

Risk factors in lottery games analysis from France & Quebec



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**Risk
factors in
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- Introduction
- Methodology
- Findings
- Conclusion

Introduction

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- ✓ Lotteries are the most prevalent form of gambling around the world
- ✓ What potential harm may be derived from this pervasive form of gambling?
- ✓ few studies have attempted to isolate participation in lotteries in order to determine the gambling-related harm associated with this practice

- ✓ Lottery gambling is the least associated with problem practices in the literature
- ✓ However, problematic lotteries practice exists
- ✓ The contribution of these harms to the total burden associated with gambling could be significant.

The prevention paradox framework

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- ✓ Gambling harms are a continuum
- ✓ High prevalence of lottery gambling participation and prevention paradox framework:
“a large number of people at a small risk may give rise to more cases of disease than the small number who are at high risk” (Rose, 1985)
- ✓ Some studies concluded that aggregate harms related to non-problem gamblers or at-risk gamblers exceed those related to problem gamblers

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A comparative analysis focused on profile and patterns of lottery players :

- 1) to define the portrait of lottery players,
- 2) to analyze the practice of playing only lotteries, their associations with problem gambling, and to health indicators and substance consumption,
- 3) to compare this to participation in other forms of gambling

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France

- **representative nationwide telephone survey, December 2013 to May 2014, among 15,635 French people aged 15– 75**

Quebec

- **2009 and 2012 nationwide telephone survey (ENHJEU-Québec), population aged 18 and over who speak French or English and live in private households throughout the province of Québec (N = 11,888 in 2009; N = 12,008 in 2012). Both survey data were combined.**

Demographic characteristics

- **gender, age, level of education, professional situation and socio-professional status**

Participation in gambling activities during the previous 12 months

- **lotteries, scratch cards, sports betting, horse racing, poker, slot machines and other casino games.**

Gambling frequency and spending in the past year.

Substance use behaviours

- **problematic drinking, daily tobacco consumption and past-year use of illicit drugs**

Problem Gambling Severity Index (PGSI)

The sample of past-year gamblers (N = 8,784, France; 16,447, Québec), was divided into two groups:

- **Exclusive lottery gamblers (ELGs) (n = 6256, France; 10,600, Québec)**
- **and Non-exclusive lottery gamblers (NELGs) (n = 2,528, France; 5,847, Québec).**

Bivariate analysis was used to compare the profiles and practices

- **gamblers from both groups; and**
- **moderate risk and problem gamblers from both groups**

A multivariate approach to determine whether the factors related to problem gambling were the same in the two groups

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Gamblers outline (1)

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	France 2014			Québec 2009 et 2012		
	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_{a}	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_{a}
N =	6 256 %	2 528 %		10 600 %	5 847 %	
Sociodemographic (1)						
Gender						
Male	43,8	68,9	***	47,1	56,5	***
Female	56,2	31,1	***	52,9	43,5	***
Age group						
15-24	9,6	22,9	***	5,2	16,8	***
25-34	17,6	21,2	***	12,8	19,7	***
35-44	21,1	17,3	***	17,8	16,0	*
45-54	21,9	16,9	***	23,9	16,2	***
55 and older b	29,9	21,7	***	40,3	31,3	***
Education						
Did not complete Baccalaureate	56,2	53,7	*	-	-	-
Completed Baccalaureate	19,4	22,5	**	-	-	-
Completed post-Baccalaureate diploma	24,3	23,8		-	-	-
Some high school	-	-	-	14,5	15,9	*
High school diploma	-	-	-	33,1	34,5	
College (CEGEP) degree	-	-	-	24,6	24,9	
University studies	-	-	-	27,8	24,7	**
Marital Status						
Single, never married	-	-	-	17,9	30,6	***
Married	-	-	-	40,9	32,4	***
Common Law	-	-	-	22,8	22,5	
Widowed, separated, or divorced	-	-	-	18,4	14,5	***

Gamblers outline (2)

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	France 2014			Québec 2009 et 2012		
	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_a	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_a
N =	6 256	2 528		10 600	5 847	
	%	%		%	%	
Sociodemographic (2)						
Occupation						
Employed	61,3	60,7		61,9	57,3	***
Student	5,3	12,0	***	3,8	13,2	***
Unemployed	9,8	10,9		-	-	-
Not active on labor market	23,7	16,4	***	-	-	-
On leave, without work, stay at home, other	-	-	-	9,9	8,6	
Retired	-	-	-	24,4	20,9	***
Socio-professional category (SPC)						
Inferior SPC	58,4	54,2	***	-	-	-
Median SPC	12,9	14,2	**	-	-	-
Superior CSP	28,7	31,6		-	-	-
Household monthly income						
Less than 1,200 €	19,1	18,9		-	-	-
1,200 € to 1,999 €	21,5	18,1	***	-	-	-
2,000 € to 3,000 €	29,9	29,5		-	-	-
3,000 € and more	29,5	33,6	***	-	-	-
Inferior income	-	-	-	6,8	7,0	
Income average inferior	-	-	-	18,5	18,0	
Income average superior	-	-	-	35,8	33,8	
Superior income	-	-	-	38,8	41,1	

Gamblers outline (3)

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	France 2014			Québec 2009 et 2012		
	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_a	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_a
N =	6 256	2 528		10 600	5 847	
	%	%		%	%	
Gambling Practices						
Gambling frequency						
[1;24[	58,9	41,3	***	46,1	41,8	***
[24;52[	15,1	13,6		15,1	14,8	
[52;104[	16,3	15,7		22,4	20,2	*
[104; + [	9,7	29,5	***	16,3	23,1	***
Gambling spending c						
	€	€		\$ CAN	\$ CAN	
Under 250	78,5	48,7	***	70,7	49,0	***
250 to 499	10,1	13,6	***	14,1	15,0	
500 to 999	6,9	13,7	***	9,9	14,0	***
1,000 and more	4,5	24,0	***	5,3	21,9	***
Gambling problem severity						
Non-problem gamblers	91,1	70,5	***	97,8	86,2	***
Low-risk gamblers	6,5	19,1	***	1,6	7,6	***
Moderate-risk and problem gamblers	2,4	10,4	***	0,6 †	6,2	***

Gamblers outline (4)

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	France 2014			Québec 2009 et 2012		
	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_a	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_a
N =	6 256	2 528		10 600	5 847	
	%	%		%	%	
Health indicators and substance use						
Harmful drinking d	6,5	14,1	***	9,0	18,8	***
Daily smoking	30,4	42,5	***	18,0	20,9	***
Past-year drug use e	7,8	19,4	***	8,0	18,4	***
Poor mental health	22,9	19,9	**	-	-	-
Suicidal ideation	5,1	4,2		-	-	--

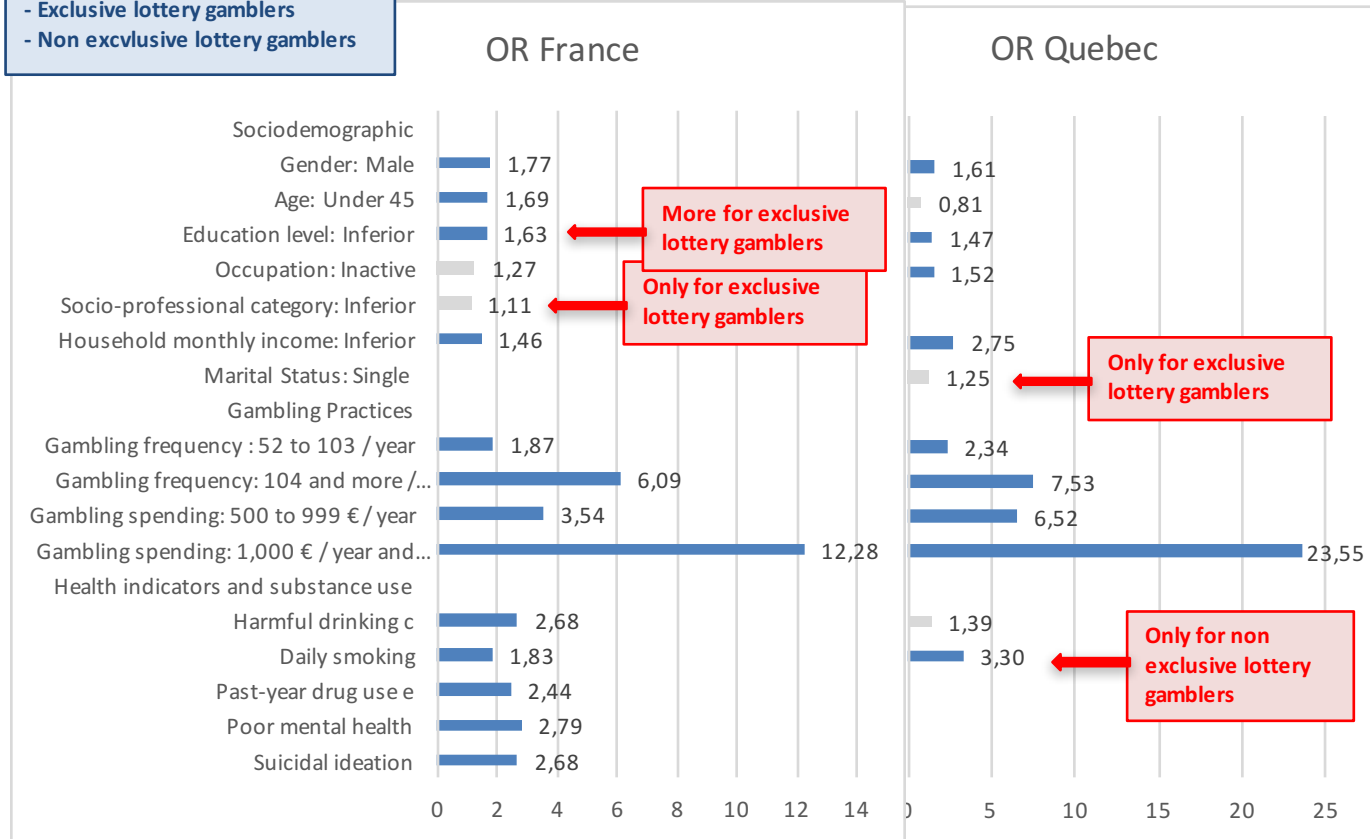
Predictors of moderate-risk or problem gambling

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On blue, common predictor factors for both groups:
- Exclusive lottery gamblers
- Non exclusive lottery gamblers

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	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2
N =	152	262	
	%	%	
Socio-démographie			
Gender			
Male	54,2	78,8	***
Female	45,8	21,2	
Age group			
15-24	8,8 †	32,2	***
25-34	23,3	24,2	
35-44	17 †	15,5	
45-54	27,9	10,8 †	***
55-75	22,1	17,3	
Education			
Did not complete Baccalaureate	81,3	64,3	***
Completed Baccalaureate	6,6 †	20,7	***
Completed post-Baccalaureate diploma	12,1 †	15,1	
Occupation			
Employed	46,4	52,2	
Student	6,3 †	16,2	**
Unemployed	22,6	20,2	
Inactive + Unknown	24,7	11,5 †	***
Socio-professional category (SPC)			
Inferior SPC	74,8	56,4	***
Median SPC	2,9 †	10,6 †	*
Superior CSP	22,4	33,0	**
Household monthly income			
Less than 1,200 €	32,1	21,6	*
1,200 € to 1,999 €	27,6	23,5	
2,000 € to 3,000 €	22,2	23,8	
3,000 € and more	18,1 †	31,1	**

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	Exclusive lottery gamblers	Non-exclusive lottery gamblers	χ^2_{a}
N =	152	262	
	%	%	
Gambling Practices			
Internet gambling	4.7 †	27,7	***
Gambling frequency			
Less than 24	21,9	14,5	
24 to 51	15,9 †	9,5 †	
52 to 103	32,3	12,3	***
104 and more	30,0	63,8	***
Gambling spending			
Under 250	39,4	14,9	***
250 to 499	14,3 †	4,4 †	***
500 to 999	19,6	13,8	
1,000 and more	26,7	66,9	***
Gambling problem severity			
Moderate-risk gamblers	90,7	76,9	***
Problem gamblers	9,3 †	23,1	***
Health indicators and substance use			
Harmful drinking	11,9 †	27,8	***
Daily smoking	36,0	56,0	***
Past-year drug use	16,8 †	34,3	***
Poor mental health	42,7	37,7	
Suicidal ideation	15,5 †	9,2 †	

- ✓ The differing inclusivity of what constituted “lottery activities” of ELGs
- ✓ A third comparison group composed of exclusively non-lottery gamblers?

- ✓ ELGs have less intensive gambling practices and present lower rates of problem gambling.
- ✓ But, in France, more than a third of moderate-risk and problem gamblers are exclusive lottery players
- ✓ ELGs who are MR/PG are more likely to be men, older, belong to lower socio-professional groups and report lower income and education levels.
- ✓ Despite the low levels of harm associated with lottery, the concentration of problems within certain groups, means that these harms cannot be dismissed.

- ✓ This study outlines the place of lottery games among all gambling activities.
- ✓ These associations indicate that prevention efforts need to be broad in their inclusivity of activities, regardless of the activities overall associated harm.
- ✓ At the same time, it is necessary that prevention target specific groups who demonstrate higher risk with so called ‘ low-risk activities’.

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