried to deposit more than they knew were allowed. Over 95% of the sample size never attempted to deposit more than €1050 per 30 day period, showing the effectiveness of this policy to lower the amount of money wagered by users (Broda et. al., 2008). This policy shows that high deposit limits are unnecessary, as most people never tried to deposit too much money. A flexible deposit limit worked well for this company, and its users.

7.5.4 Online Gambling Options

The three case studies and British Columbia exhibit a variety of legalized gambling schemes, ranging from a single state operator to restricting residents from accessing domestic gambling sites. Worldwide, there are many different types of domestic gambling schemes.³² The following examples review most forms of legalized online gambling, as summarized in Table 6.

³² Unless otherwise stated, the information from section 8.4 comes from Williams and Wood, 2007a.

Table 6: Problem Gambling Prevalence Rates Among Other Countries

Country	Jurisdiction	Year of Most Recent Prevalence Test	Type of Prevalence Test	Severe Problem Gambler Prevalence Rate	Moderate Problem Gambler Prevalence Rate	Problem Gambler Prevalence Rate
United States	Entire Country	2001	SOGS	1.9% (5+)	3.6% (3-4)	5.5%
Norway	Entire Country	2005	CPGI	1.9%	3.6%	5.5%
Germany	Entire Country	2007	SOGS	0.2% (5+)	0.4% (3-4)	0.6%

Source: Kavli and Berntsen, 2005.

The United States, a country well-known for a deep history of gambling, does not have any legalized online gambling. The US has gone even further and has taken action against offshore internet gambling companies by disallowing financial transaction providers in the United States to help facilitate gambling online. Yet, because the tradition of legalized land-based gambling, especially in cities such as Las Vegas and Atlantic City, the level of problem gambling remains high in comparison to other countries (Stucki and Rihs-Middel, 2007).

Norway presents an example where a large percentage of the population (6.5%) gambled online in 2007 (i.e. more than double than in Canada). This is in part because casinos and slot machines are banned in Norway (Bakken et. al., 2009). Like British Columbia, Norway has a state monopoly on internet gambling, with Norsk Tipping running these services. However, by banning land-based casinos and slot machines, Norway has forced those inclined to gamble towards the internet, and thereby raised the prevalence rate of problem gamblers which was 5.5% in 2005.³³

Like in Finland, the German government has a state monopoly on internet gambling, and does not allow foreign companies to operate legalized internet gambling. However, unlike British Columbia, the German government does not permit casino games, instead allowing lotteries,

³³ This prevalence study was done before 2007, when slot machines were banned.

sports betting, and horse race betting to take place online. Although Germany offers similar services, it showed an incredibly low prevalence rate of 0.6% in a 2006 study using the SOGS (Bakken et. al., 2009).³⁴

When it comes to examples similar to Australia, there are very few. One of the only known examples of a country disallowing its residents to gamble on domestic websites is Papua New Guinea. However, there is insufficient data to show how the prevalence rates have been affected. In the next section, I look at the criteria that will be used to measure policy options. I will then design the policy options to address the targets I have identified.

³⁴ The German problem gambling prevalence study is only available in German, and thus despite the low rate of problem gambling, this country was not a consideration for the case study analysis.

8: Policy Objectives, Criteria, and Measures

This section looks at the policy objectives to consider when analyzing and developing policy alternatives. It also outlines the criteria and measures that will form the basis for the evaluation of policy alternatives.

Long-term policy objectives outline an ideal situation for the province of British Columbia's venture into online gambling, and two long-term policy objectives have emerged from the analysis. The first objective is to reduce the prevalence rate of problem gamblers to below 2.5%, or roughly the same as Atlantic Canada. The second long-term goal is to reduce the number of immigrant problem gamblers in BC.

To accomplish these long-term goals, there are shorter-term goals to meet. The first is to make the public aware of the services that are available for moderate problem gamblers. Studies in BC and other jurisdictions show that many gamblers are unaware of the help that is available (BC Ministry of Public Safety and Solicitor General, 2008). A second short term goal is to lower the number of moderate problem gamblers, which also includes youth. These goals need to be completed within 5 years.

8.1 Criteria

The criteria used to evaluate policy options are: cost, stakeholder acceptability, effectiveness, and transitional equity; each criterion scores high (3), medium (2) or low (1) based on a given measure (see Table 7).

Table 7: Criteria Matrix

Criteria	Definition	Benchmark	Measure	Value
Cost	Cost of problem gambling programs in British Columbia.	Annual amount of money directed towards problem gambling. The current budget for 2009/10 is \$4.6 million, down from the previous year.	<\$12 million = High \$12-\$18 million = Medium >\$18 million = Low	3 = High 2 = Medium 1 = Low
	Provincial government	2008/09 net income was \$1.07 billion. \$1.12 billion is the 2009/10 target. Also includes negative externalities.	>\$1.12 billion = High \$1.07-\$1.12 billion = Medium <\$1.07 billion = Low	3 = High 2 = Medium 1 = Low
Stakeholder Acceptability	Net income for land-based casinos	In 2008/09 net income was \$1.34 billion, less than BCLC's estimate of \$1.40 billion. The 2009/10 target is \$1.46 billion.	>\$1.46 billion = High \$1.34-\$1.46 billion = Medium <\$1.34 billion = Low	3 = High 2 = Medium 1 = Low
	Non-profit sector	Received \$240 million last year from BCLC revenues. Expect to receive only \$171 million in 2009/10. Also includes negative externalities to local governments.	>\$240 million = High \$200-\$240 million = Medium <\$200 million = Low	3 = High 2 = Medium 1 = Low
Effectiveness	Health care use by problem gamblers	Percentage of severe and problem gamblers who use health care services. In 2007/08, it was less than 1%, showing most gamblers are going untreated. Victoria had 6.1% seek a doctor's attention, while Nova Scotia had 4.9%.	>6% = High 5%-6% = Medium <5% = Low	3 = High 2 = Medium 1 = Low
	Moderate problem gambler prevalence rate	Currently, CPGI screen lists 3.7% of British Columbians as moderate problem gamblers. All of the successful cases were near or below 2%.	<2% = High 2%-3% = Medium >3% = Low	3 = High 2 = Medium 1 = Low
Transitional Equity	Winners and losers among the different stakeholders affected by the policy <ul style="list-style-type: none"> • BC Government • Federal Government • Land-Based Casinos • Gamblers (X2) • Charities/Local Governments • Law Enforcement • Offshore Casinos • Support Groups 	Government is currently big winner with increase in gambling limit. Gamblers weighted double, since they are the ones who need protection.	>6 Winners = High 4-6 Winners = Medium <4 Winners = Low	3 = High 2 = Medium 1 = Low

8.1.1 Cost

Cost represents the amount spent on treating problem gambling in the province. This includes all provincially funded gambling services, but not health care costs. The benchmark is \$5.4 million, the amount spent in the past year. BC was last among the seven provinces that had problem gambling services in 2007/08. It also represents 0.5% of gambling revenue in 2007/08, compared to 2.1% in Ontario (Canadian Partnership for Responsible Gambling, 2009). To determine these costs, statistics from similar jurisdictions can help make per person estimates of counselling services, especially when looking at actual costs to the Ministry of Health Services (Basham and White, 2002). British Columbia has spent close to \$5 million the past several years. If spending were at the 2007/08 national average (1.4%), it would need to be roughly \$15 million (Canadian Partnership for Responsible Gambling, 2009). Adding plus or minus \$3 million would give a medium range cost of \$12-\$18 million (=2). Any cost below \$12 million would score high (=3). Finally, any policy greater than \$18 million is low (=1).

8.1.2 Stakeholder Acceptability

Acceptability looks at the major stakeholders i.e., provincial government, gamblers, the private shareholders of the land-based casinos, and the non-profit sector and their approval levels for each policy. Acceptability refers to stakeholders believing that the revenue received can beneficially evaluate a policy, but also includes negative externalities that result from gambling. For the non-profit sector, their funds, although not based on any formula, are still tied to gambling revenue. This is not strictly a monetary criterion, as several stakeholders have other issues that affect their levels of acceptability. These pros and cons associated with these issues are evaluated subjectively, using the numbers provided in section 4.3 as a guideline. I compare all the pros and cons against the most recent benchmark set by each stakeholder in order to determine the score that is given.

The net income for the provincial government is projected to be \$1.12 billion in 2009/10, compared to a net income of \$1.07 billion in 2008/09, so this is the range for a medium cost (=2). Any income higher than \$1.12 billion is considered a success, and given a high score (=3). Any income below \$1.07 billion is a decrease from the previous year, and given a low score (=1). However, provincial interests also include negative externalities borne on the province and its growth. These include an increase in crime (\$3591 per person), lost business productivity related to an increase in goods and services in BC (\$2358 per person), bankruptcy costs (\$251 per person), increased illness and use of social services (\$1188 per person), and detriment to families (\$62 per person).³⁵

Next, the net income for land-based casinos projects to be \$1.46 billion in 2009/10, compared to \$1.34 billion generated in 2008/09. This will be the range for a medium cost (=2). Anything above \$1.46 billion is an accomplishment for casino owners, and given a high score (=3). Anything below \$1.34 billion is a decrease in revenue, and given a low score (=1) (British Columbia Lottery Corporation, 2009a). Land-based casinos do not have to consider negative externalities other than increased regulatory costs, since most of these externalities fall on the provincial government. Finally, the non-profit sector received \$240 million in grants last year. This number was a record high, and anything higher can be considered a success, and will receive a high score (=3). Originally scheduled to receive \$239 million in 2009/10, they will now receive \$171 million (Shaw, 2010). However, \$240-\$200 million is medium (=2), as it still represents a significant decrease in revenue. Finally, anything below \$200 million will be low (=1). The non-profit sector is comprised of charities and local governments. Charities are inconsiderate of most negative externalities, while local governments will have to deal with several of the negative externalities that fall under their jurisdiction or impact their local communities.³⁶ Each

³⁵ The costs come from section 4.3, where they explained in detail.

³⁶ For a complete list of pertinent jurisdictional powers, see Table 15, Appendix D.

stakeholder receives a value, and the total score divided by 3 yields the average score for this criterion.

8.1.3 Effectiveness

The goal of any policy should be to reduce the number of moderate problem gamblers. The benchmark set by the latest CPGI screen shows 3.7% of British Columbians are moderate problem gamblers. All of the jurisdictions in the case study analysis showed moderate gambler levels near or below 2%, so anything below this number will receive a high score (=3).³⁷ BC is an example of a bad case, so anything above 3% is given a low score (=1), with anything between 2%-3% being medium (=2).³⁸

An additional measure of effectiveness is looking at how many people are using health care services to treat their problems, and thus reducing the rate of problem gambling. Because BC ranks so low in health care use with less than 1% using health care services, this part of effectiveness is given the same score as the moderate problem gambling component (BC Ministry of Public Safety and Solicitor General, 2008). A benchmark was more difficult to determine due to a lack of information. With Nova Scotia showing 4.9% using health services, anything less than 5% becomes a low score (=1), as this is the minimum needed for BC to reach the same level as one of the case studies (Nova Scotia Health Promotion and Protection, 2007). The only other information found was for Victoria, showing 6.1%. Therefore, anything between 5% and 6% is given a medium score (=2). Any percentage above 6% is a high score (=3). I will add the scores, and then divide by 2 to get an average score for the criterion.

³⁷ See Table 2 for the moderate problem gambling prevalence rate of each case.

³⁸ 3% is used in lieu of 3.7% because BC's moderate problem gambler rate is so much higher than the next closest case study (Finland, 2.1%) that even a small decrease will not be considered medium.

8.1.4 Transitional Equity

The last criterion is transitional equity, looking at winners and losers among the different stakeholders. All the stakeholders outlined in this study are represented. Because a reduction in problem gambling is a long term goal, gamblers are given double the weight. Transitional equity measures the shift in that balance, in addition to the other winners and losers among stakeholders. With 8 stakeholders, this equates to a total of 9 potential winners or losers. The benchmark comes from the government's current policy to increase the gambling limit, and make itself a major winner through increased net profits. If a policy creates more winners (>6 winners) than losers, it will receive a high score (=3). If the policy keeps roughly the same number of winners and losers (4-6 winners), it will receive a medium score (=2). If there are less than 4 winners, it will receive a low score (=1).

8.2 Policy Alternatives

This section will outline the policy options that have been determined by the research done in this study.

8.2.1 Option 1: Status Quo

This alternative involves the current policy changes that are taking place online. The weekly deposit limit will be increased from \$120/week to \$9999/week, and the number of online options will increase.³⁹ Funding for problem gambling will remain at its current level, as one of the lowest in Canada. There are some counsellors available, but they only briefly target the Chinese and Vietnamese communities. Services will remain the same, with some culturally diverse needs being met, but only at a minimum level, and without any changes to treatment strategies. Most of the culturally-diverse treatment is directed towards aboriginals, who are

³⁹ This change in policy was announced on August 20,2009 (British Columbia Lottery Corporation, 2009a)

benefitting from an approach designed to examine their culture and beliefs. Nevertheless, most of the cases of problem gambling will go untreated and treatment service providers will remain without the resources to target moderate problem gamblers.

8.2.2 Option 2: Culturally-Sensitive Treatment Plan

This option addresses the problems of BC's diverse population, and how to deal with the different cultures, languages and systems of belief. Currently, the system for dealing with aboriginals is much more developed, with counselors working with communities to stop the social problems that lead to problem gambling (BC Problem Gambling). However, the system to deal with immigrants is far less developed. There is no mention of vulnerable minorities (other than the Chinese and Vietnamese) who face the same problems listed in the detailed analysis in section 8.1 (BC Partnership for Responsible Gambling, 2010).

The culturally-sensitive strategy involves programs designed specifically for immigrants, looking at their unique problems and concerns. It is an integrated approach that will involve community leaders in all areas, and one that is modeled after the current plan targeting aboriginals. A large part of this plan will be helping immigrants adjust to Canada, and helping them understand the problems with excessive gambling. This treatment plan also involves targeting immigrant communities, and educating them on what a gambling problem is. Because many immigrant families are so greatly influenced by the head of the household, this treatment program should target schools where kids can understand these problems without family interference. Finally, cultural values must be understood. This involves branching out to immigrant communities. Using counsellors with the same ethnic background should also be a priority. These strategies will help target more people, and deal with issues that are currently leading to a higher rate of gambling prevalence among immigrants.

8.2.3 Option 3: Increase Treatment Awareness

This option addresses the problem of a lack of information in section 7.4. Currently, there is \$147.3 million in BCLC revenue transferred to the health sector. If attempts are made to increase total BCLC revenue through increased internet gambling, a larger portion of this money should be going to the health industry to specifically treat problem gamblers. Unfortunately, this has not been the case. The amount transferred to the health sector has only increased by \$4 million over the past decade, despite record revenues in most years (British Columbia Lottery Corporation, 2009a) After all, internet gamblers have the highest rates of problem gambling in BC, when categorizing problem gamblers into the activities they prefer (BC Ministry of Public Safety and Solicitor General, 2008). First, this plan will educate counsellors and others who work in the treatment sector on when to refer gamblers to support services, which services are available, and which should be used in each specific scenario. This will allow more people who need medical attention to be referred to health services (Gambling Research Panel, 2004).

In addition to referring more people to medical treatment at an early stage, the second part of this treatment plan targets the 54% of the population who do not know there are free counselling services available (BC Ministry of Public Safety and Solicitor General, 2008). A program similar to Nova Scotia's Yellow Flag Campaign will be launched, targeting both internet gamblers and youth, among others. Where the Yellow Flag Campaign looked at the internet poker boom, the Treatment Awareness Plan will target all the online games offered by BCLC. While BCLC's Game Sense plan has done a good job increasing television and internet advertisements, this strategy will use the same forms of advertising, but also deal with internet gambling. There are many differences between internet and land-based gambling, and with the risk so high of internet gambling problems developing, this program should start by looking at this part of the problem, and telling people about all the services that are available to them.

8.2.4 Option 4: Research and Lower Limits

This option addresses the lack of research in BC, as well as the problem of high online deposit limits. This policy proposes a more gradual approach to changing the deposit limits, as well as the creation of a research centre to help direct future goals and policies. Starting with the deposit limits, the current change to \$9999/week represents an increase of more than 8000% in the weekly deposit limits. This option proposes starting with the ALC deposit limit of \$1000/week, which would be much more gradual, and in line with current policy in Canada. However, to accommodate those wishing to gamble more, this change would also incorporate a sliding deposit limit for those who wish to gamble more. Based on the policy of an offshore gambling company, people will have to prove that they have the financial means to support a higher rate of gambling in order to increase their deposit limits (Broda et. al., 2008). Furthermore, in a strategy designed to alert people who are spending a lot of money, anyone who spends more than \$10,000/year on the website will automatically be contacted to determine if they are a problem gambler. This includes those who meet the requirements to have a higher deposit limit granted.

With the increase in internet games and deposit limits, British Columbia is taking a step ahead of the ALC, and moving further away from other provinces. Internet gambling is the future for BCLC expansion, and to properly conduct policy on internet gambling, a research centre needs to be set up. This centre should look at gambling prevalence among internet gamblers only, how they are reacting to the new deposit limits, and other costs that are being undertaken by society due to internet gambling. Special attention should be paid to moderate problem gamblers, and how they react to the changes to internet gambling policy and whether one legalized gambling option is the best approach for a low prevalence rate. This research centre will collaborate with other jurisdictions, and facilitate cooperation between relevant stakeholders. This

centre will be based on the Alberta Gaming Research Institute, which currently investigates many of the issues that BC should be looking at (i.e. immigrants, internet gambling).

8.2.5 Option 5: Prohibit Legalized Gambling

Based on Grinols' (2004) argument that the costs of gambling greatly exceed the benefits, this option looks at completely removing all legalized gambling in the province. This includes not only PlayNow, but also all land-based casinos, retailers, and other establishments where legalized gambling exists. If citizens wish to gamble, their only option will be the offshore market, where there is no guarantee of safe and secure transactions, and that their money is safe. Currently, \$87 million a year is leaving the province in the form of gambling losses to offshore casinos. This number will increase if there are no legalized options. Because there is still gambling available, the extinction of legalized gambling does not mean that all treatment services will shut down. Services are maintained at a lower level, and the existing problems of fewer people seeking treatment and culturally-diverse needs not being met will continue. The main attraction of this policy is that it reduces the moral dilemma that plagues the province: providing a service and having to treat the problems associated with that service. Leaving gambling to non-government companies allows the province to concentrate solely on reducing problem gamblers without having to worry about revenues.

9: Policy Analysis

In this section I will analyze each policy based on the criteria outlined in section 8.1. The results of this analysis are also summarized in Table 8. Following this analysis is a policy recommendation.

9.1 Option 1: Status Quo

Cost: In 2008/09, the BC government spent \$5.4 million on problem gambling in the province.⁴⁰ This represented a small percentage of the net gambling revenue, and was considerably less than other provinces. The most comparable data, from 2007/08, shows BC spending only 0.5% of its net gambling revenue on problem gambling, compared to a 1.4% national average.⁴¹ Since that year, revenue has gone up slightly, but spending on problem gambling has gone down. For the next year, the budget is set at \$4.6 million. This is \$800,000 less than last year, and below the minimum threshold of \$12 million. Even though this strategy will not help solve gambling problems, it receives a HIGH for minimizing costs and it scores 3.

Stakeholder Acceptability: Last year the BC government saw a decrease in net income for the first time since 1982/83. A net income of \$1.07 billion in 2008/09 represents a decrease of \$20 million from 2007/08. However, with the increase in weekly online deposit limits and the introduction of more online gambling options, the potential exists for another record profit. This is projected in BCLC's estimation of a \$1.12 billion net income for the province in 2009/10. However, this projected revenue comes with negative externalities that are not being treated in the least bit. They include crime, bankruptcy, illness, treatment, social services and family costs.

⁴⁰ Unless otherwise indicated, the information for 10.1 comes from British Columbia Lottery Corporation, 2009a.

⁴¹ See Figure 6.

The province must also be concerned with the losses in business and employment, as workers will be less productive if they are gambling (Grinols, 2004). With the province projected to increase income by only \$50 million, and negative externalities not being combated, the ranking is MEDIUM and it scores 2.

The net revenue of land-based casinos fell by \$3.6 million in 2007/08. However, this occurred after 6 straight years of profits going up by \$50 million or more. Projections for 2009/10 see profits increasing by a modest \$34.4 million. There are fears that the changes to PlayNow will negatively impact land-based revenues. Yet, land-based casinos made it through the first wave of legalized online gambling (2004) with record breaking profits. Furthermore, PlayNow net revenue was below target last year. Land-based casinos receive MEDIUM, and a score of 2.

In 2008/09 the non-profit sector received \$240.2 million in re-allocated revenue from BCLC. Of this money, \$156.3 million went to charitable and community organizations, while \$83.9 million went to local governments that host community gaming centres or land-based casinos. For 2009/10, the total was originally projected to decrease slightly, to \$239 million (BC Ministry of Finance, 2009). However, this number has recently been reduced to \$171 million. The charitable and community organizations will lose roughly \$26 million through this change in re-allocation funds (Shaw, 2010). Local governments will receive much less than before, and will continue to bear the costs resulting from the same negative externalities that the provincial government is facing. Because of these recent developments, the non-profit sector receives LOW and it scores 1. In total, stakeholder acceptability averages 1.67.

Effectiveness: There are two ways to measure effectiveness. The first is the number of people who are using health services to treat their gambling problems. This number is already extremely low in BC, as less than 1% of gamblers used health care services in the past year. The benchmark is set by Victoria, who showed 6.1% of problem gamblers had done the same. With the current policy, and fewer resources diverted to problem gambling, there will be less chance

that campaigns and awareness programs are launched in excess of what is already being done.

The rate will likely stay the same, and thus this is ranked LOW and scores 1.

The second way to measure effectiveness is with the prevalence rate of moderate problem gamblers. With this policy, there will be more games online and a much higher weekly deposit limit. With less money available to help moderate problem gamblers, and more possibilities for them to exacerbate their problems, and to create new moderate problem gamblers, their rate will not drop. They receive a LOW in effectiveness and score of 1. When looking at both scores combined, the average is 1.

Transitional Equity: Winners are few under this policy. The federal government will not lose, as their revenues will stay the same or increase slightly. Land-based casinos, although threatened, project a small revenue increase. The provincial government can be considered a loser, because revenues will only rise modestly, while negative externalities will continue to remain costly, and could even get worse with an increase in internet gambling. Gamblers are a big loser. With this new policy, they will have the same gambling opportunities as before, except with added options online, including a larger deposit limit. Furthermore, the budget to treat problem gamblers is smaller than last year. This also hurts support groups who will feel a greater burden without the added resources. Charities and local governments also lose, as their share of revenue is going down, despite the potential for government revenue to go up. Offshore casinos will lose clients and revenue, as BC residents are able to do more at a more reputable website operated by the government. Finally, law enforcement is a loser, as they will have to deal with the added costs to society. In total, there are six losers with a total score of seven. With only two winners, transitional equity is LOW and it scores 1.

9.2 Option 2: Culturally-Sensitive Treatment Plan

Cost: Immigrants make up 26% of BC's population, while Asian immigrants account for a total of 14% of the population (Statistics Canada, 2010). With immigrants and Asians being particularly susceptible to gambling problems, these percentages lead to a large number of problem and at-risk gamblers who require treatment. In 2007/08 BC spent \$2.5 million on treatment, a large portion of which went to strategies targeting aboriginals. Some money was also differed to strategies targeting youth, seniors, women and a help line (Canadian Partnership for Responsible Gambling, 2009). With a more intensive strategy towards immigrants, any new program will cost just as much as the previous treatment budget. An additional \$2.5 million will increase the budget to roughly \$7.1 million. This criterion therefore receives a HIGH ranking and it scores 3.

Stakeholder Acceptability: The provincial government will spend more money treating the gamblers that account for a large percentage of total revenue. It is undetermined how much money in health care that will be saved from this policy, but what is known is that the government will save significant money pertaining to the negative externalities that come from problem gambling. However, in this economic climate the government will have a difficult time giving up significant revenue in favour of more problem gambling spending and uncertain gains in negative externality reduction. There are positives and negatives, but total net income will decrease from the previous year's total of \$1.07 billion. The provincial government receives a MEDIUM and scores 2. Land-based casinos will also disprove of this new strategy, as a culturally-sensitive strategy will negatively impact revenues. Targeting a segment of the population means a large percentage of gamblers will no longer be frequenting land-based casinos, as well as online. Currently, 25% of British Columbians gamble at casinos at least once a year, while 3% gamble online (BC Ministry of Public Safety and Solicitor General, 2008). This will reduce revenues, with no financial upside for the land-based casinos. They receive a LOW

and score 1. Lastly, the non-profit sector will also lose revenue through this strategy. They are already feeling the brunt of government cuts, and will stand to acquire less money through this program. If land-based casinos and community gaming centres are making less money, the non-profit sector will not see a rise in funds. Local governments will make some gains through reduced negative externalities, but charities will not gain anything. They rank LOW and score 1. The ranking for all three stakeholders averages to 1.33.

Effectiveness: This program will increase the number of people using health services, as immigrants become more well-informed about the services that are available to them. However, because many immigrants need help adjusting to Canada and the fact that immigrants are only a sub-section of the total population, this rate will likely not reach the benchmark of 6.1% of Victorians who use health services. Improvements will take time, as medical and problem gambling staff in BC need to be educated on how to best deal with clients. The ranking is LOW, and score is 1.

This program targets a part of the population that should help decrease the rate of moderate problem gamblers to a reasonable level. By focusing on a certain segment, it is unlikely that a full transformation can occur, with moderate problem gambling rates going below 2%. However, by treating a vulnerable sub-section of the population that is prominent in gambling, a large gain can be made through this program. This ranks MEDIUM and scores 2. The average for both measures is 1.5.

Transitional Equity: There are four losers, starting with the federal government, who will lose a small amount of money through lost transfers from the provincial government. Charities and local governments will not benefit from any policy that decreases total gambling revenue, as they depend on high numbers for even a chance at more funding. Land-based casinos are not concerned with a reduction in problem gambling, and will lose through a reduction in revenue. Finally, offshore casinos will not benefit either, as they will lose some of their BC problem

gamblers to treatment and rehabilitation. Provincial government, who will lose revenue through funding this program and lost gambling income, will gain from positive publicity and a decrease in negative externalities, which have potential to outweigh previous benefits gained through revenue. The Gamblers are big winners, as a large sub-group is being targeted through this strategy. There may also be a greater effect in the future, as responsible gambling practices are passed down through these immigrant cultures. Law enforcement is also a winner, as the more problem gamblers that are treated means fewer people getting involved in criminal activities. Finally, support groups are winners with any strategy that makes their job easier, and helps them focus on a smaller group of problem gamblers more intensively. In total, there are 5 winners, with gamblers counting twice, and a MEDIUM ranking.

9.3 Option 3: Increase Treatment Awareness

Cost: This program will force the government to spend more money on problem gambling, as treatment costs can be especially high. Ontario is considered a leader in treatment programs in Canada, and it spent over \$9 million (\$0.69 per person) in 2007/08. At the same per capita rate, this would represent a total spending of \$3.1 million by BC (Canadian Partnership for Responsible Gambling, 2009). Furthermore, Ontario does not have to deal with internet gambling. Removing the costs already borne by BCLC's Game Sense treatment strategy and adding additional costs for an internet strategy can be seen as cancelling out. In total, adding \$3.1 million to the current budget of \$4.6 million equals a total spending of \$7.6 million. Furthermore, there will be additional counselling costs as more people seek help. At \$100/visit, and an expected increase of several percentage points in the number of people seeking counselling, this will mean an extra 1590 people seeking counselling for every 1% increase. For every 1590 counselling appointments, the cost will increase by \$159,000. An expected half million dollars should be devoted to the increase in counselling services, many of which may lead to medical

treatment. In total (\$7.6 million + \$0.5 million) this awareness plan will cost roughly \$8.1 million, and thus receives HIGH ranking and a score of 3.

Stakeholder Acceptability: Although the provincial government will be spending more on problem gambling services, and will experience decreases in gambling revenue, it may also be able to lessen the amount of money spent on the health care system and the rest of the negative externalities. Currently it allocates \$147.3 million per year to health services. However, this decrease will have to happen over time, as the number of problem gamblers decrease. Furthermore, the increase in spending is not very high considering how much is being lost to negative externalities, and the potential for recovered revenue and business production through this policy. The cost of this program is small when looking at the potential gains. This policy will receive a HIGH ranking and score of 3. Land-based casinos will disapprove of this strategy that will affect their patrons. Many people do both online and land-based gambling, and the more people who are encouraged to seek medical attention or attend counselling services, the fewer people who will spend money at casinos. The number of casino gamblers is already down 2% (25% of population) from the last prevalence study (BC Ministry of Public Safety and Solicitor General, 2008). This decrease can partly be attributed to the province's current responsible gambling strategy. A more intensive strategy will decrease this number even further. Much like other strategies targeting problem gamblers, this option will reduce profits that have already dropped considerably over the past few years (British Columbia Lottery Corporation, 2009a). Land-based private shareholders receive LOW and score 1. Finally, the non-profit sector may appreciate the fact that there will be fewer problem gamblers, and those who are will receive proper treatment, but any policy that lowers gambling revenue will not help them gain resources. They are already considerably lower than last year, and they will stay the same under this policy. Local governments will receive less for hosting casinos and community gaming centres, while reaping benefits from decreased negative externalities. Charities will only lose revenue, and not

gain anything. Non-profit sector receives LOW and scores 1. The average score for all stakeholders is 1.67.

Effectiveness: This policy will increase the number of problem gamblers who use medical services to treat their problems. With more people seeking counselling, a full advertising campaign, and strategies to specifically target the internet, this percentage increases to a level similar to that of Nova Scotia. There is currently no strategy focusing on medical treatment, so it is expected that the current rate (<1% seeking medical attention) will rise substantially. It will likely not jump all the way to being > 6%, but it should get past the 5% threshold set by Nova Scotia. Health care use receives a MEDIUM ranking and scores 2. The number of moderate problem gamblers should also decrease substantially. Ontario's experiment with greater awareness spending has led to a 2.6% moderate problem gambling rate (Alberta Gaming Research Institute, 2010). With BC also targeting internet gamblers, the number of moderate problem gamblers will decrease. Going below 2% will take some time, and is an uncertainty due to other characteristics mentioned in section 7, but the rate will go down. The moderate problem gambling rate receives a MEDIUM ranking and scores 2.

Transitional Equity: The BC government will be a winner. Their small losses will be financial, although their gains will be from responsible gambling, and a decrease in the amount of money spent on long run social costs (i.e. negative externalities). Perhaps the biggest winners are the gamblers, who will now be able to rely on better counselling services, internet-specific campaigns to warn them of the dangers, and campaigns designed to alert them towards the medical care that is available. Support groups will also benefit from the added money pouring in from the province. Finally, law enforcement will benefit greatly, as criminal costs to society will decrease. There are still several losers. The non-profit sector has a hard time winning because their revenue is not tied directly to provincial gambling revenues. Land-based casinos will lose revenue when their clients are more able to understand and receive treatment. With less gambling

revenue, the federal government will also lose out on a small bit of money. Even offshore casinos will lose, as it is inevitable that some of their clients will be caught by the new treatment services and campaigns that will become available to all British Columbians. In total, there are 5 winners, receiving MEDIUM and scoring 2.

9.4 Option 4: Research and Lower Limits

Cost: The cost for this option is largely dependent on the additional costs needed to set up a research centre. Research costs in BC are currently \$340,000 of the roughly \$4.6 million being spent. In Ontario, the 2007/08 cost of running a treatment centre was \$4 million (Canadian Partnership for Responsible Gambling, 2009). This would push the cost of BC's problem gambling programs to \$8.6 million dollars annually. Without approximating the cost of starting the research centre, the total cost is certain to receive HIGH ranking and score 3.

Stakeholder Acceptability: With a projected \$50 million increase in net government income, the government is taking a cautiously optimistic approach to 2009/10 (BC Ministry of Finance, 2009). They are banking on the increase in deposit limits leading to greater revenue for eGaming. By reducing the deposit limits to \$1000/week, revenue will likely go down, but only slightly according to Broda et. al. (2008). There may be some good will from these responsible gambling practices, in addition to somewhat controlling negative externalities. The government will be less accepting of this policy, but it still represents an increase over the old policy of \$120/week. The provincial government receives MEDIUM and scores 2. One group that may be more accepting of this policy is the land-based casinos. Their shareholders will approve of any policy that curbs the amount of gambling available on the internet. However, the reduction to \$1000/week is still significantly higher than the previous policy of \$120/week, combined with the fact that some players can still deposit more if they can prove to BCLC that they are financially able to do so. Although happy, this is not an ideal situation, and will likely keep revenues steady. This policy receives MEDIUM and scores 2. The non-profit sector is already feeling the effects of

revenue cuts. By conducting a policy that has potential to further lower projected revenue for the province, they do not stand to gain any new concessions, nor do local governments stand to gain very much in decreased negative externalities. A research centre may help problem gambling, but it will not help their revenue outcome. They receive LOW and score 1. When averaging all three stakeholders, the result is 1.67.

Effectiveness: Lowering online deposit limits does not help address the number of people using health care services; it only helps reduce the number of problem gamblers. However, by funding a research centre, there is potential for improvement. Without an increase to the awareness campaign, this increase will be minimal at best, and likely will not push health care visits over the 6.1% threshold set by Victoria. The result remains LOW and scores 1. With a reduction in deposit limits, combined with a new research centre, the number of moderate problem gamblers will decrease. In Ontario, the research centre has helped the moderate problem gambling rate reach 2.6% (Alberta Research Gaming Institute, 2010). Pouring millions of dollars into a research centre, as opposed to the \$340,000 that was previously spent, will help BC reduce the number of moderate problem gamblers to below 3%, perhaps reaching the same level as Ontario (Canadian Partnership for Responsible Gambling, 2009). This receives a score of MEDIUM. When averaging out both scores, the final score is 1.5.

Transitional Equity: This is the type of policy that will create many winners because of its ability to reduce problem gambling and costs (i.e. negative externalities) associated with it. Support groups will benefit from the findings that come from the research institute. They will be able to use this information to help bolster their practices and services. Law enforcement will benefit because with a reduction in moderate problem gambling, there will be fewer gambling-related crimes, and criminal schemes being developed. Gamblers will benefit from more money going towards problem gambling research, as studies (i.e. immigration, internet gambling) will help properly direct future gambling policy in the province. Even the BC government will benefit,

as it will receive public support, more positive media attention, and make some progress regarding negative externalities. They may not lose as much money as they think, as losses from a reduction in deposit limits are often exaggerated (Broda et. al., 2008). Land-based casinos will be happy that something is being done to curb the amount of money that can be wagered online. Finally, the offshore casinos can also be called a winner, as with a lower deposit limit, people who are looking for higher stakes gambling may wish to go to an unlicensed internet company that does not scrutinize its customers over deposit limits. The two primary losers are the non-profit sector and the federal government. The federal government will not benefit from better publicity or responsible gambling practices. The non-profit sector will not benefit either, as they have had their funds slashed in better times. In total, there are 7 winners, ranking HIGH and scoring 3.

9.5 Option 5: Prohibit Legalized Gambling

Cost: Current spending on problem gambling is \$4.6 million for 2009/10. Without any land-based casinos or other legalized gambling options, the amount spent will slowly decline over time. There are still problem gamblers who need to be treated. Removing legalized internet gambling in BC will help stop the development of problem gamblers, but current problem gamblers can still participate by travelling to the nearby state of Washington, travelling to popular destinations such as Las Vegas or Atlantic City, or by going online. There is no reason to increase services when legalized options are decreased, and thus the amount spent will decline. This number will always stay well-below the \$12 million threshold, and the policy receives a HIGH, and score of 3.

Stakeholder Acceptability: While the BC government's revenue has stagnated recently, this does not detract from the fact that revenues have increased considerably over the past 35 years. By removing gambling completely, the government stands to lose a projected \$1.12 billion in 2009/10. However, there are also some positives to consider, that at least some-what help

soften the blow. The average money spent by the state to combat negative externalities (i.e. crime, bankruptcy, illness, treatment, social services, family costs) will be wiped out. It is debatable whether these negative externalities are worth more than the \$1.12 billion the province would have received, but they help the government gain public support, and reduce the moral dilemma of treating the problem gamblers state-run casinos produce. This receives MEDIUM, and scores 2. Land-based casinos, on the other hand, have no positive outcome from this policy. They are projected to make \$1.46 billion in 2009/10. All this revenue will be lost, with shareholders only caring about revenues, and not the positive aspects of having fewer problem gamblers. They rank LOW and score 1. Finally, the non-profit sector has both positive and negative sentiments regarding this policy. On the one hand, local governments will have less burden resulting from negative externalities. On the other hand, local governments will lose revenue for hosting land-based casinos, and charities will lose their source of income with nothing positive in return. Because there are more negative aspects than positive, the non-profit sector scores 1, a ranking of LOW. The average for this criterion is 1.33.

Effectiveness: With no new money directed towards problem gambling, the number of gamblers using health services is not expected to increase. To even think that with less money being spent on problem gambling programs that the number of people seeking treatment will rise more than 500% (to the 5% threshold) is very doubtful. With no legalized gambling in BC, there is less incentive for the government to launch campaigns and awareness programs targeting problem gamblers and at-risk segments of the population. This rate will stay the same, way below the minimum 5% threshold, ranks LOW, and receives a score of 1.

The big effect of this policy will be felt on the number of moderate problem gamblers. 3.7% is a high rate, the third highest moderate problem gambler rate in Canada (Canadian Partnership for Responsible Gambling, 2009). With this policy, there will be no more games available online, and no way for anyone in the province to legally gamble at a land-based venue.

Despite the fact that offshore gambling is still available online, the \$87 million going offline accounts for much less than the \$1.12 billion in revenue that the government was expected to make in 2009/10 (BC Ministry of Finance, 2009). This is the best case scenario to quickly reduce the number of moderate problem gamblers, as many gamblers either will not have access to offshore internet gambling, are not interested in gambling online, or are distrustful of online gambling. The rate should drop by more than 50%, falling below the 2% threshold, receiving HIGH, and a score of 3.

Transitional Equity: The winners outnumber the losers, starting with the provincial government, who wins because it has relieved itself from the moral dilemma that comes with providing gambling services, and from having to treat the very same problem gamblers state-run casinos produce. The costs that are avoided and the positive publicity that will come from removing all gambling in the province should help negate losses in revenue to the point where the government can be considered a winner. Gamblers are also a winner, as removing gambling protects them better than any treatment or advertisement program ever could. Law enforcement has fewer crimes to deal with, and is less concerned about organized crime. Offshore casinos now are the only option left for gamblers in BC, so they are also winners through this policy. Finally, support groups will have more resources to devote to fewer problem gamblers, and will be better equipped to deal with the current situation. The federal government is one of the losers, as it will lose a small portion of yearly revenue from the province. Land-based casinos are big losers, having to relinquish a large amount of money and getting nothing in return. Finally, the non-profit sector is a loser, as the charities who receive government money will no longer get it from gambling revenue. In total there are six winners, with gamblers counting twice, and a MEDIUM ranking.

Table 8: Policy Evaluation Matrix

		Option 1	Option 2	Option 3	Option 4	Option 5
Criteria	Definition	SQ	CSTP	ITA	RLL	PLG
Cost	Cost of Problem Gambling	High (3)	High (3)	High (3)	High (3)	High (3)
Stakeholder Acceptability	Provincial Government	Medium (2)	Medium (2)	High (3)	Medium (2)	Medium (2)
	Net Income for Land-Based Casinos	Medium (2)	Low (1)	Low (1)	Medium (2)	Low (1)
	Non-Profit Sector	Low (1)	Low (1)	Low (1)	Low (1)	Low (1)
Overall		L/M (1.67)	L/M (1.33)	L/M (1.67)	L/M (1.67)	L/M (1.33)
Effectiveness	Health Care Use by Problem Gamblers	Low (1)	Low (1)	Medium (2)	Low (1)	Low (1)
	Moderate Problem Gambler Prevalence Rate	Low (1)	Medium (2)	Medium (2)	Medium (2)	High (3)
Overall		Low (1)	L/M (1.5)	Medium (2)	L/M (1.5)	Medium (2)
Transitional Equity	All 8 Stakeholders (Gamblers Count Double)	Low (1)	Medium (2)	Medium (2)	High (3)	Medium (2)
Total	Maximum = 12	6.67	7.83	8.67	9.17	8.33

9.6 Recommendation

Based on my analysis, all four alternatives rank higher than the status quo. All options fall below the medium cost threshold of \$12 million to receive a HIGH ranking. No program is high in cost, and thus there are no LOW or MEDIUM scores for cost. Stakeholder acceptability shows varying degrees, with only one result of high acceptability from any stakeholder. This comes from Option 3, where the provincial government ranks HIGH due to having a very acceptable balance between revenue and reduced negative externalities. Because of recent developments, the economic climate, and options involving less gambling revenue, the non-profit sector scores LOW in each option. It is difficult for any stakeholder to score high when each

option is reducing gambling revenue significantly. The status quo, Option 3 and Option 4 show the highest stakeholder acceptability (1.67), as all of these options represent scenarios that are tolerable to the provincial government. Effectiveness shows similar results, as no option is able to achieve HIGH ranking for either the percentage of gamblers seeking medical help, or the moderate problem gambling prevalence rate. This is largely because the status quo for both is extremely low, and progress can only go so far. Option 3 and Option 5 score the best effectiveness, with a MEDIUM average, while Option 4 and Option 2 are next with a LOW-MEDIUM (1.5) average. Option 3 is the only alternative to achieve a ranking greater than LOW for health care use, as its objective is to make people aware of the treatment services in BC. Option 5 achieves a HIGH ranking for reducing moderate problem gamblers due to its elimination of legalized gambling. Lastly, transitional equity scores poorly for the status quo and best for Option 4. This is because the deposit limit scheme is set in a way to at least partly please most stakeholders. The three other options show MEDIUM equity, and are unable to please everyone due to the tradeoffs that exist between revenue, negative externalities and lowering problem gambling rates.

With these findings in mind, my policy recommendation is to immediately implement Option 4, a research centre combined with a new deposit limit scheme. This policy ranks high in transitional equity, and is acceptable to the provincial government and land-based casinos, both of whom are concerned with revenues. This is also a scheme that ranks HIGH in cost, as changing online deposit limits involves zero cost, while a research centre will involve a moderate cost to operate. Implementing this policy immediately conforms with the short term goal of reducing the number of moderate problem gamblers, in addition to helping work towards the long term goal of reducing the problem gambler prevalence rate to 2.5%. One area of concern is that this program will not help increase the number of gamblers seeking medical attention, although it may be an area to research at the new gambling research centre. By establishing a research centre, studies

can be conducted to help design policies to fulfill other goals: reducing the number of immigrant gamblers, and how best to make the public aware of the services that are available. The research centre will act as the means to further all future goals to reduce problem gambling, and will be a means of lowering costs and uncertainty involved in future policies.

9.7 Future Research

Future research should take a more in depth look at gamblers in British Columbia. This would allow for a better evaluation of the characteristics of BC gamblers. One way to achieve this would be to run a survey. Much of the data used in this study either is several years old, or deals with the population as a whole due to lack of data describing only gamblers. Some current data dealing directly with gamblers would help determine better approximate the problems that need to be addressed in BC.

Although it is beyond the scope of my research, a thorough examination of the illegal market could help determine more reasons why people prefer to gamble online. This extended research could also help determine the effects of policies that reduce legalized gambling, and whether residents would turn to the illegal market. There are only a few statistics available pertaining to how much money British Columbians spend on offshore gambling, and no data to show what and where they prefer to play.

10: Conclusion

The introduction of the internet has changed the world profoundly in so many ways. It has made communication and business easier than ever before, but as with all new modes of technology, there are dangers. Gambling has been around since ancient times, and it was only a matter of time before it collided with the internet. The result has been a mode of leisure and entertainment that is more easily accessible and quicker to play than at traditional land-based casinos. With the ease to gamble rising, so too does the risk of problem gambling. In British Columbia, the potential for problem gambling takes on a whole new risk with the introduction of a state-run online gambling monopoly, and subsequent increase of weekly deposit limits and online games. Today, PlayNow is only the second legalized online gambling monopoly in Canada, and has surpassed its counterpart, PlaySphere, in both deposit limits and number of games available. Internet gambling has the potential to be a major source of revenue for the provincial government, but it also can lead to a wide variety of social problems and negative externalities. With internet gamblers more likely to become problem gamblers than offline gamblers, online gambling in BC has the potential to increase the already high problem gambling rate in BC (Williams and Wood, 2007a).

This study attempts to address problem gambling in BC by identifying characteristics common to problem gambling, and using the results of a case study analysis to formulate policy options. The results of the case study analysis show that BC has a high problem gambling prevalence rate, a high level of immigrant gamblers, and minimal treatment and informational services. Through an analysis of characteristics common to problem gamblers, and subsequent research into the most important characteristics, I suggest policy options to target the gaps in treatment and services for problem gamblers.

The results of my research are five policy options: the status quo, a culturally-sensitive treatment strategy, a treatment awareness plan, a change in deposit limits combined with the creation of a research centre, and prohibiting all legalized gambling. I then use four criteria to analyze each policy option: cost, stakeholder acceptability, effectiveness, and transitional equity. The results of the analysis indicate that changing the deposit limits and creating a research centre are the best way to balance all interests when it comes to problem gambling. Because the government is in charge of operating the gambling services, and treating the problem gamblers, a compromise was hard to find that would satisfy major stakeholders and make a difference towards problem gambling.

Lowering the deposit limits is preferred because it still leaves the limits (\$1000/week) relatively high, and allows some gamblers to raise their limits based on proving they can handle the financial risk. Adding a research centre to investigate problem gambling allows the government to probe future policy options, and keep public safety as a major objective, while continuing to reap the financial rewards of a high online limit. I recommend this policy for both the short and long run. One of the biggest problems for state-run online gambling is balancing revenue needs with responsible practices and negative externalities. This is the policy option that does the best job balancing all interests.

To conclude, the research that I undertook is only part of the work that needs to be done to better understand what motivates BC gamblers. This is a complex topic that is not well developed among academic literature and research. More research is needed to develop the factors and ideas that I presented. Internet gambling is an industry that has experienced significant growth over the past decade. Legalized internet gambling requires the attention of researchers before it becomes a widespread problem.

Appendices

Appendix A: Games Available in British Columbia

Table 9: Games Available at Land-Based Casinos

Regular Table Games	Blackjack
	Lucky Ladies Blackjack
	Baccarat
	Dragon Bonus Baccarat
	Roulette
	Electronic Sic Bo Poker
	Craps
Poker Games	Texas Hold'em/Omaha
	Seven Card Stud
Non-Traditional Poker	Caribbean Stud Poker
	Fortune Pai Gow Poker
	Three Card Poker
	Four Card Poker
	Let it Ride Poker
	Texas Shootout Poker

Table 10: Games Available at Various Retailers

SportsFunder	2010 Raffle
	Countdown to 2010
	Instant
	50/50
	Pull Tab
Lotto Games	Lotto 6/49
	LOTTO MAX
	BC/49
	Extra
	Millionaire Life
Quick Draw Games	Keno
	Pacific Hold'em Poker
	Knockout 21
Instant Win Games	Scratch & Win
	Set For Life
	Pull Tab
Sports Action Games	Oddset
	Over/Under
	Point Spread
	Toto

Table 11: Games Available Online

SportsFunder	Going For Gold
	Going For Gold Summer Addition
	Inside Track
	Road to Vancouver
Lotto Games	Lotto 6/49
	LOTTO MAX
	BC/49
	Extra
	Millionaire Life
Quick Draw Games	Keno
	Knockout 21
	Pacific Hold'em Poker
Instant Win Games	Scratch & Win
	Set For Life
	Pull Tab
Sports Action Games	Oddset
	Over/Under
	Point Spread
	Toto
Pick A Prize	Pick a Prize 2010 Edition
Interactives	10'000 Clams
	The Archaeologist
	Bingo
	Boggle
	Café 21
	Dogs Playing Cards
	Fads Gone Bad
	Fruit Smash
	Going For Gold
	Going For Gold Summer Addition
	Hangman
	Horse Quarters
	Instant Lotto 6/49 Interactive
	Inside Track
	Labtastic
	The Lost Pyramid
	Lucky Lily Pads
	Monopoly
Moustache Match	

Appendix B: Gambling Screens Used

Table 12: South Oaks Gambling Screen Scored Items

SOGS Question #	20 Scored Items	
4	When you gamble, how often do you go back another day to win back money you have lost?	
5	Have you ever claimed to be winning money gambling, but weren't really? In fact you lost?	
6	Do you feel you have ever had a problem with betting or money gambling?	
7	Did you ever gamble more than you intended to?	
8	Have people criticized your betting or told you that you had a problem, regardless of whether or not you thought it was true?	
9	Have you ever felt guilty about the way you gamble, or what happens when you gamble?	
10	Have you ever felt like you would like to stop betting money on gambling, but did not think that you could?	
11	Have you ever hidden betting slips, lottery tickets, gambling money, IOUs, or other signs of betting from your spouse, children or other important people in your life?	
13	Have money arguments ever centered on your gambling?	
14	Have you ever borrowed from someone and not paid them back as a result of your gambling?	
15	Have you ever lost time from work (or school) due to betting money or gambling?	
16	If you borrowed money to gamble or to pay gambling debts, who or where did you borrow from?	
	A	From household money
	B	From your spouse/partner
	C	From relatives or in-laws
	D	From banks, loan companies, or credit unions
	E	From credit cards
	F	From loan sharks
	G	You cashed in stocks, bonds or other securities
	H	You sold personal or family property
	I	You borrowed on your checking accounts (passed bad checks)

Table 13: Canadian Problem Gambling Index Scored Items

CPGI Question #	9 Scored Items
5	Have you bet more than you could really afford to lose? Would you say never, sometimes, most of the time, or almost always?
6	Still thinking about the last 12 months, have you needed to gamble with larger amounts of money to get the same feeling of excitement?
7	When you gambled, did you go back another day to try to win back the money you lost?
8	Have you borrowed money or sold anything to get money to gamble?
9	Have you felt that you might have a problem with gambling?
10	Has gambling caused you any health problems, including stress or anxiety?
11	Have people criticized your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
12	Has your gambling caused any financial problems for you or your household?
13	Have you felt guilty about the way you gamble or what happens when you gamble?

Appendix C: Revenue Derived from Problem Gamblers

Table 14: Percentage of Gambling Revenue Derived from Problem Gamblers

Year	Jurisdiction	% of Revenue Derived from Problem Gamblers
2003	Ontario	36%
1999	United States	15%
1999	Australia	33%
2000	New Zealand	19%
2004	Canada	32%*

* weighted by population

Source: Williams and Wood, 2007b.

Appendix D: Federal-Provincial Jurisdiction of Negative Externalities

Table 15: Federal-Provincial Jurisdiction of Negative Externalities

Category	Issue	Level of Jurisdiction
Criminal Activity	Apprehension	Federal and Provincial
	Criminal Justice Costs	Provincial
	Incarceration	Federal and Provincial
Business and Employment Losses	Bankruptcy Court	Provincial
Health	Health Care	Provincial
Social Services	Treatment	Provincial
	Unemployment Insurance	Federal
Family Problems	Divorce Court	Provincial

Source: Canadian Department of Justice, 2010.

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