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"Are the girls out to bingo? And is "Frenchie" gettin tipsy? On a Sudbury Saturday night": Gambling among Older Francophones in North-Eastern Ontario

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“Are the girls out to bingo? And is “Frenchie” gettin tipsy? On a Sudbury Saturday night”: Gambling among Older Francophones in North-Eastern Ontario

by

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Well the girls are out to bingo and the boys are gettin stinko
We think no more of Inco on a Sudbury Saturday Night
The glasses they will tinkle while our eyes begin to twinkle
And we think no more of Inco on a Sudbury Saturday Night

With Irish Jim O'Connell there & Scotty Jack McDonald
There's hunky Frederic Herzal gettin tight but dats alright
There's happy German trixie there with Frenchie gettin tipsy
And even Joe the gypsy knows it’s Saturday tonight

Ya well Marianne and Mabel come to join us at the table,
And tell us how the bingo went tonight we'll lookout right
That if they won the money we'll be laughin up the honey boys
'Cause everything is funny for its Saturday tonight

We'll drink the loot we borrowed and recuperate tomorrow
'Cause everything is wonderful tonite-we had a good fight
We ate the deli pickle and we forgot about the nickel
And everybody's tickled for it’s Saturday tonight

The songs that we'll be singin They might be wrong but they'll be ringin
And now the lights of town are shinin bright-and we're all
Right-We'll get to work on Monday-but tomorrow's only Sun.
And we're out to have a fun day for it’s Saturday tonight

-Charles Thomas "Stompin' Tom" Connors (1967)

Pour Armand et Laurette Emond

Abstract

Since its legalization, gambling has become a popular form of entertainment in Canada (e.g., Tepperman & Wanner, 2012). Despite this increase in popularity, little research has been done examining gambling among older adults, and even in this area of research there is a lack of attention to minority groups (e.g., Ariyabuddhiphongs, 2012; Munro, Cox-Bishop, McVey, & Munro., 2003). Tirachaimongkol and colleagues (2010) proposed a theoretical pathways model to help explain problem gambling risk in older adults. This model includes three "clusters" of risk factors, including individual vulnerability factors, social and environmental factors, and behavioural regulation factors. The second cluster is especially relevant to problem gambling research on minority groups.

There is almost no gambling research that has been conducted with Francophone minority populations. Francophones in Ontario have been found to be at risk of marginalization and exclusion (e.g., Fougère, 2006; Kauppi et al., 2004; Picard & Charland, 1999), and thus at greater risk for psychological distress (e.g., Cairney & Krause, 2005; Clark, Colantonio, Rhodes, & Escobar, 2007; Thériault & Stones, 2009).

The purpose and goal of this work was to better understand gambling in a sample of older Francophones from North-Eastern Ontario. A sample of 181 older (over 55 years) Francophones from North-Eastern Ontario (M age = 68.7, SD = 7.6) were recruited using snowball sampling with the help of key individuals, organizations, and networks within the Francophone community. Most of the participants were women (59.7%) and were married (74.0%). The participants filled out a culturally modified and translated version of a questionnaire designed by Norris and Tindale (2006). This instrument included a wide variety of scales, items, and

measures concerning demographics, gambling attitudes and behaviours, problem gambling, and various comorbidities.

This dissertation is divided into two studies; the first had the purpose of constructing a demographic, social, and intergenerational family profile of gambling in older Francophones in North-Eastern Ontario. This profile was then compared to a similar profile of older Anglophones in Ontario constructed by Norris and Tindale (2006; Tindale & Norris, 2012). Since this study was the first to examine gambling in this population, it was thus exploratory in nature. This study found that gambling was not an important recreational activity or pastime for the participants and that remarkably few of those in the sample were at risk of problem gambling compared to the samples from Norris and Tindale (2006; Tindale & Norris, 2012). It was also found that participants had a high level of community involvement which may be why this sample is unique, and why problem gambling is so low.

Considering these findings, the second study aimed to apply the pathways model proposed by Tirachaimongkol and colleagues (2010) in order to better understand problem gambling risk and, specifically, to understand why those in the Francophone sample were not at higher problem gambling risk. The results of this study supported the link between problem gambling and individual vulnerability factors; however, the cluster of social and environmental factors identified by Tirachaimongkol and colleagues did not explain why Francophone participants were still at a lower risk of problem gambling. One plausible explanation for this finding, and something that this pathways model does not take into account, is the possibility that a positive ethnic identity might act as a protective factor for problem gambling risk. By testing the pathways model's applicability to the older Francophone population in North-Eastern

Ontario, this study helped to elaborate its usefulness by highlighting both its successes and failures/omissions.

Although the two studies presented here have their limitations, they are the first to examine these issues in this population. The findings of these studies help us better understand gambling among older Francophones in North-Eastern Ontario. The fact that, contrary to expectations and to the previous literature, problem gambling was not an issue for the Francophone sample means that there more that needs to be done to understand gambling among older minority groups.

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"Feeling gratitude and not expressing it is like wrapping a present and not giving it."

– W. A. Ward

A work like this is not done in a bubble. Even if my name is on the title page, I am not the only one who played a role in the creation of this dissertation. I owe a debt of gratitude to a great deal of people. I will try my best to acknowledge everyone that has helped me in the creation of this dissertation.

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Literature review

Introduction

Gambling is a popular form of entertainment and has a long history and presence in most cultures and societies (e.g., Tepperman & Wanner, 2012; Tse, Hong, Wang, & Cunningham-Williams, 2012). Since its legalization in Canada during the 1970s and its commercialization in the 1990s, gambling has become more accessible and popular (Campbell & Smith, 2004; Korn, 2001; Tepperman & Wanner, 2012). Although gambling has increased in popularity for the entire adult population, the number of older adults gambling has increased remarkably compared to other age groups. In a 1975 U.S. survey, 75% of young (25–44) and 67% of middle aged (45–64) adults reported they had gambled at some point. This compared to 88% of adults in general (including older adults) in 1998. This is a large increase in lifetime gambling rates; however, it is not as remarkable as the increased rates for older adults (65+), from 35% in 1975 to 80% in 1998 (National Opinion Research Center [NORC], 1999). In Ontario, 74% of older adults have reported that they participated in some type of gambling activity during the past year (Wiebe, Single, Falkowski-Ham, & Mun, 2004), compared to 63.3% of people over 18 (Canadian Partnership for Responsible Gambling, 2013). This indicates that older adults are the fastest-growing group of gamblers, due to a higher percentage of older adults attracted to gambling (Community Links Nova Scotia, 2010).

Despite the increased rates of gambling, little research has been done examining gambling among older adults, and within the available research "there has been a concomitant lack of attention paid to non–English speaking, ethnic groups" (Munro et al., 2003, p. 5). In a 2012 review of the available literature on gambling in older adults, Ariyabuddhiphongs confirmed this lack of minority research, suggesting that "the lack of such research is due

perhaps to the sensitivity of the topic, as well as the lack of interest in gambling research" (p. 303). The purpose of this dissertation is to help bridge this gap in the literature, specifically by examining gambling among older Francophones in Ontario. Given that there is little available research regarding gambling in minority older adults, and none about gambling in older Francophones in Ontario, this work will focus on creating new knowledge. However, to arrive at this new knowledge, and to gain a better understanding of the context around gambling in older Francophones in North-Eastern Ontario a wide range of literature, from various disciplines, regions and dates must be explored, even if the available literature is a less than an accurate or desirable comparison.

The general gambling research tends to be divided into two groups: the first, and most common, is that which examines problem gambling in older adults (e.g., Community Links Nova Scotia, 2010; Erikson, Molina, Ladd, Pietrzak, & Petry 2005; Hong, Sacco & Cunningham-Williams, 2007). However, most older adults do not have a gambling problem and view gambling as a social activity (e.g., Hope & Havir, 2002; Norris & Tindale, 2006; Tindale & Norris, 2012). Researchers in the second general group study the motivations, attitudes, and behaviours of recreational gamblers. Understanding this area of research helps us to gain a comprehensive understanding of gambling among older adults. Both of these areas of study are important and thus will be covered.

Considering that problem gambling has been associated with a wide range of co-morbid disorders such as: lower physical health, addictive disorders, mood and anxiety disorders (e.g., Desai, Maciejwski, Dausey, Caldarone, & Potenza., 2004; Erikson et al., 2005; Johansson, Grand, Kim, Odlaug, & Götestam, 2009; Lorains, Cowlishaw, & Thomas, 2011), it is necessary

to gain a better understanding of how it can affect a potentially vulnerable population like older adults, especially those in a minority group.

As researchers, we bring multiple and unique perspectives to our work. In all transparency this is true of me and this work; my experience and who I am shaped this project. I grew up in a Francophone family in North-Eastern Ontario where the participants of this study were recruited. I was and am a very involved, passionate, and vocal Francophone. The exploration of various issues that influence my community has been an overarching theme of most of my research and education.

As an adolescent I was involved with various Francophone groups (e.g., the French Canadian Association of Ontario - ACFO, Franco-Ontarian Youth Federation - FESFO, Francophone Student Federation - AEF). This did not end during my formal education in Francophone institutions; my curiosity and personal passion have all contributed to my interest. During my master's degree, this lead me to begin my quest to understand issues that influence older Francophones in Ontario. Thus this project stems from this curiosity and personal passion. When I joined the gambling research group at Wilfrid Laurier/University of Guelph, this passion, and curiosity about Francophone issues drove my research, and this body of work. This is my community; these individuals are my grandparents, parents, aunts and uncles. This is my social location.

Francophones in Ontario are not like Francophones from Québec, or other regions in Canada. They are a minority, representing 4.8% of the total provincial population (Office of Francophone Affaires; 2012). However, it is also important to note that the definition of a minority is more than simply the size of a population. Seyranian, Atuel, and Crano (2008) discuss that minority group membership is associated with a lack of power, less favourable social

conditions, and lower status. This is in contrast to the social majority, that is, those who hold the majority of positions of social power in a society. They conclude that, for the most part, there is a negative stigma attached to being part of a minority group. This may be a consequence of oppression, or may also be part of an in vs. out group bias (e.g. Tajfel, 1970). Regardless, it is necessary to examine the available gambling research of other older (and general) minority groups, be they ethnic, linguistic, visible or other, to have a better understanding of the context around gambling in older Francophones in North-Eastern Ontario.

Since the literature on gambling in older adults is limited, it is consistent that there is limited theory regarding gambling, especially problem gambling. Tirachaimongkol and colleagues (2010) proposed a model inspired by a generic pathways model. Thus far, this is the only model that has been proposed to explain problem gambling in older adults. This model contains three main clusters of factors that are associated with problem gambling in older adults. These pathways include: individual vulnerability factors, environmental factors, and behavioural regulatory factors.

Like most of the literature about gambling in older adults, Tirachaimongkol and colleagues' model concentrates on the pathological aspects of gambling. Other researchers have consistently shown that minorities tend to have higher rates of problem gambling (e.g., Alegría et al., 2009; Kim 2012; Welte, Barnes, Wieczorek, Tidwell & Parker, 2001). This has been found to be true for Black (e.g., Chhabra, 2007; Sacco, Torres, Cunningham-Williams, Woods & Unick, 2011: Welte et al., 2001), Hispanic (e.g., Alegría et al., 2009; Welte et al., 2001) and Asian Americans (e.g., Kim, 2012). There are several factors that may explain these differences, from those related to culture and ethnicity (e.g., Chhabra, 2007; Kim, 2012) to those related to the

marginalization that can come with being part of a minority group (e.g., Alegría et al., 2009; Chhabra, 2007).

Most of the above-mentioned research about gambling in minorities comes from the United States. In Canada, a country with a very different socio-demographic makeup, the research is truly limited, as research on gambling in this country has largely concentrated on white Anglo-Saxon Canadians (e.g. Tepperman, 2008). Recently, there has, however, been a growing research interest in gambling among Aboriginal peoples in Canada (CCGR, 2012). Like other minority groups, problem gambling and gambling rates are disproportionally higher among First Nations peoples in Canada (e.g., Dion, Collin-Vézina, De La Sablonnière, Philippe-Labbé & Giffard, 2010; Wardman, el-Guegaly & Hodgins, 2001; Williams, Stevens & Nixon, 2011). As mentioned in research on minority groups from the United States, culture and ethnicity (e.g., Bélanger, 2006, 2011) as well as marginalization (Currie et al., 2010; Dion et al., 2010) might explain some of these differences.

Although there is no research specifically dedicated to gambling among older Francophones in Ontario, there have been a few gambling studies in the province of Québec that have taken linguistic status into account. As in the above-noted research on gambling in minority populations, those who are in a linguistic minority are more likely to have higher gambling and problem gambling risk rates. This was true for the Anglophone and Allophone groups (e.g., Chevalier, Allard & Audet, 2002; Ellenbogen, Gupta & Derevensky, 2007).

However, it is important to note that the Québec research has been conducted primarily with adolescents. Thus, the findings and conclusions of these studies might not be transferable to older adults in Ontario. Considering this, and that Francophones in Ontario are not like other

minority groups, because of their legal and non-immigrant status, it is essential to discuss the research findings regarding this population.

Similar to other minority groups, Francophones, especially older Francophones, in Ontario are more likely to be at risk of marginalization (e.g., Fougère, 2006; Picard & Charland, 1999) and exclusion, and thus at greater risk for psychological distress (e.g., Cairney & Krause, 2005; Clark, Colantonio, Rhodes & Escobar, 2007; Thériault & Stones, 2009). In addition, Francophones in Ontario are also more likely, compared to the general population, to engage in behaviours that are associated with problem gambling (e.g., nicotine and alcohol use and dependence, e.g., DeWitt & Bénéteau, 1999a, 1999b; Picard & Hébert, 1999, Statistics Canada, 2005). For these reasons, the various potential factors that may contribute to problem gambling among older Francophones in Ontario will be discussed. However, some have argued that for those in a minority linguistic setting, gambling as a social activity might be a way to combat social isolation and provide an opportunity to be among others (Tirachaimongkol, Jackson, & Tomnay, 2010). When considering the literature on gambling and problem gambling in minority older adults, it is important to consider the potential negative effects as well as the potential benefits of gambling on the health and well-being of older Francophones in Ontario.

Older Adults and Gambling

Problem Gambling

Wu and Wortman (2009) write "In general, the elderly have been relatively ignored in the research on gambling" (p. 345). In the gambling research on older adults that does exist, the authors depict gambling in one of two ways. The first view is that "gambling is a 'hidden problem' for seniors. Many more seniors are either at risk for having a gambling problem or are

experiencing gambling problems than is indicated in prevalence studies and most research" (Community Links Nova Scotia, 2010, p.39). The other perspective is that there is "no evidence to support the idea that casino gambling activities threatened older adults in any way. In fact, for the most part it was the social benefits of their casino visits that they enjoyed the most" (Hope & Havir, 2002, p. 195) For example, Norris and Tindale (2006; Tindale & Norris, 2012) concluded that gambling can be a positive social activity and that age does not necessarily put older adults at risk for problem gambling.

In a review of the available literature on gambling in older adults, Munro, Cox-Bishop, McVey, and Munro (2003) found that the principal theme examined by most (54%) researchers was problem/pathological/compulsive gambling. Other main themes found in the literature were focused on the marketing (5%), community impact (11%), demographics (15%) and social (15%) gambling aspects. In a more recent review of the peer-reviewed academic literature, Tse, Hong, Wang, and Cunningham-Williams (2012) synthesized the research findings using a similar categorization system. The authors classified the literature into seven categories: participation rates for gambling, prevalence rates of disordered gambling, motivation for gambling, risk factors for problem gambling, protective factors for problem gambling, negative health outcomes from gambling, and positive health outcomes from gambling.

It is clear that the primary interest of gambling researchers has been in the area of problem gambling among individuals "having difficulties in limiting money or time spent on gambling that results in adverse consequences" (Volberg, Nysse-Carris, & Gerstein, 2006, p.11). In a major portion of the gambling literature, the prevalence rate of current (in the past 12 months) problem gambling ranged from 0.3% (Desai, Desai, & Potenza, 2007) to 2.2% (Tse, Hong, & Ng, 2013), to 10.4% (Zanarek & Chapleski, 2005). In Canada the rate, as measured by

the Canadian Problem Gambling Index (CPGI), ranges from 1.6% to 6.1%, depending on the province in question. The latest figures estimate a problem gambling rate of 3.4% in Ontario for older adults (Canadian Partnership for Responsible Gambling, 2013). Even if the prevalence rate of problem gambling is low, it has been estimated "that for every person with a gambling problem, at least five other people are adversely affected" this includes family members, friends, employers and colleagues (Productivity Commission, 1999, as cited in Tirachaimongkol et al., 2010, p. 532). These gambling related harms may include problems related to: theft, domestic violence or other illegal behaviours, inability to meet the costs of essentials such as food or rent, lower performance at work, possibly leading to job loss, relationship problems and health or personal impacts (Productivity Commission, 1999).

While problem gambling rates appear to be inconsistent across the board, these rates are even more confusing when we look at the problem gambling research on older adults. Some studies indicate that older adults have lower rates of problem/pathological gambling when compared to middle-aged and younger adults (e.g., Hong et al., 2009; McCready, Mann, Zhao, & Eves, 2008; NORC, 1999; Wiebe et al., 2004), while others indicate a higher prevalence rate in older adults (e.g., Erikson et al., 2005; Philippe & Vallerand, 2007; Levens, Dyer, Zubritsky, Knott, & Oslin, 2005), and still some others have found that older adults are no more or less at risk of gambling problems than the general population (Norris & Tindale, 2006).

Problem gambling has been associated with a wide range of co-morbid disorders. In a "systematic review and meta-analysis" of population surveys, Lorains, Cowlishaw, and Thomas (2011) reviewed 11 studies pertaining to the prevalence of common comorbid disorders among gamblers. They found high prevalence rates for several comorbid conditions in the representative studies. The condition with the highest mean prevalence rate was nicotine dependence, followed

by alcohol misuse and illicit drug abuse. These comorbid conditions share several common features and are often referred to as addictive disorders (Potenza, 2006, as cited in Lorains et al., 2011). Results also indicated that mood and anxiety disorders "were highly prevalent in problem and pathological gambling. Unlike the case for addictive disorders which may co-develop with problem and pathological gambling, it has been suggested that mood and anxiety disorders may often precede gambling problems" (Lorains et al., 2011, p.495). The authors conclude that their findings strongly suggest that problem and pathological gamblers have high prevalence rates for many comorbid disorders and that this has an impact for treatment providers. These findings are not only relevant to treatment providers, but also for those belonging to marginalized populations, be it due to language (e.g., Cairney & Krause, 2005), ethnicity, or age (e.g., Tirachaimongkol et al., 2010).

With the use of Version 2 of the Short Form Health Survey, an 8-item health measure, Erikson and colleagues (2005) found that disordered gambling among older adults was associated with mental and physical health problems. Although this was the "first [study] to link poorer mental and physical health in a sample of older adults" (Erikson et al., 2005, p. 758), due to a limited and incomplete measure of health and well-being, further evaluation is needed to determine the specific types of mental and physical health problems associated with problem gambling.

In a sample of 843 older adults (65+), Levens and colleagues (2005) found that problem gambling was associated with binge drinking, risk for posttraumatic stress disorder, and being a veteran. The authors postulated that, as some research may suggest (e.g., Wood & Grifts, 2007), gambling, like alcohol, may provide a means of escape from trauma, thus explaining the link found in this study between problem gambling and drinking, PTSD, and being a veteran. The

authors also found that at-risk gambling status was predicted by minority race/ethnicity status. It is important to note that socio-economic status was not controlled for in this study; however, marital status was.

In one of the very few Ontario studies, McCready, Mann, Zhao, and Eves (2008) identified various socio-demographic health determinants and mental health problems that were associated with gambling-related problems in older adults. With the use of the Canadian Community Health Survey (Mental Health and Well-being), the authors similarly found that both alcohol and substance dependence were significantly associated with experiencing gambling problems. Not surprisingly, more frequent participation in gambling activities was associated with an increased risk of problem gambling. This association was particularly strong with Video Lottery Terminals (VLTs) or casino slot machines. When examining socio-demographic variables, McCready and colleagues (2008) found that education and marital status had a significant impact on the risk of problem gambling. Increased education and being married were both associated with lower risks of problem gambling. Although these results were trending, interestingly, those living in Northern Ontario were also more likely to be at risk of problem gambling when compared to the other regions of Ontario. Weibe et al. (2004) also found similar relationships between marital status, alcohol, nicotine dependence, and problem gambling among older Ontarians. In contrast, these researchers did not find a relationship between problem gambling and self-reported health; however, there was some indication of greater depressive feelings among problem gamblers.

In a representative survey study of adults (18–65+), Desai and colleagues (2007) found that older (65+) recreational gamblers were likely to have used alcohol in the past year and were likely to have a lifetime history of depression. It was also found that the younger gamblers, when

compared to older gamblers, were more likely to have used alcohol or to have abused alcohol or another substance in the past year. However, the researchers also found that older gamblers were more likely to consider themselves healthy when compared to younger recreational gamblers. The findings of this study led the authors to conclude that "recreational gambling in older adults does not appear to be associated with adverse health measures, as observed in younger gamblers, and may even possibly provide some beneficial effect" (Desai et al., 2004, p. 1678). It is essential, however, to interpret these findings with caution. It is not tremendously surprising that older adults would have lower rates of alcohol/substance use and abuse, considering the possibility of a selective mortality bias in this particular portion of the population. It is also possible that this study ignored those who are not healthy enough to gamble and thus created a bias of healthier gamblers. Although recreational gambling may be beneficial for various reasons, the above-mentioned study was not designed to determine this point.

Theoretical Models of Problem Gambling in Older Adults

In a review of the older adult gambling literature, Ariyabuddhiphongs (2012) highlights the atheoretical nature of most gambling research, especially in older adult populations, This review, by Ariyabuddhiphongs (2012), describes the few theoretical frameworks used in the gambling literature. The first, inspired by Bandura (1986), is the social cognitive theory model, wherein there is a reciprocal interaction between personal and environmental factors and gambling behaviours. These personal factors can include education, beliefs about skill, hope, optimism, and money consciousness. Environmental factors include family and friends (Ariyabuddhiphongs & Chanchalermporn, 2007). The social cognitive theory model discusses gambling behaviour as a result of learning and observation. It does not, however, explain

problem gambling risk, especially for those in a minority group. This theory is very broad; although not necessarily a bad thing, it examines gambling in all age groups, not specifically older adults, among whom, gambling behaviours differ.

The second framework presented by Ariyabuddhiphongs's review is not so much a theory, but rather a concept used to explain gambling behaviours in older adults. This concept is that of mediations — specifically, how the effects of personal and environmental nature can mediate gambling behaviour, like: socioeconomic status, ethnicity, stress and depression can mediate gambling behaviours. Additionally, MacKinnon and Luecken (2008) discuss that by focusing on certain medications, such as the effect that socialization has on both casino gambling and excitement, and thus on the frequency of gambling, that the information from these mediations may yield information crucial to the development of theory.

Lastly, Ariyabuddhiphongs's review highlights the pathways model put forth by Tirachaimongkol and colleagues (2010). This theoretical model builds on the generic pathways model of pathological and problem gambling by Blaszczynski and Nower (2002), applying it specifically to older individuals (55+). The authors argue that existing problem gambling models do not adequately address older adults, since the factors related to problem gambling in older adults "are distinct from those related to lifetime gambling problems" (Tirachaimongkol et al., 2010, p.533). The model they propose, which is derived from synthesizing (or regrouping) the various literatures on gambling in older adults and identifying three main "clusters" of factors, best encapsulates various factors that can explain problem gambling risk in older adults. It is also the only current gambling theory that is specifically aimed towards older adults. For this reason, the pathways model will be used to drive and explain the findings of this research.

The various clusters identified by Tirachaimongkol and colleagues are not independent; they interact with each other, especially the first and second clusters. The first of these concerns "individual vulnerability factors," risk factors that are immediate and personal to the individual. These factors include distressing situations, both sudden and accumulated, urgency or apathy over these situations, and service barriers. This cluster is consistent with evidence in the literature that older adults with problem or pathological gambling gamble to escape life's stresses and negative emotions (e.g., Erikson et al., 2005; Levens et al., 2005; Lorains et al., 2011; McCready et al, 2008).

The second cluster comprises social and environmental factors. These factors include unsupportive environments, including social biases and stereotypes "such as ageism [which] may aggravate existing discriminations that may be based on an older person's race/ethnicity, cultural/religious background, gender, socio-economic status and/or sexual orientation" (Tirachaimongkol et al., 2010, p. 538). It is suggested that those who are economically disadvantaged and socially marginalized are the most vulnerable to "gambling-related harm." The psychosocial and demographic findings of studies like those by Erikson et al. (2005), Levens et al. (2005) and McCready et al. (2008) would fall into this cluster of factors. The implication here is that older adults who grew up in an environment where gambling was part of the familial or cultural tradition may re-engage in this activity or augment their involvement to reconnect to their familial/cultural roots. For older adults who are isolated due to language, cultural, and structural barriers, gambling may provide an opportunity to be among others in environments where they are not judged on their age.

The final cluster comprises behavioural regulation factors. These factors include disinhibition, impaired decision-making, and impaired judgement, often due to medical side

effects and brain-related changes as a result of a stroke or dementia or from prolonged substance abuse.

In the three-cluster pathways model proposed by Tirachaimongkol and colleagues (2010), the third cluster highlights medical and biological reasons for problem gambling while the first two highlight individual and environmental factors. The authors argue that the second cluster can play a role in our understanding of why an individual starts to gamble, and that the factors from the first cluster might play an important role in understanding why a person continues to gamble. The authors argue that components from each cluster interact within and across the clusters. See Figure 1 for an illustration of the pathways model.

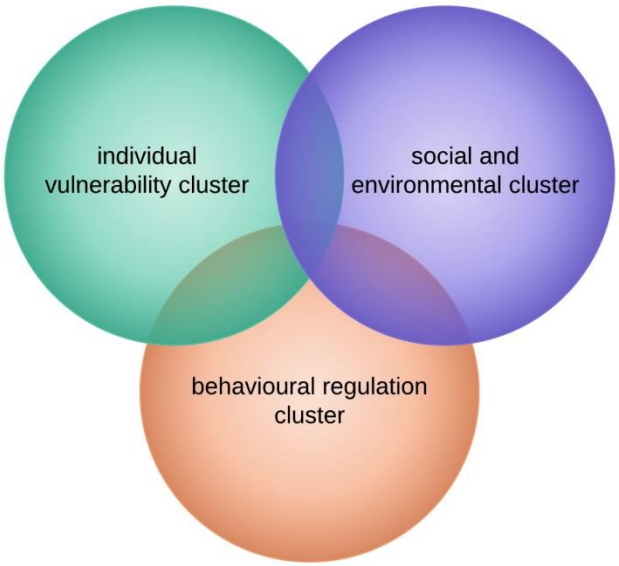

Figure 1. Illustration of the Pathways Model by Tirachaimongkol et al., 2010

The second cluster of Tirachaimongkol and colleagues' model comprises social and environmental factors that can put an older adult at risk of problem or pathological gambling. These include social biases, stereotypes, oppression, marginalization, and discrimination. An older person's "race/ethnicity" and "cultural/religious background" are described as factors that

can be associated with problem gambling. Individuals who are members of a minority population or group are also often victims of social bias. Additionally, the cluster model highlights the interactions between various factors associated with problem gambling: for example, barriers in accessing social services caused by social and environmental factors can translate into individual vulnerabilities. For those in minority groups, barriers to services, discrimination, and marginalization are all too common.

The pathways model indirectly explains the role of culture in problem gambling risk in older adults. Since the gambling literature has largely ignored both older adults and minority adults (e.g. Munro et al., 2003; Wu & Wortman, 2009), there are no theoretical models examining the relationship between culture and problem gambling risk. Both marginality and ethnicity have been proposed to explain why those in minority groups have higher problem gambling risk (e.g. Alegría et al., 2009; Kim, 2012). The second cluster in Tirachaimongkol and colleagues' pathways model encompasses both possible explanations.

In an effort to parse out the dynamic between ethnicity and marginality, and its effect on casino gambling, Chhabra (2007) examined casino gambling in Black and White populations in the American Midwest. Two paradigms have been used in leisure research to explain the underrepresentation of minorities (especially Black Americans): the marginality theory (Irwin, Gartner, & Phelps, 1990) and the ethnic theory (Pfaffenberg & Costello, 2001). The marginality theory suggests that leisure underutilization by Black Americans is a "[consequence] of past economic and social dissemination and segregation practice" (Irwin, Gartner & Phelps, 1990, as cited in Chhabra, 2007, p. 221). Using the ethnic theory, however, Chabra suggests that "racial groups have values and norms that are distinctive from the … mainstream culture" (Chhabra,

2007, p. 221) and that these differences in norms and values explain the different usage of leisure resources.

Using a self-administered questionnaire, Chhabra (2007) determined the influence of ethnicity (self-identification of race) and marginality (measured by income and limited access to transportation) on casino gambling. It was found that ethnicity and marginality both had an influence on casino gambling behaviours. Black respondents gambled more frequently, incurred a higher financial loss when gambling in a casino, and spent more money in the casinos when compared to the White respondents. The ethnic differences were still significant after controlling for feelings of marginality. Problem gambling per se was not measured in this study; the focus was instead on gambling behaviours. This study offers credibility to both of the aforementioned leisure theories and illustrates the complexity of gambling research in minority populations. As Alegría and colleagues (2009) suggested, those in a minority situation may be at risk of problem gambling not only for ethnic and cultural reasons, but also because of various other known factors like socioeconomic status (SES) and other comorbid factors.

In addition to ethnicity and marginality, the pathways model also highlights the role of other comorbid factors that can play a role in problem gambling risk, such as socio-economic status, mental health, and other addictive behaviours. Thus, it is important to discuss these various empirical elements.

Although the model from Tirachaimongkol and colleagues (2010) encompasses most of the available literature on, and is the only proposed theoretical model of gambling in older adults, it fails to address several aspects of gambling in this population. This model focuses exclusively on the problem gambling literature and does not discuss or take into account any personal motivations for gambling. Problem and pathological gambling do not exist

independently from recreational gambling. Since most older adults do not have a gambling problem, any and all theoretical models need to account for both personal motivations and gambling as recreation. Additionally, this model does not truly explain the role of ethnicity and marginality beyond regrouping these factors in a cluster. For this reason, it is important to examine the wide range of problem gambling research that may help illuminate the role of ethnicity and gambling in older adults.

Gambling Motivations

The pathways model by Tirachaimongkol and colleagues (2010) does address individual factors that relate to problem gambling risk in older adults. However, this cluster does not include factors related to motivation. This model also does not address non-problem recreational gambling in older adults. When trying to understand the various factors relating to gambling in older problem gamblers, Clark and Clarkson (2007) did not find a relationship between psychological distress and problem gambling in a sample of older (65+) New Zealanders, when taking gambling motivation into account. They found that both intrinsic motivations (gaining knowledge, learning, exploring and trying something new, and excitement) and extrinsic motivation (gambling for rewards, gambling as a release of tension, social recognition, and amotivation or boredom) were motivating factors. The final regression model of the significant individual predictors of problem gambling included: gambling frequency, amotivation, intrinsic motivation towards stimulation and, lastly and interestingly, subjects thinking that their parents had gambled too much. Participants' belief that their parents gambled too much accounted for the largest proportion (9%) of unique variance in the problem gambling scores (as measured by the South Oaks Gambling Scale) and it was also found that parents' gambling was related to

problem gambling ($r = 0.34$; $p < .001$) (Clark & Clarkson, 2007, p.22). These findings indicate that the study of problem gambling might be more complex than previously expected and that motivational and familial factors need to be taken into account. Norris and Tindale (2006; Tindale & Norris 2012) found that parents' gambling behaviours had a significant effect on gambling frequency, risk taking, and gambling attitudes among older adults. They also found that family warmth had a protective value against problem gambling risk. Family warmth is seen as the intimacy and encouragement of expressing a wide range of feeling, and creating a warm atmosphere within the family (Fine, Norris, & Hofstra, 2001; Hovestadt, Anderson, Piercy, Cochran & Fine, 1985).

In a cross-sectional and longitudinal study on the gambling behaviours of 907 older adults (between 71 and 97 years old), Vander Bilt, Dodge, Pandav, Shaffer, and Ganduli (2004) found that the older adults who gambled were between 1.5 and 2 times more likely than those who did not gamble to have consumed alcohol in the past year. However, it was also found that those with social interaction/support (here defined as meeting or talking with family and/or friends as often as one would like) were 2.7 times more likely to have gambled in the past year, (than those without social interaction/support). When this social interaction was taken into account in the regression model, the authors found that older gamblers were about 20% less likely than older non-gamblers to exhibit depressive symptoms (as measured by the Centre for Epidemiologic Studies Depression Scale [CES-D]). The authors argued that gambling has the potential for both negative and positive consequences. When it is seen as a community activity that can bring people together, gambling would seem to have beneficial effects.

Studies into the motivations of older gamblers are not (and should not be) limited to problem gambling. Martin, Lichtenberg, and Templin (2010) explored various intrinsic and

extrinsic motivations for recreational casino gambling among older adults in urban Detroit. Their findings as to the motivations for gambling were similar to those of Clark and Clarkson (2007); they found that 80% of respondents reported entertainment as a reason for gambling. However, almost two thirds reported that winning money was also a reason to gamble. About half of the respondents reported other intrinsic factors such as excitement, convenience, social factors, and finding it to be inexpensive entertainment as reasons to gamble. Perhaps the most troubling finding, consistent with the clusters from Tirachaimongkol et al. (2010), was that about a quarter of respondents reported gambling as a distraction from everyday problems or to escape negative feelings caused by the death of a loved one or the loss of a close friendship.

When conducting factor analyses (both exploratory and confirmatory) of the various motivations for recreational gambling, Philips, Jang, and Canter (2009) identified five distinct motivational dimensions of older adults' gambling (beyond the intrinsic/extrinsic dimension). They found, consistent with the previous literature, that the "enjoyment" dimension was the key factor for older adults' gambling motivation. Unexpectedly, the authors found that among their respondents, the other motivational dimensions all revealed low and similar mean values. Winning was the next most important factor, closely followed by curiosity, escape, and, lastly, the socializing aspect of gambling.

Similarly, Tarras, Singh, and Moufakkir (2000), found that the primary motivation for older female recreational gamblers was that casinos and gambling are entertaining and exciting. Other motivations reported by these respondents included gambling as an escape from routine and as a people-watching activity. In contrast to the majority of the previous research, Tarras, Singh, and Moufakkir found that social reasons for gambling were almost as important as reasons associated with winning.

Gender does seem to play a role in gambling behaviours and motivations. In a study of older New Zealanders, Clarke and Clarkson (2008) found that older men had a tendency to prefer gambling activities related to skill and chance, such as sports betting, some card games, and horse betting, while women preferred games of chance, such as bingo and scratch tickets. They were not, however, able to discover any motivational differences between the genders. In contrast, a Canadian study by Walker, Hinch, and Weighill (2005) found that older men had a greater tendency to gamble for reasons related to risk taking. In comparison, older woman preferred to gamble for community-based reasons, like supporting local charities.

Similarly, Bisson, Tindale, and Norris (2012) found that there exists a large gender difference regarding both gambling behaviours and motivations of older adults. Using data collected in Tindale and Norris (2006), the authors found that women were more likely than men to play bingo and card games, and men were more likely to bet on sports and play the lottery. Men were also found to have higher risk-taking attitudes; thus, it is not surprising that men reported gambling to win since they could afford the risk, due to their pension benefits. Contrastingly, women reported gambling for entertainment, enjoyment, socialization, and to escape feelings of boredom and loneliness. These findings echoed the work of Wiebe and colleagues (2004), who found similar results regarding various gambling activities. Overall, this body of research suggests that gender should be taken into account when examining gambling among older adults, but that personal motivation also needs to be taken into account.

Gambling as a Social Activity

Although like the work arising out of the pathways model (Tirachaimongkol et al., 2010), most of the research on the gambling behaviours and attitudes of older adults focuses on problem

gambling and the potential negative effects of gambling. Nevertheless not all of the research supports this focus. In an exploratory study, Hope and Havir (2002), concluded that casino gambling was not a threat to older adults (60+), and that most saw the benefits of gambling as a social activity. With the use of a survey, the authors found that most of the older adults in the study had attended casinos once or twice (41%) or a few times (44%) over the previous year, and a smaller portion (15%) stated that they had visited a casino 12 times or more in the past year, while 13% of respondents had never visited a casino. As in other studies on gambling motivation, the authors found that the main motivation for visiting the casino was for the fun and social aspect of it. Other principal reasons for visiting a casino were for the food and for something to do. In addition and contrary to some of the previous literature, only 6% of participants cited "to win" as a reason for visiting a casino.

In a follow-up study, Hope and Havir (2002) interviewed 22 older adults about their gambling behaviours and attitudes. Again, the authors found that the principal reason for visiting a casino was for the fun and social aspect of it. Most of the participants interviewed in this study echoed the sentiments of one woman: "I am smart enough to know that I won't win any money." Another woman in her late sixties said: "It has to be looked at as entertainment. [You] can't look at it as if you are going to win or regain your losses" (Hope & Havir, 2002, p.189). The main advantage to casino gambling for these older adults was its social appeal. They cited having a safe, controlled environment to meet in and socialize with others as a primary draw. Hope and Havir argued that older adults, specifically those in this study, were aware of risky behaviours in themselves and others and that the respondents viewed themselves not so much as gamblers but as "wise shoppers for affordable entertainment" (Hope & Havir, 2002, p.191).

In a similar qualitative study of eight active older female bingo players, O'Brien Cousins and Witcher (2004) found that winning money seemed to be of minor importance, but that for some players wins were eventually expected, simply because they were considered part of the game: "sometimes you win, sometimes you lose" (O'Brien Cousins & Witcher, 2004). They noted that the enjoyment of bingo was closely linked to social factors. The authors also argued that the players in their study played bingo not to add risk to their lives, but rather to add a sense of control. The social and psychological contributions of bingo were seen to contribute positively to the broad views of health and wellness.

The aforementioned studies have established gambling as a social and recreational activity. Norris and Tindale (2006; Tindale & Norris, 2012) surveyed almost 3,000 older adults and found that while gambling was a source of meaningful recreation, most did not cite it as a top recreational activity, suggesting that older gamblers are not typically limited to gambling as a source of recreation. Gambling was rated 9th (out of 18) in a rural sample (Norris & Tindale, 2006) and 12th in an urban sample (Tindale & Norris, 2012) as a favourite recreational activity. The authors also found that the overwhelming majority of participants (92%) found that gambling did not interfere with any other of their recreational activities. Consistent with the previous research, most participants (57%) cited that they gambled for entertainment and enjoyment reasons, second to winning (33%) and socializing with others (31.5%). Although in this and other studies, socialization was rarely ranked as the main reason to gamble, the authors found that only a small portion (under 18%) of participants reported gambling alone. For most, gambling was an activity that was done in the company of someone else: a spouse, friend, or family member, for example.

Conclusions on Gambling in Older Adults

In summary, the literature on gambling among older adults is clearly divided into two categories (Munro et al., 2003). For most older adults, the motivation to gamble is based on reasons related to entertainment (e.g., Martin, Lichtenberg, & Templin, 2010; Phillips, Jang, & Canter, 2009; Vander Bilt et al., 2004). In the literature discussed regarding gambling among older adults as a form social entertainment (e.g., Hope & Havir, 2003; Norris & Tindale, 2006; O'Brien Cousins & Witcher, 2004), results showed that, in some cases, gambling could be beneficial when viewed as a form of entertainment.

However, the majority of the available research examines the pathological and problematic aspects of gambling in this population (e.g., Munro et al., 2003; Tse et al., 2012). It is clear that problem gambling is important to research, considering its negative impact and its association with various comorbid conditions (e.g., Desai et al., 2001; Johansson et al., 2009; Lorains et al., 2011). Despite the interest and research examining problem gambling, the risk and rates of problem gambling in older adults remain inconsistent. Some studies indicate that older adults have lower rates of problem/pathological gambling than the general population (e.g., Hong et al., 2009; McCready et al., 2008); others indicate a higher prevalence rate in older adults (e.g., Levens, et al., 2005; Philippe & Vallerand, 2007); and others still have found that older adults are no more or less at risk of gambling problems than the general population (Norris & Tindale, 2006). It is clear that more research needs to be done to clarify the issues surrounding gambling among older adults.

The pathways model from Tirachaimongkol and colleagues (2010) encompasses most of the available literature, and provides a solid framework for understanding gambling in older

adults despite some weaknesses. As previously discussed, this model does not truly explain the role of ethnicity and marginality beyond regrouping it in a cluster.

In addition to the aforementioned literature reviews, work by Munro and colleagues (2003) and Tse and colleagues (2012) have both described the several limitations of the available literature on gambling in older adults. Both sets of authors highlighted that "the study populations have been limited to Western culture and developed countries" (Tse et al., 2012, p. 11), and that these studies have "focuse[d] on the gambling behavior of English speaking, Anglo-Saxon seniors. There has been a concomitant lack of attention paid to non-English speaking, ethnic groups" (Munro et al., 2003, p. 5). Both sets of authors encouraged community-based research, since these studies are few in the current literature (Munro et al., 2003). Further, both sets of reviewers noted that future studies should use a mixed methodology, since most of the current research is survey based (Munro et al., 2003; Tse et al., 2012). Considering these conclusions, and the purpose of this study, it is important to examine the wide range of problem gambling research that may help illuminate the role of ethnicity and gambling in older adults.

Gambling in Minority Groups

A large proportion of the available North-American and Australian minority gambling literature examines immigrant groups (Alegría, Petry, Hasin, Liu, Grant & Blanco, 2009). One of the principal ethnic minority groups on which this literature focuses is Asian immigrants, specifically the Chinese. This may be because in "Chinese culture, there is a strong tradition of believing in luck, fate and chance. Gambling is a preferred form of entertainment … as part of the social and cultural tradition" (Kim, 2012, p.71).

In a systematic review and analysis of the available North-American and Australian literature on gambling among Asian immigrants, Kim (2012) found that Asian immigrants were at two to three times greater risk of problem gambling compared to the general population. However this risk was influenced by several different factors. Not surprisingly, access to gambling had an influence on the risk of problem gambling. The author found that those living in a state where gambling was accessible (e.g. California) were more likely to have a gambling problem when compared to those who lived in a state where gambling was not accessible (e.g. Hawaii). It was also found that the rates of problem gambling were higher in Asian immigrants when compared to their countries of origin, and that refugees were at a higher risk for problem gambling, compared to the general immigrant population. This led the author to conclude "gambling participation and involvement are a function of availability and culture. Culture may predispose Asian immigrants to gambling behaviours, but the social environment appears to play a crucial role in the development of gambling behaviours" (Kim, 2012, p. 78).

In addition to the possibility of a cultural gambling predisposition, other elements of the immigrant experience may influence gambling behaviours. In a study examining non-English-speaking immigrants to Australia, Scull and Woolcock (2007) suggested that stressors from the migration process could result in an increased vulnerability to problem gambling. This is in line with Tirachaimongkol and colleagues' (2010) suggestion that gambling may be an escape from the stresses of social biases, in this case the migration process, or the status of minority groups.

In the United States, gambling research on minorities usually focuses on two minority groups: Hispanic and African American Black populations (Welte, Barnes, Wieczorek, Tidwell, & Parker, 2001). With the use of a representative sample and the South Oaks Gambling Screen, Welte and colleagues (2001) found that the rates of "current pathological or problem gambling"

were much higher among Black and Hispanic respondents (7.7% & 7.9%, respectively) when compared to the White respondents (1.8%). It was also noted that those with a lower SES reported higher rates of problem or pathological gambling. The finding that minorities in the U.S. are at greater risk of problem gambling is consistent with other studies, and remained once SES was controlled for (e.g., Volberg, 1995), even when the study controls for item bias in the analysis and measures (Sacco et al., 2011).

In a national (U.S.) epidemiological survey, Alegría and colleagues (2009) found that Blacks "had significantly higher prevalence of disordered gambling than whites" (Alegría et al., 2009, p.139). The authors also found that those with lower SES were at higher risk for disordered gambling. These authors go further than previous studies in their analysis of demographic and comorbid factors associated with problem gambling and conclude "several reasons may contribute to the racial and ethnic differences in [problem gambling] prevalence… Several of the sociodemographic characteristics and comorbidity patterns of these groups are well-known risk factors for pathological gambling" (Alegría et al., 2009, p. 139). They found that both the African American Black and Hispanic participants had, on average lower levels of education and income. Thus, those who are members of minority populations may also be at greater risk of problem gambling.

Like most of the literature on gambling, the research examining gambling among minorities tends to be concentrated on problem and pathological gambling. This research consistently demonstrates that those in minority groups tend to have higher rates of gambling overall, as well as higher problem gambling rates (e.g., Welte et al., 2001; Sacco et al., 2011; Kim, 2012). This has been found to be true for multiple minority ethnic and racial groups, such as African American Blacks (e.g., Chhabra, 2007; Sacco et al., 2011: Welte et al., 2001),

Hispanics (e.g., Alegría et al., 2009; Welte et al., 2001), and Asian Americans (e.g., Kim, 2012). These increased gambling and problem gambling rates might help to explain the possible role culture and language could play in gambling among older Francophones, as will be further discussed. Various possible reasons for these increased rates have been discussed, including those related to culture and ethnicity (e.g., Chhabra, 2007; Kim, 2012) and those related to marginalization. It has been established that those with lower SES are at higher risk for problem gambling, this is especially true for minority groups (e.g., Alegría et al., 2009; Chhabra, 2007).

Given that there are almost no Canadian studies that examine gambling among minority adults, studies from the U.S., where gambling has a similar status, offer the closest comparison. Yet Canada is a country with very different minority groups than the United States, and this must be taken into account when looking at this research. In addition, both counties have very different political systems, resources and forms of gambling. Additionally cultural differences such as different ideals, values, and morals may also influence gambling. These differences between the neighbour countries may in turn lead to different minority experiences, as has been highlighted in the health literature (e.g. Siddiqi and Nguyen, 2010).

For these reasons it is important to discuss the little available research examining gambling in minority groups in Canada. As in the U.S., however, most of this research focuses on minority immigrants. Francophones in Ontario are distinct from these groups in that they are not immigrants and have a historical presence in the country (e.g. Stebbins, 2000). For this reason, it is also important to discuss Canadian gambling research that examines non-immigrant minorities. One relevant area of research is gambling among Aboriginal peoples in Canada (CCGR, 2012). Although Francophones in Ontario are culturally and demographically distinct

from Aboriginal peoples, this literature is still important to help gain a better understanding of gambling among minority groups in Canada.

Gambling among Aboriginal Peoples in Canada

Canada is a multicultural, ethnically and linguistically diverse country, though the dominant language and culture in Canada is English (Fraser, 2006). Research on gambling in this country has largely concentrated on the Anglo cultural-linguistic group, especially those who are younger and in mid-life (e.g. Tepperman, 2008). In Canada, the research on gambling in minority groups is truly limited or, in the case of some groups, nonexistent. However, recently there has been a growing research interest in gambling among Aboriginal peoples in Canada (CCGR, 2012), and as such, they are the only minority non-immigrant group to have been included in the gambling literature. Francophones and Aboriginal peoples in Ontario are distinct for various reasons, but there may be some relevant information to be gained from studying this literature. In a study done by Tindale and Norris (2012) investigating gambling among older Métis in Ontario, almost half of the participants in the sample from North-Eastern Ontario reported French as their primary language.

Gambling, or games of chance, have historically been a central pastime and activity among Canadian First Nations. Gambling has in the past held, and still holds, social meaning and is/was important to spiritual, emotional, mental, and physical development for various Aboriginal nations (e.g. Bélanger, 2006, 2011). Researchers in this area have found that problem gambling is disproportionally higher for First Nations members in Canada: 2 to 16 times higher than for non-Aboriginals (Wardman et al., 2001).

Alegría and colleagues (2009) state that: "several of the sociodemographic characteristics and comorbidity patterns of these [minority] groups are well-known risk factors for pathological gambling" (Alegría et al., 2009, p. 139). In a review of some of the literature on gambling abuse among Aboriginal peoples, Dion, Collin-Vézina, De La Sablonnière, Philippe-Labbé, and Giffard (2010) suggest that several risk factors might explain the higher prevalence rates of problem gambling among Aboriginal peoples in Canada. Factors such as lower SES, higher exposure to gambling, higher rates of unemployment, addiction, depression, and grieving over the loss of a loved one have all been found to be associated with problem gambling, and these factors have been found to be more prevalent among Aboriginal populations in Canada.

Wardman and colleagues (2001) also found that stress appeared to be a factor associated with problem gambling among Aboriginal peoples. In this study it was not possible to determine whether greater stress leads to problem gambling or vice versa. However, "a possible stress indicator is reservation life. Living on a reservation was found to be associated with pathological gambling" (Wardman et al., 2001, p.97). Wardman and colleagues also postulated that another possible indicator of stress was grief, and in particular the grief caused by the Canadian residential school system, though this relationship is still unclear and is deserving of further study (e.g., The Truth and Reconciliation Commission of Canada, 2015).

In recent research, Currie and colleagues (2012) found that another possible source of stress among Aboriginal peoples is racial discrimination. With the use of in-person surveys of urban Aboriginal adults, it was found that most respondents (80%) had experienced a high level of discrimination due to their race in the past year. This racial discrimination was found to be a risk factor for problem gambling (in the past year). This relationship was found to be partially mediated by post-traumatic stress disorder symptoms and by the use of gambling as an escape.

Consistent with the pathways model by Tirachaimongkol and colleagues (2010), Currie and colleagues (2012) suggested that gambling may be a coping response used to escape the negative emotions associated with racism.

In a chapter reviewing problem gambling among North American Indigenous peoples, Williams, Stevens, and Nixon (2011) used the bio-psychosocial model of addictions to describe five variables "known to be causally related to addictions and which are found in North American Aboriginal people"(Williams et al., p. 183). The following variables can contribute to the higher rates of problem gambling: greater rates of gambling participation, conductive cultural beliefs (related to the existence of supernatural forces), disadvantageous social conditions, younger age, and greater availability of gambling activities and establishments. Strong cultural, historical, and traditional acceptance of gambling among Aboriginal peoples likely explains the greater overall acceptance of and frequency of participation in gambling, and, not surprisingly, higher participation has a direct relationship with higher rates of problem gambling. The gambling activities that were traditionally practiced by Aboriginal peoples in Canada are quite different than those practiced today. Historically, traditional games of chance were influenced by skill and human actions. This is no longer the case. Belief in gambling fallacies was found to be higher among Aboriginal peoples than among other Canadians. Comorbid social conditions (e.g. poverty, racism, cultural stress, marginalization, substance use, and mental and physical health problems) have been associated with problem gambling, although, as mentioned, the literature is inconsistent. Williams and colleagues (2011) postulate that the younger average age of Aboriginal peoples is another factor that can contribute to the higher problem gambling rate, due to the potential of younger age as a gambling risk factor. Lastly, considering that a large number of Aboriginal communities are also providers of commercial gambling, Aboriginal peoples might

also have greater access to gambling opportunities. This might also be a factor explaining problem gambling in this population.

The cluster pathways model of problem gambling by Tirachaimongkol and colleagues (2010) isolates social and environmental factors that are related to problem or pathological gambling. Those in minority groups are more likely to face factors highlighted in the cluster model, such as social biases, stereotypes, oppression, marginalization, and discrimination. Additionally, Tirachaimongkol and colleagues (2010) mention that "gambling as a significant part of cultural identity" (p. 537) can be a factor leading to problem gambling in older adults. Since no research has examined the role of gambling among Francophones in Ontario or across Canada, it is unknown whether gambling is a part of the cultural identity of this group. However, the factors underlined by the aforementioned literature seem to indicate the application of the pathways model in a population of Aboriginal peoples of Canada.

Aboriginal peoples in Canada are categorized into three general groups: the First Nations, the Inuit, and the Métis. The Métis are the fastest-growing group of Aboriginals and account for approximately one third of the Aboriginal population in Canada (Statistics Canada, 2006). "The growth of the Métis population is due to both demographic factors, such as high fertility rates relative to the non-Aboriginal population, and non-demographic factors, such as an increasing tendency for people to identify themselves as Métis" (Statistics Canada, 2005). The origins of the Métis people can be traced to the Canadian fur trade of the 18th and 19th centuries. The children of relationships between (mainly French) Canadian fur traders and First Nations women became the Métis. This new group of Canadians were unique in that they were rejected by both the cultures of French-Canadians and First Nations.. Thus the Métis developed a distinct hybrid culture, with their own language, rites, and activities. This cultural group, like other Aboriginal

and Francophone groups, was subjected to years of colonization and attempts at assimilation and marginalization (Fraser, 2006; Stebbins, 2000).

To date, the only study to focus on gambling among a Métis sample in Ontario has been Tindale and Norris's. In collaboration with the Métis Nation of Ontario, Tindale and Norris (2012) constructed a comprehensive social profile of a Métis population, taking into account the role of gambling attitudes and behaviours. This study was part of a larger three-year research program designed to establish a greater understanding of gambling in terms of family relationships and to explore the role of family solidarity in intergenerational relationships. To achieve this, in year one the study profiled gambling behaviours and attitudes of adults (50 and over) in Southwestern Ontario with the use of a questionnaire. In year two, researchers conducted interviews with adults aged 50–60 and their adult children to discuss family leisure and gambling attitudes within the family context. The third year of this research program focused on a Métis sample. In collaboration with the Métis Nation of Ontario, the year one questionnaire was reviewed and re-designed and subsequently implemented to reflect the reality of a Métis sample in a culturally relevant, appropriate, and sensitive way. This questionnaire included a variety of items, including measures of demographics, leisure activities, gambling behaviours (of the participants, their parents, and their children), gambling attitudes, problem gambling risk, family experiences, family warmth, mood disorders, and alcohol use, among other measures.

Although the aforementioned study was not designed to be comparative, it was found that in many respects the Métis respondents (year 3) shared characteristics of the non-Métis respondents (year 1). However, about a third of older members of the Métis population were found to be at some risk for problem gambling (using both the CPGI and the Windsor Screen, both measures developed to identify those at risk of being problem gamblers). It was also

concluded that "perhaps [the Métis] are more likely to experience comorbidity between gambling and alcohol misuse." That said, the protective dimension of close family ties in association with lower problem gambling risk was evident in this Métis sample. This study, the first to examine gambling among a Métis sample, stresses the importance of examining comorbidities, family dynamics, and culture when studying gambling in a given population.

Tindale and Norris (2012) captured some linguistic data in their study with the Métis Nation of Ontario, making theirs one of the first studies to provide relevant data about gambling among older Ontarians with French as their primary language. Closer examination of the data reveals an interesting trend regarding linguistic groups. Half of the Métis participants in this sample were from North-Eastern Ontario and, of those, 48% spoke French as their primary language. It is when comparing the French speakers to the English speakers in this subsample that trends become apparent. In terms of a demographic profile, both groups were similar, though French speakers did have lower average incomes. It is with respect to gambling that these linguistic groups differed most. The French speakers had more favourable attitudes towards gambling behaviours (measured by the Gambling Attitudes Scale) and had a slightly higher risk of problem gambling (measured by the CPGI). Lastly, the French speakers in this Métis sample had a higher rate of depression (measured by the Center for Epidemiological Studies Depression Scale) than their English counterparts. These findings are based on a small subsample of an already small initial sample, but may suggest that language, or more specifically language-based culture, may have an influence on gambling behaviours, attitudes and its comorbidities.

As in the findings reported in the gambling literature on minority groups in the United States, gambling and problem gambling rates are disproportionally higher among First Nations peoples in Canada when compared to the general Canadian population (e.g., Bélanger 2011;

Dion et al., 2010; Wardman et al., 2001). Also in line with the research done in the U.S., cultural and historical (e.g., Bélanger, 2006; 2011) reasons have been postulated to explain some of these discrepancies. However, factors associated with marginalization and with SES characteristic and comorbidity patterns of the Aboriginal peoples of Canada are also potential risk factors for gambling-related problems (e.g., Currie et al., 2012; Dion et al., 2012). Although there has been no research on gambling among older Francophones, the gambling research on minorities, in both the U.S. and Canada, is important to better understand the possible issues that can have an influence on gambling among Francophones.

Gambling and Language in Québec

Although there is no research on gambling among older Francophones in Ontario, a few gambling studies in the province of Québec have taken linguistic status into account. In a representative sample of secondary school students, Chevalier, Allard, and Audet (2002) found that Francophone youth were less at risk of problem gambling when compared to those who did not have French as their primary language. These findings were echoed in research done by Ellenbogen, Gupta, and Derevensky (2007), who examined gambling among Francophone, Anglophone, and Allophone (those with a primary language other than French or English) teenagers in Québec. This study found that both Anglophone and Allophone participants had higher rates of weekly gambling and problem gambling than Francophones. Interestingly, in the context of Québec, Anglophones and Allophones represent a minority population. In addition, these researchers also found that acculturation difficulties were associated with the rates of problem gambling, supporting its relationship with marginalization. In a study examining the influence of cultural background on parental perceptions of adolescent gambling behaviour,

Campbell, Derevensky, Meerkamper, and Cutjar (2012) found that parents did perceive youth gambling as a serious issue. However, it was found that Francophone parents in Québec were more likely to discuss issues related to gambling with their children, potentially explaining the aforementioned concerns about gambling among youth in Québec. The authors concluded that such differences may be due to "either exposure and media attention given to youth gambling and prevention initiatives in Québec and/or cultural differences" (Campbell, Derevensky, Meerkamper, & Cutjar, 2012).

Certainly, older Francophones in Ontario represent a very different sample from teenagers in Québec, and thus the results, findings, and conclusions of the above-noted studies might not be transferable to this population for various reasons (e.g., age, ethnolinguistic minority status, provincial gambling policies). That being said, the findings of the Québec studies are consistent with the pathways model by Tirachaimongkol and colleagues (2010), indicating that individuals who are victims of stereotypes, social biases, and marginalization are at greater risk for problem gambling, or that gambling can be a form of compensatory social interaction because of isolation due to language, cultural, and structural barriers. Considering this, one could postulate similar, if not stronger, findings in older Francophones in Ontario.

Francophones in Ontario

Names, Numbers and a little History

Francophones in Ontario are considered a minority group and a minority official language group representing 4.8% of the population of the province (Office of Francophone Affairs, 2012). However, there is more than numbers when one is defining, and discussing a minority group. The terms majority and minority reflect positive and negative social conditions.

The word minority tends to be associated with individuals or groups who are stigmatized, ostracised, oppressed and outcast (Blanz, Mummendey, & Otten, 1995). The words 'minority' and 'majority' have been found to create an automatic response in people. When primed with these words, respondents have been shown to produce a quick negative or positive response, thus illustrating that the words can evoke different automatic, or implicit valuations (Mucchi-Faina, Pacilli, & Pagiaro, 2011). Seyranian, Atuel and Crano (2008), asked participants to describe minority and majority groups. A content analysis of the participants' responses revealed that the definitions were conceptualized along eight dimensions. These included: power, numbers, distinctiveness, social category, group context, disposition and being the target of behaviours. This highlights the complex nature of the status of a minority group.

The aforementioned pathways model of Tirachaimongkol and colleagues (2010) does describe the potential role of ethnicity and marginality, and thus being part of a minority group in problem gambling. This model also outlines other possible comorbid and related factors that may play a role in problem gambling such as socioeconomic status, mental health, and other addictive behaviours. These factors seem related to the aforementioned dimensions associated with minority groups. Thus, it is necessary to discuss these various empirical elements, as it pertains to both older Francophones from Ontario, and their minority status.

Francophones in Ontario evidently share two commonalities — language and geography — but are not a homogeneous group. According to the Canadian census in 2006, 10.0% of Francophones in Ontario belong to a visible minority. This percentage varies per region, for example, North-Eastern Ontario has the lowest proportion of visible minority Francophones in the province (0.6%) of all regions in the province. The proportion of visible minority Francophones decreases dramatically to 4.4% when it comes to Francophones over the age of 65

(Office of Francophone Affairs, 2012), indicating that the population of younger Francophones might differ, culturally, from the older population. Even though the proportion is very small, especially for those over the age of 65, this population is not negligible. However, because of their small proportion within a minority population, the reality of visible minority, especially visible minority older Francophones in Ontario is not well captured by the available literature. Thus it is important to recognize that both visible minority and immigrant Francophones are part of the reality of French Ontario. This population is not the focus of this study but further research should be conducted to examine gambling in this particular population.

Francophones in Ontario are defined by more than simply speaking French as their mother tongue and living in Ontario. One can make a distinction between Francophones in Ontario and Franco-Ontarians. As previously mentioned, Francophones in Ontario are not a homogeneous group. However, this diversity is less present in older Francophones from North-Eastern Ontario, and in the literature of Franco-Ontarians. This common history, culture and language are important when examining this older population. Work by Bourbonnais (2007), concludes that Franco-Ontarians are a group that share this common history, culture and language. There are many ways to view, call and define Franco-Ontarians.

A definition put forward by Jutreau (2000) in a naturalistic discourse is that ethnicity is defined not by race, but rather by social association with a group that shares a common history, culture, and language. Bourbonnais (2007) concludes in her literature review that we must consider Francophones in Ontario as an ethnic group. His report prepared for the Ontario Ministry of Education and Training about ethnic identity in minority French Northern Ontario Duquette (1996) characterizes Franco-Ontarians as a distinct ethnic group in comparison to the 'new' Francophones in Ontario. Other works examining Francophones outside of Québec view

Francophones as having an ethnolinguistic identity since this identity is a result of socialization and social interactions, and assumes that one can belong to more than one ethnolinguistic group (Landry, Deveau, & Allard, 2006). In addition to sharing a common history, culture and language, Roy-Gagnon and colleagues (2011) argue with genealogical and genomic research that French-Canadians share a genetic structure. However, not everyone agrees that Franco-Ontarians are an ethnic or ethnolinguistic group. Thériault (2007) argues that "in spite of displaying sociolinguistic characteristics more typical of a minority ethnolinguistic group, Francophones in the rest of Canada cannot be defined as an ethnic minority" (p.262). Rather Francophones in the rest of Canada more closely resemble minority nationalism than an ethnic group. Since "French Canada did not seek to be differentially integrated into Anglo-Saxon North America, as do ethnic groups, but rather participate in a process of creation of another civilization" (p.262). Regardless of the language used, it is clear that Franco-Ontarians share much in common. From this it follows that the socio-economic and political relationship between the minority Francophones and the majority Anglophone population can exert a certain influence on the health and well-being of this minority group.

In 1839, John Lambton, Earl of Dunham, wrote that "There can hardly be conceived of a nationality more destitute of all that can invigorate and elevate a people, than that which is exhibited by the descendants of the French in Lower Canada, owing to their retaining of their peculiar language and manner" (as cited in Fraser, 2006, p.16). This quote, taken from an official report submitted by Lord Durham, represented the policy and governance of Canada for over 160 years (Fraser, 2006). This governmental and historical attitude towards the primary minority linguistic group of this country has had a large impact on the Francophone population throughout the past two centuries. One such example is that of Regulation 17, introduced in 1912, which

banned the teaching of the French language and the teaching of subjects in French in the Province of Ontario. This law had a lasting effect on the education of young Francophones who are now members of the older population of the province (Sylvestre, 2007; Wagner et al., 2002).

Considering that a vast majority (89%) of older (45+) Francophones in Ontario are Catholic (Statistics Canada, 2004), this might also play a role in gambling attitudes and behaviours of this group of Ontarians. Tepperman and Wanner (2012) highlighted that "the Roman Catholic church, while not unanimously in favour of gambling, recognized their local parishioners' financial needs and conveniently turned a blind eye to bingo games and other chance based fundraising" (p.26). Researchers examining the epidemiology of psychological problems in older Canadians concluded that "because English is the dominant language spoken by most Canadians, non-English-speaking Canadians are at greater risk of marginalization and exclusion and, therefore, also at greater risk for depression and/or distress" (Cairney & Krause, 2005, p.810). Considering the established relationship between marginalization and problem gambling, it is important to research gambling behaviours in these minority groups.

With over half a million Francophones in Ontario (611,500, according to Statistics Canada in 2013), Franco-Ontarians represent the largest population of French-Canadians outside of Québec. Over 75,000, or 17%, of these Francophones are over the age of 65 years, making the population of Francophones in Ontario older than the general Ontarian population, in which 14% are over the age of 65 years. The same is true for those between the ages of 55 and 64 (15% vs. 13%; Statistics Canada, 2013). Even though Franco-Ontarians only represent 4.8% of Ontarians, the concentration of Francophones varies by region, with the largest numbers in the Eastern (15.7%) and North-Eastern (23.4%) areas of Ontario (Office of Francophone Affairs, 2012).

Marginality

In an essay discussing the debate about the Franco-Ontarian identity, Paré (1995) argues that part of the Franco-Ontarian identity has been defined by a lack of power since the beginning of the 20th century. He discusses the historical and increasing exclusion of Francophones from most of the major political, social, and economic issues of Ontario. The author concludes that a sense of powerlessness shaped by exclusion is thus part of the identity discourse of Francophones in the province.

It is well known that levels of SES are related to perceived well-being (Clarke, 2000) and health (Marks, 2006; Mulatu & Schooler, 2002) in a Canadian population (Buckley, 2006; Orpana & Lemyre, 2004; McKellar, 1999). Socio-economic status is at the core of various health disparities; income, education, social support, and employment have all been shown to be related to one another and to the health and well-being of an individual (Spitzer, 2005). As mentioned previously, lower levels of SES are associated with higher gambling rates (e.g., Alegría et al., 2009; Dion et al., 2010; Williams et al., 2011) and higher rates of problem gambling (e.g., Johansson et al., 2099; McCready et al., 2008; Weibe et al., 2004; Welte et al., 2001). The study of SES, and therefore of income, employment, and education is of great relevance to the study of aging and gambling. "Importantly, the relationship between poor health status and socio-economic status often emerges with age such as that health problems associated with maturation are reported at an earlier age by those who are less affluent" (Spitzer, 2005, p.S87).

In an article reviewing the literature on concepts of social capital and the influence of social determinants on health, Bouchard, Gilbert, Landry, and Deveau (2006) stated "data have shown that members of Francophone communities [outside Québec] are generally older, less educated, and less represented in the workforce. Minority Francophones tend to live in

economically disadvantaged regions. This makes it harder to develop and access social resources" (p. S18). This broad statement was made in regard to studies based on Statistics Canada's National Population Health Survey and other Statistics Canada census information.

It is important to keep the empirical heterogeneity of older adults in mind when examining the SES of older Francophones in Ontario. The different categorization made by some gerontologists (e.g., Neugarten, 1974) between the young-old and the old-old is an attempt to help de-homogenize older adults (Chappell, McDonald & Stones, 2008). Despite this attempted de-homogenization, most statistics and research present findings about older adults as one general group.

Picard and Charland (1999) reported, with the use of Statistics Canada data, that older (over 65) Francophones on average have lower incomes than other older Ontarians ($21,000 vs. $25,500). This disparity in income between older Francophones and Anglophones in Ontario was also present in more recent data from the 2006 Canadian census. Both male and female older Francophones had lower median total incomes than older adults in the total population. In addition, the lowest median incomes among older Francophones were found in the North-Eastern region of Ontario (Office of Francophone Affairs, 2012). When examining individuals between the ages of 55 and 64, the income disparity between Francophones and Anglophones still remains ($26,130 vs. $ 31,832; Statistics Canada, 2006). The Office of Francophone Affairs also reported that 17.8% of older Franco-Ontarians are living below the low-income cut-off, in comparison to the 14.6% provincial average (Fougère, 2006). It is also important to note that this disparity in income is even more prevalent when one examines older Francophone women, in comparison to Francophone men, and the rest of older women in Ontario (Garceau, 1996).

Using data from the Canadian Community Health Survey 2000–2001 and from Statistics Canada, the Deuxième Rapport sur la santé des francophones en Ontario, or Second Report on the Health of Francophones in Ontario (DRSFO), by Picard and Allaire (2005) showed that unemployment rates were higher for Francophones over the age of 75 in comparison to the rest of the province within the same age category (12.5% vs. 5.9%). Although unemployment rates generally increase with age, this substantial difference in the unemployment rate is lessened when examining younger age groups: 5.1% vs. 4.3% for those between 65 and 74 and 4.5% vs. 4.2% for those between 55 and 64.

Data from the 2006 Statistics Canada census clearly illustrate the discrepancy that exists between older Francophones and Anglophones regarding education, which is a key component of SES. Fifty percent of Francophones over the age of 65 have no certificate, diploma, or degree, compared to 41% of older Ontarians of the same age. This discrepancy is especially true in the North-Eastern region of Ontario, the region where a larger proportion of older adults did not complete high school. Across Ontario, the proportion of Francophones in the 55 to 64 age group with a university degree is nearly double that of those in the over 65 group (16% vs. 9%). However, as with those over 65, across Ontario Francophones aged 55 to 64 have a lower overall educational attainment than the general population of the same age (Office of Francophone Affairs, 2012).

Although the differences in the rate of unemployment between older (65+) Francophones and other Ontarians are slight, the differences regarding education and income are not; this was especially true for those in the North-Eastern region of the province. Like most linguistic or ethnic groups, the SES of Francophones between the ages of 55 and 64 is not as low as that of

those above 65. A difference does exist when compared to other Ontarians of the same age, however; Francophones above 55 have overall lower SES than the rest of Ontarians over 55.

According to Picard and Charland (1999), over 80% of Francophones over the age of 65 cannot read (in French or English), or can read but with great difficulty and limitations. It is argued that this statistic could be the result of the government banning French-language education when individuals in this age group were of school age. From 1912 to 1927, the teaching of the French language and the teaching of other subjects in French was illegal in the Province of Ontario, in accordance with Regulation 17. Although this ban only lasted 15 years, it has had a lasting effect on the education of Francophones in the province, especially for older Ontarians who were directly affected by this ban, and its consequences (Sylvestre, 2007; Wagner et al., 2002).

This education ban was not the only attempt at controlling the education of Francophones in the province. Once Regulation 17 was abolished, it was replaced by a law stating that to create a school where French was the primary language of instruction, the school board must first receive written permission from the Ministry of Education. It was not until 1961 that the province recognized the right of the school boards to establish French-language schools or classes, but still the decision to establish French schools was left in the hands of primarily English-language school boards and board commissioners. This led to several conflicts, such as that surrounding the creation of L'École secondaire Franco-Cité in Sturgeon Falls in 1971; the school board initially refused to establish a French-language high school despite 80% of the town's residents being Francophones (Tremblay, 1994).

It was not until the creation of the Canadian Charter of Rights and Freedoms, in 1981, that Francophones in Ontario were guaranteed the right to an education in French. The various

preceding laws, bills, policies, and practices had a long and lasting effect on the education of Francophones in Ontario. Bernard (1990) concludes that the reason for low literacy rates among older Francophones in Ontario "elles relevant de phénomènes historiques et culturels de non-valorisation liés à la socio-économie des francophones, mettant aussi en cause l'inaccessibilité à des services scolaires en français" [relates to historical and cultural phenomena of underappreciation linked to the socio-economics of Francophones, also calling into question the inaccessibility of school services in French] (Bernard, 1990, p. 88).

In addition to SES, attitudes and perceptions can also be an indication of marginality. A study done in the City of Greater Sudbury by the Social Planning Council and Laurentian University (Kauppi, Nangia, Gasparini, Faries, Emedi, & Garg, 2004) examined this. Although almost a third (29.9%) of the city's population are Francophones (Office of the Commissioner of Official Languages, 2007), the study found considerable resentment from the Anglophones in the sample towards Francophones in the city. Over half of the Anglophone participants indicated they believed that Francophones received preferential treatment in hiring practices and that Francophones expected preferential treatment and disagreed that Francophone issues in Sudbury were poorly understood. "Over a third of the Anglophones believed that Francophones exaggerated the extent of cultural inequality and discrimination and that Francophones are prejudiced against the majority Anglophone population" (Kauppi et al., 2004, p. *ii*). Data on the possible existence of an anti-Anglophone sentiment on the part of the Francophones in the survey were not collected. The authors found that "overall, anti-Francophone sentiment was somewhat stronger than that expressed against Aboriginal people and visible minorities" (Kauppi et al., 2004, p.30). The results of this study are troubling. Considering the city's large and well-established Francophone population, it is surprising that there are still strong prejudicial, anti-

Francophone sentiments; this supports the argument that Franco-Ontarians are a minority group, even in an area with a larger established population.

Although there is no research examining problem gambling among older Francophones in Ontario, the available research does highlight social biases, stereotypes, oppression, marginalization, and discrimination as factors that affect this population. All of these factors are highlighted in the social and environmental cluster in Tirachaimongkol and colleagues' (2010) model as factors associated with problem gambling in older adults. Given this plausible application of the pathways model to older Francophones, this model will be used here as a guide to help determine if this population might be vulnerable to problem gambling.

Addiction behaviours

It has also been established that certain behaviours and conditions are associated with gambling and problem gambling, notably addictive disorders. Nicotine dependence (e.g., Lorains et al., 2011; Weibe et al., 2004), alcohol use and dependence (e.g., Desai et al., 2001; Johansson et al., 2009; Levens et al., 2005; Lorains et al., 2011; Weibe et al., 2004), and drug abuse (e.g., Desai et al., 2001; Johansson et al., 2009; Lorains et al., 2011) have all been associated with higher rates of gambling and problem gambling. Although no information is known about the relationship between these comorbid conditions and gambling among older Francophones in Ontario specifically, certain information about these conditions is known.

In Ontario, the prevalence rates of daily smoking are higher for Francophones (23.3%) when compared to Anglophones (18.2%; Statistics Canada, 2005), and compared to the current provincial average (18.1%; Statistics Canada 2015). Of the members of the Francophone population of Ontario aged 65 and over, approximately 14% smoke, in comparison to 11% of

adults over 65 in the rest of the province (Picard & Hébert, 1999). With the use of the Ontario Health Survey, DeWit and Bénéteau (1999a) point out that not only are Francophones in Ontario (especially older Francophones) more likely to smoke, they also consume more tobacco when compared with Anglophones in Ontario. With the same data set, DeWit and Bénéteau (1999b) found that Francophones are more likely to consume alcohol and are more at risk of developing alcohol-related problems. These alcohol-related problems were more prevalent for older Francophones (over 55) additionally there were also regional differences where those in central/Southwestern regions of the province were at greater risk for high alcohol consumption and alcohol-related problems (in comparison to those from Northern and Eastern regions of Ontario). This was explained by the financial differences between the regions and the fact that those in central/Southwestern regions might have more disposable income to purchase alcohol. This explanation is plausible, but another hypothesis might better explain these differences. Although they examined a different population and variables, Thériault and Stones (2009) found that among older adults in a home-care setting, Francophones living in communities where they were in a minority (e.g., Central/Southwestern regions of Ontario) were at greater risk for depression than older Francophones living in communities where they represented a larger proportion. Cairney and Krause (2005) stated that "non-English-speaking Canadians are at greater risk of marginalization and exclusion and therefore also at greater risk for depression and/or distress." This hypothesis might better explain the aforementioned findings.

Mental health

Poor psychological health (e.g., depression and anxiety) and lower perceived physical health have also been associated with gambling and problem gambling (e.g., Erikson et al., 2005;

Johansson et al., 2009; Vander Bilt et al., 2004). As mentioned by Thériault and Stones (2009), older Francophones in home care are more likely to be at risk for depression if residing in a region where they represent a smaller proportion of the population. As Cairney and Krause (2005) suggested, non-English speakers might also be at greater risk for psychological difficulties associated with aging, such as depression and other forms of distress. Specifically, using data from the National Population Health Survey of 1994–95, Cairney and Krause found that older French Canadians reported significantly more symptoms of psychological distress and depression in comparison to their English counterparts. Psychological distress was assessed by measures of depression, nervousness, anxiousness, hopelessness, and worthlessness. According to the researchers, the lower levels of SES in French-Canadians do have an influence but "alone do not account for the higher rates of distress in this group." French-Canadians also reported having lower levels of social support. This could, according to researchers, represent the marginalization of this cultural-linguistic group by the wider society. The authors postulated that marginalization might be responsible for the finding indicating that French-Canadians have higher levels of stress. However, they did not find any correlations with their stress variable and being in a marginalized situation. Thus "clearly, some other unmeasured aspect of French Canadian experience serves to place members of this cultural group at risk" (Cairney & Krause, 2005, p. 827).

Streiner, Cairney, and Veldhuizen (2006) found very similar results when examining the epidemiology of psychological problems in the elderly population in Canada. They studied data regarding mental health and well-being from the Canadian Community Health Survey. This survey evaluated five psychiatric/psychological disorders: major depression, bipolar disorder, social phobia, agoraphobia, and panic disorder. Overall, the findings for older adults were

positive: the prevalence of anxiety, mood, and any psychiatric disorders decreased in a linear fashion between the ages of 55 and 75. However, the overall lifetime prevalence for mood and psychiatric disorders was found to be higher for Francophones than for Anglophones. The later study did not, however, take SES into account.

With the use of the same data set (the Canadian Community Health Survey), Clark, Colantonio, Rhodes, and Escobar (2007) examined ethnic differences in the pathways to suicidality within a social stress framework. It was found that Francophone whites (language used by the authors of this study to describe "Canadian-born whites, French only or French bilingual, had French as the first language learnt and identified French as their ethnic group") and Aboriginal peoples of Canada were more likely to report suicidality, compared to Anglophones and visible minorities. Disadvantages in both education and income were strongly associated with the high risk for suicidality in Francophone whites. It was also found that for Francophones, a lower sense of community belonging was also associated with a higher risk of suicidality. These findings are worrisome, considering the previous research about SES among Francophones in Ontario, especially those who are older, and the increased minority status of Francophones outside of Québec.

It is noteworthy that the above-mentioned studies examined Francophones at a national level. Because the vast majority of Francophones in Canada live within the same province, Québec, the findings of surveys limited to Francophones living in Québec might not necessarily represent Francophones outside this province. Although the available literature examines Francophones in Canada, considering the minority status of Francophones in Ontario, the general findings regarding the psychological well-being of Francophones in Canada can likely be

specifically applied to Ontario (Seyanian, Atuel, & Crano., 2008); however, the scarceness of reliable scientific literature prevents this definite conclusion.

When it comes to mental health in Ontario, the differences between Francophones and the rest of Ontarians are not as clear. There are few systematic studies that examine the mental health of Francophones in Ontario. Using data from the Canadian Community Health Survey (2001), the DRSFO (Picard & Allaire, 2005) reported that Francophones tended to consult a mental health professional more frequently than Anglophones (9.3% vs. 8.5%); however, this variance was not found to be statistically significant. This report also found that there was no significant difference between levels of self-reported depression among Francophones (4%) and the rest of Ontarians (5%).

Bouchard et al. (2006) made brief mention in their analysis of data from the National Population Health Survey that showed that Francophones in Ontario on average had higher levels of stress in comparison to the rest of the population. The exact statistics and their significance were not included in the publication.

Cairney and Krause (2005) hypothesized that marginalization could be the reason for higher distress among Francophones. With data from the Canadian Community Health Survey (2001), the DRSFO (Picard and Allaire, 2005) found that Francophones in Ontario were more likely to state that they had a weak sense of belonging within their community of residence, and that this was especially true for Francophones over the age of 65. Twenty-five percent of Francophones in Ontario between the ages of 65 and 74 stated that they had a high sense of belonging, in comparison to 26.3% of Anglophones. This difference, although statistically significant, is modest. Nevertheless the discrepancy was larger when the researchers examined

Francophones over the age of 75, with 26.8% of Francophones reporting a high sense of belonging, versus 29.7% of Anglophones.

When it comes to the mental health of Francophones, few studies have provided significant information. It has been documented that French-Canadians are at greater risk of psychological distress, yet very little is actually known at a provincial level. For the most part, these studies present very modest differences and do not provide a clear indication of the relative mental health of older Francophones in Ontario. Since these studies do not provide a clear picture of the mental health of Francophones, this issue needs to be further examined.

Conclusion

Research examining gambling among Francophones in Ontario is non-existent. Additionally, most of the research examining gambling in older adults is atheoretical. Tirachaimongkol and colleagues (2010) are some of the few to have proposed a theoretical framework. The pathways model, with its three main clusters of factors associated with problem gambling in older adults, is useful in that it highlights social, environmental, personal, and behavioural factors. Like most of the literature about gambling in older adults, however, this model concentrates on the pathological aspects of gambling in this age population. It also does not directly explain the relationship between minority groups and problem gambling risk in older adults. The gambling literature has largely ignored both older adults and minority adults, Francophone or not (e.g. Munro et al., 2003; Wu & Wortman, 2009), and thus there are currently no theoretical models to examine this relationship.

Even though the Tirachaimongkol model includes most of the existing gambling research, it does not include several aspects of gambling in older adults. Like most research, this

model focuses on problem gambling. Since most older adults do not have a gambling problem, any and all theoretical models need to account for both personal motivations for gambling and gambling as a recreation activity. For these reasons, it is important to examine gambling in a wide lens.

Minorities, especially older minorities, tend to gamble more frequently and to be at a higher risk for developing a gambling problem that non-minority populations (e.g., Kim, 2011; Scull & Woolcock, 2007; Wardman et al., 2001; Welt et al., 2001; Volberg, 1995). Low SES, alcohol use, substance use, depression, and difficulties with acculturation are unfortunately common in minority groups, and all are associated with gambling issues (e.g., Alegría et al., 2009; Currie et al., 2012; Dion et al., 2010; Ellenbogen et al., 2007). There are over half a million Francophones in Ontario, and 75,000 are over the age of 65 (Statistics Canada, 2008), yet nothing is known about gambling in this population.

In order to gain a complete picture of gambling and problem gambling in minority older adults, it is essential to consider both the potential negative effects and the potential benefits of gambling on the health and well-being of older Francophones in Ontario. In addition to being the first to examine gambling in this group, the studies in this dissertation will also help in assessing the relevance of culture and language to gambling and problem gambling in Ontario. The first study aims to construct a demographic, social, and intergenerational family profile of gambling in older Francophones from North-Eastern Ontario. This will provide invaluable insight into the gambling attitudes, behaviours, covariates, and risks among this population. This study may also have practical implications. Elucidating the gambling behaviours, attitudes, comorbidities, and the factors related to and protecting against problem gambling, is important and useful to local organizations seeking to make the best use of the resources available in developing and

implementing programs that help with problem gambling. Additionally, this study will hopefully generate interest, and lead to additional larger-scale research on this topic.

The second study in this dissertation aims to use the pathways model proposed by Tirachaimongkol and colleagues (2010). This pathways model encompasses most of the available literature on problem gambling in older adults and provides a good framework to build upon. Considering the plausible application of this model to older Francophones, it is important to incorporate this model to better understand problem gambling and problem gambling risk among this population. Doing so in this research will also help to elaborate and expand on the model, with respect to research on gambling among older minority adults.

Study 1:

A demographic, social, and intergenerational family profile of gambling in older Francophones and Problem Gambling Risk Comparison with Anglophone Samples

Objectives

Since this is the first study to examine gambling among older Francophones in Ontario, its primary purpose was to construct a demographic, social, and intergenerational family profile of gambling in this population. This profile included leisure activities, problem gambling risk, comorbidities associated with gambling, and family warmth. Additionally, this profile included the gambling behaviours and attitudes of those in the sample. The inclusion of these gambling dimensions helped provide a broader understanding of gambling in this population. Lastly, this profile was used to examine potential problem gambling risk and/or protective factors that might be unique to this population. Previous literature does suggest that individuals who belong to a minority population are at greater risk of physical and mental health problems and social disparities (e.g., Alegría et al., 2009; Dion et al., 2010), and thus are at greater risk of problem gambling (e.g., Kim, 2011; Scull & Woolcock, 2007; Tirachaimongkol et al., 2010; Wardman et al., 2001; Welt et al., 2001; Volberg, 1995). To examine whether Francophones are in fact at greater risk of problem gambling, the profile of the Francophone population was compared to a similar profile (same measures and age group) of older Anglophones in Ontario that has been constructed by Norris & Tindale (2006; Tindale & Norris, 2012).

Research Questions and Hypotheses

Bearing in mind the objectives of this study, and since it is the first to examine such a topic in this population, the following hypothesis can be postulated and the following research question can be asked.

Hypothesis 1: Considering the aforementioned literature, it can be postulated that the older Francophones in this sample will demonstrate higher rates of problem gambling risk (as measured by the CPGI and the Windsor Screen) when compared to a similar sample of Anglophone older adults, collected by Norris & Tindale (2006; Tindale & Norris, 2012).

Research Question 1: What is the gambling, demographic, social, and intergenerational family profile — including gambling attitudes, activities, frequency (of the participant and their family members) and behaviours, problem gambling risk, socio-demographic characteristics, probable comorbidities such as depression and alcohol misuse, and family warmth — of the older Francophone Ontarian sample?

Methodology

Participants

Sample from Tindale and Norris (2012)

One of the objectives of this study was to compare the Francophone sample that was recruited with a similar sample of Anglophone adults from Ontario. As part of a much larger gambling study, Tindale and Norris (2012) recruited 795 adults from Ontario. Of these adults, about half, 377, were over the age of 56. Since one of the goals of this study was to compare the Francophone group with a group of older Anglophone Ontarians, only the 270 older adults born

in North America were examined. Due to the categorical nature of the age variable that was collected in this study, the mean or the maximum age of this sample cannot be calculated. The majority of these older adults were women (65.9%), and most were married and living with a spouse (63.7%, next to widowed at 13.3%), had between 1 and 3 children (65.6%, next to more than 3 at 20%), and had more than 3 grandchildren (37.4%, next to between 1 and 3 at 33.0%). Only 17.4% of the sample had an income of less than $29,000 a year; the distribution was fairly equal across the other income categories between $30,000 and $70,000 (see Table 1).

Few individuals in the sample gambled every week (27.1%), with most of those who did so buying lottery tickets (25.6%). However, the distribution of gambling frequency was fairly equal, where about a quarter of the sample rarely or never gambled, a quarter gambled once a year, a quarter gambled at least once a month, and a quarter gambled at least once a week. As expected, the majority of the sample was not found to be at risk of problem gambling. Using the CPGI, 7.4% of the sample were found to be low-risk gamblers, 5.2%, were moderate-risk gamblers, and 2.6% were problem gamblers (see Table 1). However, using the Windsor Screen, a significantly larger proportion (21.9%) of the sample was found to be at risk for problem gambling when compared to the CPGI.

Recruitment for this sample was done in 2006–07, and was accomplished by distributing posters, flyers, and surveys at community centers, recreation centres, seniors' associations, clubs, and hospitals in the Waterloo Region and Wellington County. Participants were also recruited via online and print ads in seniors' association newsletters. All participants were directed to the www.familygambling.ca website to complete the survey online. Snowball sampling was also used to increase recruitment. This survey was in English, and there was no active outreach to the

Francophone community in Southwestern Ontario. Since language spoken was not asked, it is possible that some Francophones participated in the study.

Sample from Norris & Tindale (2006)

The 2012 Tindale & Norris sample was recruited solely online, and that may have deterred some older adults. As well, this sample was recruited from the Waterloo Region and Wellington County, geographically distinct from North-Eastern Ontario, where the Francophone sample was recruited. Considering this, an additional sample was used to make the comparison with the current Francophone sample. Norris and Tindale (2006) recruited a representative sample of 2,292 adults from Ontario using hand distributed pen and paper surveys. Recruitment of this sample was done in 2004–05, and was accomplished with the help of the United Senior Citizens of Ontario (USCO). Of the total sample, 222 adults were recruited from the Algoma district in North-Eastern Ontario. The Algoma sub-sample was used in this and the subsequent study in comparisons with the Francophone sample, due to their geographical similarity.

Again, due to the categorical nature of some variables collected in this Anglophone sample, we cannot determine the mean or the maximum age of this sample. We do know that the majority of these older adults from Ontario were women (57.7%), most of those in the sample were married and living with a spouse (62.2%, next to widowed at 19.4%), had between 1 and 3 children (51.4%, next to more than 3 at 33.3%), and had more than 3 grandchildren (40.4%, next to between 1 and 3 at 37.8%). Only 21.2% of the sample had an income of less than $29,000 a year, and the distribution was fairly equal in the other income categories between $30,000 and $70,000 (see Table 1).

Table 1. Sociodemographic characteristics and gambling risk profile of the Anglophones samples

	Tindale & Norris (2012)		Norris & Tindale (2006)	
	N	**%**	**N**	**%**
Age				
55–59	80	29.6	35	15.8
60–64	61	22.6	55	24.8
65–69	44	16.3	33	14.9
70–74	29	10.7	49	22.1
over 75	56	20.7	50	22.5
Gender				
Male	80	29.6	88	39.6
Female	178	65.9	128	57.7
Marital Status				
Married or common law	172	63.7	138	62.2
Single	23	8.5	17	7.7
Divorced or separated	75	27.7	23	10.4
Widowed	0	0	43	19.4
Number of Children				
0	38	14.1	33	14.9
1–3	177	65.6	114	51.4
More than 3	54	20.0	74	33.3
Number of Grandchildren	79	29.3	47	21.2
0	89	33.0	84	37.8
1–3	101	37.4	89	40.4
More than 3				
Income				
Less than $29,000	47	17.4	56	21.2
$30,000–$59,000	60	22.2	70	31.5
$60,000–$89,000	67	24.8	32	16.8
More than $90,000	71	26.3	32	16.8
Windsor Screen (16-item scale)				
Low Risk (0–2)	127	47.0		
Risk (3–16)	59	21.9		
Windsor Screen (9-item scale)				
Low Risk (0–2)	136	50.4	137	67.2
Risk (3–16)	51	18.9	47	23.1
Problem Gambling Severity				
Index	162	60.0	153	78.1
No Risk (0)	20	7.4	27	13.8
Some Risk (1–2)	14	5.2	12	6.1
Moderate Risk (3–7)	7	2.6	4	2.0
High Risk (8+)				
	Total N=270		Total N=222	

Francophone sample (2014) sample justification

For this study a sample of 181 older Francophone Ontarian adults was recruited. As detailed by Mody and colleagues (2009), the recruitment of older adults can be very difficult and fraught with barriers in comparison to younger populations, and these barriers are especially prevalent among minority older adult populations. Considering this, 150 participants were sought, a number that would yield almost 98% power for the analyses planned in this study (G*Power, as cited by Faul, Erdfelder, Lang, & Buchner, 2007).

The participants in this study were Francophones (speaking French as their primary language) from North-Eastern Ontario where there are a large number and proportion of Francophones compared to other areas of Ontario (127,265, representing 23.4% of the region's population; Office of Francophone Affairs, 2012). This larger population/proportion facilitated the recruitment of participants. However, despite a larger population, Francophones in the North East, like those in the rest of the province, still deal with troubles related to marginalization, such as assimilation, income inequality, unemployment, and education barriers (Office of the Commissioner of Official Languages, 2007). Francophones in this area are still faced with anti-Francophone sentiments from the majority Anglophone population (Kauppi et al., 2004).

As noted above, Francophones in Ontario are not a homogeneous population. Breton (1994) and Cardinal (1994) argue that one cannot compare minority Francophones from one region to another. The situation of Francophones in Alberta is different from the situation of Francophones in Manitoba, and that of those in Toronto is quite different from that of those in North-Eastern or Eastern Ontario. Ten percent of Francophones in Ontario are from a visible minority, although this proportion varies tremendously depending on the region and the age group.

Recruitment

Several recruitment strategies were used to recruit the 181 participants in this sample. The strategies for the sampling of the participants could be considered to have used convenience, purposeful and snowball techniques. A specific community, North-Eastern Ontario, was targeted for its convenience and proximity for the researcher. This did save time and money, but also since this is the first gambling study targeting this community, proximity was essential in gathering the sample (Creswell, 2013). The sample was also collected using a purposeful sampling technique, since specific individuals, sites, and community groups were targeted in the recruitment (Creswell, 2013). These specific networks were targeted for their roles and outreach in the communities. Additionally, these targeted individuals aided in the recruitment, and those targeted by them did the same (Goodman, 1961). This type of sampling, snowball sampling, aided in acquiring as many individuals as possible in the sample. Considering these sampling methods this was not intended as a representative sample of the Francophone population at large, as recruiting methods ensured that participants were more likely to be those who had active ties in the Francophone community. This project, and recruitment for this study received ethics approval by the Research Ethics Board of Wilfrid Laurier University (REB # 3728).

Since this was a study of a minority population of older adults, it was important to have the help of community partners (e.g., key individuals, organizations, and networks) to recruit participants. This strategy was highly effective for Norris and Tindale when they partnered with the United Senior Citizens of Ontario in their 2006 study of rural Ontario seniors. More recently, they were able to recruit 100 Métis participants through a carefully negotiated agreement to engage in a community-based participatory action or community-engaged research project with

the Métis Nation of Ontario (Tindale & Norris, 2012; see also Israel, Schulz, Parker, & Becker, 1998).

For this study, various individuals from the North-Eastern Ontario Francophone community, including individuals associated with Université Laurentienne-Laurentian University, Collège Boréal, two Francophone school boards in the region, and Le Centre Victoria pour Femme, volunteered to distribute the questionnaire to individuals within their networks. The Association canadienne-française de l'Ontario du grand Sudbury [French-Canadian Association of Ontario in Greater Sudbury] also did the same within their network. Other individuals and organizations also helped with recruitment and distribution of the questionnaire.

In addition to the distribution of the questionnaire within various networks, several older adult (55+) community centres helped by distributing the questionnaire to their members. The Université du troisième âge de Sudbury, the Club Amical du Nouveau Sudbury, the Club d'Âge d'Or de La Vallée Inc., and the Club d'Âge d'Or de Sturgeon Falls are among the various older Francophone community centres that agreed to distribute the questionnaire to their membership. The help of these centres was imperative in recruiting the participants in this sample. Finally, flyers in community centres, organizations, and businesses and advertisements in the local French language newspaper, *Le Voyageur*, were employed.

In accordance to the goals and purposes of this research project, there were three inclusion/exclusion criteria. The participants in this study were: 1) at least 55 years of age, 2) Francophones (speaking French as their primary language) and 3) from North-Eastern Ontario (residing in the districts of: Nippissing, Sudbury/Manitoulin, Timiskaming, Algoma and Cochrane). The information of who was sought to participate in the study was included in all of the recruitment information. This information is also in the consent documents (appendix 1).

Considering the small size of the Francophone community in the region and the nature of the information that was gathered, several steps were taken to ensure the confidentiality of the participants. The various organizations and individuals who volunteered to help were simply sending out invitations and/or questionnaires and thus had no knowledge of which persons responded. The participants did not communicate with the community partners about the study; any and all questions were directed to the principal investigator. The invitations sent out to potential participants contained general information about the study and included details on how to participate.

Participants had the option to fill out the questionnaire either online or via paper and pencil. Those wishing to fill out the questionnaire via paper and pencil were sent the questionnaire with a stamped and addressed return envelope. In this way, the participants themselves mailed out the questionnaire in a sealed envelope to maintain confidentiality. The data derived from the online questionnaire responses were anonymous in nature since no identifying information was collected.

The data from the paper and pencil questionnaires and consent forms were de-identified by a Research Assistant (since the primary researcher, having grown up in Francophone North-Eastern Ontario, might have recognized the names of the participants on the consent forms). All data and consent forms were stored in locked file cabinets inside a locked research room on the Wilfrid Laurier campus. Confidentiality was also be ensured by assigning ID numbers to participants. Only ID numbers appeared on the research materials, and consent forms were stored separately from data sources to de-identify the information. Once the data were collected, the information from the paper questionnaire was entered into a digital format (.sav). The digital

information from both the paper and online questionnaires is kept on a password-protected and encrypted flash drive that is also kept in a locked research room on campus.

Participant information

Through the various recruitment techniques and strategies detailed above, 181 Francophones over the age of 55 were recruited for the study. Most of those who participated did so by filling out a pencil-and-paper questionnaire (n = 103) as opposed to completing the questionnaire online (n = 78). Since this study aimed to recruit individuals who were at least 55 years old, this is also the minimum age in this sample. The maximum age of this sample was 86 (M = 68.7, SD = 7.6). As is the case in most studies examining older adults, the majority of participants were women (59.7%), most in the sample were married and living with a spouse (74.0% - next to widowed at 10.5%), had between 1 and 3 children (66.3% - next to more than 3 at 18%) and had more than 3 grandchildren (42.5% - next to between 1 and 3 at 29.3.0%). Only 14.4% of the sample had an income of less than $20,000 a year; the largest proportion (36.5%) had an income between $30,000 and $59,000, with the distribution being equal across the other income categories between $60,000 and $90,000+ (17%) (see Table 2).

Table 2. Sociodemographic characteristics of the Francophone Sample (2014)

	N	%
Version		
Paper	103	56.9
Online	78	43.1
Age		
55–59	21	11.6
60–64	29	16.0
65–69	43	23.8
70–74	37	20.4
over 75	35	19.3
Mean = 68.67 (7.56)		
Gender		
Male	59	32.6
Female	108	59.7
Marital Status		
Married or common law	134	74.0
Single	6	3.3
Divorced or separated	8	4.4
Widowed	19	10.5
Number of Children		
0	13	7.2
1-3	120	66.3
More than 3	33	18.2
Mean = 2.63 (1.34)		
Number of Grandchildren		
0	35	19.3
1-3	53	29.3
More than 3	77	42.5
Mean = 3.66 (3.10)		
Income		
Less than $29,000	26	14.4
$30,000 - $59,000	66	36.5
$60,000 - $89,000	31	17.1
More than $90,000	32	17.7
Religious Affiliation		
Catholic	141	77.9
Anglican	1	0.6
No Affiliation	4	2.2
Primary Language		
French	179	98.8
English	1	.6
Michif	1	.6
Total N = 181		

In this sample, gambling was ranked at 14th (above vigorous sports, voyageur games, and snowmobiling), in a list of the most frequent recreational activities. Few individuals in the sample gambled every week (21%), with most buying lottery tickets (19.9%). The distribution was fairly equal across the categories of frequency, with about a quarter of the sample reporting that they rarely or never gambled and similar proportions reporting gambling once a year, at least once a month, and at least once a week (Table 3). As expected, the majority of the sample was found not to be at risk of problem gambling. The Windsor Screen found that 20.8% of the sample was at risk for problem gambling. However, the CPGI found that only 7.7% of the sample were low-risk gamblers and an additional 1.7% were moderate risk gamblers. None were found to be at high risk of problem gambling, indicating that, indeed, further analysis and discussion regarding problem gambling risk is worthwhile for this sample (see Table 4).

Table 3. Top 15 recreational activities in Francophone sample

	N	%
Visiting family	142	78.5
Eating at a restaurant	137	75.7
Reading	136	75.1
Moderate activities	130	71.8
Visiting friends	126	69.6
Volunteering	103	56.9
Theatrical performances	86	47.5
Going to the movies	83	45.9
Listening to French Music	60	33.1
Hobbies such as sewing/woodworking	58	32.0
Renting a movie	44	24.3
Listening to Non-French Music	43	23.8
Hunting/Fishing/Trapping	38	21.0
Gambling	**32**	**17.7**
Snowmobiling	19	10.5

Measures

In order to evaluate the above hypothesis and answer the aforementioned research questions, a culturally modified and translated version of the questionnaire by Norris and Tindale (2012) was used. To ensure the accuracy and cultural sensitivity of the questionnaire, the instrument was verified, both by an independent translator (MirTrans inc.) and a community partner. This instrument includes a wide variety of scales, items, and measures including:

The Guelph Family Gambling Items

The Guelph Family Gambling items (Norris & Tindale, 2003) include questions about demographics, as well as the gambling activities of the participants and their family members, including what games are played, with whom, and how often they participate in these gambling activities, as well as why they gamble and what, if any, gambling limitation techniques are used. The Guelph Family Gambling Items also include items meant to measure family solidarity (see Bengtson & Roberts, 1991). For the purpose of this study, a modified short form of the Guelph Family Gambling Items was used. An example of a question form this measure would be: "Why do you choose to gamble? Please check all that apply".

The Gambling Attitudes Scale (GAS)

The GAS (Kassinove, 1998) is a 59-item Likert-style scale that measures general attitudes about gambling and attitudes about specific gambling activities (casinos, horse racing, lotteries, and risk-taking). The 21 items pertaining to U.S. politics and policies were removed. The shortened version was found to have acceptable an alpha range for internal consistancy (for each of the various specific gambling activity scales) (alphas = .73 to .87) and to have acceptable internal consistency (alphas from .77 to .91) (see Norris & Tindale, 2006). More recently, in the study with members of the Métis Nation of Ontario, this scale had an acceptable internal

consistency (alphas from .83 to .87) (see Koorn, 2011). The GAS asks participants to rate from 'strongly agree' to 'strongly disagree' various statements about gambling like: "I gamble in casinos when the opportunity arises."

The Family of Origin Scales

This Family of Origin Scale (FOS) used here (Fine et al., 2000; Hovestadt, Anderson, Piercy, Cochran, & Fine, 1985) is a 15-item short form of the longer self-reporting measure of one's perception family warmth, closeness and positive affect by examining the emotional warmth, feelings, autonomy, and intimacy of one's family of origin. Family warmth as measured by the FOS was predictive of positive affect, lower social anxiety and lower loneliness. Indicating the more positive or nurturing individuals perceive their family of origin, the more likely they will report good psychosocial functioning (Fine et al., 2000).

The longer version has been used extensively and has demonstrated good reliability (e.g., Ryan et al., 1994). This shorter form has also been found to have good reliability (alpha = .86) (Norris & Tindale, 2006). Additionally this scale has been divided and modified to examine family warmth in both the family of origin (FOS-O; the family one grew up in) and the family of creation (FOS-C; the family one created). Both these modified scales were found to have good reliability (alphas= 0.90 and 86) (Norris & Tindale, 2006). The FOS has also been used to examine and compare perceptions of family warmth among and across various cultural and ethnic groups (e.g., Kane, 1998). An example of a question asked as part of the FOS is: "In my family, we encourage each other to develop friendships."

The Windsor Screen

The Windsor Screen (Frish, Fraser & Govoni, 2003) is a 16-item scale developed to identify older adults who might be at risk for problem gambling by asking binary yes-or-no

questions related to gambling. This scale has been found to have good consistency (alpha = .94) and reliability with the Problem Gambling Severity Index (PGSI) (Frish et al., 2003 [r = 0.89]; Tindale and Norris, 2006 [r = .58, alpha =.76]). Unfortunately, the 2006 sample from Norris and Tindale used a shorter version of this scale containing 9 items instead of the 16 items used in the other two more recent samples. For this reason, all comparisons with the sample from Norris and Tindale (2006) will be done with the reduced, 9-item version of the Windsor Screen. The division of the problem gambling scale categories is shown in Table 4. The Windsor Screen asks the participants to answer 'yes' or 'no' to statements with regard to the consequences of their gambling, like: "When you lose money gambling, do you return to try and win it back?"

The Problem Gambling Severity Index of the CPGI

The CPGI's Problem Gambling Severity Index (PGSI) (Ferris & Wynne, 2001) is a 9-item measure of the risk of problem gambling. It is a 4-point Likert scale–type measure that categorizes individuals into five gambling risk categories based on their summary scores: non gambler/no risk (0), low risk (1–2), moderate risk (3–7) and problem gambler (8+). The PGSI has been found to have good internal consistency (alpha = .84) and good test-retest reliability ($r = .78$, $p < .01$) (Ferris & Wynne, 2001). The distribution of participants across the problem gambling scale categories is shown in Table 4. The PGSI uses scale questions, from 'never' to 'almost always', such as: "Have you felt that you might have a problem with gambling?" to determine problem gambling risk.

Table 4. Problem Gambling Scale Categories

Measure Category	N	%
Windsor Screen - Problem Gambling Risk		
No Risk (0–2)	79	78.2
Risk (3–16)	22	21.8
PGSI - Canadian Problem Gambling Index		
No Risk (0)	113	86.9
Some Risk (1–2)	13	10.8
Moderate Risk (3–7)	3	2.3
High Problem Gambling Risk (8+)	0	0

The Center for Epidemiologic Studies Depression Scale (CES-D Scale)

The CES-D (Radloff, 1977) is a short self-report scale designed to measure depressive symptoms in a general population. The scale consists of 20 4-point Likert-type items describing the participants' moods during the previous week. The CES-D has been found to demonstrate acceptable internal consistency (alpha = .90) and validity against other depression measures such as the POMS Depression Subscale ($r = .80$, $p < .0001$) (Conerly, Baker, Dye, Douglas, & Zabora, 2002). The CES-D scale askes participants how frequently they have had a certain mood or emotion over the past week. For example: "I felt that everything I did was an effort."

The CAGE Alcohol Screen

The 4-item CAGE Alcohol Screen (Mayfield, McLeod, & Hall, 1974) scale is a short, simple screen for alcohol misuse; it is not a clinical diagnosis tool, but rather an index of suspicion that alcohol misuse might be present (Ewing, 1984). The binary yes-or-no responses result in a summary score ranging from 0 to 4. A score of 2 or more is considered to be cause for serious concern (Mayfeild, McLeod & Hall, 1974). In a meta-analysis Shields and Caruso (2004) found that the CAGE has good reliability (alpha = .74). The CAGE, is a 4 item 'yes' 'no' measure, asking questions like: "Have you ever felt you should cut down on your drinking?"

Psychometric Properties of the major scales

The above-listed measures were available to participants in both a paper and an online version to maximize the number of respondents and to simplify access and dissemination of the instrument (See appendences for the instrument and consent form). The psychometric properties of these major scales are found in Table 5.

Table 5. Psychometric Properties of the major scales

Scale (range)	Mean	SD	Range	N	Cronbach's α
PGSI – Canadian Problem Gambling Index (0–27)	0.23	0.82	0-7	130	.81
Windsor Screen – Problem Gambling Risk (0–16)	1.47	1.78	0-8	101	.73
CAGE – Alcohol Misuse (0–4)	.34	0.79	0-4	110	.74
CESD – Depression Scale (0–60)	10.76	6.58	0-52	76	.91
FOS-O – Family of Origin Scale – Family of Origin (15–75)	57.96	9.47	25-75	112	.88
FOS-O – Family of Origin Scale – Created Family (15–75)	60.42	7.71	34-75	129	.89
GAS General – Gambling Attitudes Scale General (9–54)	39.80	11.01	16-53	88	.89
GAS Casinos – Gambling Attitudes Scale Casinos (9–54)	30.15	10.96	9-35	97	.89
GAS Racing – Gambling Attitudes Scale Horse Racing (9–54)	39.59	9.74	14-54	95	.88
GAS Lotteries – Gambling Attitudes Scale Lotteries (9–54)	24.62	7.94	9-46	95	.81
GAS Risk – Gambling Attitudes Scale Risk Taking (2–12)	8.48	2.34	3-12	115	.63

Analysis

Testing the hypothesis required determining the differences in problem gambling risk, with both the PGSI and the Windsor Screen (the summed scales from Section G 1 to 16; 17 to 25 of the questionnaire), between the three samples. To accomplish this, two analyses were carried out. First a simple three-way analysis of variance was conducted on the problem gambling scores and the sample groups, then a chi-square test was done to examine the gambling risk categories as the dependent variables.

Once the hypothesis was tested the research question was examined. This required the creation of a profile of the Francophone sample. For this, a simple general analysis of the descriptive statistics (frequencies, percentages, means, etc.) was done on most of the variables (Sections A – demographic background, B – gambling activities of self and others, I, J, K, and L – various family experiences). In addition to this, a correlational analysis was done to understand the relationships between the various scale measures in the sample (Sections C and D – family warmth, E – The GAS, F – Problem gambling risk scales, G –The CES-D and H – The CAGE).

However, to gain a greater understanding as to how the Francophone sample differed from the other two on the key problem of gambling risk variables, further multivariate analyses were conducted. For example, to better understand the differences between the samples, a regression analysis predicting gambling risk status (the summed scales from Section G) was proposed. However, due to a lack of statistical significance and a very small proportion of problem gamblers in the Francophone sample, these models meant to determine whether the factors predicting problem gambling risk differed between the sample groups could not be done. These potential factors may include variables from: the demographic background (section A), the gambling behaviours and activities of the self and others (section B), various family experiences

and dimensions (sections I, J, K, and L), and all of the standardized scales (sections C, D, E, G, and H).

Additionally, considering the nature of the hypotheses, and the number of individual analyses, there are higher chances of type 1 errors. To control for this a more conservative p value of significance, of .01, was used.

Results

A demographic, social, and intergenerational family profile of gambling in older Francophones

One of the primary purposes of this study was to construct a gambling profile of the sample of older Francophones from North-Eastern Ontario. A profile was developed including leisure activities, gambling attitudes and behaviours (of both the participants and their family members), problem gambling risk, comorbidities associated with gambling, and family warmth.

Most of the socio-demographic information of the Francophone sample collected for this study is presented in the methods section and in Table 2. In order to examine gambling within a larger view of recreational activities, Table 3 shows the top 15 recreational activities reported by the Francophone sample. It is important to note that with only 32 individuals reporting gambling as a recreational activity (17.7%) it ranked 14th as a recreational activity, just above snowmobiling.

Although gambling was not selected often as a recreational activity by respondents, it was still something that a portion of the participants engaged in. In a ranking of the gambling activities of those in the sample (Table 6), buying lottery tickets was the most popular form of gambling, with about 30% of those in the sample buying tickets at least once a month and about

20% buying them a few times a year. Buying lottery tickets was followed by the purchase of scratch tickets, with about 6% of the sample buying them monthly and 22% buying them a few times a year. At the other end of the spectrum was online gambling, with about 58% of Francophone participants saying that they never engaged in this activity.

Casino gambling was not seen as a regular and frequent gambling activity for this sample, with only 5% of individuals visiting casinos at least once per month. However, the majority of participants did visit casinos once or a few times in a year (54.7%). By far the most popular casino gambling activity was playing the slot machines, with about 70% of casino gamblers mentioning that this was their game of choice, followed by blackjack (5%) and keno, poker, and roulette, respectively, (2.2%). However, of those who visited casinos, most (93%) spent less than four hours, only 19% spent more than $100 during a visit, and most (92%) set a spending limit for themselves. Those who set a limit did not have a tendency to exceed this limit (57%). Other popular strategies to prevent overspending were to bring only a set amount of cash (61.6%), to exercise self-control (41.1%), and to avoid borrowing (26.5%).

Table 6. Frequency of gambling activities

	At least monthly % (n)	Few times per year % (n)	Few times in a lifetime % (n)	Never % (n)
Lottery	29.8 (54)	17.1 (31)	13.8 (25)	12.2 (22)
Scratch tickets	6.1 (11)	22.1 (40)	16.0 (29)	28.7 (52)
Bingo	4.4 (8)	4.4 (8)	21.0 (38)	44.8 (81)
Card games	4.4 (8)	29.8 (54)	32.6 (59)	6.1 (11)
Slot machines	3.3 (6)	12.2 (22)	33.1 (60)	24.9 (45)
Sports betting	1.7 (3)	2.8 (5)	6.6 (12)	57.5 (104)
Online gambling	1.1 (2)	0.0 (0)	1.1 (2)	70.2 (127)
Other casino games	0.6 (1)	4.4 (8)	14.4 (26)	51.4 (93)
Horse race betting	0.6 (1)	2.2 (4)	19.3 (35)	50.8 (92)

Cultural factors did not figure into the reasons for gambling; none (0.0%) of the participants mentioned that gambling was part of their Francophone culture, and only 2.8% mentioned that they gambled to participate with other Francophones. Only 3.3% mentioned that being a Francophone in Ontario had an influence on their gambling behaviours. The most prominent reason for gambling was for entertainment (42.5%). Other popular reasons for gambling were to support the community (36.5%), to win (32.0%) and to socialize (22.7%) (see Table 7). Geographic limitations also did not play a large role in influencing the gambling behaviours of this population, with only 10.5% mentioning that geography played a role in accessing gambling facilities (e.g., casinos, slot machines, horse racing tracks), additionally only 2.2% mentioned to have accessibility issues (for their special needs) that were not met by the gambling facilities.

Table 7. Gambling motivations for the Francophone sample

	N	%
Entertainment	77	42.5
To support community	66	36.5
To win	58	32.0
To Socialize	41	22.7
To pass the time	33	18.2
Try something new	20	11.0
Exciting games	16	8.8
Can afford to take risks	14	7.7
Boredom/Loneliness	7	3.9
For incentives	5	2.8
Exciting attractions	5	2.8
To participate with other Francophones	5	2.8
To forget problems	2	1.1
Part of Francophone culture	0	0.0

When asked with whom they gambled, participants indicated that gambling was a social activity with most indicating that they gambled with their spouses (36.5%) and Francophone

friends (30.9%). About a quarter of the sample gambled alone, and when combining family members, including spouses, 42% of participants mentioned that they gambled with a family member (Table 8).

Table 8. Gambling companions for the Francophone sample

	N	%
Spouse	66	36.5
Francophone Friends	56	30.9
Alone	44	24.3
Sibling	24	13.3
Children	15	8.5
Non-Francophone Friends	15	8.3
Cousins	7	3.9
Mother	6	3.3
Father	2	1.1
Aunt	2	1.1
Uncle	0	0.0

About a third of participants mentioned that they knew someone who had a gambling problem (32%), and only 6% of participants mentioned that they knew that this person was seeking support for this, with an additional 12% stating that they knew that this person was *not* getting help. Also, no participants indicated that gambling caused problems within the Francophone community of North-Eastern Ontario.

In addition to having been asked with whom they gambled, participants were also asked about the gambling behaviours of their family members. Most participants indicated that they had not participated in gambling activities with their families as children (58.6%) For the most part, participants indicated that either they did not know whether their family members gamble or that their family members did not gamble. Compared to other family members, siblings and fathers had the highest rates of gambling (Table 9).

Table 9. Gambling frequency of family members

	At least monthly % (n)	Few times per year % (n)	Few times in a lifetime % (n)	Never/Unknown % (n)
Father	9.7 (11)	7.0 (8)	11.5 (13)	44.8 (81)
Mother	5.5 (10)	11.9 (14)	9.3 (11)	46.0 (83)
Sibling	10.5 (11)	12.4 (13)	33.3 (35)	25.4 (46)
Uncle	1.7 (3)	1.7 (3)	4.5 (8)	43.1 (78)
Aunt	2.3 (4)	2.2 (4)	6.1 (11)	40.9 (74)
Cousin	2.8 (5)	2.8 (5)	8.9 (16)	34.4 (62)
Children (adult)	3.9 (7)	17.1 (18)	15.5 (28)	28.7 (52)
Friend(s)	2.8 (5)	8.3 (15)	16.0 (29)	24.3 (44)

Similar to the self-reports of the Francophone participants,, they reported that their family members principally gambled for entertainment (24.9%), followed by socialization (14.9%) and to win (14.9%). Unlike for the participants themselves, community support (9.9%) was not high in the list of reasons for gambling (Table 10). Few participants (n = 41) answered the question regarding the impact of their parents' gambling on them, but of those who answered, most viewed the gambling of their parents as something positive (32%) or neither positive nor negative (36%). Only two participants indicated that gambling had caused disputes within their families, and only one participant indicated that gambling had caused problems within their families.

Table 10. Gambling motivations for family members

	N	%
Entertainment	45	24.9
To support community	18	9.9
To win	27	14.9
To Socialize	27	14.9
To pass the time	19	10.5
Try something new	6	3.3
Exciting games	15	8.3
Can afford to take risks	8	4.4
Boredom/Loneliness	2	1.1
For incentives	7	6.1
Exciting attractions	7	6.1
To participate with other Francophones	1	0.6
To forget problems	1	0.6
Part of Francophone culture	2	1.1

Overall, a majority of participants completed the scales (see Table 9). With the exception of the gambling risk scales, participants' responses reflected the full range of the scales, indicating that none of the participants had a severe gambling problem. The scales used in this study also demonstrated fair-to-excellent reliability across the Francophone participants. The mean for the CAGE scale for alcohol misuse was well below the clinical cut-off of 2. Such a score indicates that, for the most part, alcohol misuse is not an issue in this sample. Even with a standard cut-off point of 2, as opposed to 1 as used by some (Dhalla & Kopec, 2007), only two participants (1.1%) demonstrated alcohol misuse. Similarly, the mean of the CES-D was well below the clinical depression cut-off of 16 (Lewinsohn, Seeley, Roberts, & Allen, 1997). In this sample only 8 participants (4.4%) were found to be over this cut-off, indicating that depression is not an issue for the vast majority of this sample. Further interpretation of the Family of Origin Scales and the Gambling Attitude Scales will be done in comparison with the Anglophone samples.

It was clear based on both problem gambling scales that most participants do not have a gambling problem, since the full range of the scale was not used, and the means were fairly low. The Problem Gambling Severity Index of the Canadian Problem Gambling Index divides individuals into four problem risk categories: "Non-Gambler/No Risk," "Some Risk," "Moderate Risk," and "High Risk" for problem gambling. Seventy-two percent of participants completed the CPGI (see Table 10), and of those who did fill out the CPGI or were considered non-gamblers, almost 87% were considered not at risk of problem gambling. Nearly 11% were considered to be at some risk, and only 2.3% were considered to be at moderate risk. However, no participants were in the high-risk category of the PGSI, indicating that by the measure of the PGSI, participants in the sample were overwhelmingly not at risk of problem gambling.

The Windsor Screen, developed to identify problem gambling risk in older adults, divides participants into two categories: "no risk" and "risk." Fewer participants in this sample (nearly 60%) filled out the items of this scale. Of those completing the scale, the vast majority were not at risk of problem gambling (78%), again indicating that few in this sample were at risk of gambling-related issues.

Problem Gambling Risk Comparison with Anglophone Samples

Another goal of this study was to compare gambling risk, attitudes and behaviours of the Francophone sample with two comparable Anglophone Ontarian samples. Considering the aforementioned literature on problem gambling risk and minority populations, it was postulated that the older Francophones in this sample would demonstrate higher rates of problem gambling risk (as measured by the CPGI and the Windsor Screen) when compared to similar samples of Anglophone older adults collected by Norris and Tindale (2006, Tindale & Norris, 2012). It is

important to note, in contrast to the rest of the study, there are few comparisons in this analysis, a p value of .05 will be used to denote statistical significance.

Table 11 demonstrates these comparisons. An analysis of variance (ANOVA) was used to compare the raw problem gambling risk scores. The ANOVA ($F[2,526] = 4.14$, $p = .016$) examining the score of the PGSI demonstrated a significant difference between the groups. The Francophone sample had a significantly lower score on the PGSI ($M = 0.23$, $SD = 0.82$) than the other two groups. The analysis of the Windsor Screen was slightly more complicated. The 2006 sample from Norris and Tindale used a shorter, 9-item version of the Windsor Screen, compared to the 16-item scale used in this study and in the 2012 sample from Tindale and Norris. For this reason, two analyses were done to compare this measure across the groups: the first was a t-test to compare the 16-item version of the scale between the Francophone sample and the 2012 Tindale and Norris sample, and the second was an ANOVA to compare the 9-item version of the Windsor Screen across all three samples. The results of the t-test ($t[285] = -2.11$, $p = 0.04$), indicate that there was a significant difference between the Francophone sample and the 2012 Anglophone sample, where again the Francophone sample had a significantly lower score ($M = 1.30$, $SD = 1.56$). However, when examining the 9-item version of this scale across all three samples, the ANOVA ($F[2,473] = 1.40$, $p = .25$) did not reveal a significant difference between the samples. Tukey post-hoc comparisons also failed to show a significant difference between the Francophone sample and the sample from Tindale and Norris's 2012 study, this was found with the 16-item version of this screen ($p = .23$), indicating that with regard to the Windsor Screen, the primary differences between the groups are likely found in the additional items used in the 16-item version. However, overall, the results of these analyses of variance demonstrated

support for the hypothesis that the Francophone sample exhibited a different level of problem gambling risk than the two other samples.

To compare the problem gambling risk categories, a chi-square test of goodness of fit was done (Table 11.). The χ^2 ([6] = 10.04, p =.12) for the PGSI failed to show a significant difference between the three groups. However, closer analysis indicated that there was a significant difference between the Francophone sample and the sample from Tindale and Norris (2012) (χ^2, [3] = 8.3, p =.04), where a greater proportion of those in the Francophone sample were in the no risk category (n = 133, 87%). But this difference was not quite significant between the Francophone sample and the 2006 sample from Norris and Tindale (χ^2, [3] = 6.4, p = .09).

A similar pattern was found when examining the problem gambling risk categories from the Windsor Screen. When examining the risk categories derived from the 16-item version, the chi-square test found that a significantly greater proportion of Francophones were in the no risk category when compared to the sample from Tindale and Norris (2012) (χ^2, [1] = 3.2, p = .048). This difference was not significant when the 9-item version of the Windsor Screen was compared across the 3 samples (χ^2, [2] = 6.4, p = .14). However, the analysis indicated that there was a significant difference between the Francophone sample and both the 2012 sample from Tindale and Norris (χ^2, [1] = 3.9, p =.048), and the 2006 sample (χ^2, [1] = 4.7, p = .03), where a greater proportion of those in the Francophone sample were in the no risk category (n = 88, 85%).

Table 11. Problem Gambling Risk Categories

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**Mean (SD)**	**N**	**Mean (SD)**	**N**	**Mean (SD)**	***F***	***df***	***p***
PGSI	130	0.23 (0.82)	203	1.08 (3.93)	196	0.72 (1.71)	4.14	526	0.016
Windsor Screen (16-Item)	101	1.47 (1.78)	186	2.16 (3.04)			t = -2.11	285	0.04
Windsor Screen (9-Item)	103	1.30 (1.56)	187	1.70 (2.17)	184	1.61 (1.90)	1.39	473	.250
Measures	**N**	**%**	**N**	**%**	**N**	**%**	***χ²***	***df***	***p***
PGSI									
No Risk (0)	113	86.9	162	79.8	153	78.1			
Some Risk (1–2)	13	10.8	20	9.9	27	13.8			
Mod. Risk (3–7)	3	2.3	14	6.9	12	6.1	10.04	6	.123
High Risk (8+)	0	0	7	3.4	4	2.0			
Windsor Screen (16-Item)									
No Risk (0–2)	79	78.2	127	68.3			3.19	1	0.48
Risk (3–16)	22	21.8	59	31.7					
Windsor Screen (9-Item)									
No Risk (0–2)	88	85.4	136	72.7	137	74.5	6.39	2	0.14
Risk (3–16)	15	14.6	51	27.3	47	25.5			

Differences in Gambling Activities, Behaviours, and Motivations

To provide context for the Franco-Ontarian sample, comparisons were made to similar older Ontarian samples (from Norris & Tindale, 2006; Tindale & Norris, 2012). This may help explain why the Francophone sample can be considered unique.

Because the information regarding gambling activities and frequency was gathered differently in the three samples, a direct comparison between the studies was challenging. The data from the Francophone sample and the 2012 sample from Tindale and Norris were collected from an identical question, asking participants to rank, on a 7-point scale, the frequency with which they participated in various gambling activities, from never to at least every week. However, in the survey from Norris and Tindale's 2006 sample, participants were simply asked,

in a binary measure, "What sort of gambling do you participate in?" This difference in the operationalization of the variable makes a comparison with this sample truly difficult. For this reason, the comparison of gambling activities and frequency across the samples was only done between the Francophone sample and the 2012 Tindale and Norris sample.

The variables of gambling frequency and type are ordinal in nature, so a chi-square analysis was done. An analysis of variance was also done to gain a better understanding of these differences. Table 12 presents the results of the χ^2 analyses. The analyses indicated that there were significant differences between the two samples in the frequency of two different gambling activities: playing the slot machines (χ^2, [6] = 17.0, p=.009) and betting on horse races (χ^2, [6] = 32.82, $p < .001$). Because there are seven categories in the scale measure, the χ^2 analyses do not generate the information needed to interpret the nature of these differences and so an analysis of variance was done by comparing the means of the 7-point scale. This analysis also determined that the differences in the means between the two groups regarding playing slot machines (t[382] = -3.20, $p < .001$) and for horse betting (t[375] = -4.74, $p < .001$) were significantly different, indicating that those in the Francophone sample had lower frequencies of slot machine use (M = 2.63, SD = 1.70 vs. M = 3.26, SD = 1.91) and horse betting (M = 1.60, SD = 1.11 vs. M = 2.24, SD = 1.40).

Table 12. Gambling frequencies and activities

Activity	Sample	Never	Once or twice in my life	Several times in my life	Maybe once a year	A few times a year	Monthly	At least every Week			
		%(N)	%(N)	%(N)	%(N)	%(N)	%(N)	%(N)	χ^2	*df*	*p*
Bingo											
	Francophone	60.0(81)	19.3(26)	5.2(7)	3.8(5)	5.9(8)	1.5(2)	4.4(6)	12.56	6	.051
	2012	60.9(145)	14.7(35)	14.3(35)	3.8(9)	3.4(8)	1.7(4)	1.3(3)			
Card Games											
	Francophone	8.3(11)	16.7(22)	16.7(22)	11.4(15)	40.9(54)	6.1(8)	0.0(0)	13.16	6	.041
	2012	13.8(34)	13.8(34)	15.0(37)	21.1(52)	32.1(79)	2.8(7)	1.2(3)			
Sports Bet											
	Francophone	83.9(104)	6.5(8)	4(3.2)	0.0(0)	4.0(5)	2.4(3)	0.0(0)	8.20	6	.224
	2012	79.0(181)	7.9(18)	5.7(13)	3.5(8)	2.6(6)	0.9(2)	0.4(1)			
Lotto Tickets											
	Francophone	16.7(22)	8.3(11)	2.3(3)	8.3(11)	23.5(31)	13.6(18)	27.3(36)	7.42	6	.284
	2012	15.3(39)	4.3(11)	7.8(20)	7.1(18)	23.9(61)	14.9(38)	26.7(68)			
Scratch Tick											
	Francophone	39.4(52)	9.8(13)	6.8(9)	5.3(7)	30.3(40)	3.0(4)	5.3(7)	6.06	6	.417
	2012	37.9(89)	9.4(22)	6.8(9)	5.3(7)	23.4(55)	8.5(20)	6.0(14)			
Slots											
	Francophone	33.8(45)	27.8(37)	7.5(10)	9.8(13)	16.5(22)	2.3(3)	2.3(3)	16.96	6	.009
	2012	25.9(65)	18.3(46)	12.0(30)	11.2(28)	17.1(43)	11.2(28)	4.4(11)			
Other Casino											
	Francophone	72.7(93)	12.5(16)	2.3(3)	5.5(7)	6.3(8)	0.8(1)	0.0(0)	4.63	6	.592
	2012	77.8(182)	13.7(32)	1.3(3)	3.4(8)	3.0(7)	0.4(1)	0.4(1)			
Online											
	Francophone	96.9(127)	1.5(2)	0.0(0)	0.0(0)	0.0(0)	0.0(0)	1.5(2)	5.42	6	.491
	2012	91.9(216)	3.0(7)	1.3(3)	0.4(1)	1.3(3)	0.4(1)	1.7(4)			
Horse Bet											
	Francophone	69.7(92)	15.9(21)	6.1(8)	4.5(6)	3.0(4)	0.0(0)	0.8(1)	32.82	6	.000
	2012	39.6(97)	27.3(67)	13.9(34)	9.8(24)	8.2(20)	0.8(2)	0.4(1)			

In addition to the frequency of various gambling activities, other questions about the gambling behaviours of the participants were asked, and this time the nature of the variables lend themselves to a comparison across all three samples. Table 13 presents these differences. The chi-square analysis of the casino gambling behaviours, for the most part, failed to show a significant difference between the three groups. The 2012 sample from Tindale & Norris visited the casino more frequently than the other samples (χ^2, [2] = 26.79, $p < .001$). However, when examining the differences between the Anglophone and Francophone samples regarding money

and time spent at casinos, including whether participants exceeded their gambling budgets, a pattern emerges, where both samples from Tindale and Norris (2012; Norris & Tindale, 2006) are very similar to the Francophone sample. For this reason, an additional χ^2 analysis was done to compare the Francophone sample with only one of the two samples. However, this analysis failed to find a statistically significant difference between the Francophone sample and the 2012 Anglophone sample.

There were, however, some differences in how the participants prevented themselves from overspending at a casino. Those in the Francophone sample were the most likely to bring a set amount of cash (χ^2, [2] = 15.16, $p < .001$) and were also less likely to rely on self-control (χ^2, [2] = 33.90, $p < .001$). There was a marginal differences where Francophones tended to avoid borrowing (χ^2, [2] = 12.42, $p = .014$). Those in the Francophone study reported that they did not know if they had friends that gambled (an item not included in the survey from Norris and Tindale's 2006 study) (χ^2, [2] = 186.78, $p < .001$). Those in the Francophone sample were less likely to report that gambling allowed for new activities (χ^2, [2] = 16.03, $p = .003$) and were marginally less likely to report knowing a problem gambler (χ^2, [2] = 8.87, $p = .012$).

Table 13. Casino Gambling behaviours

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**%**	**N**	**%**	**N**	**%**	χ^2	***df***	***p***
Casino visits									
At least once a month	9	6.4	53	22.3	18	8.3	26.78	2	.000
Money spent									
Over 100$	21	19.4	21	12.2	58	13.5	4.48	2	.106
Time spent Gambling									
More than 4hrs	3	2.7	12	6.9	12	8.0	3.24	2	.198
Exceeding budget	45	41.3	86	48.9	71	47.7	1.67	2	.435
Avoid over gambling									
Set Spending limit	110	94.0	167	97.7	139	93.3	3.81	2	.149
Leave cards at home	20	13.5	26	15.4	23	15.4	2.43	2	.656
Bring set cash	93	62.8	88	52.1	60	40.3	15.16	2	.001
Avoid borrowing	40	27.0	35	20.7	18	12.1	12.42	2	.014
Self-Control	62	41.9	119	70.4	104	69.8	33.90	2	.000
Time limit	20	13.5							
Receive help	2	1.4							
Have Friends who Gamble									
Yes	35	26.9	200	74.1	189	88.3	186.78	4	.000
Don't know	61	46.9	27	10.0	NA	NA			
Interface w/ other activity	2	1.5	3	2.0	3	1.4	.187	2	.911
Allowing for new activities	28	22.0	48	36.9	51	26.0	16.03	2	.003
Knows a problem gambler	50	32.1	80	31.5	94	43.7	8.87	2	.012

In addition to identifying differences in gambling behaviours, comparisons were done of the gambling motivations of those in the respective samples. Table 14 presents the results of the χ^2 analyses of gambling motivations. When we examine these differences, a pattern emerges: most of the differences are between the 2012 sample from Tindale and Norris and the other two samples. Those from that sample were more likely to report gambling for: entertainment (χ^2, [2] = 20.53, $p < .001$), to socialize (χ^2, [2] = 25.35, $p < .001$), for the incentives offered by the casinos (χ^2, [2] = 6.50, $p < .039$), for the excitement of the games (χ^2, [2] = 16.74, $p < .001$), for the excitement of the attractions at the casinos (χ^2, [2] = 14.03, $p < .001$), and to try something new (χ^2, [2] = 33.40, $p < .001$). Those in the 2012 sample from Tindale and Norris were also the least likely to gamble to win (χ^2, (2) = 15.62, $p < .001$) when compared to the two other groups. The only motivation where the Francophone sample was distinct from the other two samples was

gambling to pass the time, which this sample was more likely to report (χ^2, (2) = 14.36, p < .001). These results indicate that, although most gambling motivations vary between the three samples, those from the 2012 Tindale and Norris sample are the most distinct compared to the other two samples.

Table 14. Gambling motivations

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**%**	**N**	**%**	**N**	**%**	***χ²***	***df***	***p***
Entertainment	77	55.0	163	74.8	126	56.8	20.53	2	.000
To support community	66	47.1	99	45.4	NA	NA	.103	1	.749
To win	58	41.4	98	45.0	61	27.5	15.62	2	.000
To socialize	41	29.3	100	45.9	53	23.9	25.35	2	.000
To pass the time	33	23.6	35	16.1	20	9.0	14.36	2	.001
Try something new	20	14.3	50	22.9	9	4.1	33.40	2	.000
Exciting games	16	11.4	52	23.9	24	10.8	16.74	2	.000
Can afford to take risks	14	10.0	28	12.8	18	8.1	2.68	2	.261
Boredom/loneliness	7	5.0	17	7.8	5.4	12	1.54	2	.462
For incentives	5	3.6	24	11.0	17	7.7	6.50	2	.039
Exciting attractions	5	3.6	23	10.6	6	2.7	14.03	2	.001
To participate with other Francophones	5	3.6	NA	NA	NA	NA	NA	NA	NA
To forget problems	2	1.4	10	4.6	4	1.8	4.40	2	.111
Part of Francophone culture	0	0.0	NA	NA	NA	NA	NA	NA	NA

Other Differences Between the Samples

The principal hypothesis of this study predicted those in the older Francophone sample would be at higher risk of problem gambling when compared to the non-minority samples. However, not only was this hypothesis not supported, the opposite tended to be true. Because of this, the last research question in this study is focused not on gambling and family relationships, but on a general comparison between the samples regarding the demographic and recreation information. The purpose of this comparison is not only to gain a better understanding of how the two samples from Norris and Tindale resemble or differ from the Francophone sample for

this study, but also to help understand why problem gambling risk was so low in this sample. In order to answer this question, a chi-square analysis was done on the various demographic variables (Table 15).

This analysis revealed that there was no significant difference between the samples regarding gender distribution (χ^2, [2] = 4.87, p =.088). There was, on the other hand, a significant difference with regard to age distribution between the samples (χ^2, [10] = 45024, p < .001). However, because age was collected as an ordinal variable in both of the samples from Norris and Tindale (2006; Tindale & Norris, 2012), it is thus difficult to determine whether there was a significant difference in the ages of the samples. For example, the Francophone sample had the lowest proportion of participants in both the youngest and the oldest age categories compared to the two other samples. An analysis of variance was completed with the five categories of the ordinal age variables. It found that those in the Francophone sample were slightly older than those in the other two samples, with those in the 2012 Tindale and Norris sample being the youngest (F[2,656] = 5.67, p =.004).

More participants in the Francophone sample than in the other two groups reported being married (χ^2, (6) = 23.22, p =.001). There was, however, no significant difference between the groups regarding the number of children and grandchildren participants had. Again, in the Norris and Tindale samples, this information was collected in an ordinal/categorical manner, and thus a direct comparison of this data is not possible. Although not statistically significant, the trending results indicate that those in the Francophone sample reported having a greater number of children and a slightly higher number of grandchildren. There was also a significant difference between the samples with regard to the income of the participants (χ^2, (6) = 31.24, p < .001). Again due to the ordinal/categorical nature of this variable, it is difficult to interpret this

difference. The 2012 Tindale and Norris sample had the largest number of participants reporting an income higher than $60,000, whereas the 2006 sample and the Francophone sample had the greatest number of participants reported an income lower than $29,000.

Table 15. Differences in demographic variables

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**%**	**N**	**%**	**N**	**%**	χ^2	***df***	***p***
Age									
55–59	21	11.6	80	29.6	35	15.8			
60–64	29	16.0	61	22.6	55	24.8			
65–69	43	23.8	44	16.3	33	14.9	45.24	10	.000
70–74	37	20.4	29	10.7	49	22.1			
over 75	35	19.3	56	20.7	50	22.5			
Gender									
Male	59	32.6	80	29.6	88	39.6	4.87	2	.088
Female	108	59.7	178	65.9	128	57.7			
Marital Status									
Married or common law	134	74.0	172	63.7	138	62.2			
Single	6	3.3	23	8.5	17	7.7	23.22	6	.001
Divorced or separated	8	4.4	75	27.7	23	10.4			
Widowed	19	10.5	0	0	43	19.4			
Number of Children									
0	13	7.2	38	14.1	33	14.9			
1–3	120	66.3	177	65.6	114	51.4	4.11	2	.128
More than 3	33	18.2	54	20.0	74	33.3			
Children									
Yes	153	92.2	231	85.9	188	85.1	4.99	2	0.82
No	13	7.8	38	14.4	33	14.9			
Number of Grandchildren									
0	35	19.3	79	29.3	47	21.2			
1–3	53	29.3	89	33.0	84	37.8	4.69	2	.096
More than 3	77	42.5	101	37.4	89	40.4			
Grandchildren									
Yes	130	78.8	190	70.6	145	75.5	3.78	2	.151
No	35	21.2	79	29.4	47	24.5			
Income									
Less than $29,000	26	14.4	47	17.4	56	21.2			
$30,000–$59,000	66	36.5	60	22.2	70	31.5	31.24	6	.000
$60,000–$89,000	31	17.1	67	24.8	32	16.8			
More than $90,000	32	17.7	71	26.3	32	16.8			

In addition to differences in the demographic variables, there were also significant differences between the samples with respect to recreational activities (Table 16). In fact, there was a significant difference with every activity. Those in the Francophone sample more frequently reported eating out (χ^2, [2] = 16.07, $p < .001$), reading (χ^2, [2] = 25.59, $p < .001$), volunteering (χ^2, [2] = 16.93, $p < .001$), and going to the movies (χ^2, [2] = 18.56, $p < .001$) than those in the other samples. Those in the Francophone sample also reported renting a movie (χ^2, [2] = 11.84, p = .003) and, importantly, gambling (χ^2, [2] = 9.53, p = .009) less frequently than the other samples.

Those from the 2006 Norris and Tindale sample were less likely to report visiting family (χ^2, [2] = 31.84, $p<.001$), engaging in moderate physical activities (χ^2, [2] = 126.94, $p < .001$), visiting friends (χ^2, [2] = 13.42, p = .001), attending theatrical performances (χ^2, [2] = 21.85, $p < .001$), and having artistic/crafting hobbies (χ^2, [2] = 8.97, p = .011),when compared to the other samples. Lastly, those from the 2012 Tindale and Norris sample reported more frequently listening to music (χ^2, [2] = 23.98, $p < .001$).

Table 16. Differences in recreational activities

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Activity	**N**	**%**	**N**	**%**	**N**	**%**	***χ²***	***df***	***p***
Visiting family	142	78.5	213	79.2	128	58.4	31.84	2	.000
Eating at a restaurant	137	75.7	198	73.6	131	59.8	16.07	2	.000
Reading	136	75.1	196	72.9	120	54.8	25.59	2	.000
Moderate activities	130	71.8	198	73.6	60	27.4	126.94	2	.000
Visiting friends	126	69.6	203	75.5	132	60.3	13.24	2	.001
Volunteering	103	56.9	102	37.9	96	43.8	16.93	2	.000
Theatrical performances	86	47.5	159	59.1	83	37.9	21.85	2	.000
Going to the movies	83	45.9	105	39.0	57	26.0	18.56	2	.000
Listening to French Music	60	33.1	NA	NA	NA	NA			
Listening to Non-French Music	43	23.8	NA	NA	NA	NA			
Listening to Music	70	39.1	158	58.7	87	39.7	23.98	2	.000
Hobbies such as sewing/woodworking	58	32.0	113	42.0	65	29.7	8.97	2	.011
Renting a movie	44	24.3	103	38.3	59	26.9	11.84	2	.003
Gambling	**32**	**17.7**	**78**	**29.0**	**43**	**19.6**	**9.53**	**2**	**.009**
Snowmobiling	19	10.5	NA	NA	NA	NA			

Discussion

A demographic, social, and intergenerational family profile of gambling in older Francophones

Among the various goals of this study, the construction of a gambling behaviour and attitudes profile of the sample of older Francophones from North-Eastern Ontario was principal.

Gambling was not found to be an important recreational activity or pastime among those sampled; in fact only 18% of the sample listed it as a pastime, snowmobiling being the only activity that was less popular than gambling. Considering this, the results for the gambling activity frequencies are not surprising. Consistent with other research (e.g. Tindale & Norris, 2012), this study found that the purchase of lottery tickets was the most common and most frequent gambling activity. Just less than a third (30%) of participants in the sample bought tickets at least once a month and just less than half (47%) bought tickets at least a few times a year. The examination of the other gambling activities listed demonstrates that the majority of those in the sample do not regularly engage in gambling activities.

When those who did gamble were asked why they did so, most said that they did so for entertainment (43%), to support the community (37%), or to socialize (23%). Some did gamble to win (32%) or to pass the time (18%), but for the most part, those in this sample gambled for social reasons. This finding was consistent with participants' responses to the question of with whom they gambled. Less than a quarter (24%) of the sample gambled alone; for most, gambling was a social activity done with their spouses (37%), their Francophone friends (31%), or their families (31%).

When the responses the participants gave about the gambling behaviours and motivations of their family members were examined, similar trends were found. For the most part, the participants reported that their family members, like themselves, gambled mainly for

entertainment (25%) and to socialize (15%). Again, gambling to win (15%) was common; however, family members were reported to gamble for community support less often than participants and not at a high frequency. For the most part, the participants either did not know the gambling frequency of their family members or reported that their family members did not gamble.

The data derived from the various scales measuring depression, alcohol misuse, problem gambling risk, and attitudes do not, on their own, generate much information about the older Francophone sample. Only 2 (1.1%) participants in this sample demonstrated alcohol misuse on the CAGE scale. By way of context, the CAGE was used in the Canada's Alcohol and Other Drugs Survey (CAODS). A secondary analysis of the data from the CAODS (Poulin, Webster, & Single, 1997) indicates that 5.8% of older Canadians scored a 2 or higher on this scale, and older Francophones were 17% more likely to trigger the CAGE. Based on the results of this national population-based survey, we can surmise that the proportion of older Francophones in the sample of this first study with a CAGE score of at least 2 is very low. This demonstrates how unique the individuals in this Francophone sample are.

Similarly, few participants in the Francophone sample (4.4%) were found to be above the clinical cut-off for the CES-D depression scale. When compared to a larger population-based sample, this is again rather low. Johnson, McLeod, Sharpe, and Johnston (2008) used data from a population-based survey of the Atlantic Provinces and found that 15% of respondents were above the clinical cut-off on the CES-D. When taking age into consideration, they found that 11.3% of those over 65 years of age were above the clinical cut-off, a much higher number than the 4.4% found in this older Francophone sample.

Similarly, the rate of problem gambling risk, as measured by the CPGI, in the Francophone sample is comparatively low. Currie, Hodgins, and Casey (2012) amalgamated and compared the data from four different large-scale national studies and found that those who were 65 or older were the least likely to be in the problem gambling risk categories. Only 3.4% were in the high risk category, 9.2% in the moderate risk, and 8.7% in the low risk category. Compared to those in the Francophone sample, these numbers indicate that, at least as measured with the CPGI, older Francophones in this sample seem to be at lower risk for problem gambling when compared to these large-scale national studies.

As was determined by a review of the available literature, other than the work by Norris and Tindale (2006; Tindale & Norris, 2012) there are very few, if any, Canadian studies that have used the Gambling Attitudes Scale, the Windsor Problem Gambling Screen, and the Family of Origin Scale. For this reason, direct comparison of the sample from this study with samples from Norris and Tindale's studies will be the best way to gain a full understanding, and profile, of gambling and family in the older Francophone sample.

Problem Gambling Risk Comparison with Anglophone Samples

The secondary goal of this study was to compare the problem gambling risk of the Francophone sample with the samples from Norris and Tindale (2006; Tindale & Norris, 2012). Overall, based on an examination of the results of the analyses, comparing both the raw scores of the problem gambling risk scales and the problem gambling risk categories derived from them, it is evident that there is indeed a difference between the Francophone sample and both samples from Norris and Tindale (2006, Tindale & Norris, 2012). The Francophone sample tended to

have lower score on the problem gambling measures with a smaller proportion of the sample in the categories indicating a high risk for problem gambling.

These findings, along with the previous comparison with national population-based PGSI surveys (Currie, Hodgins, & Casey, 2012), as discussed above, indicate clearly that the older Francophones in this sample are at a lower risk of problem gambling. Not only does this finding not support the first proposed hypothesis, it is the opposite of what was predicted. Contrary to the previous literature that suggests that members of minority groups are at greater risk of problem gambling (e.g., Kim, 2011, Tirachaimongkol et al., 2010, Volberg, 1995), the participants of this study were in fact at lower risk.

This finding contradicts the expectations of this study and what we know about gambling in minority groups. Considering what the literature about older Francophones in Ontario reveals, the pathways model proposed by Tirachaimongkol and colleagues (2010) would have predicted that older Francophones would be at greater risk of problem gambling, not less. But for some reason the older Francophones in this sample were protected from problem gambling. It is thus important to understand why this was the case. This will become the principal goal of the subsequent study.

Differences in Gambling Activities, Behaviours, and Motivations

The comparison of the various gambling activities and frequencies for the most part demonstrated that the three samples were more similar than different. With the exception of the lower frequency of slot machine use and horse betting among those in the Francophone sample, the gambling and casino activities were also very similar across the three samples. However, the comparison of how the participants prevented themselves from overspending while at a casino

did yield some interesting and significant results. Those in the Francophone sample were the most likely to use behaviours as a gambling control method. They more often reported bringing a set amount of cash to a casino and avoiding borrowing money to gamble. On the other hand, those in the Francophone sample were less likely to report using self-control, a non-behavioural method, as a way to prevent excessive gambling. This finding may help indicate why those in the Francophone sample had a small rate of problem gambling risk in comparison to the other samples. Additionally, those in the Francophone sample reported more often not knowing if their friends gambled, and reported less often that gambling allowed for new activities, again illustrating that gambling was not an important activity for those in this sample.

The interpretation of gambling motivations was slightly more complicated. Those in the Francophone sample were most likely to say that they gambled to pass the time. However, it was the sample from Tindale and Norris (2012) that diverged most from the other two groups in terms of gambling motivations. This sample was more likely to report gambling for entertainment, to socialize, for the incentives, to try something new, and for the excitement of the games and casinos. The gambling motivations reported by the Francophone sample are much more consistent with the Algoma sub-sample from Norris and Tindale (2006), a similar sample from North-Eastern Ontario, suggesting that regional difference may have an effect on gambling motivations or that gambling motivations may be dependent on some other factor.

The comparison of recreational activities between the samples was helpful to illustrate what may make the Francophone sample distinct. Francophones were, not surprisingly, less likely when compared to the two Anglophone samples to list gambling as a recreational activity. This was also true with renting a movie, although the latter may be due to the small difference in the time of recruitment, and the closing of several movie rental stores and arrival of movie

streaming services like Netflix (e.g., Andrew-Gee, 2013). However, the Francophone participants were more likely to report eating out, going to the movies, reading, and volunteering as recreational activities. The last two may give us the most insight into those in this sample, since this may indicate a more educated and involved sample than the population in question. This will be further discussed in the next study.

Other Differences between the Samples

The comparison of the demographic and recreational variables was helpful to illustrate what may make the Francophone sample different from the previous two samples, and may help to explain the low problem gambling risk rates in this sample. The recruitment of the Francophone sample may be at the heart of what makes the participants in the group unique. This recruitment method did permit the collection of a sample with a similar (non-statistically different) gender distribution, and a fairly similar age distribution (although it was statistically different, the variation was not tremendous between the three samples).

Those in the Francophone sample were, however, much more likely to be married, and were more likely to have grandchildren. Marital status has been found to be a determinant of gambling frequency and problem gambling rate in older adults (60+), where those who are married have a lower frequency and are less at risk of problem gambling (Zaranek & Chapleski, 2005).

Participants in the Francophone sample, like those from the Algoma sub-sample (Norris & Tindale, 2006) were additionally found to have lower income rates when compared to the provincial sample (Tindale & Norris, 2012), which may be a regional difference. Along with marital status, income and education have been found to be determinants of problem gambling in

older adults. Older adults with lower income and education rates (or a lower SES) were found to gamble at a higher frequency and be at greater risk for problem gambling (Zaranek & Chapleski, 2005). Since those from North-Eastern Ontario had lower incomes, the finding of lower rate of problem gambling was, again, surprising.

Although this study did not ask the participants about their level of education, it did use income as a proxy measure for socioeconomic status. However, three-quarters of participants listed reading as a recreational activity, possibly illustrating that there is not a typical correlation between income level and education among this population. This is also in contrast to the research indicating lower education and literacy among older Francophones in Canada (e.g., Sylvestre, 2007; Wagner et al., 2002) and Ontario (e.g., Bouchard et al., 2006; Office of Francophone Affairs, 2012). The fact that over half of the participants also listed volunteering as a recreational activity also helps to illustrate that this is not a typical sample of older adults. While those in this group do not gamble frequently, when they do gamble, it is for social and pro-social reasons. And the gambling is often done as a social activity with family and specifically with Francophone friends (vs. non-Francophone friends). This, along with their active community and family lives, is an indication that individuals in this sample are clearly different than those in two other samples, and are engaged with their community. This may also be a demonstration of a greater level of social capital in this sample (see Putnam, 1995).

This community involvement may be why this sample is unique, and why problem gambling is so low. Garceau (1996) also found that volunteering is a common activity for older Franco-Ontarian women, in a similar sample of connected participants. Considering the recruitment techniques used for this study, these findings are not surprising. Since this is a study of a minority older population, recruitment access was aided with the help of community

partners. As such, this sample was not intended to be representative since participants were likely those with active ties within their communities. These ties with the Francophone community may help in part to explain the low problem gambling rates in this sample. In a review of the literature on gambling and culture, Raylu and Oei (2002) highlighted the relationship between the acculturation process and problem gambling rates. Considering the heavy community ties, it is probable that those in this sample did not acculturate to the mainstream culture, but rather kept their Francophone culture. This may be at heart why this sample of older Francophones had a lower rate of gambling and problem gambling risk, in contrast to what was postulated based on other literature on older minority adults.

The results of this study are fascinating, but they also contradict the current model proposed by Tirachaimongkol and colleagues (2010), specifically the second cluster, which focuses on social and environmental factors that include social bias and stereotypes. This model suggests that older Francophones would be at greater risk for problem gambling and not, as was found, less. For this reason it is important to apply this cluster and the whole model put forth by Tirachaimongkol and colleagues (2010), and to determine how it applies to the Francophone sample in this study, and to thus better understand problem gambling risk in this sample.

Study 2:

Pathways Model and Problem Gambling Risk in Older Francophones

Objectives

The primary purpose of the previous study was to construct a gambling profile of an older Francophone sample. That study also sought to examine whether Francophones are at greater risk of problem gambling than Anglophones. To do this, the profile of the Francophone population was compared to a sample of older Anglophones in Ontario by Norris & Tindale (2006, Tindale & Norris, 2012). Results showed that, counter to what had been hypothesized, the Francophone sample had a consistently lower score on the problem gambling measures and had a smaller proportion of participants in the categories indicating a high risk for problem gambling. Applying the Tirachaimongkol et al. (2010) pathways model to understand problem gambling risk, and specifically to understand why those in the Francophone sample were not at higher problem gambling risk, is the objective of this second study. It is important to note that the application of this model is one that is post-hoc to the collection of the data. This model is used to better understand the results of study 1.

This model has limitations in that it focuses exclusively on problem gambling and does not address or take into account any personal motivations for gambling. Since most older adults, and especially those in the Francophone sample, do not have a gambling problem, any and all theoretical models need to account for both personal motivations and gambling as a recreation activity. It is thus important to examine other factors related to both problem and recreational gambling.

Research Questions and Hypotheses

The pathways model by Tirachaimongkol and colleagues (2010) proposed three problem risk clusters: individual vulnerability factors, social and environmental factors, and behavioural regulation factors. For this reason, the research questions and hypotheses in his study will be divided into these clusters:

Individual Vulnerability Factors

The first risk factor cluster discussed in the pathways model includes individual vulnerability factors such as negative emotions, trying to escape life's stresses, and substance use. Several studies have indicated that there is a relationship between problem gambling risk and various comorbidities such as depression (e.g., Erikson et al., 2005; McCready et al., 2008) and alcohol/substance use (e.g., Desai et al., 2007; Levens et al., 2005; Wood & Grifts, 2007) in older adults. Authors have also found that these comorbidities are stronger among those in minority groups (e.g. Currie et al., 2012). The model presented by Tirachaimongkol and colleagues (2010), does mention a relationship between these individual factors and problem gambling risk.

Hypothesis 1:

Based on factors related to this pathway model cluster and on the literature on comorbidity in minority groups, and similar to findings by Tindale and Norris (2012) among a Métis sample, older Francophones from this sample should demonstrate greater comorbidity between problem gambling risk and alcohol misuse (as measured by the CAGE Alcohol Screen). In accordance with the aforementioned literature, it can also be postulated that those in the Francophone sample, and in particular the Francophones who are at greater risk of problem gambling, will

have higher rates of alcohol misuse and depression than the similar sample of Anglophone older adults collected in Ontario by Norris & Tindale (2006; Tindale & Norris, 2012).

Social and Environmental Factors

The second risk factor cluster in the pathways model includes social and environmental factors such as social bias, marginalization, or exclusion based on an older person's age, race/ethnicity, cultural or religious background, socioeconomic status, and/or sexual orientation. Those who are economically disadvantaged and socially marginalized are hypothesized to be at a greater risk for "gambling-related harm". Additionally this cluster also includes factors related to the environment that one lived in such as the family and friend environment, such as family history of gambling (Tirachaimongkol et al., 2010). Considering this, the following hypothesis and research questions are proposed.

Hypothesis 2:

Similar to findings in the Métis sample (Tindale & Norris, 2012), family warmth (as measured by the Family of Origin Scales) will play a protective role against problem gambling risk in an older Francophone sample.

Research Question 1:

Is there evidence of SES acting as a cluster predictor of problem gambling?

Research Question 2:

Do gambling attitudes differ between the two groups? If so, how?

Research Question 3:

Do the two samples report engaging in gambling activities with the same or different individuals (e.g. family or friends)?

Research Question 4:

Do the Francophone respondents perceive that their language and minority status has an influence on the various factors associated with gambling, their gambling behaviours and attitudes, and the gambling of their community?

Behavioural Regulation Factors

Research Question 5:

Considering the last pathway in Tirachaimongkol and colleagues (2010) model, are medical conditions of those in the Francophone sample associated with problem gambling risk?

Motivational Factors, Gender differences, and Attitudes

The cluster model by Tirachaimongkol and colleagues (2010) includes several factors that may influence problem gambling. However, this model does not account for personal motivations or gender differences and how this may influence gambling. As previously discussed, some studies have identified gender differences with regard to gambling (e.g. Bisson, Tindale, & Norris, 2012; Clarke & Clarkson, 2008; Walker, Hinch, & Weighill, 2005). Bisson, Tindale, and Norris (2012) noted differences between men and women in gambling attitudes, behaviours, and motivations. For this reason, the following research questions were asked:

Research Question 6a:

Will these gender differences also be present in the Francophone sample?

Research Question 6b:

What are the gambling attitudes, behaviours, and motivations of those in the Francophone sample?

Research Question 6c:

Do these factors have a role to play in problem gambling risk?

Methodology

Participants and Measures

For a description of the participants and measures used in this study, please refer to the first study (p. 63). Again, considering the nature of the hypotheses, and the analyses, a smaller more conservative p value of significance will be used. Those with a p value smaller or equal to .01 will be viewed as statistically significant.

Results

Individual factors

Testing the first hypothesis required the examination of the correlations between the problem gambling risk measures (the summed scales from Section G), the measure of depression (summed scale from Section H – 1 to 20), and alcohol misuse (summed scale from Section H – 21 to 24). These correlations were then compared between the samples.

Research by Tindale and Norris (2012) found a comorbid relationship between problem gambling risk and alcohol misuse. Problem gambling has also been associated with depression (e.g., Johansson et al., 2009). Considering the literature regarding addictions and mental health among minorities (e.g., Currie et al., 2012; Dion et al., 2010) and Francophones in Ontario (e.g., Cairney & Krause, 2005), it was postulated that there would be a larger comorbid relationship between depression and alcohol misuse and problem gambling risk in the Francophone sample. However, in the light of previous findings regarding the comparison of depression and alcohol

misuse in larger national population-based studies (Johnson et al., 2008, Poulin, Webster & Single, 1997), Francophones in the sample may not have a higher rate of addictions and mental health in comparison to the sample from Tindale and Norris (2012).

To determine if both alcohol misuse (as measured by the CAGE) and depression (as measured by the CES-D) were comorbidities in the Francophone sample, a bivariate Pearson's correlation was done. Table 17 demonstrates the results of this analysis. Not surprisingly (and indicating a level of validity), there was a strong relationship between both problem gambling measures ($r = .56$, $p < .01$). However, no significant relationship was found between depression (CES-D) and alcohol misuse (CAGE) and both problem gambling measures. This finding indicates that, in this sample, neither depression nor alcohol misuse was a comorbid factor with problem gambling. Nevertheless, depression and alcohol misuse were moderately related ($r = .26$, $p< .05$), indicating that those who measured high on depression were also at risk of alcohol misuse.

Table 17. Correlations of comorbidities and problem gambling in Francophone sample

Measures	1	2	3. CES-D	4. CAGE
1. CPGI	-	.559**	.029	0.074
2. Windsor		-	.088	.107
3			-	.264*
4				-

Note: Correlations marked with an asterisk (*) were significant p < .05.
Note: Correlations marked with two asterisks (**) were significant at p < .01.

Unfortunately, neither the CAGE nor the CES-D was measured in the sample from Norris and Tindale (2006), so for this reason a comparison was not done with this group. In contrast, Table 18 demonstrates the correlations between these variables in the 2012 sample from Tindale and Norris. The results of the correlation analysis indicate that again both problem gambling measures are strongly related ($r = .54$, $p < .01$). In addition to this, depression and alcohol misuse

were also related to the problem gambling measures. Depression (CES-D) was moderately related to both problem gambling measures. Alcohol misuse (CAGE) was also moderately related with the Windsor Screen ($r = .15$, $p < .05$), although it was not significantly correlated with the CPGI. These results indicate that, in this sample, depression and alcohol misuse are indeed comorbid factors with problem gambling risk.

Table 18. Correlations of comorbidities and problem gambling in the sample from Tindale & Norris (2012)

Measures	1	2	3. CES-D	4. CAGE
1. CPGI	-	.536**	.193*	.050
2. Windsor		-	.212*	.154*
3			-	.233*
4				-

Note: Correlations marked with an asterisk (*) were significant at p < .05.
Note: Correlations marked with two asterisks (**) were significant at p < .01.

To test this hypothesis, depression and alcohol misuse were compared between the samples. Table 19 demonstrates these differences: the mean comparison failed to show a significant difference between the two samples with regard to alcohol misuse (CAGE), but did reveal a marginal difference in the depression (CES-D) measure ($t[232] = -2.03$, $p = 0.04$), with those in the Francophone sample having a lower rate ($M = 10.8$. $SD = 6.6$).

Table 19. Alcohol and Depression scale measures

	Francophone (2014)		Tindale & Norris (2012)				
Measures	**N**	**Mean (SD)**	**N**	**Mean (SD)**	***t***	***Df***	***P***
CES-D	76	10.76 (6.58)	158	12.66 (6.92)	-2.03	232	0.044
CAGE	110	0.34 (0.79)	218	0.43 (0.91)	-0.93	326	0.355

The original plan of analyses to answer the aforementioned hypotheses included a Fisher r-to-z test to compare the strength of the comorbid relationships between the samples, in order to determine whether alcohol misuse and depression were more significant comorbidities among those in the Francophone sample. However, this was not possible since there was no relationship

between depression, alcohol misuse, and problem gambling risk in the Francophone sample, even though these relationships existed in the sample Tindale and Norris (2012).

Social and environmental factors

Tindale and Norris (2012) found a protective association between family warmth and problem gambling risk, and, considering this, a similar result was expected in the Francophone sample. Table 20 presents the results of the bivariate correlation analysis. In addition to both problem gambling measures being highly related, so were both family warmth measures, the Family of Origin Scale – Origin and the Family of Origin Scale – Created ($r=.56$, $p < .01$), (the summed scales from Sections C – 1 to 15 and D – 1 to 15) again indicating the validity of this measure. However, neither FOS measure was correlated with either problem gambling measure in this sample.

Table 20. Correlations between family warmth and problem gambling risk in Francophone sample

Measures	1	2	3. FOS-O	4. FOS-C
1. CPGI	-	.559**	-.066	-.110
2. Windsor		-	.128	-.027
3			-	.513*
4				-

Note: Correlations marked with an asterisk (*) were significant at p < .05.
Note: Correlations marked with two asterisks (**) were significant at p < .01.

Contrastingly, Table 21 presents the protective relationship between family warmth and gambling in both samples from Norris and Tindale (2006; Tindale & Norris, 2012); however, which measure is related with problem gambling risk varies with the sample in question. In the 2006 sample from Norris and Tindale, the Family of Origin Scale – Created (FOS-C), measuring the family warmth of one's current, created family, is negatively correlated with both the CPGI ($r= -.21$, $p < .05$) and the Windsor Screen ($r= -.20$, $p < .05$). Yet the Family of Origin Scale –

Origin (FOS-O), measuring the perception of family warmth in one's family of origin, was not significantly correlated with the problem gambling measures, indicating that in this sample it was the warmth of one's created family that could protect against problem gambling. In the 2012 sample from Tindale and Norris, however, the FOS-C was not significantly correlated with either problem gambling measure. The FOS-O was negatively correlated with the Windsor Screen (r= -.16, p < .05) but not the CPGI, indicating that in this sample, one's family of origin may have had a protecting influence on problem gambling risk.

Table 21. Correlations between family warmth and problem gambling risk in the sample from Norris & Tindale (2006) and Tindale & Norris (2012)

	Tindale & Norris (2012)				Norris & Tindale (2006)			
Measures	1	2	3. FOS-O	4. FOS-C	1	2	3. FOS-O	4. FOS-C
1. CPGI	-	.536**	.026	-.066	-	.653**	-.076	-.208*
2. Windsor		-	-.156*	-.136		-	-.031	-.200*
3			-	.335**			-	.474*
4				-				-

Note: Correlations marked with an asterisk (*) were significant at p < .05.
Note: Correlations marked with two asterisks (**) were significant at p < .01.

Considering these different findings between the samples, it is surprising that although the Francophone sample had a slightly higher mean value for both FOS, this was not statistically significant. In fact, there was no significant difference between any of the samples regarding the family warmth measures; this was true for both the analyses of variance and the post-hoc tests (Table 22).

Table 22. Family warmth scale measures

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**Mean (SD)**	**N**	**Mean (SD)**	**N**	**Mean (SD)**	***F***	***df***	***p***
FOS – O	112	57.96 (9.47)	229	55.88 (12.87)	177	57.67 (11.27)	1.26	518	.284
FOS – C	103	60.42 (7.71)	222	59.63 (8.75)	170	58.88 (8.16)	1.72	515	.181

As with the previous hypotheses, the original plan of analyses to answer the aforementioned hypotheses included a Fisher r-to-z test, to compare the strength of the protective relationship of family warmth on problem gambling risk. However, since there was no relationship between family warmth and problem gambling risk in the Francophone sample, this test was not carried out, to determine in the protective relationship was stronger for the Francophone sample.

In addition to answering these various hypotheses, this study had the objective to determine the specific factors, such as socioeconomic status, that contribute to problem gambling in this minority population. The original plan of analyses included the development of a regression model. However, due to the very low number of individuals who are at risk of problem gambling and the very low overall scores on the problem gambling scales, a statistically significant model could not be built.

An analysis of variance was done of the sub-scales of the Gambling Attitudes Screen to examine whether and how the gambling attitudes between the groups differed (Table 23). Only two of the five subscales differed. Those in the 2012 sample from Tindale and Norris had overall a more favourable attitude towards gambling when compared to the two other groups ($F[2,496] = 31.25$, $p < .001$). Those in the Francophone sample were, however, the least likely overall to endorse risk-taking items ($F[2,549] = 5.78$, $p = .003$). These results indicate that, with the exception of risk taking, those in the Francophone sample are rather similar to the other samples with regards to their gambling attitudes. Nevertheless, the lower endorsement of risk taking may also help explain the lower problem gambling risk in this sample.

Table 23. Comparison of the GAS sub-scales

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Gambling Attitudes Screen	**N**	**Mean (SD)**	**N**	**Mean (SD)**	**N**	**Mean (SD)**	***F***	***df***	***p***
General	88	38.80(11.01)	216	47.19(14.09)	193	37.54(11.70)	31.25	496	.000
Casino	97	30.15(10.96)	218	30.65(11.90)	186	32.07(8.33)	1.37	500	.254
Horse Racing	95	39.59(9.74)	213	38.21(9.60)	182	37.47(8.57)	1.63	489	.197
Lottery	95	24.62(7.94)	222	25.84(8.28)	190	25.20(6.57)	.93	506	.397
Risk Taking	115	8.48(2.34)	234	9.49(2.71)	201	9.00(2.79)	5.78	549	.003

To determine whether participants in the three samples gambled with different individuals, χ^2 analyses were done (Table 24). The results of the analyses indicate that individuals in the 2006 Norris and Tindale sample tended to gamble with a different group of individuals compared to the other two samples. Those in this sample reported gambling less with their spouses (χ^2, [2] = 9.16, p = .010), siblings (χ^2, [2] = 22.31, p < .001), cousins (χ^2, [2] = 6.97, p = .031), and moderately with their mothers (χ^2, [2] = 6.32, p = .042), and were less likely to gamble alone (χ^2, [2] = 46.10, p < .001). Those in the Francophone sample, on the other hand, were less likely to gamble with friends (when combining Francophone and non-Francophone friends) compared to the other groups (χ^2, [2] = 11.77, p = .003). Considering these results, it is not surprising that, compared to those in the 2012 Tindale and Norris sample, Francophones reported less family gambling participation (χ^2, [2] = 8.67, p = .003).

Table 24. Comparison of Gambling co-participants

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**%**	**N**	**%**	**N**	**%**	χ^2	*df*	*p*
Spouse	66	43.4	103	48.4	76	34.2	9.16	2	.010
Alone	44	24.3	53	24.9	10	4.5	46.10	2	.000
Sibling	24	15.8	36	16.9	8	3.6	22.31	2	.000
Children	15	9.9	24	11.3	17	7.7	1.67	2	.434
Francophone Friends	56	36.8							
Non-Francophone Friends	15	9.9							
Friends (Francophone and Non-Francophone)	58	38.2	120	56.3	110	49.5	11.77	2	.003
Cousins	7	4.6	7	3.3	1	0.5	6.97	2	.031
Mother	6	3.9	14	6.6	4	1.8	6.32	2	.042
Father	2	1.3	3	1.4	2	0.9	.264	2	.876
Aunt	2	1.3	1	0.5	2	0.9	.762	2	.983
Gambling participation with family	62	45.6	143	61.4			8.67	1	.003

Similarly to the previous χ^2 analyses, the reported gambling motivations of participants' family and friends in the 2006 sample from Norris and Tindale were different from the other samples (Table 25). Participants in this sample were less likely to report their friends and family gambling to socialize (χ^2, [2] = 13.92, p =.001), to pass the time (χ^2, [2] = 22.48, p < .001) and trended to report for the excitement of the games (χ^2, [2] = 7.91, p=.019) and were most likely to report their friends and family gambling to win (χ^2, [2] = 29.33, p<.001). Those in the 2012 sample from Tindale and Norris were also most likely to report that their family and friends gambled to try something new (χ^2, [2] = 10.91, p = .004) and to forget their problems (χ^2, [2] = 11.45, p=.003). These results suggest that those in the Francophone sample were similar to either of the two other samples, depending on the gambling motivations of their family and friends.

Table 25. Gambling motivations of the participants' friends and family

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**%**	**N**	**%**	**N**	**%**	χ^2	*df*	*p*
Entertainment	45	34.6	84	31.1	75	34.4	.78	2	.676
To support community	18	14.2	51	18.9	NA	NA	1.34	1	.260
To win	27	21.3	72	26.7	100	45.9	29.33	2	.000
To Socialize	27	21.3	79	29.3	33	15.1	13.92	2	.001
To pass the time	19	15.0	33	12.2	4	1.8	22.48	2	.000
Try something new	6	4.7	28	10.4	7	3.2	10.91	2	.004
Exciting games	15	11.8	37	13.7	13	6.0	7.91	2	.019
Can afford to take risks	8	6.3	12	4.4	9	4.1	9.20	2	.631
Boredom/Loneliness	2	1.6	16	5.9	3	1.4	9.21	2	.010
For incentives	7	5.5	9	3.3	8	3.7	1.14	2	.565
Exciting attractions	7	5.5	17	6.3	5	2.3	4.53	2	.104
To participate with other Francophones	1	0.8	NA	NA	NA	NA	NA	NA	NA
To forget problems	1	0.8	13	4.8	1	0.5	11.45	2	.003
Part of Francophone culture	2	1.6	NA	NA	NA	NA	NA	NA	NA

This pattern is similar to that presented previously regarding the gambling motivations of the participants in the three samples (see Table 14 – in Study 1). In fact, an examination of the Phi coefficients of the gambling motivations of the individual and the gambling motivations of their friends and family (Table 26) reveal that, with the exception of gambling for incentives provided by the casinos, these motivations are related to each other.

Table 26. Phi-Coefficients of gambling motivations

		Family and Friends											
Gambling Motivations		1	2	3	4	5	6	7	8	9	10	11	12
Self													
1.	Entertainment	.202**											
2.	To support community		.268**										
3.	To win			.247**									
4.	To Socialize				.273**								
5.	To pass the time					.215**							
6.	Try something new						.220**						
7.	Exciting games							.277**					
8.	Can afford to take risks								.130*				
9.	Boredom/Loneliness									.115*			
10.	For incentives										.069		
11.	Exciting attractions											.257**	
12.	To forget problems												.171**

The questionnaires used in all three samples also asked a few questions about family issues or problems that had resulted from gambling. Those from the Francophone sample were marginally less likely to report having had a family dispute over gambling (χ^2, [2] = 7.23, p = .027), but were as likely to report that gambling had caused family problems as the other groups (although this was a minority of participants in both cases). Table 27 shows the rates at which the three samples reported family disputes or problems caused by gambling.

Table 27. Family problems caused by gambling

	Francophone (2014)		Tindale & Norris (2012)		Norris & Tindale (2006)				
Measures	**N**	**%**	**N**	**%**	**N**	**%**	χ^2	*df*	*p*
Family dispute over gambling									
Sometimes to Regularly	2	1.4	10	6.6	17	8.2	7.23	2	.027
Gambling causes family problems									
Sometimes to Regularly	16	10.9	28	11.5	12	5.7	5.00	2	.082

Given the purpose of this study, the participants in the Francophone sample were also explicitly asked about the relationship between their gambling attitudes and behaviours and their linguistic status (Table 28). As noted, there is a large body of literature that suggests a relationship between problem gambling risk and marginalization (e.g., Alegría et al., 2009; Kim, 2012; Seyanian et al., 2008; Welte et al., 2001). There is also some literature suggesting that older Francophones in Ontario may be a marginalized group (e.g., Bouchard et al., 2006; Kauppi et al., 2004; Picard & Allaire, 2005; Picard & Charland, 1999). Nevertheless, very few of the participants perceived that their language had an influence on their gambling behaviours. Only 6 participants responded that being Francophone had an influence on their gambling, and when they were asked to place this influence on a 5-point scale (1 being no influence and 5 being a great deal of influence), the mean was 1.5. When asked if their language had had an influence on

their gambling attitudes, only 2 participants said that it had. These results indicate that the participants in the Francophone sample did not perceive that their language had had an influence on their gambling. Additionally, those sampled did not report that gambling was an issue within the Francophone communities.

Table 28. Perception of influence of language on gambling

Questions about Language and Gambling	N	%
Does being Francophone have an influence on your gambling?	6	1.3
If yes, how much (1 to 5)?	M=1.53	SD=1.19
Has gambling ever caused a problem in your Francophone community?	0	0.0
Have the gambling behaviours of your family member ever cause a problem in your Francophone community?	1	0.2
Are your attitudes towards gambling influenced by being Francophone?	2	0.4

Behavioural regulation factors

Only the questionnaire used in the Francophone sample examined medical conditions and pharmaceutical side effects that could lead to problem gambling. Therefore, no comparison could be done between the samples. No participants (n = 0) in the Francophone sample reported having a medical condition that may have influenced their gambling behaviours.

Other motivational factors

The profile in the previous study describes the gambling motivations of those in the Francophone sample (see Table 7). As with other research questions in this and the previous study, due to the low number of problem gamblers in this sample, it was not possible to determine the relationship between problem gambling risk and personal gambling motivations.

In addition to not taking personal motivational factors into account, the pathways model by Tirachaimongkol and colleagues (2010) does not take gender differences into consideration. Research done by Bisson, Tindale, and Norris (2012), using some of the same data used in this study (the sample from Tindale & Norris, 2012), noted differences in gambling attitudes and motivations between men and woman, as supported by previous research (e.g., Clarke & Clarkson, 2008; Walker et al., 2005). To determine whether these differences were present in the Francophone sample and whether these differences varied between the samples, 3-way factorial analyses of variance and contingency analyses were done with the gambling attitudes scales (GAS) and the gambling motivations.

Table 29 and Figure 2 illustrate the analysis of the gambling attitudes scales (GAS). This analysis indicates that indeed there are overall gender differences across the samples, with the exception of the general attitude towards gambling ($F[1, 483] = .510$, $p = .475$) and horse racing ($F[1, 475] = 0.21$, $p = .884$). There were trending differences between men and woman with regards to the attitudes towards lotteries ($F[1, 492] = 4.27$, $p = .039$), and a significant difference where men had an overall more favourable attitude, and risk taking ($F[1, 534] = 7.92$, $p = .005$), which, as previously mentioned, Francophones had a lower endorsement. There was also a marginally significant interaction between gender and sample membership was also significant ($F[2, 484] = 3.42$, $p = .034$), as Figure 2 illustrates. Men in the Francophone sample had a more favourable attitude towards casinos when compared to the other samples, but women in the Francophone sample had a much less favourable attitude compared to the other samples.

Table 29. Gambling Attitudes Scale (GAS) gender differences among the samples

Gambling Attitudes Scale	Sample	Male **M(SD)**	Female **M(SD)**
GAS-General	Francophone	40.97 (10.08)	39.11 (11.65)
	Tindale and Norris (2012)	48.27 (13.56)	46.74 (14.28)
	Norris and Tindale (2006)	37.32 (11.89)	37.96 (11.62)
GAS-Casino	Francophone	33.89 (11.43)	27.81 (10.10)
	Tindale and Norris (2012)	31.35 (11.88)	30.52 (11.91)
	Norris and Tindale (2006)	31.73 (8.37)	32.64 (8.32)
GAS-Horse Race	Francophone	39.60 (8.74)	39.47 (10.40)
	Tindale and Norris (2012)	38.24 (9.54)	38.30 (9.63)
	Norris and Tindale (2006)	37.31 (9.67)	37.78 (7.95)
GAS-Lottery	Francophone	25.54 (7.08)	23.90 (8.36)
	Tindale and Norris (2012)	27.48 (9.36)	25.28 (7.67)
	Norris and Tindale (2006)	25.81 (6.97)	24.96 (6.33)
GAS-Risk Taking	Francophone	8.74 (2.22)	7.98 (2.44)
	Tindale and Norris (2012)	9.64 (2.73)	9.26 (2.60)
	Norris and Tindale (2006)	9.40 (2.57)	8.46 (3.05)

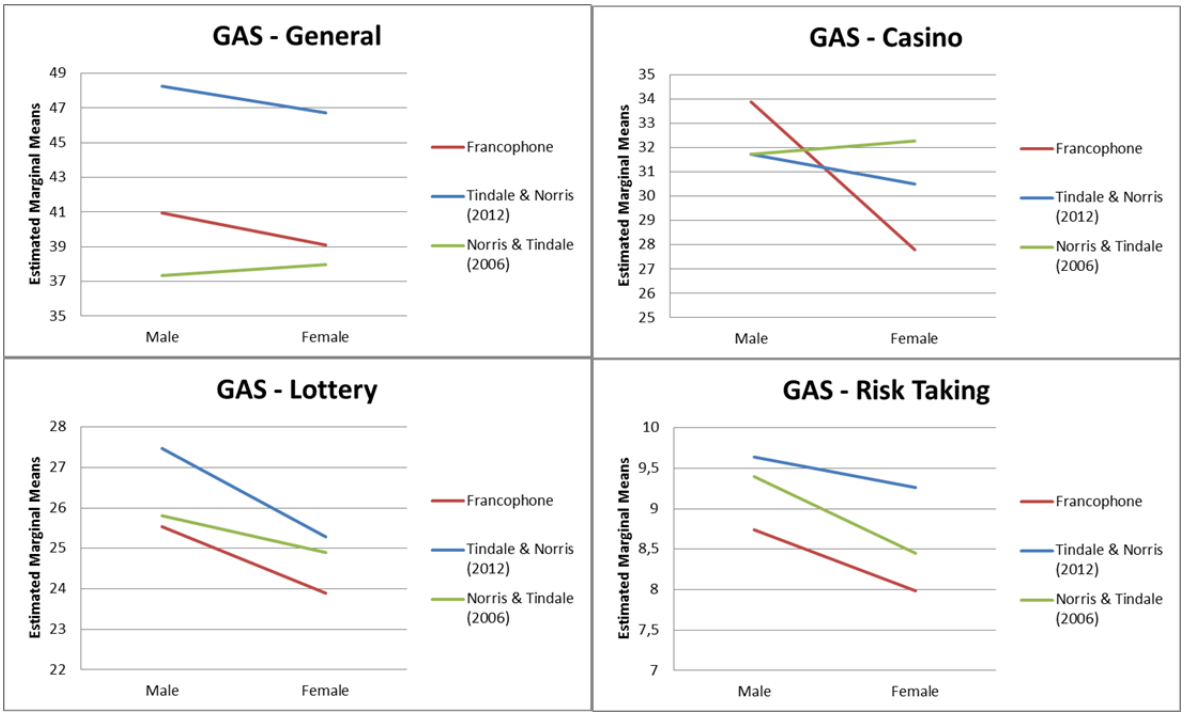

Figure 2. Gambling Attitudes Scale (GAS) gender differences among the samples

Considering the binary nature of gambling motivation as a dependent variable, a general linear model (GLM) ANOVA was used instead of a traditional factorial ANOVA (Rutherford, 2001). Table 30 presents the percentage of men and woman who endorsed the various gambling motivations, compared to those who did not, taking into account only those who answered this question, and not the entire sample. The results of the GLM ANOVA show that only two gambling motivations presented gender differences: gambling because the subject could afford to take financial risks ($F[1, 550] = 6.60$, $p = .010$) and gambling for entertainment ($F[1, 550] = 7.32$, $p = .007$). There was a trending interaction between gender and sample group regarding gambling for entertainment ($F[2, 484] = 4.30$, $p = .014$). These results indicate that men reported gambling because they could afford to do so at a higher frequency and that, for the most part, the same was true for entertainment. However, Francophone women endorsed gambling for entertainment more frequently than anyone in the other samples, and men in this sample endorsed gambling for entertainment less frequently than anyone else. When examining a chi-square test done looking at the gender differences within the Francophone sample, it seems that Francophone women endorsed gambling to socialize more than Francophone men (χ^2, $[1] = 5.53$, $p = .019$).

Table 30. Gambling motivations gender differences among the samples

Motivation	Sample	Male **%(N)**	Female **%(N)**
Entertainment	Francophone	40.9 (18)	69.9 (58)
	Tindale and Norris (2012)	78.1 (50)	74.3 (107)
	Norris and Tindale (2006)	51.1 (45)	60.9 (78)
To support community	Francophone	54.5 (24)	48.2 (40)
	Tindale and Norris (2012)	43.8 (28)	47.9 (69)
	Norris and Tindale (2006)	NA	NA
To win	Francophone	52.3 (23)	42.2 (35)
	Tindale and Norris (2012)	42.2 (27)	45.1 (65)
	Norris and Tindale (2006)	35.2 (31)	21.9 (28)
To Socialize	Francophone	18.2 (8)	38.6 (32)
	Tindale and Norris (2012)	46.9 (30)	45.8 (66)
	Norris and Tindale (2006)	21.6 (19)	25.8 (33)
To pass the time	Francophone	27.3 (12)	25.3 (21)
	Tindale and Norris (2012)	14.1 (9)	16.7 (24)
	Norris and Tindale (2006)	8.0 (7)	10.2 (13)
Try something new	Francophone	13.6 (6)	15.7 (13)
	Tindale and Norris (2012)	28.1 (18)	20.8 (30)
	Norris and Tindale (2006)	2.3 (2)	4.7 (6)
Exciting games	Francophone	13.6 (6)	12.0 (10)
	Tindale and Norris (2012)	18 (28.1)	21.5 (31)
	Norris and Tindale (2006)	13 (14.8)	7.8 (10)
Can afford to take risks	Francophone	9.6 (8)	13.6 (6)
	Tindale and Norris (2012)	8.3 (12)	21.9 (14)
	Norris and Tindale (2006)	8 (6.3)	10.2 (9)
Boredom/Loneliness	Francophone	4.5 (2)	6.0 (5)
	Tindale and Norris (2012)	3.1 (2)	8.3 (12)
	Norris and Tindale (2006)	6.8 (2)	3.9 (5)
For incentives	Francophone	4.5 (2)	3.6 (3)
	Tindale and Norris (2012)	9.4 (2)	10.4 (2)
	Norris and Tindale (2006)	10.2 (9)	5.5 (7)
Exciting attractions	Francophone	4.5 (2)	3.6 (3)
	Tindale and Norris (2012)	10.9 (7)	10.4 (5)
	Norris and Tindale (2006)	3.4 (3)	1.6 (2)
Gamble with Francophones	Francophone	9.1 (4)	1.2 (1)
To forget problems	Francophone	2.3 (1)	1.2 (1)
	Tindale and Norris (2012)	1.6 (1)	5.6 (8)
	Norris and Tindale (2006)	2.3 (2)	1.6 (2)
Part of culture	Francophone	0.0 (0)	0.0(0)

Because of the nature of information regarding gambling activities and frequency was gathered differently in each study, the gender comparison could not be done with the sample from Norris and Tindale (2006). Thus this comparison between the samples was done only with the Francophone sample and the 2012 sample from Tindale and Norris. Table 31 represents the frequency of each gambling activity reported by each gender by its mean on the 7-point scale. The analysis of variance indicates that women participated in bingo ($F[1, 362] = 19.01$, $p < .001$), scratch tickets ($F[1, 356] = 6.55$, $p = .011$), and slot machines ($F[1, 371] = 11.81$, $p = .001$) more often and more regularly than men. Men, on the other hand, engaged in sports betting more often than women ($F[1, 342] = 6.53$, $p = .011$).

Table 31. Gambling activity gender differences among the samples

Gambling Activity (7-point scale)	Sample	Male **M(SD)**	Female **M(SD)**
Bingo	Francophone	1.38 (.78)	2.28 (1.90)
	Tindale and Norris (2012)	1.49 (.90)	2.01 (1.44)
Card Games	Francophone	3.98 (1.50)	3.68 (1.48)
	Tindale and Norris (2012)	3.53 (1.51)	3.57 (1.51)
Sports Bet	Francophone	1.63 (1.41)	1.30 (.97)
	Tindale and Norris (2012)	1.72 (1.38)	1.36 (.93)
Lotto Tickets	Francophone	4.86 (2.21)	4.53 (2.17)
	Tindale and Norris (2012)	4.53 (2.31)	4.85 (1.92)
Scratch Tickets	Francophone	2.57 (1.98)	3.36 (2.00)
	Tindale and Norris (2012)	2.90 (2.07)	3.32 (2.05)
Slot machines	Francophone	2.07 (1.55)	2.90 (1.70)
	Tindale and Norris (2012)	2.86 (1.85)	3.46 (1.92)
Other Casino Games	Francophone	1.43 (.97)	1.67 (1.31)
	Tindale and Norris (2012)	1.46 (.98)	1.43 (1.07)
Online Gambling	Francophone	1.14 (.90)	1.09 (.66)
	Tindale and Norris (2012)	1.30 (1.13)	1.19 (.84)
Horse Betting	Francophone	1.48 (.85)	1.63 (1.23)
	Tindale and Norris (2012)	2.32 (1.48)	2.20 (1.30)

Within the Francophone sample, no gender differences regarding the other scale variables, such as depression, alcohol misuse, problem gambling, and family warmth, were found. This indicates that other than attitudes towards gambling and risk taking, and a few gambling motivations, there were few gender differences in this sample.

Discussion

Individual factors

The first risk factor cluster discussed in the pathways model by Tirachaimongkol and colleagues (2010) is individual vulnerability factors. These are risk factors that are immediate and personal to the individual. These factors include: negative emotions, trying to escape life's stresses, and substance use. Based on the literature, the hypotheses of this study predicted that not only would there be a relationship between problem gambling (PGSI and the Windsor Screen) and the individual risk factors of depression (CES-D) and alcohol misuse (CAGE), but that this relationship would be stronger in the Francophone sample.

Contrary to expectations, this is not what was found. No significant relationship was found between depression, alcohol misuse, and either problem gambling risk measure in the Francophone sample. Additionally, those in the Francophone sample reported significantly lower rates of both depression and alcohol misuse when compared to the two samples from Norris and Tindale (2006; Tindale & Norris, 2012). The result of these hypotheses not only is surprising, but also lends support to this risk factor cluster of the pathways model since, there are no individual factors and problem gambling in this sample.

The sparse literature that examines "individual" factors such as addictions and mental health does suggest that older Francophones in Ontario should be at greater risk for alcohol misuse, addictions (DeWit & Bénéteau, 1999b; Picard & Hévert, 1999; Statistics Canada, 2005), and depression (e.g., Cairney & Krause, 2005; Clark et al., 2007; Picard & Allaire, 2005; Streiner, Cairney, & Veldhuizen, 2006), and thus it was expected that Francophones would be at greater risk of alcohol misuse and depression. However, this was not the case. Work done by DeWit and Bénéteau (1999b) and Thériault and Stones (2009), along with the results of the last

research question, may help explain why this particular sample of older Francophones may not be at greater risk of these individual factors, compared to other Francophone samples.

DeWit and Bénéteau (1999b) found that older (55+) Francophones in Ontario were generally more likely to consume alcohol in comparison to the general Ontarian population. This was especially true for those in the Southwestern regions of the province. Those in Eastern and North-Eastern Ontario, however, had lower rates of alcohol consumption in comparison to those in Southwestern Ontario. The author of this study suggested that this regional difference might be due to the financial differences, and that those in the Southwest region of the province had more disposable income to purchase alcohol. However, research on socioeconomic status (income) and alcohol consumption demonstrates a different relationship, where those with lower socioeconomic status are more likely to have higher alcohol consumption in most communities (e.g., Johnson, Corley, Starr, & Deary, 2011; Huckle, Casswell, & You, 2010; Mulia & Karriker-Jaffe, 2012).

Work by Thériault and Stones (2009) postulated a different reason as to why those in Eastern and North-Eastern Ontario might not be as disadvantaged compared to those in different regions of the province. In a study examining depression in home-care clients in Ontario using multi-level linear modelling, the researchers took the linguistic composition of the communities in which the clients lived into account. They found that overall the Francophone clients were at greater risk of depressive symptoms. However, those living in communities where they were in a smaller minority (like Southwestern Ontario) were even at greater risk. The results of these studies indicate that older Francophones living in communities where there is a smaller concentration of Francophones may be at increased risk for these individual factors related to problem gambling. These findings support the conclusion reached by Cairney and Krause (2005)

that minority Francophones may be at greater risk of depression due to exclusion and marginalization. Participants in this study are from North-Eastern Ontario, a region where Francophones reside in a greater concentration compared to other regions of the province. Therefore, as mentioned earlier, they have more protective factors given they lived in a region with a larger proportion of Francophones. Additionally, the results of the last research question, examining other differences between the samples, indicated that participants in the Francophone sample were more involved in and attached to their community. This involvement and connectedness, and the resulting reduction in isolation and marginalization, may explain why this sample of older Francophones did not have higher rates of depression and alcohol misuse. Additionally, this sampling bias, of connected, literate individuals, combined with the low rates of problem gambling, may also explain the lack of a significant relationship.

As much as the results for this hypothesis were surprising, they did lend support for the individual vulnerability factors cluster in the pathways model (Tirachaimongkol et al., 2010). Not only did Francophone participants have lower rates of problem gambling risk, but they also had lower rates of the depression and alcohol misuse, both individual vulnerability factors. Contrastingly, both samples from Norris and Tindale (2006; Tindale & Norris, 2012) had higher rates of both problem gambling risk and the individual vulnerability factors, and these two were indeed related. These findings indicate that this cluster of factors might be valid predictor of problem gambling risk in samples or populations who are at risk of these individual vulnerability factors.

Social and environmental factors

The second risk factor cluster in the pathways model includes social and environmental factors. These include social bias, marginalization or exclusion, race/ethnicity, cultural or religious background, socioeconomic status, and/or sexual orientation. This cluster hypothesizes that older adults who are marginalized are at greater risk for gambling-related harm (Tirachaimongkol et al., 2010). But this cluster also includes those with personalities predisposed to novelty-seeking behaviours or superstitious beliefs, and those for whom gambling is a part of their cultural or ethnic identities. This risk factor cluster would also include older adults who grew up in an environment where gambling was part of their family or cultural traditions.

This cluster of factors might best explain cultural differences and the increased risk of problem gambling for those in minority groups. For this reason, several of the hypotheses and research questions proposed in the study fit within this cluster of risk factors. The authors of this pathways model argued that components from one cluster can interact within and across the clusters (Tirachaimongkol et al., 2010). One such example is the socio-economic status of older adults. Socio-economic status can interact with individual factors such as alcohol use, as discussed in the previous cluster, as well as with the social and environmental aspects of problem gambling risk. One of the objectives of this study was to construct a profile comparing those in the Francophone sample to the other two samples from Norris and Tindale (2006, Tindale & Norris, 2012). One such item of comparison is income, as a proxy for socioeconomic status. This comparison found that those in the sample from Tindale and Norris (2012), sampled across the province, had a higher socioeconomic status than those from North-Eastern Ontario, indicating a regional difference rather than a cultural or linguistic one. Again, this could suggest that those in

the Francophone sample would be at greater risk for problem gambling when compared to the 2012 Anglophone sample from Tindale and Norris.

Income is a well-known proxy measure of socio-economic status (e.g., Spitzer, 2005), but it by no means gives a complete picture of an individual or cultural group. The examination of the recreational activities of the older adults in the different samples gave a much richer picture of these individuals. Those in the Francophone sample were, more likely to volunteer (more than half) and read (three quarters) when compared to both Anglophone samples. Although those in the Francophone sample had a lower income, when compared to the 2012 Anglophone sample from Tindale and Norris, reading was given a higher priority. There have been remarkably few studies to examine the role of socioeconomic status in the reading habits or behaviours of adults. In a study dating back over 30 years, Kling (1982) found that socioeconomic status had an influence on the reading habits of adults. More recent work has found, not surprisingly, that education also plays a role in the reading habits and frequency of adults (e.g., Scales & Rhee, 2001). The combined information about the socioeconomic status and the reading habits of those in the Francophone sample indicates that the relationship between reading habits and socioeconomic status in this population is atypical, and that further research is needed.

In addition to socioeconomic status, this cluster also includes personalities and beliefs that may predispose older adults to novelty-seeking behaviours. Although a direct measurement of novelty-seeking behaviours was not included in the questionnaire used for this study, gambling attitudes were captured. One of the several research questions aimed to compare the gambling attitudes (as measured by the Gambling Attitudes Scales) of the three samples. For the most part, the three samples were rather similar. However, those from the sample of older adults across the province (from Tindale & Norris, 2012) generally demonstrated a more favourable

attitude towards gambling, compared to those in the other samples. More closely related to this cluster of factors are attitudes towards risk taking. Those in the Francophone sample were found least likely to have favourable attitudes towards risk taking, which may help to explain some of the differences in problem gambling risk, since risk taking and problem gambling risk are related (e.g. Cyders, Smith, Spillane, Fisher, Annus, & Peterson, 2007; Gupta, Derevensky, & Ellenbogen, 2006).

A major aspect of the social and environmental factors cluster, and of this study, is the role of family. In both of their samples, Tindale and Norris found a protective association between family warmth (as measured by the Family of Origin Scales) and problem gambling risk. The third hypothesis of this study predicted that a similar pattern would be seen in the sample of older Francophones; this was, however, not the case. The lack of association between family warmth and problem gambling risk in the Francophone sample is likely due to the sample's very low problem gambling risk rate, especially given that there was no significant difference in family warmth found between the three samples.

There are more aspects of familial life that may play a role in the social environment that could contribute to the risk of problem gambling. Thus, it is important to know whether older adults gamble with family, with friends, or alone. It is likewise important to know what, if any, role gambling played in the older adults' families of origin and what the gambling motivations of those family members were. A comparison of with whom the participants engaged in gambling behaviours demonstrates that those in the Francophone sample are similar to the 2012 Tindale and Norris sample. When looking at the individuals with whom participants gambled, the two samples were similar, with the exception that those in the Francophone sample gambled less frequently with friends. This is probably due to the separation of this item; they were asked about

Francophone and non-Francophone friends. However, when asked if they engaged in gambling activities with family members, only about half of those in the Francophone sample endorsed this item, compared to almost two thirds of the sample from Tindale and Norris (2012). With the exception of this, the overall results indicate that, for the most part, those in the Francophone sample gamble with the same individuals as those in the sample from across Ontario. As well, the reported motivations of family and friends in the Francophone sample are similar to those in the two other samples.

Considering that for the most part all three samples were similar, the familial aspect of the social and environmental cluster of factors may not fully explain the differences in problem gambling risk among the different samples. Family warmth was, however, found to be protective in the two non-Francophone samples. Whereas it had no appreciable effect in the Francophone sample, this is likely due to the very small rate of problem gambling in the Francophone sample.

In addition to family interactions, socioeconomic status, and attitudes, culture and marginalization are seen as major factors in Tirachaimongkol and colleagues' (2010) social and environmental cluster. Very few of the participants thought that their culture and language had any influence on their gambling behaviours or attitudes. Nor did the participants indicate that gambling was an issue within their Francophone community.

The research on gambling and minorities indicates that those in minority groups are at greater risk of problem gambling (e.g., Kim, 2012; Sacco et al., 2011; Welte et al., 2001). Therefore, it was hypothesized that those in the older Francophone sample would have a higher rate of problem gambling risk. But contrary to the hypotheses, those in the Francophone sample were not found to be at greater risk of problem gambling. This result, although important, also poses a new question: why is this case?

Those in the Francophone sample were found to be more likely, when compared to the two other samples, to use behaviours to control and prevent overspending when they did gamble, as opposed to using attitudes of self-control. They were more likely to bring a set amount of cash and avoid borrowing money to fund their gambling activities. They were also less likely to rely on self-control, a non-behaviour-based method of control. These findings may help to explain the differences in problem gambling rates. However, they do not explain why these methods of control vary between the samples.

One plausible explanation for this surprising result, although contrary to the pathways model by Tirachaimongkol and colleagues (2010), is that of a positive ethnic identity. There is very little existing research that examines the relationship between ethnic identity and gambling or problem gambling risk. The majority of the gambling literature on minority groups focuses on their higher rates of problem gambling as compared to dominant cultures, which are generally linked to marginalization (e.g., Alegría et al., 2009; Chhabra, 2007; Sacco et al., 2011; Tirachaimongkol et al., 2010), acculturation (Dion et al., 2010; Ellenbogen et al., 2007; Williams et al., 2011), and stress (e.g., Currie et al., 2012; Scull & Woolcock, 2007; Wardman et al., 2001) — all potential negative aspects of belonging to a minority group.

However, despite what is described in the previous literature, having strong ties to a minority ethnic or linguistic group is not necessarily negative. There is some, however limited, literature researching the significance of ethnic identity to well-being for those in minority groups, especially for older adults. The conceptualization of a strong ethnic identity is derived from work done by Tajfel (1978) and Phinney (1989; 1992). A strong ethnic identity includes feeling a sense of commitment and belonging to one's ethnic group, as demonstrated by one's behaviours and involvement within the group (Chavez-Korell, Benson-Flórez, Rendón, & Farías,

2014), as well as exhibiting positive feelings about the group (Williams et al., 2012). In the case of populations such as Francophones in Ontario, identification with and use of one's language may also demonstrate one's positive identity, or as those who research this area ones positive ethnolinguistic identity (Bourgeois, Busseri, & Rose-Krasnor, 2009). Francophones are undoubtedly a minority group in Ontario. Older Francophones in the North-Eastern part of the province are less diverse in their demographic make up (Office of Francophone Affaires, 2012), indicating a common history, culture and language. Bearing this in mind, some consider Franco-Ontarians, especially born in Canada, as a distinct ethnic group (e.g., Bourbonnais, 2007; Duquette, 1996). Others argue that Francophones outside of Québec cannot be defined as an ethic minority (e.g., Thériault, 2007). However, work examining the identity of minority Francophones in Canada and in Ontario, view these individuals as members of an ethnolinguistic group (e.g., Landry, Deveau, & Allard, 2006).

Some studies have found that a positive and strong ethnic identity is associated with various measures of well-being, and may possibly act as a "buffer" against the harmful effects of discrimination and marginalization (Smith & Silva, 2011). A meta-analysis of almost 200 studies examining ethnic identity in Americans of colour (Black, Hispanic, Latino, Asian, or Native American) found a positive relationship between ethnic identity and well-being. This relationship was found to be strongest among adolescents and young adults. In examining the role of ethnic identity in anxiety and depression in Black Americans, researchers found that those in the sample who had stronger ethnic identities (as measured by Phinney's Multigroup Ethnic Identity Measure) had fewer symptoms of depression and anxiety. The authors also postulated that "ethnic identity is thought to play a role in moderating the relationship between discriminatory experiences and psychological well-being" (Williams et al., 2012, p35). Similar results were

found in a study examining a large-scale sample of Filipino Americans. The strength of identification with a Filipino ethnic group was found to be directly associated with fewer depressive symptoms (Mossakowski, 2003).

In Canada, similar results have been found within a sample of First Nations adults. A strong ethnic identity and in-group ties were found to have a protective effect against discrimination and depressive symptoms. However, this was found to be limited to males in the sample, indicating that the relationship between ethnic identity and well-being may be more complex than previously thought (Bombay, Matheson &, Anisman, 2010).

In a national sample of 333 young (14–25) Francophone Canadians living outside of Québec, Bourgeois, Busseri, and Rose-Krasnor (2009) found an association between well-being (especially psychological) and strong positive ethnolinguistic identity. They found that higher rates of self-identification, commitment to a Francophone community, and use of the French language were associated with a higher perceived impact on an individual's physical health, self-esteem, reduction of anxiety, and overall well-being. Additionally, the authors found that a higher frequency of participation in activities within the Francophone community was also associated with an increase in well-being.

Landry, Deveau, Losier, and Allard (2009) found similar results when examining a larger sample of over 8000 Francophone high school students outside of Québec. They found that there was indeed a relationship between ethnolinguistic identity and psychological well-being in these students. They highlighted higher rates of life satisfaction and perceived physical health in the students who identified with the Francophone ethnolinguistic group.

Unfortunately, the aforementioned studies excluded older adults from their samples. Chavez-Korell and colleagues write that "little is known about ethnic identity and the role it

serves in the day-to-day lives of older adults" (2014, p.259). Identity development has traditionally been conceptualized as something that occurs during adolescence (e.g., Marcia, 1966), despite the idea that individuals' attitudes regarding their ethnic identity are something that evolve as part of a lifelong process (e.g., Cross & Fhagen-Smith, 2001). Chavez-Korell, Benson-Flórez, Rendón, and Farías (2014) examined older (65 to 97) Latino or Hispanic Americans, and found that, as in younger samples, a stronger positive ethnic identity was associated with lower rates of depressive symptoms. In addition, this study found that ethnic identity was also associated with better physical functioning, indicating that ethnic identity might be an important factor for an older minority population.

Unfortunately, there have been no studies to examine the link between ethnolinguistic identity and well-being in older Francophones in Ontario or outside of Québec. Additionally there are no studies examining the possible relationship between ethnic identity and problem gambling risk. This study did not measure the ethnolinguistic identity of older Francophones, but considering how this sample was recruited, as well as participants' active community involvement, in the form of volunteering, and engagement with Francophone friends, it is probable that those in this sample identify strongly with a Francophone ethnolinguistic identity. This may be why this sample of older Francophones had lower rates of gambling and problem gambling risk, in contrast to what was postulated based on other literature on older minority adults. There is no doubt that further research must be done to determine whether ethnic identity in this population, or any, can play a role in mediating against problem gambling risk. An analysis was attempted comparing the problem gambling risk of those who mentioned volunteering as a recreational activity. Volunteering was used as a proxy for community

belongingness, however, the overall level of problem gambling risk was so low that it was not possible to test.

This study also sought, like the pathways model, to determine the specific factors that may contribute to problem gambling risk in the Francophone sample. The construction of a regression model was planned but, due to the very low overall score of problem gambling risk (on both the PGSI and Windsor scale), and the low number of individuals who were potentially at risk of problem gambling, such an analysis and model were not feasible.

Behavioural regulation factors

The last cluster of the pathways model is one that examines behavioural regulation issues such as disinhibition, which refers to impaired decision-making and judgement, typically due to medical side effects as a result of stroke, disease, or prolonged substance use. This potential problem gambling risk factor was not examined in the samples from Norris and Tindale (2006, Tindale & Norris, 2012), and therefore comparison could not be done between the samples. No participants in the Francophone sample reported having medical conditions that would influence their gambling behaviours. It is not surprising that no participants indicated they had had a stroke or Parkinson's. These conditions affect approximately 1.1% and .003% of Canadians respectively (Public Health Agency of Canada, 2009; Lix et al., 2010). Additionally, this study targeted individuals who were living within the community, as opposed to those living in various care facilities. For this reason, it cannot be concluded that this factor in the pathways model is not applicable in this minority group, but simply that it was not applicable for this sample.

Motivational factors

There were few gender differences with regards to scaled variables such as problem gambling risk, depressive symptoms, and alcohol misuse. Nevertheless, consistent with the results of Bisson, Tindale, and Norris's 2012 research on gender differences in gambling behaviours among rural Ontario seniors, there were some gender differences in gambling attitudes and motivations. For the most part these differences were similar across the three samples. Men had an overall more favourable attitude towards lotteries and risk taking. However, only in the Francophone sample did men have a more favourable attitude towards casino gambling, indicating some interaction between gender and group membership. Similarly, Francophone women reported gambling for entertainment as a motivation for gambling more so than those in the other samples. Overall, in all three samples, women also endorsed buying scratch tickets, playing bingo, and playing on slot machines more so than men. Men, however, engaged in sports betting more than women. The results of this gender comparison indicate that, with the exception of casino gambling attitudes and gambling for entertainment, the gender differences were similar among the three samples, again illustrating that the Francophone sample may be more similar than distinct from the other two groups.

Conclusion of Second Study

The process model proposed by Tirachaimongkol and colleagues (2010) is a good way to regroup various factors that may lead to problem gambling among older adults. However, it does not mean that all older adults are at risk of problem gambling. This model takes into account factors associated with individuals and their social and cultural environments and factors related to behaviour regulation.

Individual factors were found to be valid predictors of problem gambling risk in the non-Francophone sample. The literature examining these individual risk factors among older Francophones (e.g., Cairney & Krause, 2005; Picard & Allaire, 2005; Statistics Canada, 2005) suggested that older Francophones would be at a greater risk of problem gambling due to these individual factors. Psychological comorbidities were found to be associated with problem gambling risk in both the Norris and Tindale (2006, Tindale & Norris, 2012) samples. This relationship was surprisingly absent in the participants of the Francophone sample, indicating either that individual factors are not relevant problem gambling predictors in this sample or that the very low proportion of the Francophone participants who are at risk of problem gambling did not allow for a proper analysis. Since these associations were present in both the Norris and Tindale samples (2006, Tindale & Norris, 2012), the latter explanation might be the most plausible, and make the interpretation of this clearer.

The second risk factor cluster — social and environmental factors — also predicted that those in the Francophone sample would be a higher risk of problem gambling due to various aspects related to being a marginalized ethnolinguistic group (e.g., Cairney & Krause, 2005; Clark et al., 2007; Kauppi et al., 2004; Office of Francophone Affairs, 2012; Sylvestre, 2007). However, the opposite was found: those in the Francophone sample were less at risk of problem gambling than those in the similar samples from Norris and Tindale (2006, Tindale & Norris, 2012). The process model views being older and being part of a minority ethnolinguistic group as inherently negative: the authors write that "ageism may aggravate existing discriminations that may be based on an older person's race/ethnicity, cultural/religious background, gender, socio-economic status and/or sexual orientation" (Tirachaimongkol et al., 2010, p. 538). However, having strong ties to one's ethnic or linguistic group may in fact buffer against these negative

aspects related to marginalization. Although no research has as yet examined the possible relationship between ethnic identity and problem gambling risk, in any minority population, research does demonstrate physical and psychological benefits to a strong ethnic identity for minority emerging adults (e.g., Smith & Silva, 2011), older adults (Chavez-Korell et al., 2014), and younger minority Francophones in Canada (Bourgeois, Busseri, & Rose-Krasnor, 2009; Landry et al., 2009). Considering how this sample of older Francophones from North-Eastern Ontario was recruited, stronger ethnolinguistic ties are likely, and may explain why this cluster of factors did not apply to this minority sample, at least to this particular sample and how it was recruited. Additionally, although the purpose of this study was to examine the gambling behaviours of older Francophones, gambling was not seen to be an important recreational activity or pastime for those in the Francophone sample. Finally, considering the non-census sample size, the factors related to behavioural regulation were not applicable to the Francophone sample. This, again, does not mean that this pathway is not applicable, but rather that it would take a much larger sample to investigate its role in older Francophones.

General Conclusion

The purpose and goal of the two studies presented here was to better understand gambling in a sample of older Francophones from North-Eastern Ontario. Since the first study of this dissertation was the first to examine gambling in this population, it sought to construct a demographic, social, and intergenerational family profile of gambling of the older Francophone sample and compare this profile to one of older Anglophones in Ontario (Norris & Tindale, 2006; Tindale & Norris, 2012). The second study aimed to apply the pathways model developed

by Tirachaimongkol and colleagues (2010) in order to better understand problem gambling risk in older Francophones from North-Eastern Ontario.

The profile study illustrated that gambling was not important for those in the sample. Gambling ranked among the lowest in the listed recreational activities (just above snowmobiling), and those who did gamble did so infrequently. Additionally, those who gambled did so for motivations related to entertainment, socialization, or community support. Thus, counter to the hypotheses and the aforementioned literature, participants in this sample reported low rates of problem gambling risk (on both the Windsor scale and the PGSI). The mean for problem gambling risk and the percentage of those at risk were lower than the rates shown in national level data (e.g., Currie, Hodgins & Casey, 2012). The same was also found to be true when examining the measures relating to depression (CES-D) and alcohol misuse (CAGE). The rates of depression and alcohol misuse in this sample were, again, substantially lower than in national level surveys (e.g., Poulin, Webster, & Single, 1999; Johnson, McLeode, Sharpe, & Johnston, 2008).

The second goal of this study was to gain a contextual understanding of the gambling behaviours and attitudes and problem gambling risk in the Francophone sample by comparing this profile to a similar sampling of older Anglophones in Ontario (Norris & Tindale, 2006; Tindale & Norris, 2012). This comparison yielded several interesting results. First, again those in the older Francophone sample did not have higher rates of problem gambling risk in comparison to both of the Anglophone samples. However, the Francophone sample was remarkably similar to the other two samples when it came to other gambling comparisons, such as gambling activities, frequencies, attitudes, and motivations. Where the samples differed most was in their demographic characteristics. Those in the Francophone sample were more likely to be married

and to have more grandchildren. Additionally, those in the Francophone sample, consistent with past research (e.g., Bouchard, Gilbert, Landry, & Deveau, 2006; Office of Francophone Affairs, 2012), were more likely to report a lower income compared to the Anglophone samples. However, the use of income as a proxy for socioeconomic status may be more complicated in this sample, since the majority (three-quarters) of the participants listed reading and volunteering as recreational activities, behaviours more typically expected of higher income groups.

The vast majority of the problem gambling literature (e.g., Kim, 2011; Scull & Woolcock, 2007; Tirachaimongkol et al., 2010; Wardman et al., 2001; Welt et al., 2001; Volberg, 1995) describes those in minority groups, both younger and older adults, as being at a higher risk of problem gambling. This is in sharp contrast to what was found in this sample of older Francophones. Why might this be? What is different about this sample of older minority adults? We do know that those who are married have a lower gambling frequency and are less at risk of problem gambling than those who are unmarried, and that socioeconomic status is also associated with problem gambling risk (e.g., Zaranek & Chapleski, 2005). Considering this, and the results of this study, might there be something else protecting this sample from problem gambling risk?

The second study aimed to better understand problem gambling risk in this sample by applying the pathways model proposed by Tirachaimongkol and colleagues (2010). The sample was analyzed according to the three problem risk clusters put forth by Tirachimongkol and colleagues, the first concerning individual vulnerability factors, the second comprising social and environmental factors, and the third focusing on behavioural regulation factors.

The individual vulnerability factors cluster comprises risk factors that are immediate and personal to the individual, such as alcohol misuse and depression. To better understand this

cluster the relationship between the likely comorbid factors and problem gambling was examined. However, no relationship was found in the Francophone sample, likely because of the very low rates of problem gambling, alcohol misuse, and depression in the sample. Considering this, these results were not surprising. However, since this comorbid relationship did exist within the Anglophone samples (Norris & Tindale, 2006; Tindale & Norris, 2012), and since there is a higher rate of problem gambling risk in these samples, these results help support the relevance of the individual vulnerability factors cluster.

The second cluster describes social and environmental factors; these include factors such as social bias, marginalization, or exclusion based on age, ethnicity, and socioeconomic status. This cluster in the pathways model predicts that those who are socially marginalized are at greater risk for gambling-related harm. This was not found to be the case with the older Francophone sample, as demonstrated by the first study. Not only are the Francophones in this sample slightly less at risk of problem gambling, but virtually none of the participants reported that their language or culture was a factor in their gambling behaviours, although direct awareness may not be present. In addition to ethnic marginality, this cluster includes items related to socioeconomic status, personal attitudes, and familial factors. To better understand why this sample of older Francophones is less at risk of problem gambling, all the factors of this cluster were examined.

Those in the Francophone sample have lower overall incomes than those in the Anglophone samples, possibly placing them at greater problem gambling risk. However, the use of income as a proxy for socioeconomic status in this sample did not yield expected results and the findings of the first study indicated that there is more to socioeconomic status than income when trying to understand problem gambling risk.

This cluster also includes personalities or beliefs that may predispose older adults to novelty-seeking behaviours. Those in the Francophone sample were remarkably similar to those in the Anglophone samples when it came to gambling and risk-taking attitudes (as measured by the GAS). These results indicate that attitudes and novelty-seeking behaviour do not explain the differences in problem gambling risk between the samples. This was also true when looking at family factors. In the Francophone sample there was no link between family warmth (FOS) and problem gambling risk, again likely due to the very low rate of problem gambling risk in the sample. When examining other aspects of familial interactions and gambling, such as why, how, and with whom participants gambled, again very few differences were found between the samples.

Despite the fact that those in the Francophone sample are part of a minority, and are economically disadvantaged compared to the Anglophone samples, they were still at a lower risk of problem gambling than the other samples. Yet there were few differences with respect to the role of gambling attitudes and family to potentially explain this lower problem gambling risk. These results indicate an issue with this cluster of Tirachaimongkol and colleagues' pathways model. One plausible explanation for this finding, and something that this model should take into account, is the possibility that a positive ethnic, or ethnolinguistic, identity might act as a protective factor regarding problem gambling risk. There is currently no research that examines this link. There are, however, studies indicating that positive ethnic identity can act as a buffer against the harmful effects of marginalization (e.g., Smith & Silva, 2011; Terwillinger et al., 2012). This ethnolinguistic identity buffer effect was found in a younger sample of Francophones outside of Québec (e.g., Bourgeois, Busseri, & Rose-Krasnor, 2009; Landry, Deveau, Losier, & Allard, 2009). Considering the method of recruitment of the participants in the Francophone

sample, and how their community ties may be a proxy for a positive ethnolinguistic identity, this may explain why the social and environmental factors cluster of the pathways model failed to explain the problem gambling rates of this minority sample.

The last cluster of the pathways model examines behavioural regulation issues likely due to medical conditions or pharmaceutical side effects. Considering the size of the Francophone sample and the small proportion of those affected by such side effects, this cluster of the pathways model was not applicable in this study.

Although it has its limitations, and was not directly applicable in the Francophone sample, the pathways model put forward by Tirachaimongkol and colleagues (2010) can be a good way to regroup and conceptualize various factors that may explain problem gambling risk. However, clearly it has its limitations when examining problem gambling risk in this sample of older Francophones from North-Eastern Ontario. In addition to not taking positive ethnic identity into consideration, this model also does not take personal motivational factors or gender differences into consideration.

Research does indicate that there are gender differences when it comes to gambling motivation (e.g., Clarke & Clarkson, 2008; Walker et al., 2005). This was again found to be the case is the Francophone sample, as well as the Anglophone samples. Similar to the results found by Bisson, Tindale, and Norris (2012), across the three samples, men had a more favourable attitude towards lotteries and risk taking. Higher risk-taking behaviours have been associated with an increase in problem gambling risk (e.g., Cyders, Smith, Spillane, Fisher, Annus, & Peterson, 2007; Gupta, Derevensky, & Ellenbogen, 2006). Additionally only in the Francophone sample did the men have a more favourable attitude towards casino gambling than the women. Women in the Francophone sample were more likely than their Anglophone counterparts to

report gambling for entertainment reasons. Although no differences were found in the level of problem gambling risk between the genders in this sample, gender differences in problem gambling risk have been reported in census-level data in this country (Afifi, Cox, Martens, Sareen, & Enns, 2010). Therefore, any model attempting to explain gambling and problem gambling risk should take gender and gambling motivations — factors the pathways model does not include — into account.

These are the first studies to examine gambling among older Francophones in Ontario, specifically in North-Eastern Ontario. The primary objective of these studies was to bridge several different gaps in the gambling literature. First, since older adults have been "relatively ignored in the research on gambling" (Wu & Wortman, 2009, p. 345), there is a need for more research examining gambling among older adults, particularly older Canadians. Ergo, this study helps to contribute to a limited body of research. Additionally since "there has been a concomitant lack of attention paid to non-English speaking, ethnic groups" (Munro et al., 2003, p. 5), and this gap in the problem gambling research is especially true for ethnic minority older adult gambling research (e.g., Ariyabuddhiphongs, 2012). These studies help to fill this gap in the limited body of research examining gambling among minority older adults.

In addition to these empirical contributions, the results of this dissertation research have theoretical implications. These are the first studies to propose a plausible relationship and mediation between problem gambling risk and positive ethnic/ethnolinguistic identity among minority groups. This study also helps elaborate upon the pathways model by Tirachaimongkol and colleagues (2010) by recommending that ethnic and linguistic identity be considered in the social and environmental factors cluster of the model. Additionally, the pathways model does not consider gender and motivational differences. Both of these could be part of the individual

factors cluster. Both of these could be part of the individual factors cluster, which would provide a more well-rounded and intersectional profile of gambling behaviours.

Finally, these studies have applied implications. It is important for those who work within the Francophone community, especially those who work with older Francophones, that the gambling behaviours, attitudes, and comorbidities, and the factors related to and protecting against problem gambling, are well understood. An understanding of these factors and their basis in scientific research is useful for local organizations to develop and implement programs to help with problem gambling or best use the resources available. For example, the idea of positive ethnic and ethnolinguistic identity could be used as an intervention. One could develop an intervention to foster and develop a positive sense of identity for an individual who is at risk of problem gambling. Additionally, by better understanding the pathways model proposed by Tirachaimongkol and colleagues (2010), the results of this study may help in identifying older adults who may be at risk of problem gambling, and thus help in developing resources for these older adults — resources that are culturally specific and take concepts like positive ethnic identity into account.

However, like all past research, there are limitations. Some of these studies are simply focused on problem gambling and do not view gambling as a recreational activity (e.g., Erikson et al., 2005; Johansson et al., 2009), others do not include minority groups (e.g., Desai et al., 2004; Munro et al., 2003), and those that do not examine older adults (e.g., Kim, 2012; Sacco et al., 2011).

Most of these limitations lie with either the focus of the studies or the sample recruited. The participants in the Francophone sample were recruited primarily using snowball sampling, with key individuals and organizations within the Francophone community of North-Eastern

Ontario assisting in the distribution of the questionnaire. Since this is the first gambling study with this population, it is important to note that in order to access this population, it was necessary to use convenience sampling. This process led to the recruiting of a sample that was not representative of the population at large, nor was it intended to be. Those participating in this study were more likely to have active ties within the Francophone community, which in turn likely indicate a positive self-identification and positive ethnic identity as a Francophone. This lack of representativeness is clear in the findings of the studies, as exemplified by the hobbies and involvement of the participants.

Additionally, the length and vocabulary of the questionnaire likely led to a selective sample. Older Francophones in Ontario have been found to have lower literacy rates compared to older Anglophones in the province (Wagner et al., 2002). Picard and Charland (1999) state that the vast majority, over 80%, of older (over 65) Francophones in Ontario cannot read (French or English), or can read but with great difficulty. By having a longer questionnaire with such a vocabulary, individuals with lower literacy levels would have been missed in this sampling strategy. This was supported by the income profile of the participants, since the majority reported enjoying reading and volunteering as hobbies.

The non-representative nature of the sample may have had an influence on the findings of these studies. The very low rates of problem gambling risk and the low rates of comorbid issues such as depression and alcohol misuse all go against the previous research on older minority populations (e.g., Cairney & Krause, 2005; DeWit & Bénéteau, 1999b; Picard & Allard, 2005; Scull & Wollcock, 2007; Statistics Canada, 2005) and the hypotheses of these studies. These results, or lack thereof, are possibly due to a selective sample of involved, active, and literate older Francophones. Lichtenberg (2011) highlights the dangers of this, by noting

differences between a traditionally recruited older minority pool, and a comparable population based sample, where those in the recruited pool tended to be healthier. Since, problem gambling risk and health are related (e.g. Erikson et al., 2005; McCready et al., 2008) this, again, indicates, that those in the sample of these studies may not be representative, and the may explain the results found.

Additionally, not every intended comparison between the samples was possible. Some variables were collected differently in the comparison studies. For example, the 2006 sample from Norris and Tindale (2006) used a 9-item scale version, whilst the Francophone sample and the 2012 Tindale and Norris sample used a 16-item scale. Additionally, some items collected in the Francophone studies (e.g. some methods of gambling avoidance) were not collected in the previous Anglophone samples. And certain variables were collected in a different nature (ordinal vs. categorical), and thus could not always be compared. Lastly, although the second study suggests that a relationship might exist between positive ethnic identity and problem gambling risk, there was no direct measure of ethnic identity and this relationship. It is also important to note that there may have been some issues with the questionnaire measures, as some of the scales (e.g. FOS, Guelph Family Gambling Items, GAS) were translated and used for the first time in French for these studies. However, the problem gambling scales were in French from other studies (Centre for Addiction and Mental Health, 2008).

Moreover, comparing samples that were recruited almost a decade apart may also produce some issues with the results. The aforementioned results are likely the result of the differences between the linguistic groups, however, these results may be, in part, due to time effects on the data. For example, when it came to recreational activities, there was a difference between the groups in the frequency of renting a movie. This may be due to cultural factors, or

may be due to time factors, with the advent of movie streaming services, and the closing of movie rental services. This passage of time could be responsible for things like gambling preferences, the popularity and accessibility of certain gambling activities can vary over time. This is especially true, in Ontario with the modernization of the Ontario Lottery and Gaming Corporation (OLG, 2012).

These studies sought to examine gambling among older Francophones in North-Eastern Ontario. Since these are the first studies to examine this issue in this population, they aimed to do a lot: to include a wide range of variables and to cover as many different aspect of gambling as possible. Future studies should be more precise and focus on specific aspects of gambling in this population. For example: Are older Francophones who are problem gamblers different than other problem gamblers? Are the problem gambling mechanisms the same? Since, for the most part, there exists differences between cultural and ethnic groups in problem gambling risk, the same should be true for older Francophones. Would there be a different rate of problem gambling risk with a more representative older Francophone sample? If positive ethnic identity actually acts as a buffer, one would expect to see a difference. Also, this research focused on one specific region of the province; it would be beneficial to understand the gambling behaviours, attitudes, motivations, comorbidities and risks of older Francophones elsewhere in the province and country. Would there be differences in older Francophones from different areas of the province? Considering the work by Thériault and Stones (2009), there are likely to be differences, especially in terms of comorbid factors of gambling and marginality. These questions may help to illuminate possible cultural differences and other mechanisms that may be unique to this population.

A more limited scope of focus in individual studies may also help to shorten the questionnaire or instrument used; this could help lead to a better response rate and a more representative sample. Such a sample ought to include those older Francophones with limited literacy. This may be difficult, but this population should not be ignored. This could be done with the use of interviews, or even having an individual read out the questionnaire, or this could possibly done electronically. A more inclusive and representative sample would help to foster a better understanding of gambling in this population, including members of visible minorities.

It would also be worthwhile for researchers to examine those who are members of a visible minority. Although visible minorities do not make up a large proportion (less than 1%) of older Francophones in North-Eastern Ontario, their experiences and gambling behaviours should not be ignored. Since research in the U.S. examining problem gambling reports higher problem gambling among visible minority groups (e.g., Alegría et al., 2009; Chhabra, 2007), the same might be true of older visible minority older Francophones in Ontario, like Hatian-Ontarians. Gambling research among these populations may help illuminate the relationship between marginality and gambling. Additionally, future research should also examine the issues surrounding the idea that Franco-Ontarians are a minority group, an ethnic group, a linguistic group or a combination of the two. It would be beneficial for research in this area to understand how older Franco-Ontarians view themselves. This would, again, contribute to a better understanding of the reality of older Franco-Ontarians and French-Canadians.

Although these two studies have their limitations, and there remain several unanswered questions, these studies make a number of contributions. The findings of these studies help us better understand gambling among older Francophones in North-Eastern Ontario; they indicate that gambling is a complicated matter to study. Contrary to expectations and the previous

literature, problem gambling was not an issue for the older Francophones in the sample, even though they belonged to a minority group. They were also not at greater risk for the expected comorbid issues. In fact, those in this sample were protected against problem gambling risk, depression, and alcohol misuse, possibly due to a greater level of community involvement and a strong positive ethnic identity. Additionally, with the exception of problem gambling risk, the Francophone sample was very similar to the two comparable Anglophone samples. The similarity shown between the three samples suggests that factors other than ethnic identity are more powerful in shaping gambling behaviours. These findings illustrate that future research on minority groups must take a broad look at understanding the potential differences between minority groups and gambling issues.

These studies also helped elaborate the pathways model by Tirachaimongkol and colleagues (2010). They helped expose its weaknesses and omissions. As described, this model has a simplistic view of those who are members of a minority, by not taking positive ethnic identity into account as a possible buffer to problem gambling. This model also paints all minority groups with the same brush, and negates the potential differences between various minority groups. This model also fails to account for gender related differences in how this may influence problem gambling risk in older adults.

The model does not take a developmental perspective. The cumulative advantage/disadvantage theory could tie in nicely with the pathways model. The cumulative advantage/disadvantage theory examines a person by taking their life course into account, not simply looking at them in the current moment (e.g. Dannefer, 2003; Merton, 1988). This theory is especially relevant when examining older adults who are members of minorities, where the inequality experience at a young age can accumulate and accentuate the difficulties related to

marginalization (e.g., Dannefer, 2003). These difficulties may add to the problem gambling risk. Unfortunately, the two studies conducted in this dissertation were not longitudinal, thus, cannot take a life course perspective. However, they may indicate that older adults with a positive ethnic identity and those who are engaged with their community may have accumulated an advantage over time protecting them against problem gambling risk. Identifying issues with the pathways model is significant in that this contributes to a better model, and push forward on more advanced and higher quality research in the future.

In addition to adding to the landscape of the gambling and psychology research literature these studies, importantly, add to the research about minority Francophones. As thoroughly discussed, there exists a gap in the research about Franco-Ontarians, this is especially true for older Francophones. In fact, these are the first studies to examine gambling in this population, these findings are new and important knowledge about this minority population. These results are especially relevant for those in the Francophone community of North-Eastern Ontario. The possibility that positive ethnic identity can protect against problem gambling in this population, is important for those who work within this community, and all minority communities.

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Appendences

Appendix 1: Consent Form

Formulaire de consentement libre et éclairé

"Le jeu chez les francophones âgés de la région du Grand Sudbury"

LAURIER
Wilfrid Laurier University
Department of Psychology

Cette étude est menée aux fins de la dissertation doctorale de Éric R. Thériault M.Sc. sous la supervision de la professeure Joan Norris Ph.D. de la Wilfrid Laurier University et le professeur Joseph Tindale Ph.D. de la University of Guelph. Cette étude est au sujet des relations familiales et des activités de jeu récréatives. Notre objectif est de créer un profil détaillé des francophones qui participent à des jeux récréatifs. Trois cent participant.e.s qui : (1) habitent dans la région de la ville du Grand Sudbury, (2) qui parlent le français comme langue primaire (Francophone) et (3) qui ont 55 ans ou plus, sont demandés de participer à cette étude. Ce questionnaire est composé d'échelles et de questions variées, et devrait prendre environ 45 minutes à compléter. Ce questionnaire peut être complété en ligne ou en format papier crayon. Dans le questionnaire, nous vous demandons à quel point vous êtes d'accord ou pas d'accord avec des énoncés quant à vos croyances et à vos activités de jeu. Une question typique du type « d'accord / pas d'accord » serait : « J'aime acheter des billets de la loterie ». Nous allons également vous poser des questions aux sujets de vos activités récréatives, votre consommation d'alcool ainsi que des questions démographiques telles que votre âge et combien d'enfants vous avez.

Si vous consenter à participer, vous comprenez alors que :

- votre participation est volontaire
- les renseignements personnels sont strictement confidentiels
- vous êtes entièrement libre de retirer votre consentement et de cesser de participer à tout moment
- vous pouvez sauter toutes les questions que vous ne voulez pas répondre, sans pénalité
- seuls les chercheurs auront accès au questionnaire complété
- si vous remplissez le questionnaire en ligne, la confidentialité des données ne peut pas être garantie lorsque les données sont en transition sur l'internet
- si vous remplissez le questionnaire en format papier crayon, malgré le fait que ce formulaire de consentement est poster avec le questionnaire, ces deux documents seront séparés l'un de l'autre pour assurer la confidentialité des renseignements personnels. Cependant, la confidentialité ne peut pas être assurée lorsque les données sont en transition
- les questionnaires en format papier crayon, vont être transférés en format numérique
- les questionnaires et les formulaires de consentement (format papier) seront entreposés (séparément) dans un cabinet sous clé dans un lieu sécuritaire, dans une salle de recherche sécuritaire à l'Université Wilfrid Laurier et la confidentialité sera également assurée en attribuant des numéros d'identifications anonymes aux données des participant.e.s
- les données électroniques seront entreposés sur un disque rigide, crypté et protégé par un mot de passe dans un local verouillé à l'Université Wilfrid Laurier
- selon les normes de recherche, les formulaires de consentement et les questionnaires en format papier seront détruits par Dre. Joan Norris pas plus tard que le 1ièr avril 2021 ;
- les données anonymes numériques seront gardées de façon indéfinie
- les données seront résumées de sorte à ce qu'aucun individu ne puisse être identifié à partir des résultats
- puisque les données seront dépersonnalisées à la réception, vos données ne peuvent pas être retirées une fois qu'elles sont soumises
- Il n'y a pas de rémunération financière pour avoir participé à cette étude

Votre participation aidera à améliorer nos connaissances par rapport à la façon dont les gens perçoivent le jeu récréatif. De plus, les résultats pourraient également aider à améliorer les services de soutien pour ceux qui ont des problèmes de jeu.

Puisque nous allons vous demander comment vous vous sentez au sujet de certains enjeux, il ce peux que vous resentez des sentiments d'inconfort temporaire. Ces sentiments sont tout à fait normaux et devraient être passagés. Cependant, encore une fois, vous pouvez prendre une (ou plusieurs) pauses, ou vous pouvez arrêter de répondre aux questions entièrement. Vous pouvez aussi sauter les questions que vous ne voulez pas répondre. Toutefois, si vous avez des questions sur le jeu, ou des problèmes de jeu, ou si vous ressentez des émotions négatives qui persistent ou accroissent suite à la participation à cette étude, veillez contactez les chercheurs. Vous pouvez également contacter, en toute confidentialité, la Ligne ontarienne d'aide sur le jeu problématique au 1-888-230-3505, ou visiter le www.opgh.on.ca/Indexfr.html ou le Centre de santé communautaire du Grand Sudbury (705-670-2274).

Merci d'avoir participé à notre sondage.

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Je, _____, (en lettres moulées) consens à participer dans l'étude Le jeu chez les francophones âgés du Nord-Est de l'Ontario menée par Éric Thériault, Joan Norris et Joseph Tindle et je comprends les informations qui ont été présentés dans ce formulaire, et que j'ai reçu une copie du formulaire.

_____ _____

(Signature du participant) (Date)

Les résultats de cette étude vont être inclus dans la dissertation doctorale d'Éric R. Thériault. Le rapport final de ce projet va être affiché sur le site Web de notre subventionnaire, le Ontario Problem Gambling Research Centre. Le rapport sera affiché (en anglais) après approbation sur le site Web www.gamblingresearch.org. Vous pouvez également communiquer avec le chercheur pour une copie d'un sommaire des résultats, dès le 1ier septembre 2014.

Si vous avez des questions, s'il-vous-plaît contactez le chercheur, Éric Thériault (en Français ou en Anglais), ou un de ses superviseurs (les informations sont présentées ci-haut). Ce projet a reçu l'approbation éthique par l'entremise du conseil d'éthique de recherche de la Wilfrid Laurier University (numéro d'approbation : 3728). Si vous sentez que vous n'avez pas été traité selon les descriptions dans ce formulaire, ou que vos droits en tant que participant.e ont été violés au cours de cette étude veillez communiquer avec Dr. Robert Basso (en anglais) au bureau de recherche de la Wilfrid Laurier University, rbasso@wlu.ca ou (519) 884-1970 poste 4994 ou Éric Thériault (en français) thxe8710@mylaurier.ca ou au (519) 884-0710 poste 3719. Cette étude est subventionnée par le Ontario Problem Gambling Research Centre.

Appendix 2: Questionnaire

LAURIER
Wilfrid Laurier University

Le jeu chez les francophones âgés de la région du Grand Sudbury

Étude sur le jeu (gambling) familial

Dans ce questionnaire, le terme « jeu » signifie « *Gamble* » ou « *Gambling* »

A: Renseignements de base

Votre code postal (les trois premiers caractères) _____

1) Votre sexe ?
- ❑ Homme
- ❑ Femme

2) Votre année de naissance ? _____

3) Votre état matrimonial ?
- ❑ Marié ou union de fait
- ❑ Célibataire
- ❑ Séparé ou divorcé
- ❑ Veuve ou veuf

4) Combien d'enfants avez-vous ? _____

5) Combien de petits enfants avez-vous ? _____

6) Donnez un estimé de votre revenu familial brut ?
- ❑ 0—29,000 $
- ❑ 30,000 $—59,000 $
- ❑ 60,000 $—89,000 $
- ❑ 90,000 $ et plus

7) Votre religion :
- ❑ Catholique
- ❑ Anglicane
- ❑ Chrétienne non incluse ailleurs
- ❑ Musulmane
- ❑ Aucune appartenance religieuse
- ❑ Autre (veuillez préciser) : _____

8) Votre langue primaire :

- ❑ Français
- ❑ Anglais
- ❑ Ojibwa
- ❑ Cree
- ❑ Oji-cree
- ❑ Michif
- ❑ Autre (veuillez préciser) : _____

9) Quelles sont vos loisirs préférés ? S.V.P., cochez toutes les activités qui s'appliquent.

- ❑ Jouer de la musique francophone
- ❑ Jouer de la musique non-francophone
- ❑ S'adonner à des jeux voyageurs
- ❑ Pratiquer des sports vigoureux comme le hockey, le tennis, le ski, la raquette
- ❑ Pratiquer des activités modérées comme la marche, la natation et le golf
- ❑ Aller au théâtre
- ❑ S'adonner au jeu (« *gambling* »)
- ❑ Aller au cinéma
- ❑ Louer un film et le visionner à la maison
- ❑ Sortir au restaurant
- ❑ Visiter des amis
- ❑ Visiter des membres de la famille
- ❑ Lire
- ❑ Faire du bénévolat pour une église ou un organisme charitable
- ❑ S'adonner à des activités de loisir comme coudre, travailler le bois ou d'autres activités d'artisanat
- ❑ Suivre un cours
- ❑ Pratiquer la pèche, la chasse, le piégeage
- ❑ Faire de la motoneige
- ❑ Autre (veuillez préciser) : _____

B: Les activités de jeu

Dans cette section, nous nous intéressons à vos activités de jeu.

1) À l'aide de l'échelle suivante, indiquez le chiffre qui représente le mieux la fréquence à laquelle vous vous adonnez au jeu, pour chaque énoncé.

Jamais	Une ou deux fois dans ma vie	Plusieurs fois dans ma vie	Environ une fois par année	Quelques fois par année	Chaque mois	Au moins chaque semaine
1	2	3	4	5	6	7

	1	2	3	4	5	6	7
Bingo (dans une salle de bingo ou à distance)							
Tirages (levées de fonds pour les hôpitaux, cancer, etc.)							
Gager sur les sports							
Les billets de loterie tels que le 6/49, Lotto Max							
Les billets « gratteux » ou les billets Nevadas							
Les machines à sous dans un casino ou un bar							
Les jeux de casino autre que les machines à sous							
Le jeu (« *gambling* ») sur Internet							
Miser aux courses de chevaux							
Autre							

Si vous avez coché « autre », précisez : _____

Avez-vous cessé le jeu ? ☐ oui ☐ non

Si oui, à quel âge ?

- ❑ 30 ans ou plus jeune
- ❑ 31 – 40 ans
- ❑ 41 – 50 ans
- ❑ 51 – 60 ans
- ❑ 61 – 70 ans
- ❑ 70 +

Si vous avez répondu « jamais » à toutes les questions dans B1, sautez à la question B.16.

3) À environ quel âge avez-vous commencé le jeu ?

- ❑ Moins de 30 ans
- ❑ 31 – 40 ans
- ❑ 41 – 50 ans
- ❑ 51 – 60 ans
- ❑ 61 – 70 ans
- ❑ 70 +

4) Pourquoi est-ce que vous vous adonnez au jeu ? S.V.P., cochez toutes les raisons qui s'appliquent.

- ❑ Pour le plaisir et le divertissement
- ❑ Pour gagner
- ❑ Pour socialiser avec des gens comme la famille ou les amis
- ❑ Pour les récompenses offertes par les casinos telles que les repas à rabais
- ❑ Pour passer le temps
- ❑ Pour me sauver des sentiments d'ennui et de solitude
- ❑ Pour l'excitation de participer au jeu
- ❑ Pour oublier mes problèmes
- ❑ Pour l'excitation des attractions
- ❑ Pour essayer quelque chose de nouveau
- ❑ Mon revenu me permet de prendre des risques
- ❑ Pour appuyer les organismes communautaires et charitables
- ❑ Parce que cela fait partie de ma culture francophone
- ❑ Parce que je participe avec les gens de mon héritage francophone
- ❑ Autre (veuillez préciser) : _____

5) Est-ce que votre emplacement géographique influence votre goût de participer au jeu (p.ex. Il y a un casino dans votre communauté ou à proximité).

- ❑ Oui
- ❑ Parfois
- ❑ Non

6) Le fait d'être francophone a-t-il une influence sur votre participation au jeu ?

- ❑ Oui
- ❑ Non

Si oui combien? (veuillez encercler) :

1	2	3	4	5
Pas du tout		Un peu		Beaucoup

7) Avec qui participez-vous au jeu ? S.V.P., cochez toutes les options qui s'appliquent.

- ❑ Mère
- ❑ Père
- ❑ Oncle
- ❑ Tante
- ❑ Cousin(e)
- ❑ Époux/Épouse
- ❑ Enfant(s)
- ❑ Frère ou sœur
- ❑ Amis francophones
- ❑ Amis non-francophones
- ❑ Seul
- ❑ Autre (veillez préciser) : _____

8) Comment souvent visitez-vous un casino pour participer au jeu ?

- ❑ Jamais
- ❑ Une fois par quelques années
- ❑ Une ou deux fois par année
- ❑ Au moins une fois par mois
- ❑ Au moins une fois par semaine
- ❑ Chaque jour

Si vous avez répondu « jamais », sautez à la question B.16.

9) En moyenne, combien dépensez-vous sur le jeu lors d'une visite à un casino ?

- ❑ Moins de 100 $
- ❑ Plus de 100 $

10) Est-ce que vous vous imposez une limite monétaire lorsque vous visitez un casino ?

- ❑ Oui
- ❑ Non

11) Si oui, à quel point respectez-vous votre limite ? S.V.P., cochez tous les choix qui s'appliquent.

- ❑ Je laisse mes cartes bancaires et mes cartes de crédit à la maison.
- ❑ J'utilise un montant prédéterminé d'argent comptant.
- ❑ Je refuse d'emprunter de l'argent de mes amis ou de ma famille.
- ❑ Je fais preuve de contrôle de soi.
- ❑ Je me donne une limite de temps.
- ❑ Les gens m'aident.
- ❑ Autre (veillez préciser) : _____

12) Vous arrive-t-il de dépasser votre budget ?

- ❑ Non
- ❑ Oui, comment souvent ?_____

13) Quels jeux jouez-vous lorsque vous êtes au casino ?

- ❑ Baccara
- ❑ Black Jack
- ❑ Craps
- ❑ Keno
- ❑ Machines à sous
- ❑ Mahjong
- ❑ Poker
- ❑ Roulette
- ❑ Rummy
- ❑ Autre (veillez préciser) : _____

14) En moyenne, combien de temps passez-vous à un casino à la fois ?

- ❑ Moins de 4 heures
- ❑ Plus de 4 heures

15) Est-ce que les établissements de jeu en Ontario (ex. Sudbury Downs, Rideau Carleton Raceway) accommodent vos besoins spéciaux si vous en avez ?

- ❑ Ne s'applique pas
- ❑ Oui
- ❑ Non

16) Est-ce que vos amis aiment s'adonner au jeu ?

- ❑ Oui
- ❑ Non
- ❑ Je ne le sais pas

17) À l'aide de l'échelle suivante, indiquez le chiffre qui représente le mieux la fréquence à laquelle les <u>membres de votre famille</u> s'adonnaient au jeu.

Jamais / Je ne le sais pas	**Une ou deux fois lors de leurs vies**	**Plusieurs fois dans leurs vies**	**Peut-être une fois par année**	**Quelques fois par année**	**À chaque mois**	**À chaque semaine**
1	**2**	**3**	**4**	**5**	**6**	**7**

	1	**2**	**3**	**4**	**5**	**6**	**7**
Mère							
Père							
Frère ou Sœur							
Oncle							
Tante							
Cousin(e)							
Amis							
Enfants (Adultes)							
Autres							

Si vous avez coché « autre », veillez préciser : _____

Si vous avez répondu « jamais » à toutes les questions, sautez à la question B.20.

18) Pourquoi pensez-vous que les membres de votre famille aiment/aimaient à participer au jeu ? S.V.P., cochez toutes les raisons qui s'appliquent.

- ❑ Pour le plaisir et le divertissement
- ❑ Pour gagner
- ❑ Pour socialiser avec des gens comme la famille ou les amis
- ❑ Pour les récompenses offertes par les casinos telles que les repas à rabais
- ❑ Pour passer le temps
- ❑ Pour se sauver des sentiments d'ennui et de solitude
- ❑ Pour l'excitation de participer au jeu
- ❑ Pour oublier leurs problèmes
- ❑ Pour l'excitation des attractions
- ❑ Pour essayer quelque chose de nouveau
- ❑ Leur revenu leur permet de prendre des risques
- ❑ Pour appuyer les organismes communautaires et charitables
- ❑ Parce que cela fait partie de sa culture francophone
- ❑ Parce qu'ils participent avec les gens de leur héritage francophone
- ❑ Autre (veuillez préciser) : _____

19) À l'aide de l'échelle suivante, veuillez indiquer l'effet que la participation au jeu de vos parents a eu sur votre vie et la vie des autres membres de votre famille :

1	2	3	4	5	6	7
Entièrement positif	Généralement positif	Bien pour 1-2 personnes	Neutre ou à impact équilibré	Ont blessé 1-2 personnes	Généralement négatif	Totalement négatif

20) Avez-vous déjà participé au jeu avec des membres de votre famille lorsque vous étiez un <u>enfant ou un jeune adulte</u> ?

- ❑ Jamais
- ❑ Parfois
- ❑ Régulièrement

Si vous avez répondu « jamais », sautez à la question B.22.

21) Avec qui participiez-vous au jeu lorsque vous étiez un <u>enfant ou un jeune adulte</u> ? S.V.P., cochez toutes les réponses qui s'appliquent.

- ❑ Mère
- ❑ Père
- ❑ Frère ou Sœur
- ❑ Oncle
- ❑ Tante
- ❑ Cousin(e)
- ❑ Amis
- ❑ Autre (veuillez préciser) : _____

22) Participez-vous au jeu avec les membres de votre famille là que vous êtes adulte ?

- ❑ Jamais
- ❑ Parfois
- ❑ Régulièrement

23) Avez-vous déjà eu des disputes familiales par rapport à <u>votre</u> participation au jeu ?

- ❑ Jamais
- ❑ Parfois
- ❑ Régulièrement

a. Si vous avez des disputes familiales par rapport à <u>votre</u> participation du jeu, avec qui vous disputez-vous ? À quel sujet ?

_____
_____
_____
_____
_____

24) Est-ce que votre participation au jeu interfère ou nuit à votre participation à d'autres activités de loisir ?

- ❑ Oui
- ❑ Non

25) Si non, est-ce que votre participation au jeu vous a permis de participer à de nouvelles activités ?

- ❑ Oui
- ❑ Non

26) Connaissez-vous quelqu'un qui a un problème de jeu ?

- ❑ Oui
- ❑ Non

27) Si oui, cette personne reçoit-elle du soutien pour ce problème ?

- ❑ Oui
- ❑ Non
- ❑ Je ne le sais pas

28) Est-ce que les activités de jeu d'un membre de votre famille ont déjà causé des problèmes pour votre famille ?

- ❑ Oui
- ❑ Non

29) Si oui, quels membres de la famille ?

- ❑ Mère
- ❑ Père
- ❑ Frère ou Sœur
- ❑ Oncle
- ❑ Tante
- ❑ Cousin(e)
- ❑ Époux/Épouse
- ❑ Enfant(s)
- ❑ Gendre(s)/Bru(s)
- ❑ Petit(s)-enfants(s)
- ❑ Nièce ou neveux
- ❑ Autre (veuillez préciser) :_____

Si oui, de quel type de problème s'agissait-il et quel a été son impact sur vous ?

_____

_____

_____

_____

30) Est-ce que vos activités de jeu ont déjà causé un problème pour votre communauté francophone ?

- ❑ Oui
- ❑ Non

Si oui, de quel type de problème s'agissait-il et quel a été son impact sur votre communauté ?

_____
_____
_____
_____

31) Est-ce que les activités de jeu d'un membre de votre famille ont déjà causé un problème pour votre communauté francophone ?

- ❑ Oui
- ❑ Non

Si oui, de quel type de problème s'agissait-il et quel a été son impact sur votre communauté ?

_____
_____
_____
_____

32) Est-ce que vos attitudes et activités en vers le jeu sont influencer par fait d'être francophone?

- ❑ Oui
- ❑ Non

Si oui, comment?

_____
_____
_____
_____

C: Les expériences de famille dans laquelle vous avez grandi

Cette section est au sujet de la famille au sein de laquelle vous avez grandi. À l'aide de l'échelle suivante, veuillez indiquer à quel point vous êtes d'accord avec chaque énoncé.

Entièrement d'accord	**Accord**	**Neutre**	**En désaccord**	**Fortement en désaccord**
1	**2**	**3**	**4**	**5**

	1	**2**	**3**	**4**	**5**
1. L'atmosphère dans ma famille est habituellement désagréable.					
2. Mes parents encourageaient les membres de ma famille de s'écouter l'un l'autre.					
3. Ma famille m'a enseigné que les gens sont fondamentalement bons.					
4. Mes parents pouvaient avouer quand ils avaient tort.					
5. La résolution des conflits familiaux était une expérience très stressante.					
6. Mes parents m'ont encouragé de m'exprimer de façon ouverte.					
7. Ma famille ignorait ou critiquait souvent mes attitudes et mes sentiments.					
8. Dans ma famille, je me sentais libre d'exprimer mes opinions.					
9. L'atmosphère dans ma famille était froide et négative.					
10. Dans ma famille, je sentais que je pouvais discuter afin de résoudre nos conflits.					
11. Dans ma maison, les repas étaient habituellement amicaux et plaisants.					
12. Dans ma famille, nous étions habituellement capables de résoudre les conflits.					
13. Dans ma famille, c'était facile d'exprimer mes sentiments et mes pensées.					
14. Mes parents nous décourageaient d'exprimer des opinions différentes des leurs.					
15. Ma famille avait une règle non écrite : n'exprimez pas vos sentiments.					

D: Les expériences dans la famille que vous avez créée

Cette section est au sujet de votre situation familiale actuelle. À l'aide de l'échelle suivante, veuillez indiquer à quel point vous êtes d'accord avec chaque énoncé.

Entièrement d'accord	**Accord**	**Neutre**	**En désaccord**	**Fortement en désaccord**
1	**2**	**3**	**4**	**5**

	1	**2**	**3**	**4**	**5**
1. Dans ma famille, nous nous encourageons à développer des amitiés.					
2. Dans ma famille, les conflits ne se règlent jamais.					
3. J'ai de la difficulté à comprendre ce que les autres membres de ma famille disent et comment ils se sentent.					
4. Dans ma famille, j'exprime tous mes sentiments.					
5. Ma famille est ouverte à toutes les façons différentes de voir la vie.					
6. Je dois souvent deviner ce que pensent et ressentent les autres membres de ma famille.					
7. Les membres de ma famille prennent rarement la responsabilité de leurs gestes.					
8. Dans ma famille, parfois je n'ai pas besoin de m'exprimer pour me faire comprendre.					
9. Je comprends facilement ce que les autres membres de ma famille disent et ressentent.					
10. J'ai de la difficulté à exprimer mes opinions dans ma famille.					
11. Les membres de ma famille sont indifférents quant aux sentiments des autres.					
12. Dans ma famille, il est interdit d'exprimer certains sentiments.					
13. Les membres de ma famille sont habituellement sympathiques aux sentiments					

	1	2	3	4	5
des autres.					
14. Dans ma famille, les gens acceptent la responsabilité de leurs gestes.					
15. Ma famille est chaleureuse.					

E: Les attitudes envers le jeu

Cette section est au sujet des attitudes générales envers le jeu et des attitudes spécifiques envers la course aux chevaux, la loterie et les casinos. À l'aide de l'échelle suivante, veillez indiquer à quel point vous êtes d'accord avec chaque énoncé. Nous comprenons que les questions semblent se répéter, mais nous apprécions le temps que vous prenez pour les répondre.

Entièrement d'accord	Plutôt d'accord	Légèrement d'accord	Légèrement en désaccord	Plutôt en désaccord	Fortement en désaccord
1	2	3	4	5	6

	1	2	3	4	5	6
1. J'aime participer au jeu.						
2. Je pense que le jeu est bon pour le Canada.						
3. Je soutiens le droit des francophones de participer au jeu aussi souvent qu'ils le veulent.						
4. J'aime acheter des billets de loterie.						
5. J'aime miser sur les courses de chevaux.						
6. Je soutiens le droit des Canadiens et des Canadiennes de participer au jeu aussi souvent qu'ils et elles le veulent dans un casino.						
7. Je déteste miser sur les courses de chevaux.						
8. Je participe au jeu dans un casino lorsque l'occasion se présente.						
9. Je pense que le jeu est bon pour les francophones.						
10. Je veux miser sur les courses de chevaux.						
11. Je déteste participer au jeu dans un casino.						
12. Je veux acheter des billets de loterie.						

13. J'aime participer au jeu dans un casino.						
14. Je pense que miser sur les courses de chevaux est bon pour le Canada.						
15. Je deviens excité quand je suis avec des gens qui misent sur les courses de chevaux.						
16. Participer au jeu dans un casino est acceptable.						
17. La loterie est nuisible pour notre communauté francophone.						
18. Je participe au jeu lorsque l'occasion se présente.						

Entièrement d'accord 1	**Plutôt d'accord 2**	**Légèrement d'accord 3**	**Légèrement en désaccord 4**	**Plutôt en désaccord 5**	**Fortement en désaccord 6**

	1	**2**	**3**	**4**	**5**	**6**
19. Je me sens à l'aise avec les gens qui jouent souvent à la loterie.						
20. Je soutiens le droit des Canadiens et des Canadiennes de participer au jeu aussi souvent qu'ils et elles le veulent.						
21. Je suis une personne qui cherche l'excitation.						
22. Je veux participer au jeu.						
23. Il est acceptable d'acheter des billets de loterie.						
24. Je veux miser sur les courses de chevaux quand les gens autour de moi en discutent.						
25. Je pense que miser sur les courses de chevaux est bon pour les francophones.						
26. Je deviens excité quand je suis avec des gens qui participent au jeu.						
27. Je veux acheter des billets de loterie quand les gens autour de moi en discutent.						
28. Je veux participer au jeu quand les gens autour de moi en discutent.						
29. Miser sur les courses de chevaux est acceptable.						

30. Je suis à l'aise avec les gens qui fréquentent souvent les casinos pour participer au jeu.							
31. Je mise sur les courses de chevaux lorsque l'occasion se présente.							
32. Il est acceptable que les gens dans ma ville s'adonnent au jeu.							
33. Je veux participer au jeu dans un casino.							
34. Je me sens bouleversé quand je vois des annonces pour la loterie.							
35. Il est acceptable que les gens dans ma ville misent sur les courses de chevaux.							
36. La loterie est nuisible pour notre société.							

Entièrement d'accord 1	**Plutôt d'accord 2**	**Légèrement d'accord 3**	**Légèrement en désaccord 4**	**Plutôt en désaccord 5**	**Fortement en désaccord 6**

	1	**2**	**3**	**4**	**5**	**6**
37. Je pense que ce serait mieux pour la province si le jeu dans les casinos était interdit.						
38. Je supporte le droit des francophones de participer au jeu dans les casinos aussi souvent qu'ils et elles le veulent.						
39. J'achète des billets de loterie lorsque l'occasion se présente.						
40. J'aime prendre des risques.						
41. Il est acceptable qu'il y ait des casinos dans ma ville.						
42. La participation au jeu est acceptable.						
43. Je déteste les loteries.						

Si vous avez répondu « jamais » pour toutes les options dans la question B1 (Les activités de jeu), sautez complètement la section F.

F: Les conséquences du jeu

Dans cette section nous voulons en savoir davantage sur votre perception de la réaction des autres vis-à-vis de votre participation au jeu. Si vous avez arrêté de participer au jeu, répondez aux questions comme si vous y participiez encore.

	Oui	Non
1. Depuis que vous avez commencé à participer au jeu, vous vous sentez plus déprimé, soit après le jeu ou en général.	☐	☐
2. Vous avez déjà caché vos activités de jeu, par exemple, où vous étiez ou combien vous avez gagné / perdu.	☐	☐
3. Lors de votre participation au jeu, vous avez déjà dépensé plus d'argent que vous aviez planifié.	☐	☐
4. Quand vous perdez de l'argent au jeu, vous retournez pour tenter de la regagner.	☐	☐
5. Le jeu vous donne un sens d'excitation ou un « *high* » qui vous redonne de l'énergie.	☐	☐
6. Vous avez déjà été surpris à quel point le temps passe vite lorsque vous participez au jeu.	☐	☐
7. Le jeu a rempli un vide dans votre vie, et vous aide à vous sentir moins seul.	☐	☐
8. Vous avez déjà emprunté de l'argent des amis, de votre famille, des cartes de crédit ou des institutions bancaires pour que vous puissiez participer au jeu.	☐	☐
9. Depuis que vous avez commencé à participer au jeu, vous perdez intérêt dans d'autres activités.	☐	☐
10. La relation avec vos proches a souffert depuis que vous avez commencé à participer au jeu.	☐	☐
11. Vous vous trouvez à penser de plus en plus au jeu et vous recherchez des façons pour jouer.	☐	☐
12. Depuis que vous avez commencé à participer au jeu, vous avez de la difficulté à payer vos factures de ménage et vos dépenses personnelles, telle que votre loyer, l'épicerie et l'hydro.	☐	☐
13. Le jeu vous fait sentir bien lorsque vous vous sentez mal.	☐	☐
14. Vous avez des changements d'humeur radicaux et extrêmes depuis que vous avez commencé à participer au jeu.	☐	☐
15. Vous arrêtez de penser à vos problèmes quotidiens lorsque vous participez au jeu.	☐	☐
16. Vous pensez que vous allez gagner « le gros lot » chaque fois que vous participez au jeu.	☐	☐

Jamais	Parfois	La plupart du temps	Presque toujours
1	2	3	4

	1	2	3	4

Au cours des 12 dernier mois :

17 Avez-vous misé plus d'argent que vous pouviez vous permettre de perdre?				
18. Avez-vous eu besoin de miser plus d'argent pour obtenir la même excitation?				
19. Êtes-vous retourné jouer une autre journée pour récupérer l'argent que vous aviez perdu?				
20. Avez-vous vendu quelque chose ou emprunté pour obtenir de l'argent pour jouer?				
21. Avez-vous déjà senti que vous aviez peut-être un problème de jeu?				
22. Le jeu vous a-t-il déjà causé des problèmes de santé, y compris du stress ou de l'angoisse?				
23. Des personnes ont-elles critiqué vos habitudes de jeu ou vous ont-elles dit que vous aviez un problème de jeu (même si vous estimez qu'elles avaient tort)?				
24. Vos habitudes de jeu ont-elles causé des difficultés financières à vous ou à votre famille?				
25. Vous êtes-vous déjà senti coupable de vos habitudes de jeu ou de ce qui arrive quand vous jouez?				

26. Avez-vous une condition médicale qui peut influencer vos comportements du jeu ou votre inhibition (ex. démence, AVC, maladie de Parkinson, etc.) ?

- ❑ Oui
- ❑ Non

G: Humeur récente

Dans cette section, nous voulons en apprendre davantage sur vos humeurs et vos émotions.
Indiquez la fréquence des sentiments et des comportements suivants lors de la dernière semaine. Utilisez l'échelle suivante :

Moins que 1 journée	**1 – 2 jours**	**3 – 4 jours**	**5 – 7 jours**
1	**2**	**3**	**4**

Lors de la dernière semaine :

	1	**2**	**3**	**4**
1. J'ai été dérangé par des choses qui ne me dérangent habituellement pas.				
2. Je n'avais pas envie de manger, je n'avais pas d'appétit.				
3. J'avais l'impression de constamment broyer du noir (« *feeling blue* ») même avec l'aide de mes amis et de ma famille.				
4. J'avais l'impression d'être aussi bon que les autres.				
5. J'ai eu de la difficulté à rester concentré sur mes tâches.				
6. Je me sentais déprimé.				
7. J'avais l'impression que tout ce que je faisais nécessitait trop d'effort.				
8. J'avais de l'espoir pour l'avenir.				
9. J'avais l'impression que ma vie était un échec.				
10. Je me sentais peureux.				
11. Mon sommeil était agité.				
12. J'étais heureux.				
13. Je parlais moins souvent que d'habitude.				
14. Je me suis senti seul.				
15. Les gens étaient hostiles.				
16. J'ai profité de la vie.				
17. Il y a eu des épisodes où j'ai pleuré.				
18. Je me suis senti triste.				
19. J'avais l'impression que les gens ne m'aimaient pas.				
20. Je ne pouvais pas me « lancer » dans ma journée.				

H: Utilisation d'alcool

Dans cette section, nous voulons en savoir davantage au sujet de votre utilisation d'alcool.

1) Comment souvent consommez-vous des boissons alcooliques, du vin ou de la bière ?

- ❑ Jamais
- ❑ Moins d'une fois par mois
- ❑ 1-3 boissons par mois
- ❑ 1-6 boissons par semaine
- ❑ Une boisson par jour
- ❑ Plus d'une boisson par jour

2) Si vous buviez dans le passé et avez cessé, comment souvent consommiez-vous des boissons alcooliques, du vin ou de la bière ?

- ❑ Moins d'une fois par mois
- ❑ 1-3 boissons par mois
- ❑ 1-6 boissons par semaine
- ❑ Une boisson par jour
- ❑ Plus d'une boisson par jour

Ceci est un bref questionnaire par rapport à votre utilisation d'alcool.

	Oui	**Non**
3. Avez-vous déjà pensé que vous deviez réduire votre consommation d'alcool ?	☐	☐
4. Est-ce que les gens autour de vous vous tracassent en critiquant votre consommation d'alcool ?	☐	☐
5. Est-ce que vous êtes déjà senti mal ou coupable par rapport à votre consommation d'alcool ?	☐	☐
6. Avez-vous déjà pris un verre en vous levant le matin pour calmer vos nerfs ou pour vous vous débarrasser d'une gueule de bois (« hang-over »)?	☐	☐

I: Votre famille

Pour ces questions, veillez écrire vos réponses.

1) Avec quels membres de votre famille gardez-vous un contact régulier ?

_____

2) Avec qui habitez-vous ?

_____

Les questions suivantes sont au sujet de vos relations familiales. Pensez à votre famille en général et pas à un membre individuel. Veillez cocher les réponses appropriées.

Jamais ou pas du tout 1	**Un peu ou rarement 2**	**Certains ou parfois 3**	**Souvent ou beaucoup 4**

	1	**2**	**3**	**4**
3. À quel point les membres de votre famille vous aiment-ils ?				
4. À quel point les membres de votre famille comprennent-ils vos sentiments ?				
5. À quel point pouvez-vous compter sur votre famille si vous avez un problème sérieux et que vous avez besoin d'aide ?				
6. À quel point êtes-vous à l'aise de discuter de vos inquiétudes avec votre famille ?				
7. À quelle fréquence les membres de votre famille demandent-ils trop de vous ?				
8. À quelle fréquence les membres de votre famille vous critiquent-ils ?				
9. À quelle fréquence les membres de votre famille vous ont-ils déçus quand vous aviez besoin d'eux ?				
10. À quelle fréquence les membres de votre famille vous vexent-ils (vous « *tapent sur les nerfs* ») ?				

J: Les attentes familiales

1) À quel point vous sentez-vous obligé …

Pas du tout	Un petit peu	Un peu	Beaucoup
1	2	3	4

	1	2	3	4
D'annuler vos plans lorsqu'un parent semble être troublé				
D'appeler ou de visiter votre famille, ou de leur écrire régulièrement				
D'annuler vos plans lorsqu'un membre de votre famille autre qu'un de vos parents semble être troublé				
D'ouvrir vos portes à un membre de votre famille				

K: Le contact familial

1) À quelle fréquence êtes-vous en contact avec n'importe quel membre de votre famille (p.ex. vos frères, sœurs, parents, enfants) qui n'habitent pas avec vous ? Ceci comprend les visites, les appels téléphoniques, les lettres, les messages textes ou les courriels (veillez encercler).

Jamais ou presque jamais	Moins d'une fois par mois	Environ une fois par mois	Deux ou trois fois par mois	Environ une fois par semaine	Plusieurs fois par jours	Environ une fois par jour	Plusieurs fois par jour

L: Le soutien familial

1) Par semaine, environ combien d'heures consacrez-vous aux membres de votre famille pour du soutien émotionnel ? (veillez encercler)

Moins de 1 heure	1-2 heures	3-5 heures	Plus de 5 heures

2) Par semaine, environ combien d'heures de soutien émotionnel recevez-vous des membres de votre famille ? (veillez encercler)

Moins de 1 heure	1-2 heures	3-5 heures	Plus de 5 heures

3) À part du soutien émotionnel, environ combien d'heures par semaine aidez-vous les membres de votre famille ? (veillez encercler)

Moins de 1 heure	1-2 heures	3-5 heures	Plus de 5 heures

4) À part du soutien émotionnel, environ combien d'heures par semaine d'aide recevez-vous des membres de votre famille ? (veillez encercler)

Moins de 1 heure	1-2 heures	3-5 heures	Plus de 5 heures

5) Environ combien d'argent recevez-vous de votre famille chaque mois ? (veillez encercler)

0 $	Moins de 100 $	101 $-500 $	500 $-1 000 $	Plus de 1 000 $

MERCI BEAUCOUP D'AVOIR REMPLI NOTRE SONDAGE !

Votre participation aidera à améliorer nos connaissances par rapport à la façon dont les gens perçoivent le jeu récréatif. De plus, les résultats pourraient également aider à améliorer les services de soutien pour ceux qui ont des problèmes de jeu.

Si vous avez des questions par rapport au jeu ou si vous avez des problèmes de jeu, vous pouvez également contacter, en toute confidentialité, la Ligne ontarienne d'aide sur le jeu problématique au 1-888-230-3505, ou visiter le www.opgh.on.ca/Indexfr.html ou le Centre de santé communautaire du Grand Sudbury (705-670-2274).

S'il-vous-plaît, veillez retenir une copie du formulaire de consentement libre et éclairé, puisque ce formulaire contient toutes les informations essentielles par rapport à cette étude.

S'IL-VOUS-PLAÎT, VEUILLEZ METTRE LE QUESTIONNAIRE ET LE FORMULAIRE DE CONSENTMENT SIGNÉ DANS L'ENVELOPPE ADDRESSÉ ET AFFRANCHIE FOURNIS. ET POSTER CETTE ENVELOPE POUR RETOURNER LE QUESTIONNAIRE AUX CHERCHEURS. MERCI BEAUCOUP!

Maintenant, songez à des faits qui sont pertinents à cette étude mais qui n'ont pas été posés dans ce questionnaire. Si vous voulez partager quoi que ce soit, utilisez l'espace ci-dessous pour écrire les renseignements supplémentaires :