



Gambling and associated problems for youths: some lessons for prevention

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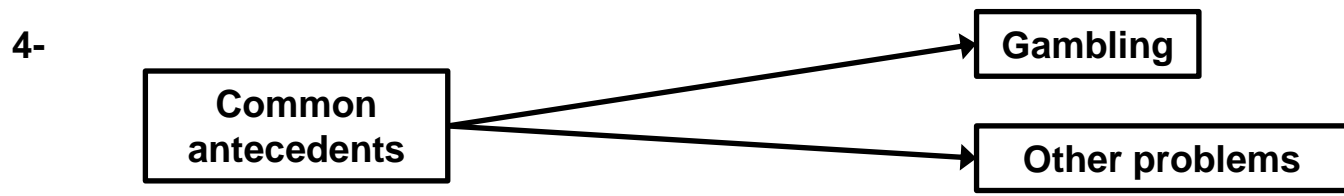
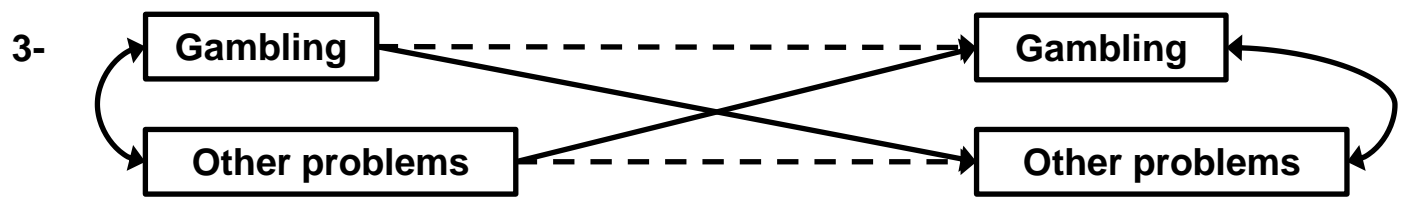
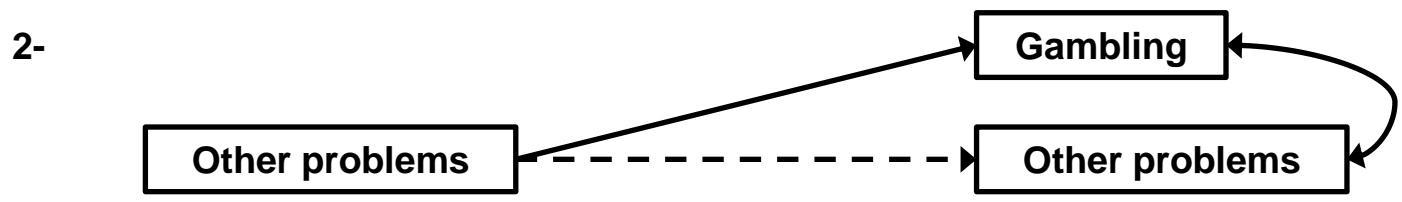
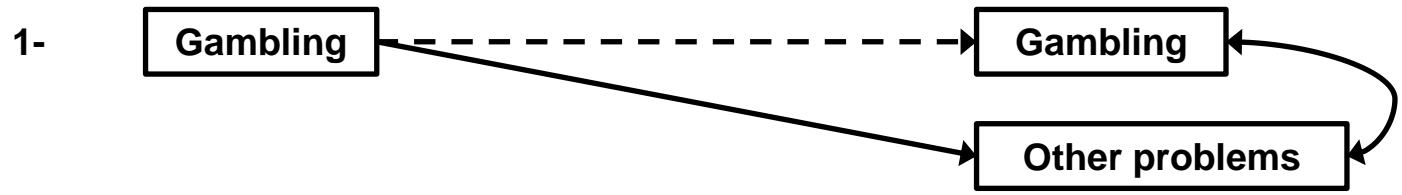
Part 1
Comorbidity

Gambling



Consumption of psychotropic drugs, Feelings of depression, Low academic performance

Significance of these links?



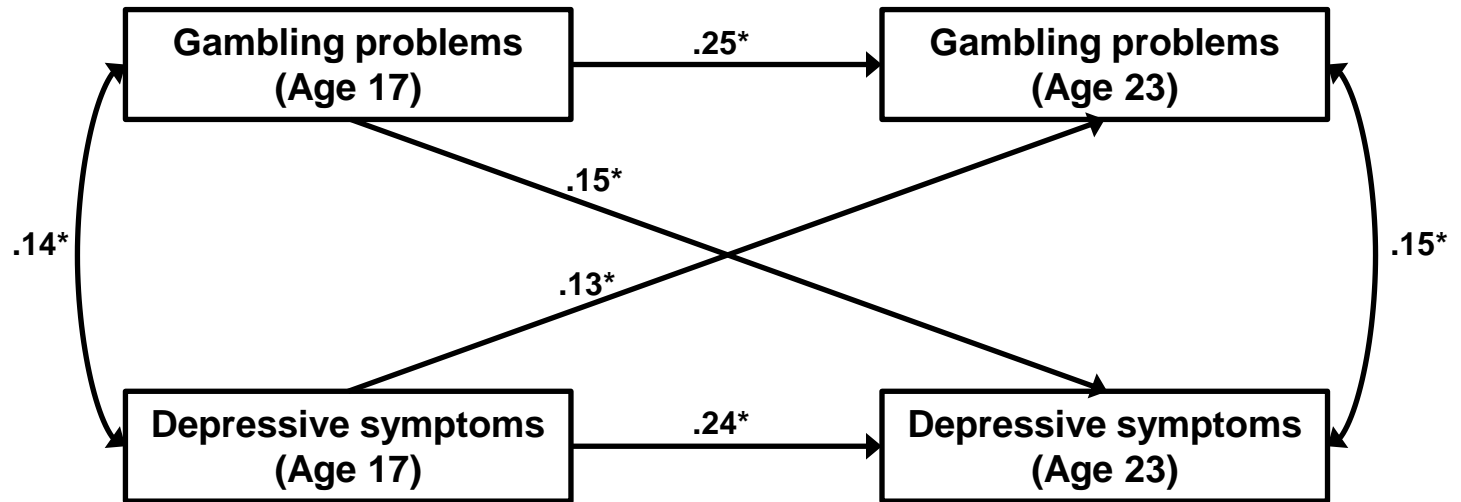
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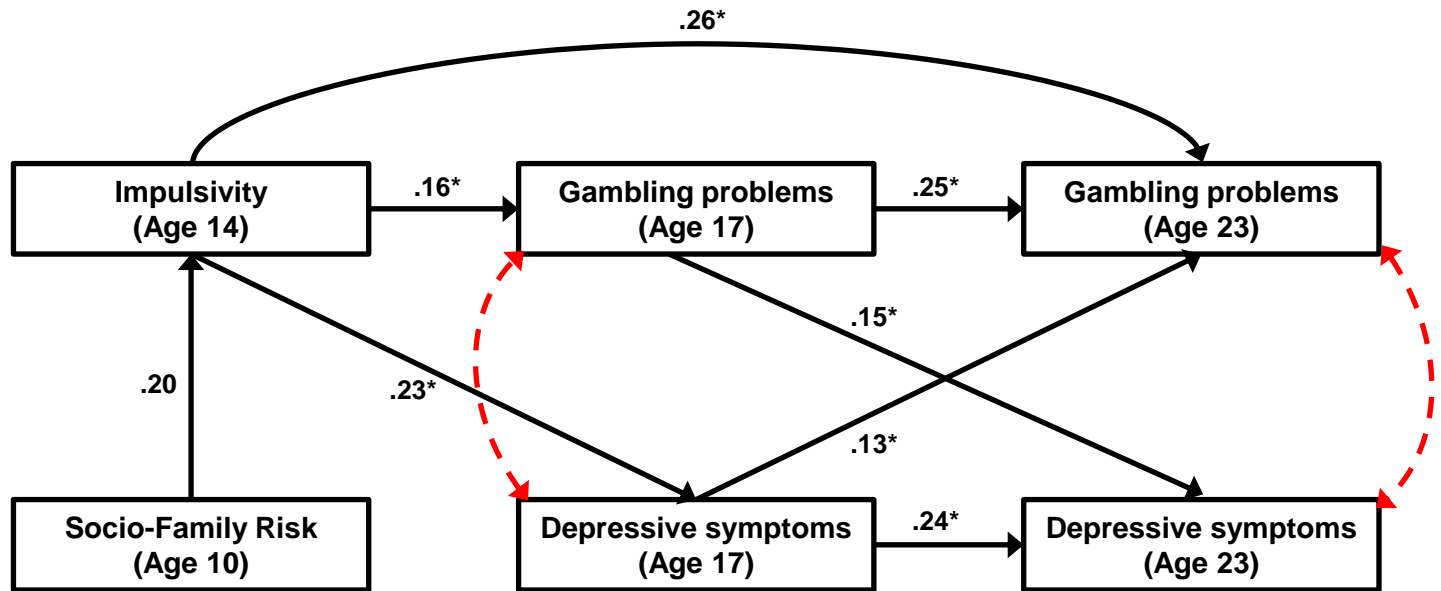
- Longitudinal studies required to support these links

Study 1

*(Dussault, Brendgen, Vitaro, Wanner & Tremblay, 2011,
Journal of Child Psychology and Psychiatry)*

- **ÉLEM: Étude Longitudinale des Enfants de Montréal (Longitudinal study for Montreal children)**
 - **Montreal boys from disadvantaged areas (N = 1161)**
 - **Aged 6 years old in 1984; followed until the age of 30**



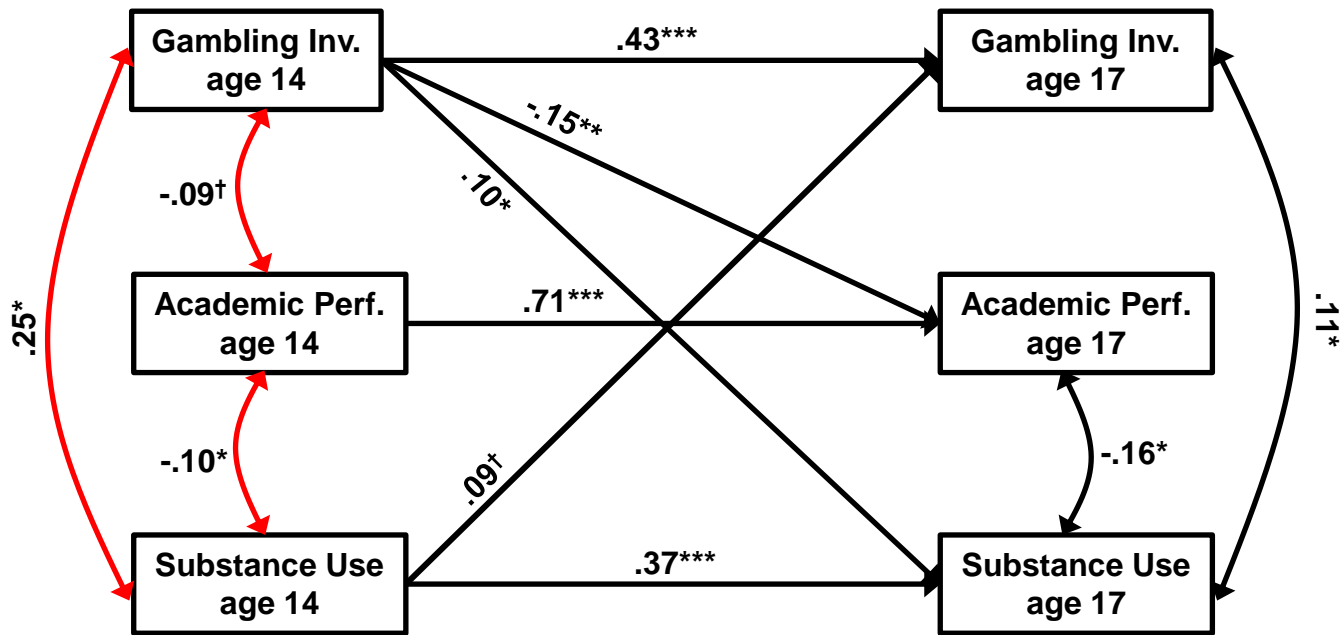


Results of the SEM analysis after inclusion of early risk factors. Significant paths are indicated by solid lines.

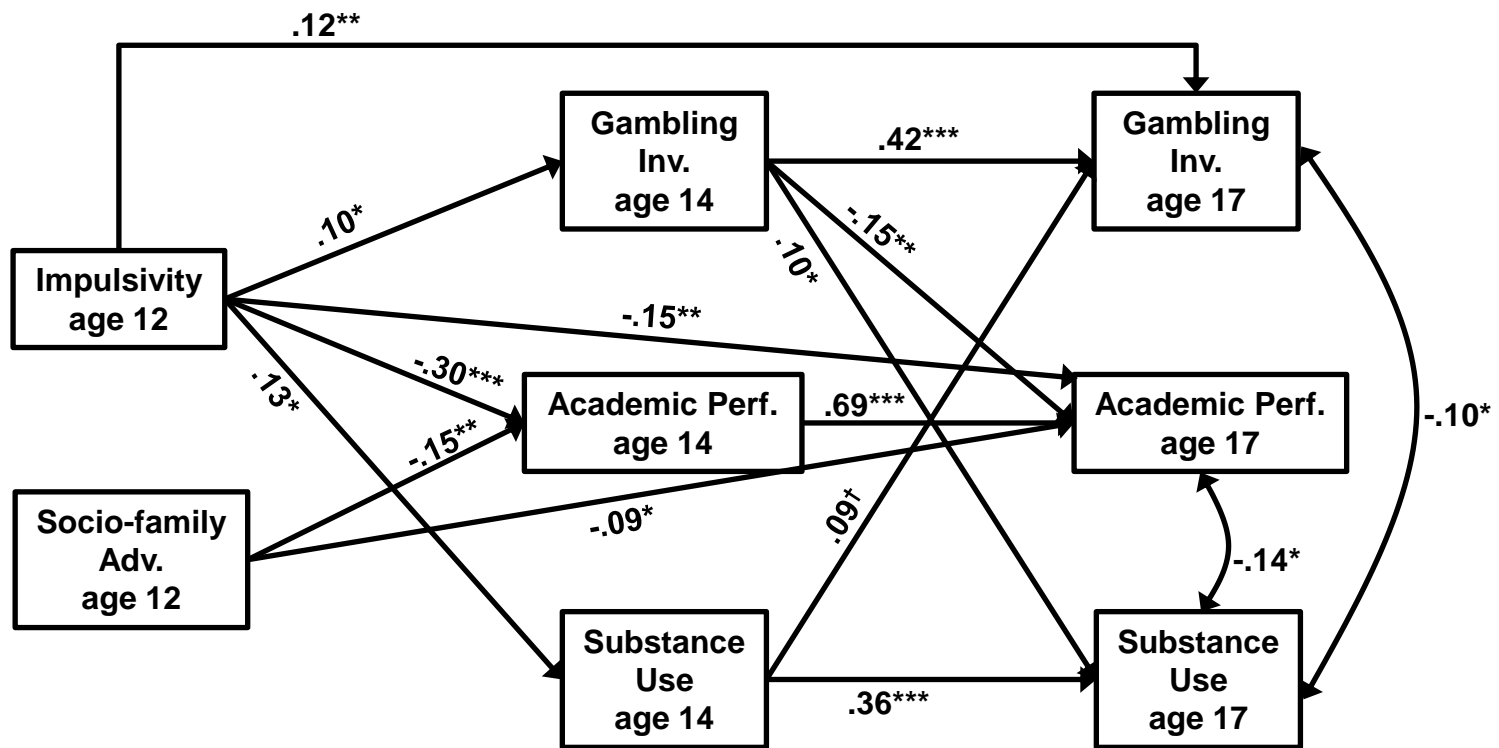
Study 2

*(Vitaro, Brendgen, Girard, Dionne & Boivin, soumis;
re: Action concertée 2014-2017)*

- **ÉJNQ: Étude sur les Jumeaux Nouveau-nés du Québec
(Study on newborn twins in Quebec)**
 - **Twins from the region of Montreal born between
1995 and 1998 (N = 766)**
 - **Followed until 19 years old (study in progress)**



*** $p < .001$; ** $p < .01$; * $p < .05$; † $p = .06$



* $p < .05$; ** $p < .01$; *** $p < .001$; † $p = .06$

Findings

- 1. The combined emergence of gambling and other problems explained by common antecedents**
- 2. After the period of emergence, influence (uni- or bidirectional) between gambling and other problems = part of their co-evolution**

Lesson #1 for prevention

1. Target common antecedents to prevent the *combined emergence* of gambling and other problems at the beginning of adolescence = generic early prevention
2. Specifically target gambling and/or each of the other problems afterward to avoid *mutual influences* = specific prevention

How?

1. Antecedents: impulsivity

Programs to increase capacity for self-control

Ex. *Tools of the Mind* (Diamond et al. 2007): executive functions (i.e. inhibition, delay of gratification, cognitive flexibility and working memory)

2. Gambling

Prevention and awareness programs

Ex. Recension Ladouceur, Goulet & Vitaro (2013) *International Gambling Studies*

Part 2
Risk factors

> 20 individual risk factors associated with gambling problems among youths (longitudinal studies)
(Dowling, Merkouris, Greenwood et al., 2017, Clinical Psychological Review)

- **Impulsivity**
- **Aggression**
- **Alcohol, marijuana, tobacco**
- **Antisocial/delinquent behaviour**
- **Symptoms of depression**
- **Male sex**
- **Negative affect**
- **Sensation seeking**

Study 3

(Allami, Vitaro, Brendgen, Carbonneau & Tremblay, en préparation)

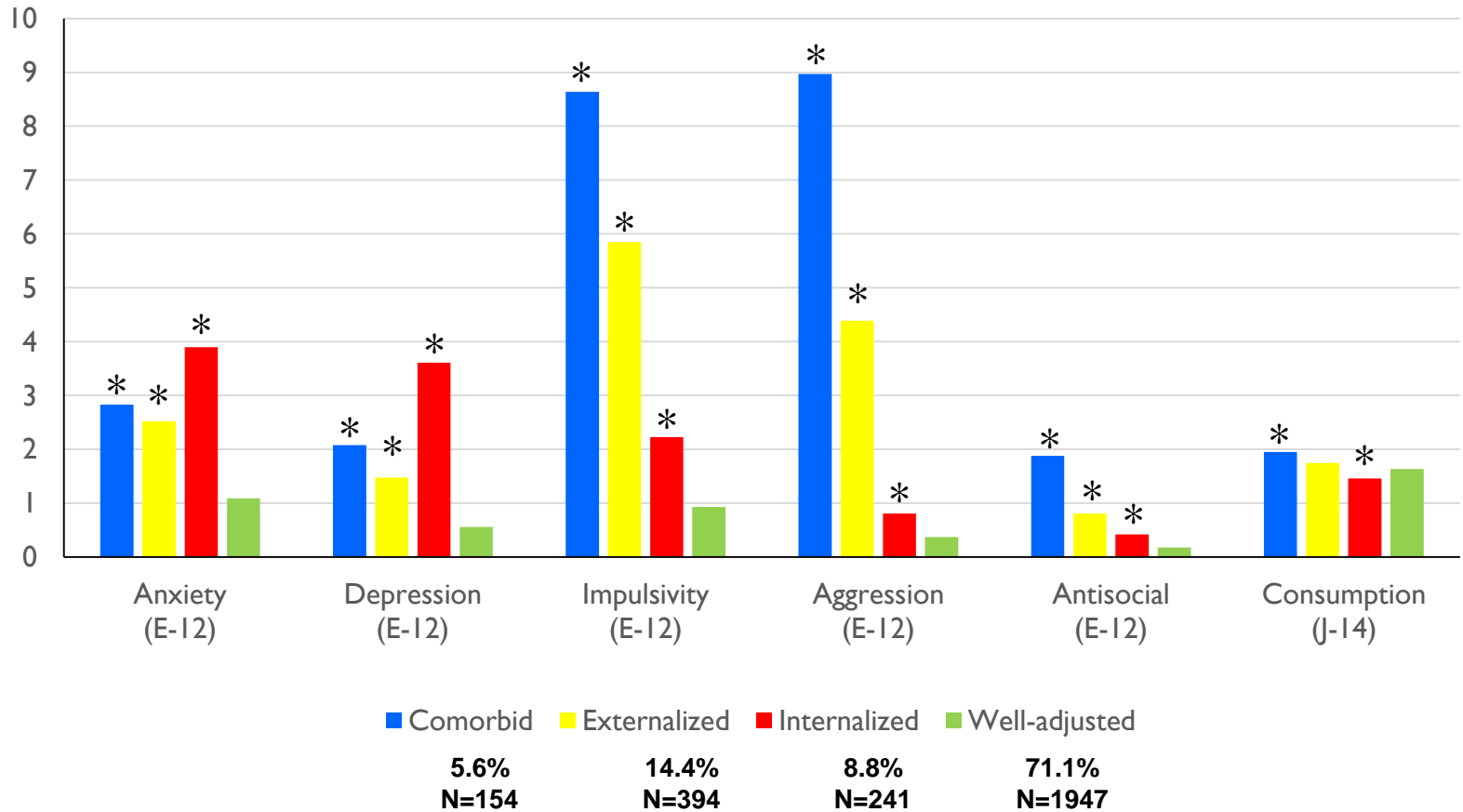
- ÉLEM (Longitudinal study for Montreal children):
1161 boys from disadvantaged
areas**
- ÉLEMQ (Longitudinal study for Quebec
kindergarten children): 2000
representative children (50% girls)
+ 1037 children with behavioural
problems**
- Followed from 6 to 30 years of age**

--Profiles empirically derived with the help of a statistical technique (Latent class analysis)

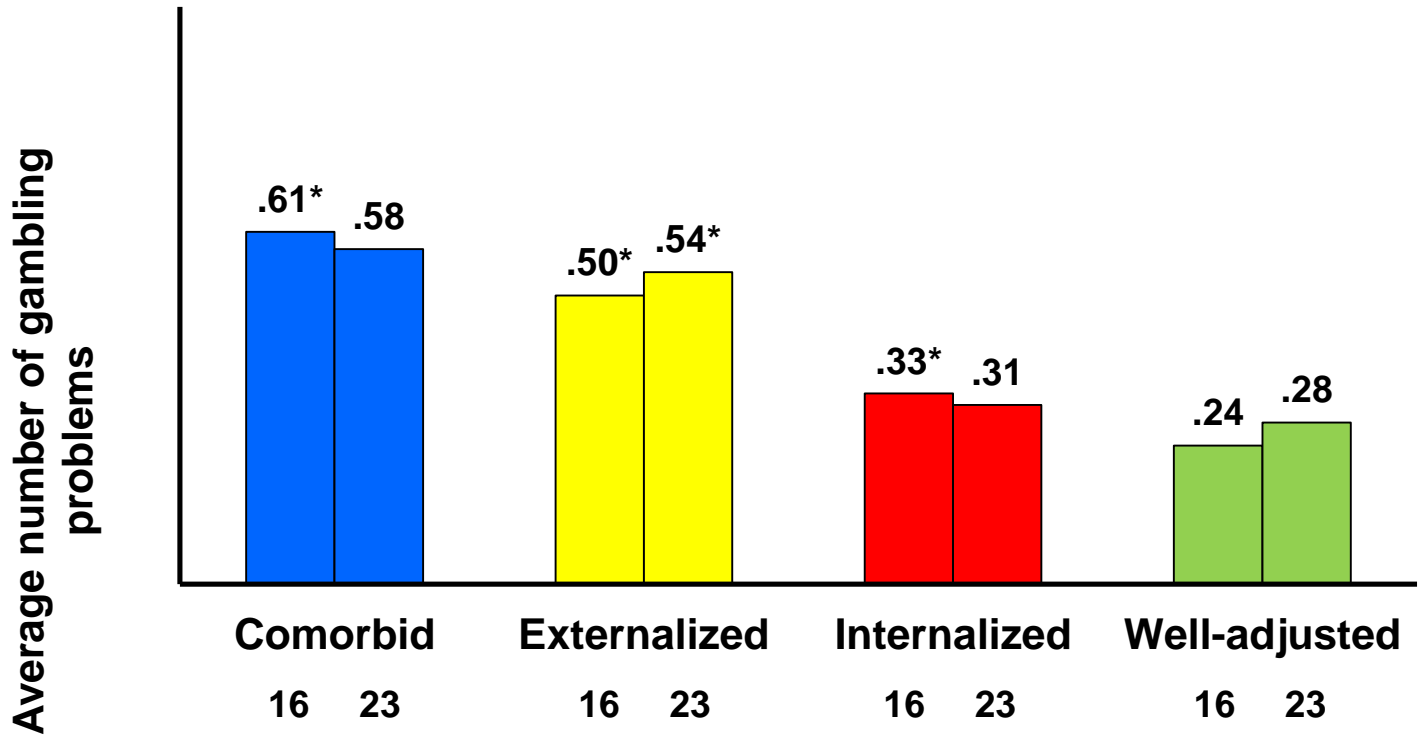
--Based on 6 behavioural dimensions evaluated at the beginning of adolescence (12-14 years old)

- **Impulsivity (E-12)**
- **Depression symptoms (E-12)**
- **Anxiety (E-12)**
- **Aggression (E-12)**
- **Delinquency (E-12)**
- **Consumption of psychotropic drugs (J-14)**

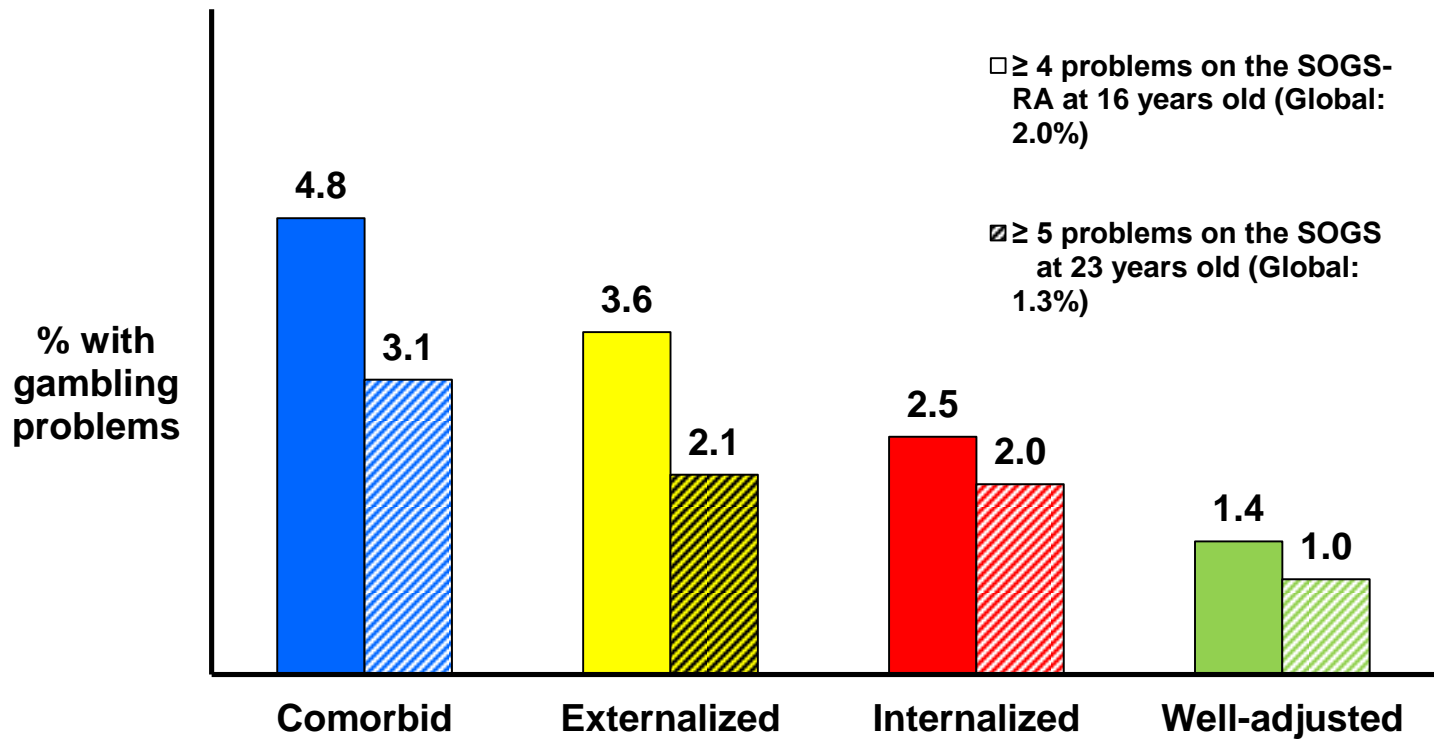
Profiles at preadolescence

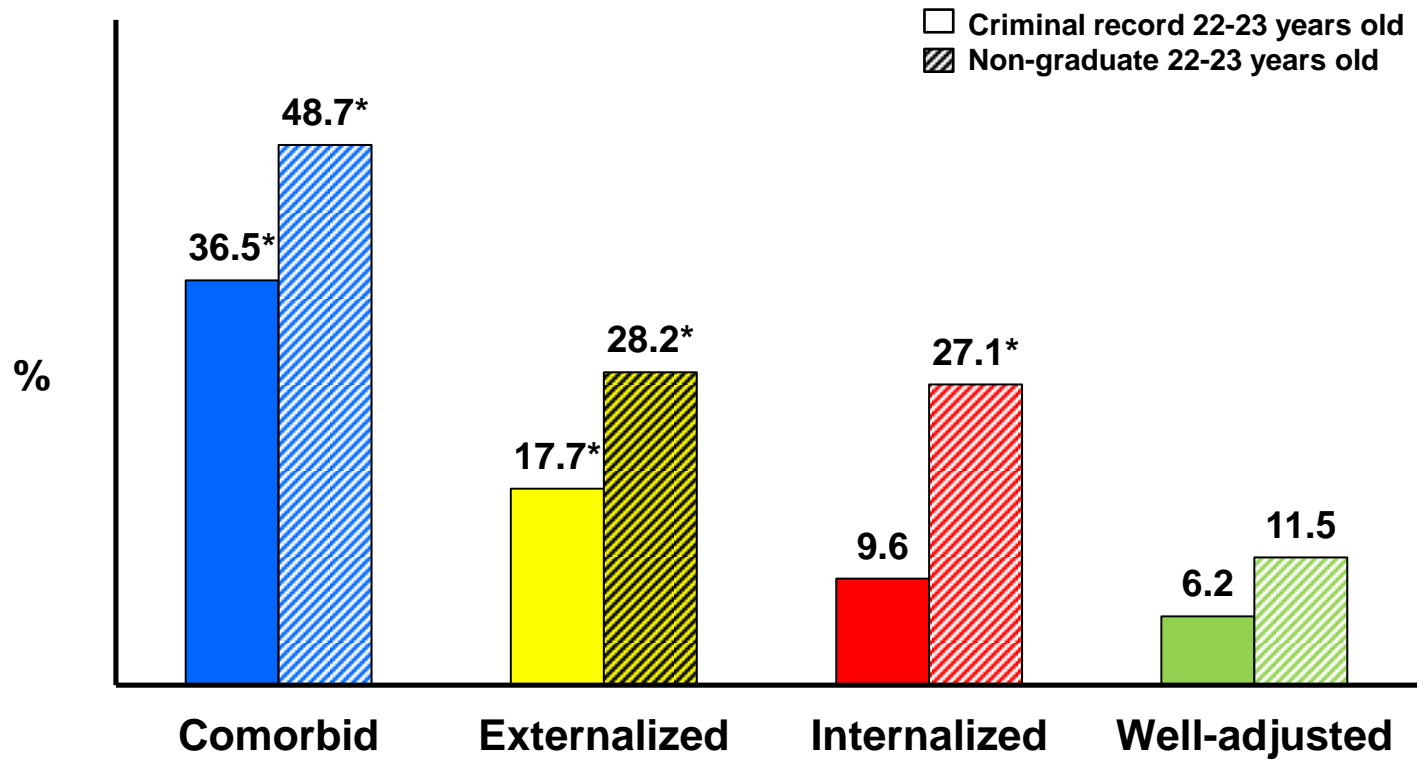


* : statistically significant difference with respect to well-adjusted group



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Lesson #2 for prevention

- 1. Identify the personal profile of adolescents**
- 2. Adopt a differential approach for intervention that is adapted to the profile of each**

Which?

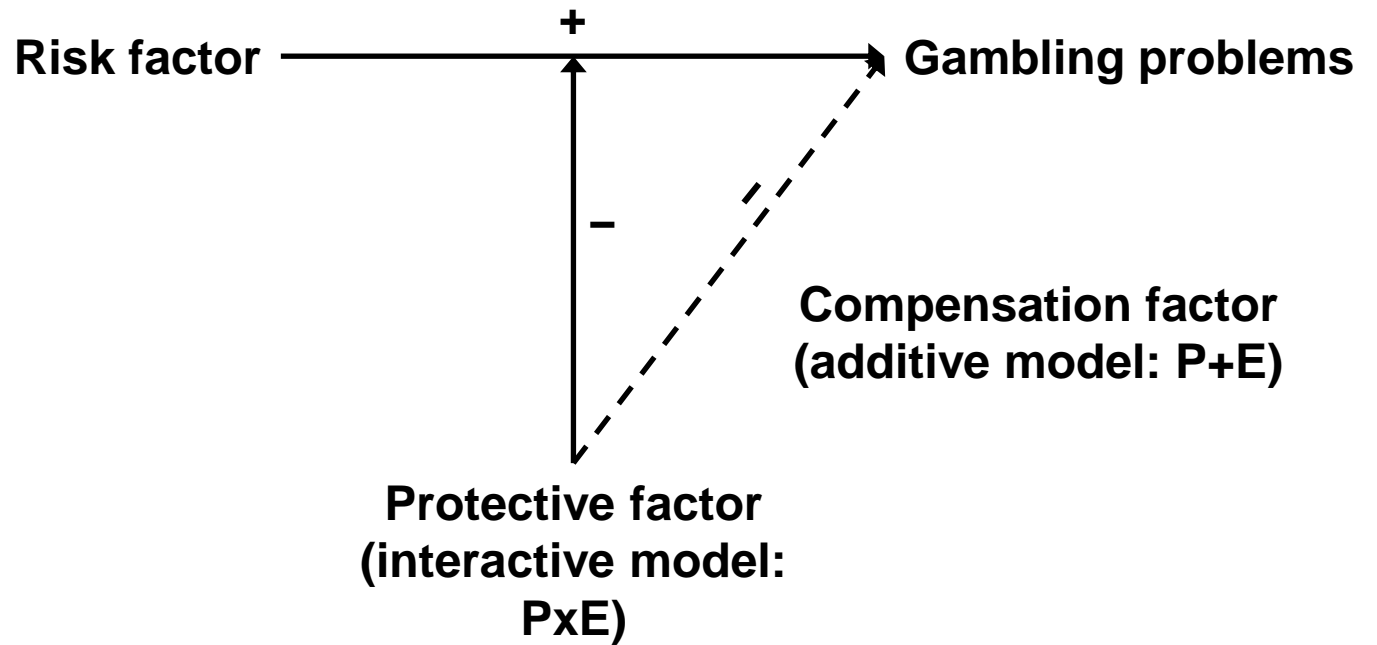
PREVENTURE (Conrod et al.)

- **2 meetings lasting 90 minutes**
- **4-8 adolescents/meeting**
- **Identification of the profile of participants based on impulsivity, sensation seeking, anxiety and negative thinking**
- **Strategies for coping aiming to help manage the cognitions and emotions for each profile**
- **Role-playing and supervised exercises**
- **Based on the principles of cognitive-behavioural and motivational approaches**
- **Many empirical studies on its effectiveness**

Part 3
Protective (and compensation) factors

> 12 social protective (or compensation) factors identified in association with gambling problems among youths
(Lussier, Derevensky, Gupta et Vitaro, 2014, *Psychology of Addictive Behaviors*; Rosen, Lucassen, Eleaning et al., 2016, *Asian Journal of Gambling Issues*)

- Social support**
- Conforming peers**
- Parental supervision**
- Family attachment**
- School attachment**



Allami et al. (in preparation)

Compensation/protective factors (vs gambling problems at 16 years old)

Factor	Compensation	Protective
Parental supervision	Yes	-
Attachment adolescents-parents	Yes	<i>Exacerbated for internalized</i>
Conforming peers	Yes	-
School engagement	Yes	

Allami et al. (in preparation)

Compensation/protective factors (vs gambling problems at 23 years old)

Factor	Compensation	Protective
Parental supervision	-	-
Attachment adolescents-parents	-	Protective for internalized
Conforming peers	-	<i>Exacerbated for externalized</i>
School engagement	Yes	Protective for internalized and comorbid

Lesson #3 for prevention

Target protective (or compensation) factors that are of a social nature

- **Improve Parental supervision and Relations among parents and children**
- **Cultivate an Attachment to school**

- **Modify social Norms**
- **Reduce accessibility**

How?

- **Workshops destined to improve disciplinary practices and the relation between parents and children**
(i.e. Information from the Maison Jean Lapointe to improve parent-children relations)
- **Activities destined to cultivate an attachment to school (i.e. *Check and Connect* program on mentorship)**
- **Social Norms: Awareness campaigns such as those for tobacco**

Part 4
Conclusions

Conclusion / Conceptual aspects

- **During preadolescence: general vulnerability toward addictive behaviours (and other problems)**
- **During adolescence and at the beginning of adulthood: specialization toward particular addictive behaviours**
- **Etiological model of an interactive nature:
Personal vulnerability X Environmental characteristics**

Conclusion / Applied aspects

A prevention approach with three components

- **Component at preadolescence targeting common antecedents**
- **Component at adolescence specifically targeting gambling and related problems**
- **Component at adolescence also targeting:**
 - a) The coping abilities specific to each profile**
 - b) Protective/compensation factors specific to each profile**

Thank you