

Is online practice a risk factor of problem gambling?

Results from the 2014 French National Survey on
Gambling.

JEAN-MICHEL COSTES
VINCENT EROUKMANOFF

French Monitoring Centre for Gambling (ODJ)

International Gambling Conference
Preventing harm in the shifting gambling environment: Challenges, Policies & Strategies

Auckland
10, 11, 12 FEBRUARY 2016

Outline

2

**Online
risk factor
of
problem
gambling?**

Introduction

Methodology

Findings

Conclusion

- Introduction
- Methodology
- Findings
- Conclusion

Gambling legal framework in France

3

Gambling legal framework in France **before 2010**

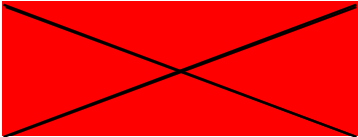
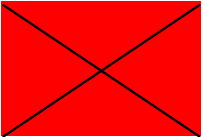
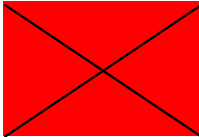
Online
risk factor
of
problem
gambling?




Introduction

Methodology

Findings

Conclusion

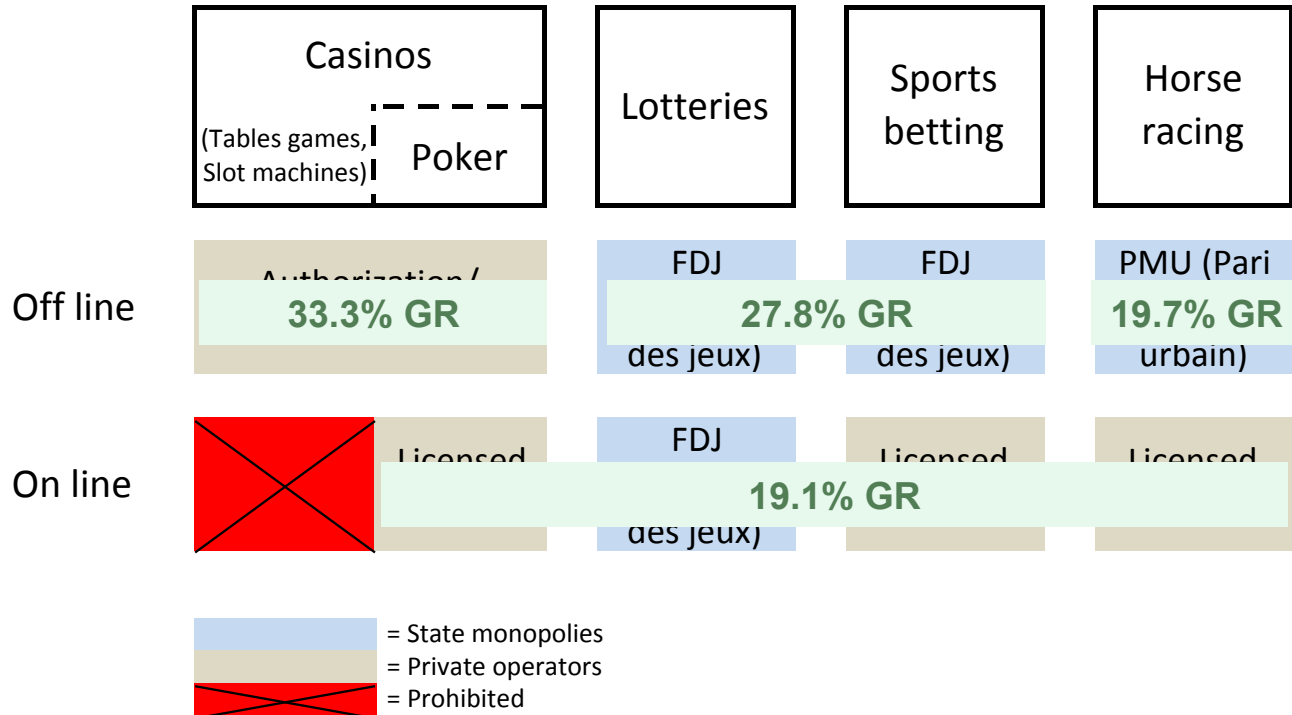
	Casinos (Tables games, Slot machines) Poker	Lotteries	Sports betting	Horse racing
Off line	Authorization/ Concession	FDJ (Française des jeux)	FDJ (Française des jeux)	PMU (Pari mutuel urbain)
On line		FDJ (Française des jeux)		

-  = State monopolies
-  = Private operators
-  = Prohibited (except for some FDJ an PMU games)

Gambling legal framework in France

4

Gambling legal framework in France **after 2010**



Online
risk factor
of
problem
gambling?

Introduction

Methodology

Findings

Conclusion

**Online
risk factor
of
problem
gambling?**

Introduction

Methodology

Findings

Conclusion

Online gamblers more likely to be male, young, single, well educated and belonging to more affluent social classes than offline players

Many studies have reported higher gambling related problems among online compared with offline gamblers.

Why ?

- ✦ Accessibility and flexibility
- ✦ Lack of social control
- ✦ Virtual money

Some studies that control for factors such as demographic variables and gambling involvement have found that online gambling does not predict problem gambling anymore

Only a few empirical studies have specifically compared online and offline gamblers.

Online
risk factor
of
problem
gambling?

Introduction

Methodology

Findings

Conclusion

- National French Health Barometer survey, Representative nationwide telephone survey
- From **December 2013 to May 2014** among **15,635** French people aged **15–75 years**.
- 2-stage random sampling design: household, individual
- Landline and cell samples
- Refusal rate was 35.7%
- Data weighted to represent the French population structure according to age, gender, educational level, region of residence, and level of urbanization

- A set of questions about:
 - **Demographic characteristics,**
 - **Gambling patterns,**
 - **Mental health status and substances use behaviours**
- Alcohol Use Diagnostic Identification Test (AUDIT-C)
- Mental Health scale (MH-5, a specific section from the Short-Form 36 questionnaire; cut-off of : > 55)
- The Problem Gambling Severity Index (PGSI) was used to assess the severity of gambling problems (cut off: >=5)

Sample splitted into 2 groups : offline and online gamblers
two-stage analytical procedure

- ✦ Univariate analysis: demographic profile, health status and substances use behaviours, and gambling patterns of each group
- ✦ Multivariate logistic regressions were performed to estimate associations between socio-demographic characteristics, gambling patterns and online gambling.

Dependent variables	
Demographic characteristics	Gambling patterns
Gender	Gambling frequency (last year)
Age	Gambling spending (last year)
Education	Number of activities practiced
Socioprofessional category	Type of game played
	Problem gambling (PGSI≥5)

Online
risk factor
of
problem
gambling?

Introduction

Methodology

Findings

Conclusion

**Online
risk factor
of
problem
gambling?**

Introduction

Methodology

Findings

Conclusion

- Introduction
- Methodology
- **Findings**
- Conclusion

Gambling activities in France in 2014

10

Gambling participation among French people aged 15-75 years in 2014

Gambling activities	Last year prevalence (%)	Among those who play this type of game: % playing	
		off line	on line
Lottery	39.9	97.2	5.4
Scratch card games	32.5	99.5	1.7
Sports betting	6.3	94.6	9.5
Horse racing	4.1	86.5	23.6
Poker	2.7	81.3	39.2
Slot machines	5.4	98.9	1.6
Casinos (excluding poker)	2.0	99.4	2.2
Other games	1.0	97.6	6.4
Overall	56.2	98.2	7.3

Source : Enquête nationale sur les jeux d'argent et de hasard ODJ/INPES 2014

Online risk factor of problem gambling?

Introduction

Methodology

Findings

Conclusion

Problem gambling in France in 2014

11

Online risk factor of problem gambling?

Introduction

Methodology

Findings

Conclusion

Problem gambling prevalence in France in 2014

PGSI	Overall 15-75 years population			Gamblers	
	n	%	IC 95 %	%	IC 95 %
Non gamblers	6851	43.8	(43.0 - 44.6)	-	-
Nonproblem gamblers	7481	47.8	(47.1 - 48.6)	85.2	(84.4 - 85.9)
Low-risk gamblers	889	5.7	(5.3 - 6.0)	10.1	(9.5 - 10.7)
Moderate-risk gamblers	340	2.2	(1.9 - 2.4)	3.9	(3.5 - 4.3)
Problem gamblers	75	0.5	(0.4 - 0.6)	0.9	(0.7 - 1.0)

Source : Enquête nationale sur les jeux d'argent et de hasard ODJ/INPES 2014

Online gamblers vs Offline gamblers (1)

	Offline gamblers n = 8,142	Online gamblers n = 643	Test: *p≤0.05 **p≤0.01 ***p≤0.001
Demographic characteristics			
Gender			
Women	50.9	24.2	***
Men	49.1	75.8	***
Age			
15-24	13.1	17.8	***
25-34	17.9	27.6	***
35-44	19.7	23.3	*
45-54	20.6	17.8	ns
55-75	28.7	13.5	***
Professional Situation			
Working	60.4	70.1	***
Student	10.1	10.1	ns
Unemployment	7.0	9.2	*
Other (or no answer)	22.4	10.6	***
Socioprofessional category (SPC)			
Low SPC	58.3	43.6	***
Middle SPC	28.9	37.2	***
High SPC	12.8	19.2	***
Education			
Did not complete Baccaulaureate	56.8	39.2	***
Completed Baccaulaureate	20.0	23.6	*
Completed Post-Baccaulaureate diploma	23.2	37.2	***

Online
risk factor
of
problem
gambling?

Introduction

Methodology

Findings

Conclusion

Online risk factor of problem gambling?

Introduction

Methodology

Findings

Conclusion

Health status and substances use behaviours	Offline gamblers n = 8,142	Online gamblers n = 643	Test: *p≤0.05 **p≤0.01 ***p≤0.001
Mental health status			
good (MH5 score ≥ 56)	77.6	82.2	**
bad (MH5 score < 56)	22.4	17.8	**
Suicidal ideation			
yes	4.8	5.5	ns
Tobacco (daily consumption)			
yes	33.8	34.2	ns
Alcohol: AUDIT-C			
yes	8.4	12.4	***
Drug use (last year use)			
yes	10.1	23.6	***

Online gamblers vs Offline gamblers (3)

Gambling patterns	Offline gamblers	Online gamblers	Test:
	n = 8,142	n = 643	*p≤0.05 **p≤0.01 ***p≤0.001
(14)			
Gambling frequency (last year)			
[1;24[55.5	32.9	***
[24;52[14.7	13.8	ns
[52;104[15.8	20.6	**
[104;+[14.0	32.7	***
Gambling spending (last year)			
< 250 € (including no answer)	72.1	43.0	***
[250;500[€	10.9	13.4	ns
[500;1000[€	8.4	15.5	***
>= 1000 €	8.7	28.1	***
Number of activities practiced			
1	60.2	36.9	***
2	26.6	27.4	ns
3 or more	13.2	35.7	***
Gambling participation:			
Lottery	68.4	76.2	***
Scratch card games	47.9	41.9	**
Horse racing	10.4	21.2	***
Sports betting	5.4	31.2	***
Poker	2.8	30.1	***
Casino games (excluding poker)	12.1	22.8	***
Problem gambling (PGSI≥5)			
yes	1.7	6.4	***

Online
risk factor
of
problem
gambling?

Introduction

Methodology

Findings

Conclusion

Sample splitted into 2 groups : offline and online gamblers
two-stage analytical procedure

- ✦ Univariate analysis: demographic profile, health status and substances use behaviours, and gambling patterns of each group
- ✦ Multivariate logistic regressions were performed to estimate associations between socio-demographic characteristics, gambling patterns and online gambling.

Dependent variables	
Demographic characteristics	Gambling patterns
Gender	Gambling frequency (last year)
Age	Gambling spending (last year)
Education	Number of activities practiced
Socioprofessional category	Type of game played
	Problem gambling (PGSI \geq 5)

Online
risk factor
of
problem
gambling?

Introduction

Methodology

Findings

Conclusion

Online gambling associated factors

16

	Adjusted OR	CI-95%
Demographic characteristics		
Gender		
Women	1	
Men	1.65	1.31 - 2.08
Age		
15-44	1	
45-75	0.78	0.62 - 0.97
Socioprofessional category (SPC)		
Low SPC	1	
High SPC	1.47	1.18 - 1.84
Education		
Did not complete Bacalalaureat	1	
Bac. or Post-Bac. diploma	2.14	1.68 - 2.73

Adjusted OR CI-95%

Gambling patterns

Gambling frequency (last year)

< 52	1	
≥ 52	1.60	1.25 - 2.07

Gambling spending (last year)

< 500 €	1	
≥ 500 €	1.56	1.18 - 2.06

Number of activities practiced

1 or 2	1	
3 et +	0.92	0.70 - 1.20

Gambling participation: (ref = 1; no practice)

Lottery	1.86	1.43 - 2.41
Scratch card games	0.83	0.67 - 1.03
Horse racing	1.60	1.17 - 2.18
Sports betting	4.00	2.94 - 5.45
Poker	9.01	6.43 - 12.63
Casino games (excluding poker)	1.06	0.77 - 1.47

Problem gambling (PGSI ≥ 5)

no	1	
yes	0.78	0.38 - 1.58

**Online
risk factor
of
problem
gambling?**

Introduction

Methodology

Findings

Conclusion

- ✓ French online gamblers are more likely to be men, younger people and belonging to more affluent social classes than offline players
- ✓ They have more intensive practices and they are more likely to be problem gamblers
- ✓ All other patterns related factors being controlled, online gamblers are not more likely to be problem gamblers
- ✓ Internet offers an easier access to gambling and allows people to gamble more often and to spend more money.
- ✓ The relationship between online practice and problem gambling could thus be established mainly because of this simple fact.

- Bush, K., Kivlahan, D. R., McDonell, M. B., Fihn, S. D., & Bradley, K. A. (1998). The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. *Archives of Internal Medicine*, 158(16), 1789-1795.
- Costes, J.-M., Eroukmanoff, V., Richard, J.-B., & Tovar, M.-L. (2015). Les jeux d'argent et de hasard en France en 2014. *ODJ*, (4), 9.
- Costes, J.-M., Pousset, M., Eroukmanoff, V., Le Nezet, O., Richard, J.-B., Guignard, R., ... Arwidson, P. (2011). Les niveaux et pratiques des jeux de hasard et d'argent en 2010. *OFDT*, (77), 8.
- Currie, S. R., Casey, D. M., & Hodgins, D. C. (2010). Improving the psychometric properties of the Problem Gambling Severity Index. Canadian Consortium for Gambling Research.
- Ferris, J., & Wynne, H. (2001). The Canadian problem gambling index. Ottawa, ON: Canadian Centre on Substance Abuse.
- Gainsbury, S. M. (2015). Online Gambling Addiction: the Relationship Between Internet Gambling and Disordered Gambling. *Current Addiction Reports*, 2(2), 185-193.
- Gainsbury, S. M., Russell, A., Hing, N., Wood, R., & Blaszczynski, A. (2013). The impact of internet gambling on gambling problems: A comparison of moderate-risk and problem Internet and non-Internet gamblers. *Psychology of Addictive Behaviors*, 27(4), 1092-1101.
- Gainsbury, S. M., Russell, A., Hing, N., Wood, R., Lubman, D., & Blaszczynski, A. (2013). How the Internet is Changing Gambling: Findings from an Australian Prevalence Survey. *Journal of Gambling Studies*.
- Griffiths, M., & Barnes, A. (2008). Internet Gambling: An Online Empirical Study Among Student Gamblers. *International Journal of Mental Health and Addiction*, 6(2), 194-204.
- Griffiths, M., Wardle, H., Orford, J., Sproston, K., & Erens, B. (2008). Sociodemographic Correlates of Internet Gambling: Findings from the 2007 British Gambling Prevalence Survey. *CyberPsychology & Behavior*, 12(2), 199-202.
- Journal Officiel. LOI relative à l'ouverture à la concurrence et à la régulation du secteur des jeux d'argent et de hasard en ligne, Pub. L. No. 2010-476 (2010).
- Leplège, A., Ecosse, E., Verdier, A., & Perneger, T. V. (1998). The French SF-36 Health Survey: translation, cultural adaptation and preliminary psychometric evaluation. *Journal of Clinical Epidemiology*, 51(11), 1013-1023.
- ODJ. (2015). Evolution du chiffre d'affaires de l'industrie du jeu sur 1995-2014. Consulté 16 décembre 2014, à l'adresse <http://www.economie.gouv.fr/observatoire-des-jeux/evolution-chiffre-daffaires-lindustrie-jeu-sur-periode-1995-2014>
- Richard, J.-B., Gautier, A., Guignard, R., Léon, C., & Beck, F. (2015). Méthode d'enquête du Baromètre santé 2014. Inpes.
- Tovar, M.-L., Costes, J.-M., & Eroukmanoff, V. (2013). Les jeux d'argent et de hasard sur Internet en France en 2012. *OFDT*, (85), 6.
- Valleur, M. (2015). Gambling and gambling-related problems in France: Gambling in France. *Addiction*, 110(12), 1872-1876.
- Wardle, H., Moody, A., Griffiths, M., Orford, J., & Volberg, R. (2011). Defining the online gambler and patterns of behaviour integration: evidence from the British Gambling Prevalence Survey 2010. *International Gambling Studies*, 11(3), 339-356.
- Williams, R. J., & Wood, R. T. (2007). Internet gambling: A comprehensive review and synthesis of the literature. Report prepared for the Ontario Problem Gambling Research Centre, Guelph, Ontario, Canada, 30.
- Wood, R. T., & Williams, R. J. (2007). Problem gambling on the internet: implications for internet gambling policy in North America. *New Media & Society*, 9(3), 520-542.