# Risk of harm as a function of type of gambling

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#### Disclosure of conflict of interest

- This study was funded by the Public Health Agency of Sweden.
- I have no current or past affiliation with the gambling industry.
- All my research has been financed by the Swedish state, research councils, and public benefit funds and organizations (except for a minor grant in 2014, from the RGT in the UK, for writing a research review).
- Consulting only for Swedish and Norwegian governmental agencies.
- I have presented my research to many organizations and stakeholders, including at events organized by gambling companies. This is part of my "public outreach" responsibilities at the university. I have received reimbursement for travel expenses but never requested speaking fees.

## 1 Background

# Problem gambling (PG) is more common in some forms of gambling

- Statistics from Sweden's national PG helpline, gambling type that causes most harm (examples, 2016):
  - 56% of callers: online casino and/or online slots
  - 2% of callers: lotteries
- My comparative analysis (2011) of 18 prevalence studies from various countries (examples):
  - EGMs and casino gambling often strongly associated with PG
  - Lotteries never strongly associated with PG
- My three qualitative studies of problem gamblers (2009-2015)
  - As above
- Etcetera, many other studies and statistics show the same picture
- Behavioral, addiction, cognitive, neuroscientific, and sociological theories explain this picture

#### But some research may appear to show another picture

- A great surprise to hear some people say: "new research shows that all forms of gambling are equally risky"
- "Statistically controlling for gambling involvement substantially reduced or eliminated all statistically significant relationships between types of gambling and disordered gambling" (LaPlante, Nelson, LaBrie & Shaffer, 2011)
  - "... after controlling for involvement ... the relationships between games and gambling-related problems disappeared or were attenuated" (LaPlante, Afifi & Shaffer, 2013)
  - **Involvement** = participation in multiple forms of gambling.
- Some other studies show complex relationships between forms of gambling, PG and involvement

#### How does this make sense?

- How can the apparently discordant results of previous studies be explained?
- How are involvement, PG and specific forms of gambling related, in the Swedish context?

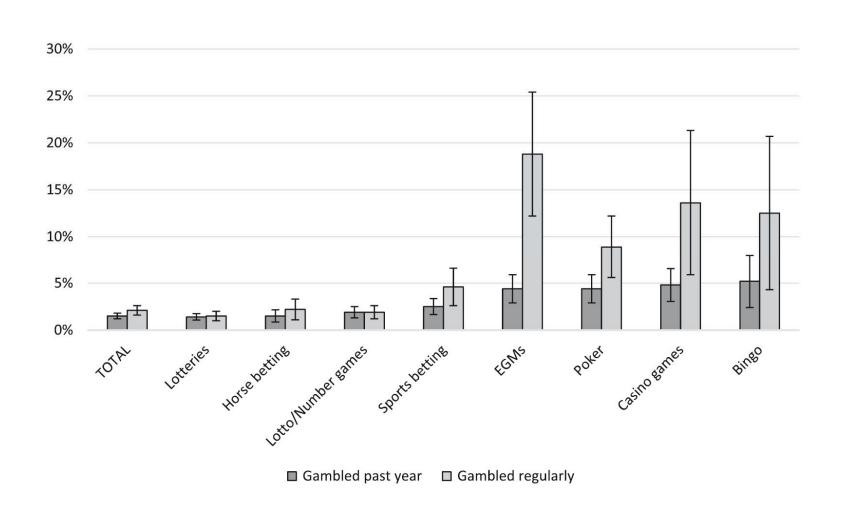
## 2 Our study

### **Our study**

- Purpose: explore associations between PG, forms of gambling, and involvement
- Per Binde, Ulla Romild & Rachel Volberg
- Data from Swelogs Swedish Longitudinal Gambling Study (Wave 1), data collected in 2008-2009, ca. 5,000 past year gamblers (8,165 participants).
- PG = PGSI 5+
- 8 major forms of gambling (land-based and online, combined).
- We chose not to use regression analysis to "control for involvement" – several other analytical approaches
- Results published in International Gambling Studies, 2017

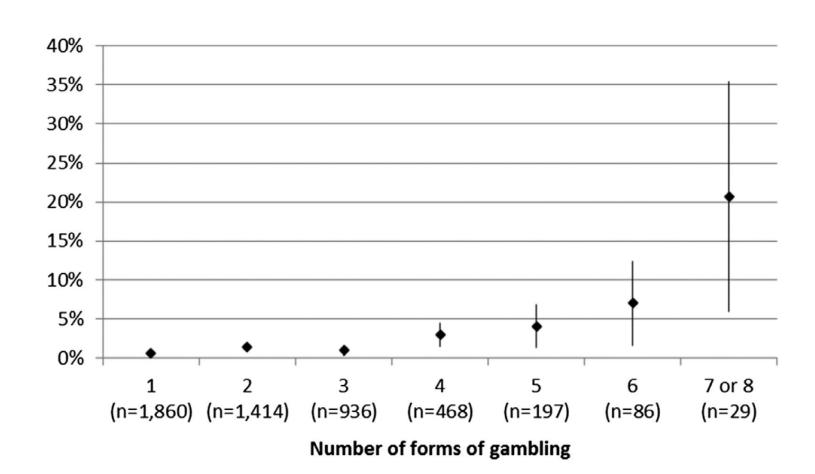
## 3 What we found

# Problem gamblers in different gambling forms



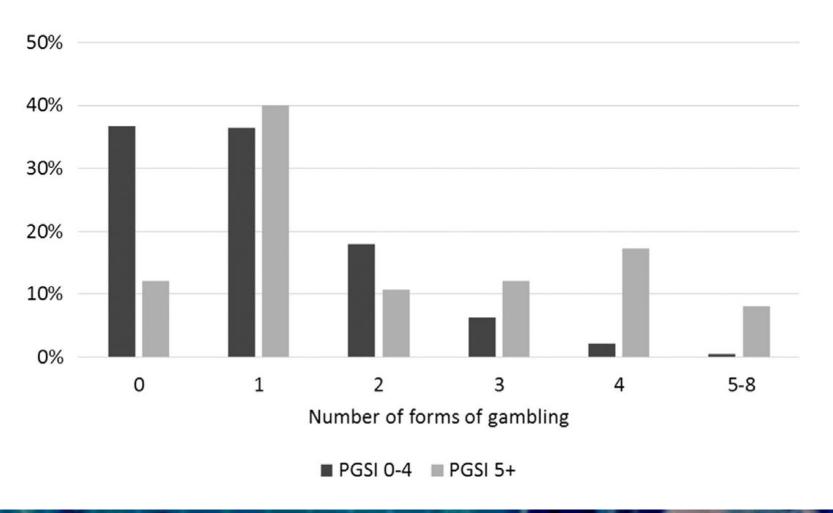
### **Gambling involvement (1)**

Proportion of PGSI 5+ gamblers in relation to number of forms of gambling (yearly participation)



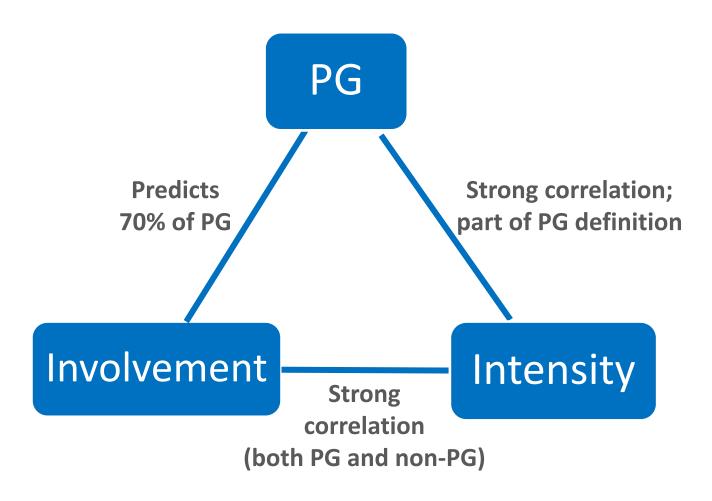
### **Gambling involvement (2)**

Proportion of non-PG and PG gamblers in number of forms of gambling, (regular participation)



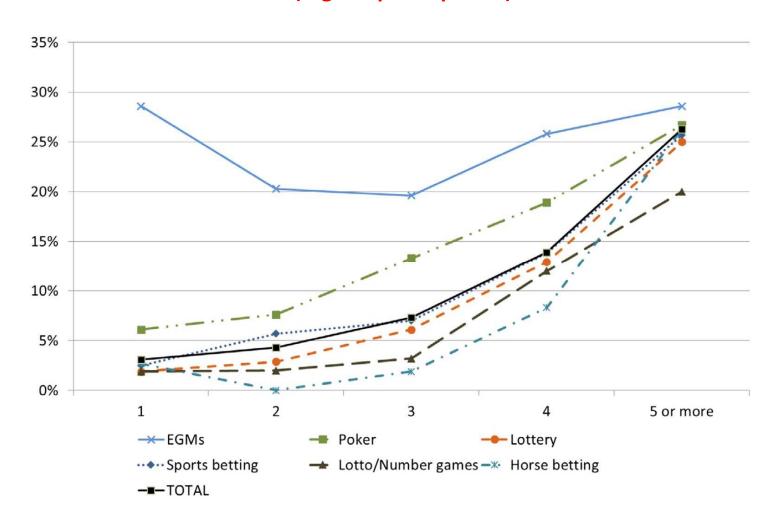
### PG, involvement and intensity

(intensity = time & money spent)



# Constellations of PG, gambling forms and involvement

(regular participation)



#### **Conclusions**

- In Sweden, EGMs, casino games and bingo were closely associated with PG
- High involvement is associated with PG, but 40% of problem gamblers participated regularly in only one form of gambling
- Limitations:
  - cross-sectional data;
  - does note distinguish between gambling in a physical venue and gambling online;
  - only Swedish data
- Policy implication for Sweden: PG is concentrated to a few high-risk forms of gambling, prevention should focus on these forms

# The anthropology of gambling www.ongambling.org



#### **Published results:**

Binde, Per, Romild, Ulla, & Volberg, Rachel A. (2017). Forms of gambling, gambling involvement and problem gambling: Evidence from a Swedish population survey. *International Gambling Studies*, 17(3), 490-507.



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