

# Mental Health and Substance Use Disorders in Gambling Disorder: What does it mean for treatment?

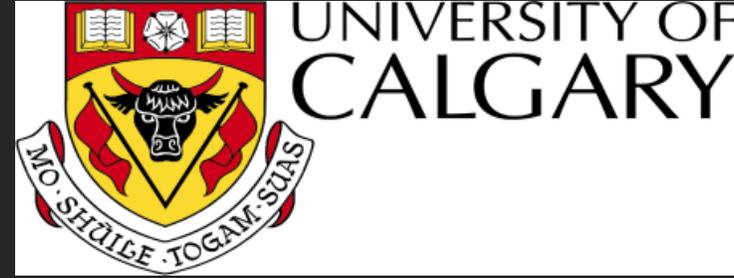
David Hodgins

Gambling Addiction. Science, Independence, Transparency

4<sup>th</sup> International Multidisciplinary Symposium

Fribourg, June 2018

# Disclosures



- Partial salary support and research grant support from the Alberta Gambling Research Institute
- Industry-funded hospitality, conference travel funds

# Comorbidity

- Presence of mental health or substance use disorder, either concurrently or sequentially
- Concurrent Disorders
- Dual Diagnosis
- Multiple comorbidity
- Community versus treatment samples

# Scoping Review



International Gambling Studies

ISSN: 1445-9795 (Print) 1479-4276 (Online) Journal homepage: <http://www.tandfonline.com/loi/rigs20>

## A scoping review of co-morbidity in individuals with disordered gambling

Igor Yakovenko & David C. Hodgins

To cite this article: Igor Yakovenko & David C. Hodgins (2018) A scoping review of co-morbidity in individuals with disordered gambling, International Gambling Studies, 18:1, 143-172, DOI: 10.1080/14459795.2017.1364400

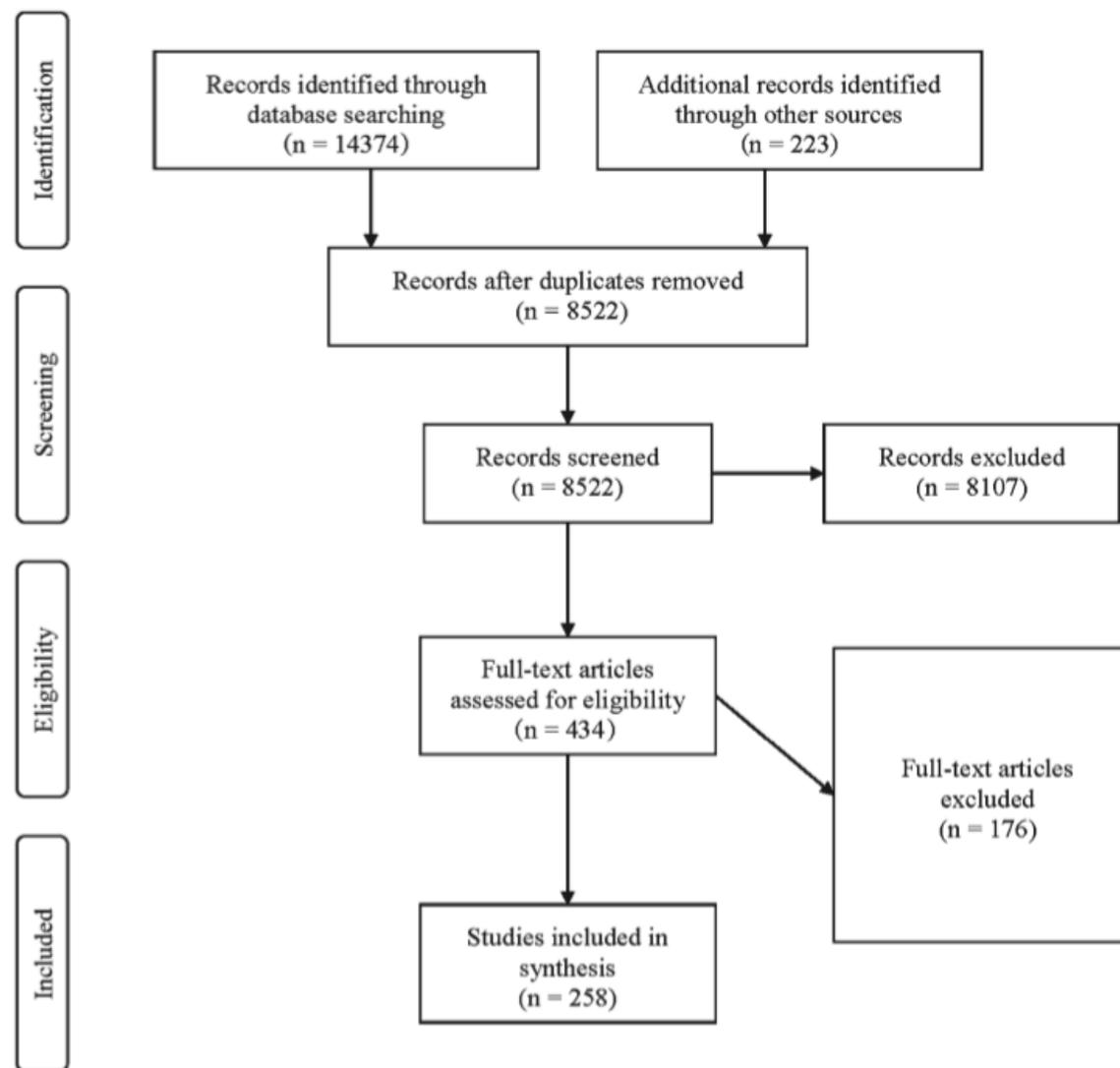
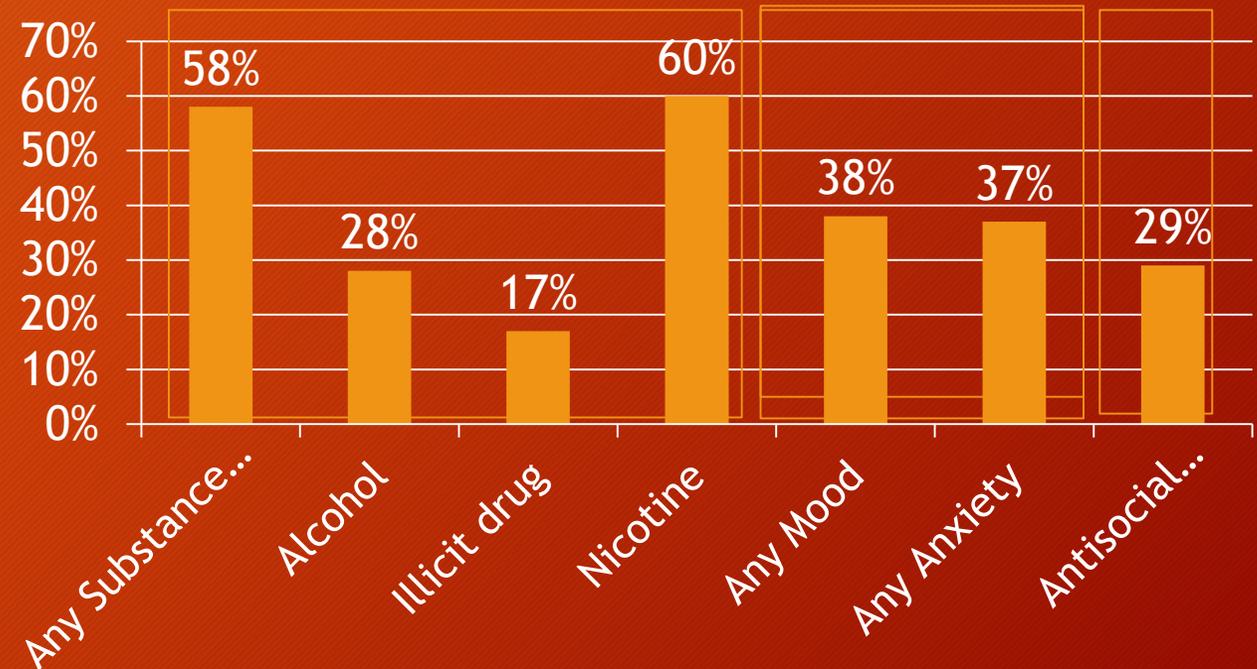


Figure 1. PRISMA flow diagram.

# Comorbidity is common in community samples of problem gamblers

- Lorains et al, 2011 Meta analysis
- 11 studies
  - 6 United States
  - 2 Canada
  - 2 Switzerland
  - 1 Korea
- Results quite variable

Comorbidity Rate Among PGs



# Comorbidity and multiple comorbidity is the rule, not the exception

## NCRG-Funded Research



### GAMBLING DISORDER RARELY TRAVELS ALONE

There are about 2.5 million adults with gambling disorder in the United States.

More than 95% of people with gambling disorder have at least one other mental health disorder (anxiety, depression, etc.).

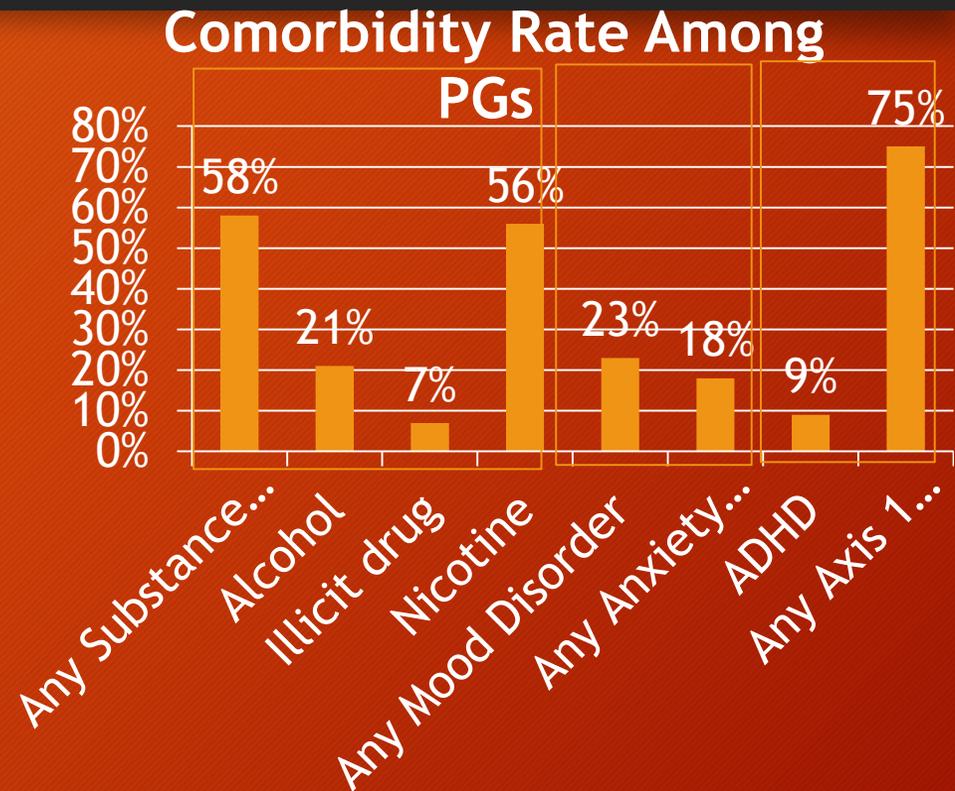
Two-thirds of people with gambling disorder have 3 or more other mental health disorders.



The data presented show rates of co-occurring disorders in the ~1% of adult Americans who have gambling disorder. The data comes from the landmark mental health study, the National Comorbidity Survey Replication, conducted by Harvard Medical School and funded by the National Institutes of Mental Health.

# Comorbidity is common in treatment samples

- Dowling et al . 2015 Meta analysis
- 36 studies
  - range from 4 to 26 studies per disorder
- Not consistently higher than community samples



# Does comorbidity matter?

- Clinical picture: Related to more severe gambling problems, other psychosocial problems, impulsivity
- Assumption: Rockier recovery, more dropout, poorer gambling treatment outcomes

# Case Study - Chris

- Age 25
- Self-employed - sales
- Internet poker gambling
- Major debts
- Phase of life issues - anxiety, depression
- Alcohol problem
- “escape gambler”
- Cognitive errors - “gambling is a solution” belief

- Plus - many cognitive justifications
  - I will only play a few hands
  - I will limit myself to \$30.
- Treatment Process - Seven sessions
  - Motivational enhancement “incompatibility with self-image”
  - Monitoring Success and Failures
    - New activities, avoiding cues to gamble
  - Functional Analyses

# Cognitive analysis and restructuring

Discussion with Dad about money – 11am

↓  
Few Drinks at lunch

↓  
I'll only play \$30. – maybe I'll win  
enough to make a payment

↓  
5 hours of play- \$400.

# Outcome

- Success?
- Quit gambling
- Still drinking heavily, but not more and not linked to gambling situations
- Longer term follow-up?

# The data

- Treatment effectiveness overall
  - Consistently positive and growing evidence-base
    - Cognitive-behavioural treatments
    - Motivational Interviewing
    - Brief Treatment
    - Online Treatments
    - Naltrexone (not approved)
  - Impact of comorbidity on these outcomes?
    - Little studied
    - Recommendation #1

# Does having a comorbid disorder or two affect how well you do in treatment?

- Dowling 2016 review
  - 21 treatment studies that looked at one or more comorbid disorders
- Mood - of 12 treatments, only 2 shows a negative effect
- Alcohol Use Disorder - of 11 studies only 3 showed negative impact
- Anxiety Disorder - of 12 studies only 1 showed a negative impact
- Personality Disorders - 1 study, no effect

# Interpretations

- Very meager data base
- One plausible interpretation is that people make sensible decisions about where to present for treatment - people choosing gambling treatment are managing the other issues reasonably well
- Need to study impact of gambling disorder on mental health and SUD treatment
- Gambling Disorder rates are high in these patient groups.
  - Cowlshaw et al. 2014 meta analyses- 25 studies of substance treatment samples
    - Gambling Disorder- 14%, Problem gambling 23%

# Implications

ADDICTION

SSA | SOCIETY FOR THE  
STUDY OF  
ADDICTION

METHODS AND TECHNIQUES

doi:10.1111/add.14166

## Can one simple questionnaire assess substance-related and behavioural addiction problems? Results of a proposed new screener for community epidemiology

Magdalen G. Schluter<sup>1</sup> , David C. Hodgins<sup>1</sup> , Jody Wolfe<sup>2</sup> & T. Cameron Wild<sup>2</sup>

Department of Psychology, University of Calgary, Calgary, Alberta, Canada<sup>1</sup> and School of Public Health, University of Alberta, Edmonton, Canada<sup>2</sup>

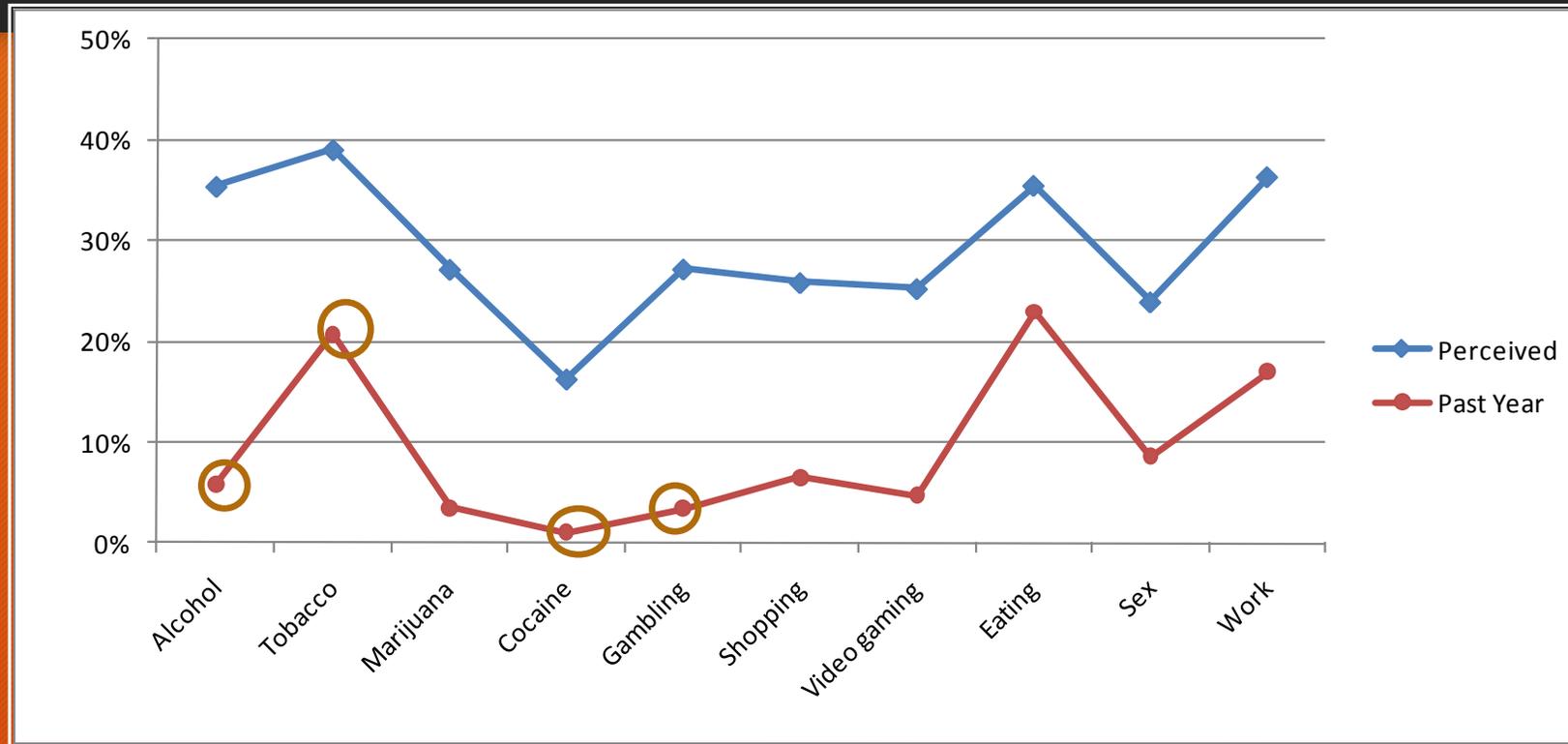
• Cl  
th

• Ne  
wh

# Understanding patterns of co-occurrence (example from addictions)

- Where will gambling problems show up in numbers large enough to screen?

# Problem Prevalence and Perceived Problem Prevalence in Alberta (N = 6000)

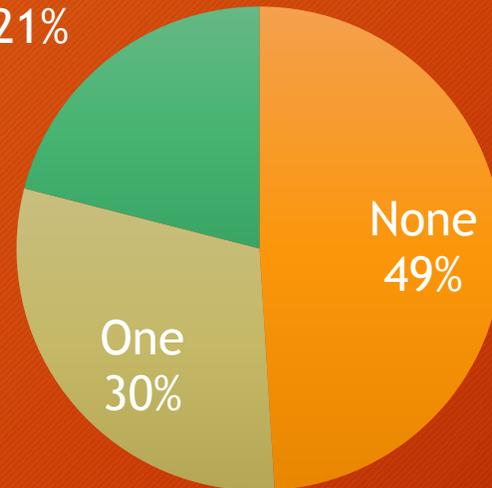


Konkolj Thege, B., Colman, I., el-Guebaly, N., Hodgins, D., Patten, S., Schopflocher, D., Wolfe, J., & Wild, T.C. (2015). Substance-related and behavioural addiction problems: Two surveys of Canadian adults. *Addiction Research and Theory*, 23(1), 34-42.

# What about comorbidity?

- Past Year problems?

Two or  
more  
21%



# What about comorbidity?

Past Year Problems (N = 2728)- 7 problem clusters

Smokers (pure)

Problem eaters (pure)

Workaholics (pure)

Shopping (plus 1-2)

Sex Addicts (plus 1-2)

Video games (plus 1)

Mixed-addicts (2-3)

# Conclusions

- Half the respondents had a problem (half did not)
- Mix of “pure disorders” and mixed-addiction
  - Eating, Work, Smoking can be pure disorders
  - Sex, video and shopping tend to have other problems
  - Substances tend to have most other problems
  - Gambling is comorbid
    - $M = 3.4$  problems ( $SD = 2$ )
- Behavioural and substance problems may group differently than we expect, which may have implications for organizing treatment

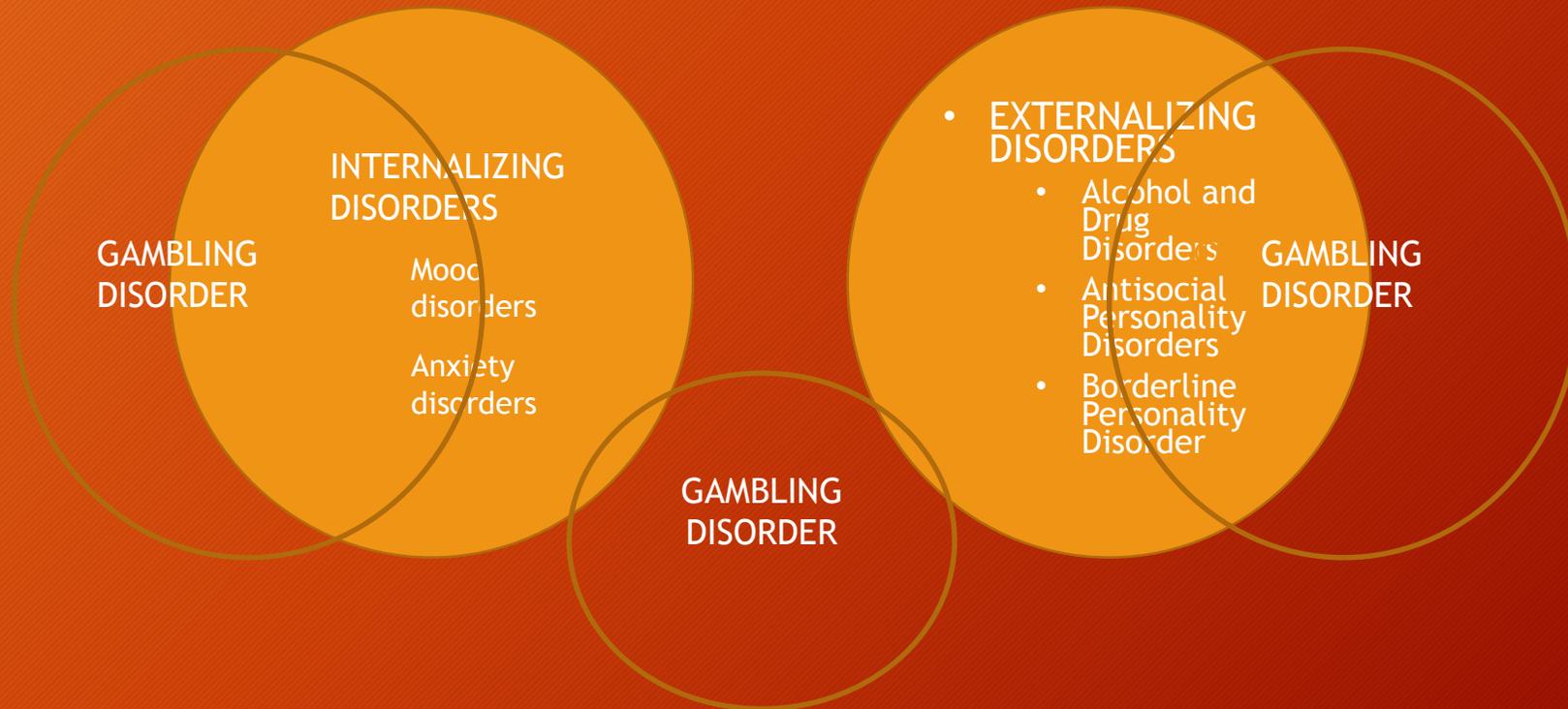
# Possible Etiological Models

- Gambling as an escape - people with mental health disorders attempt to self-medicate the dysphoria
- Substance use disorder may trigger gambling disorder via neuroadaptation in brain reward circuits that lead to other disorders (precipitation model)
- Gambling arousal and distress cause mental health symptoms such as anxiety and depression (secondary disorder model)
- An underlying factor causes both disorders (third factor model)
  - Impulsivity, reward deficiency syndrome, emotional dysregulation deficit
- Addiction Syndrome Models (e.g., Shaffer)

# Subtypes of Gambling Disorder



# Subtypes of Gambling Disorder



# Scoping Summary & Conclusions

- Most of the research to date has focused on prevalence of comorbidity of gambling and other disorders in community samples and in gambling and substance treatment clients
- Comorbidity is linked to more complicated problems
- No clear evidence that gambling treatment is ineffective with comorbidity

# Scoping Summary & Conclusions

- Screening for comorbidity in gambling treatment is important but perhaps more important is screening in mental health and substance treatments
- How to intervene in efficient and effective ways is unclear
- Need to document and evaluate the “no wrong door” approaches

## **policy paper**

# Addressing the Needs of Problem Gamblers With Co-Morbid Issues: Policy and Service Delivery Approaches

Kathya Martyres<sup>1</sup> & Phil Townshend<sup>2</sup>

<sup>1</sup> Department of Justice & Regulation, Melbourne, Victoria, Australia

<sup>2</sup> Drug and Alcohol Rehabilitation Asia (DARA), Koh Chang, Thailand

