SETTING LIMITS: GAMBLING, SCIENCE AND PUBLIC POLICY.

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Pekka Sulkunen
Prof. Emeritus
CEACG, Department of Social Research
University of Helsinki
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Authors:
Pekka Sulkunen, Thomas Babor, Jenny Cisneros Örnberg, Michael Egerer, Matilda Hellman, Charles Livingstone, Virve Marionneau, Janne Nikkinen, Jim Orford, Robin Room, Ingeborg Rossow

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OBJECTIVES AND METHODS

Objective: state of the art

- to determine what kinds of issues for public interest arise from gambling
- to determine how problematic gambling is related to the total amount of gambling
- to determine what kinds of policies and "responsible gambling" tools are effective and cost-efficient

Methods:

- systematic review of research literature
- about 2300 studies consulted
- 721 references, about 70 % presenting original research or systematic reviews
- critical collective assessment of evidence
- summary statement highlighting major concerns and recommendations
Contents

Foreword by Dr Vladimir Poznyak, WHO

1 Introduction

2 The history of gambling regulation and the rise of the industry

3 The gambling industry: global structures and modern trends

4 The range and burden of gambling problems

5 Gambling behavior and problem gambling

6 The total volume of gambling and the prevalence of gambling problems

7 The effects of changing availability

8 Industry strategies and their regulation: marketing, game features, and venue characteristics

9 Pre-commitment and interventions in risk behavior

10 Gambling control regimes

11 Treatment and early intervention services

12 Summary and conclusions: gambling policy and the public interest
Global growth of gambling 2003-2022 in million EUR

GGR by region

Courtesy of H2 Gambling Capital
PART 1 OF THIS PRESENTATION: THE TOTAL CONSUMPTION MODEL
The total consumption model (TCM)

Figure 6.1. Illustrative curves demonstrating a uni-modal distribution skewed to the right, as applied to gambling.
The total consumption model (TCM)

*Figure 6.2.* Assumed associations between total gambling consumption, prevalence of excessive users, and harm rate in a population.
TCM Version 1: Heavy gambling

- Solid support for the skewed distribution and high concentration of gambling consumption (Govoni, 2000; Grun and McKeigue, 2000; Lund 2008; Hansen and Rossow 2008; Hansen and Rossow 2012)

- A small fraction of gamblers account for a very large fraction of all gambling activities and of all gambling expenditures (eg. Chipman et al. 2006; Williams and Wood 2004; Livingstone and Woolley 2007)

- High turnover in the upper end of the tail
TCM Version 2: prevalence of gambling problems -1

• **Very small prevalence rates**
  • varying across populations and in time from 0.5% to 7.6%
  • cross-country average of 2.3% of the population (smaller than for alcohol or drugs)

• **Variable individual level risk curves**
  • no J-curves (cf. alcohol);
  • r-curves frequently observed;
  • linear curves are also common
TCM Version 2: prevalence of gambling problems -2

• **Population level burden of harm**
  • most likely to follow a linear pattern
  • this is not always observed in studies of change

• **Confounding factors at the population level**
  • small frequencies → measurement errors
  • unrecorded consumption
  • game mix may change (substitution)
  • population mix may change (abstainers/heavy)
  • high fluidity of the problem gambling population

• **Estimated 7 to 15 other people besides the gambler are affected**
Comorbidity

Half of the public revenue from gambling comes from a very small minority of heavy gamblers (1 to 2 percent of the population) (verified)

About half of this group have one or more of the following

- Poverty
- Mental health problems and elevated suicide risk
- Physical health problem
- Substance use problem
- Criminal record

→ causal sequencing is not the key issue!
Recommendations 4 and 5/13: bearing the burden

4. A very small part of the population and of those who gamble account for a very large share of the total spending. Effective preventive policy will have to accept that it most likely also reduces the total volume of the trade.

5. The direction of causality between gambling and other problems cannot always be determined, but comorbidity should nevertheless be considered in regulating and in providing help.
PART 2 OF THIS PRESENTATION: AVAILABILITY THEORY
Availability theory

- Increased availability increases demand and consumption
- Decreased availability decreases demand and consumption
- Confounding factors
  - Few studies
  - Other changes in the context and population mix
  - Changes in games and environments
  - The price factor is hard to estimate
  - Substitution/complementary relations are not well known

- Conclusion on the basis of available evidence: availability matters but involves many elements and dimensions. EXAMPLE: game features
Table 7.1. Studies of the impact of increased availability according to country, type of change, and outcomes.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>AVAILABILITY CHANGE</th>
<th>YEAR</th>
<th>OUTCOMES</th>
<th>REFERENCES</th>
<th>OBSERVATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUSTRALIA</td>
<td>General increase in gambling availability</td>
<td>2003-2012</td>
<td>No increase in problem gambling; gambling participation declined</td>
<td>Abbott et al. (2016)</td>
<td>Points towards adaptation model</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>Permission to set up EGMs in hotels in</td>
<td>1991</td>
<td>Problem gambling increased</td>
<td>The Australian Institute of Gambling Research (1995)</td>
<td>Also found positive effects on employment</td>
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<td></td>
<td>Queensland</td>
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<tr>
<td>CANADA</td>
<td>Opening of the gaming hall “Trois-</td>
<td>2007</td>
<td>No elevation in crime or increase in problem gambling</td>
<td>Alain et al. n.d</td>
<td></td>
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<td></td>
<td>Rivieres” in Quebec</td>
<td></td>
<td></td>
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<tr>
<td>CANADA</td>
<td>Opening of “Hull” casino</td>
<td>1996</td>
<td>No increase in problem gambling rate</td>
<td>Jaques and Ladouceur 2006</td>
<td></td>
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<tr>
<td>CANADA</td>
<td>Opening of “Niagara Falls” casino</td>
<td>1996</td>
<td>Gambling problems higher a year after opening the casino</td>
<td>Room et al. 1999</td>
<td></td>
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<tr>
<td>CANADA</td>
<td>Opening of “Windsor” casino</td>
<td>1994</td>
<td>No increase in problem gambling rate; though higher demand for problem gambling counselling</td>
<td>Govoni et al. 1998</td>
<td></td>
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<tr>
<td>FRANCE</td>
<td>Permitting licensed Internet gambling</td>
<td>2010</td>
<td>Increased participation, but decreased problem gambling, when compared to unregulated sites</td>
<td>Costes et al. 2015</td>
<td></td>
</tr>
<tr>
<td>SWEDEN</td>
<td>Opening of two casinos</td>
<td>2001</td>
<td>Increased gambling problems in community</td>
<td>Westfelt 2006</td>
<td></td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>Permission to open 19 casinos</td>
<td>2002</td>
<td>No change in problem gambling</td>
<td>Bondolfi et al. 2008</td>
<td>Same time as prohibition of non-casino gambling machines and strict preventive measures inside casinos</td>
</tr>
<tr>
<td>UK</td>
<td>Introduction of the National Lottery</td>
<td>Mid-1990s</td>
<td>Excessive gambling increased</td>
<td>Grun and McKeigue 2000</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Opening of casinos in Kentucky</td>
<td>1993</td>
<td>No effect on bankruptcies</td>
<td>Boardman and Perry 2007</td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Parishes allowed to set up EGMs in</td>
<td>1992</td>
<td>Increase of Gamblers Anonymous groups</td>
<td>Campbell and Lester 1999</td>
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<td></td>
<td>Louisiana</td>
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### Table 7.2. Impact studies of reduced availability of gambling machines.

<table>
<thead>
<tr>
<th>COUNTRY</th>
<th>AVAILABILITY CHANGE</th>
<th>YEAR</th>
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<th>OBSERVATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORWAY</td>
<td>Temporary EGM prohibition; afterwards Norsk Tipping monopoly</td>
<td>2007</td>
<td>Problem gambling prevalence; differing results depending on measurement, but problem gambling help seeking decreased</td>
<td>Rossow and Hansen 2015 ; Lund 2009</td>
<td>Combined with EGM modifications, removal of note acceptors, personal identification card</td>
</tr>
<tr>
<td>SWITZERLAND</td>
<td>Gambling machines outside casinos prohibited</td>
<td>2005</td>
<td>No decrease in problem gambling, but clear reduction of problem gamblers with probable alcohol problem</td>
<td>Bondolfi et al. 2008</td>
<td>Same time permission to open 19 casinos</td>
</tr>
<tr>
<td>US</td>
<td>Temporary ban of EGMs in South-Dakota</td>
<td>1994</td>
<td>Significant decrease of visits to problem gambling treatment facilities</td>
<td>Carr et al. 1996</td>
<td>Ban lasted only three months</td>
</tr>
<tr>
<td>US</td>
<td>Ban of EGMs in South-Carolina</td>
<td>2000</td>
<td>Number and size of Gamblers Anonymous groups decreased</td>
<td>Bridwell and Quinn 2002, Williams et al. 2012b</td>
<td>Demand for help with problem gambling remained low in later years as well as during the ban.</td>
</tr>
</tbody>
</table>
**Figure 7.1.** Number of help line calls per half year by year and main problem game

- **Ban bank note acceptor, July 1st, 2006:** 711 calls
- **Ban night time EGM gambling, January 1st, 2007:** 270 calls
- **Ban all EGMs, July 1st, 2008:** 253 calls
- **Introduction new EGMs, mainly throughout 2009:** 117 calls

The graph shows the number of help line calls from 2006 to 2011, categorized by half-year periods and main problem games. The calls are represented in two categories: all other games and EGMs.
New Zealand pokie machine
Norwegian Multix EGM
Regulating game features

EVIDENCE SUPPORTS:

• High speed, high and progressive jackpot size, losses disguised as wins (LDW) are always bad and can be regulated

• Sensory effects, fake interactive features, other misleading skill enhancers are known for their effects and can be regulated to reduce harm

• Limits on maximum spending or losses per hour, day, week or month are frequently applied and often work if sufficiently low

• Protective rules on payments, frequent mandatory pay-outs and credit displays in real money are effective techniques to improve loss awareness and can be implemented

LESS CERTAIN ABOUT THESE:

• Limiting bet sizes may reduce gambling but also increase it

• The balance sought by operators between intensity, time on device and spending money is often beyond the reach of regulators
Conclusions and a recommendation: regulating availability

- The harm to society varies with the total amount of money and time spent on gambling. **Game features have different potentials for harm and different capacities to collect money from players.**
- Industry strategies have **multiple goals** and seek a balance between them
- Some strategies are **beyond the reach of** regulation (integrating gaming and gambling, variations in game features and venue characteristics according to market conditions)
- Game offer is a complex whole: effects of single factors or features or regulations on these are difficult to identify
- **There is a need to develop composite indicators (CI) for pre-evaluating industry strategies and for assessing ex post their effects on gambling related harm**
CONCLUSION

Redistribution of wealth, concentration of the cost on a very small fragment of the population, and reinforcement of other vulnerabilities make gambling policy an issue of distributive justice.
LOOP ONE: PUBLIC REVENUE AND PUBLIC COST

- Gambling
- Need for funds
- Revenues
- Costs
- Problems

Question mark indicates the relationship between the entities.
LOOP TWO: DEPENDENCIES ON THE "RENT"

Gambling

Pressure to promote

Public revenue

Resource needs (quality & availability of services)

Service providers (NGOs etc)