PREVENTION OF PROBLEM GAMBLING: A COMPREHENSIVE REVIEW OF THE EVIDENCE & RECOMMENDED BEST PRACTICES

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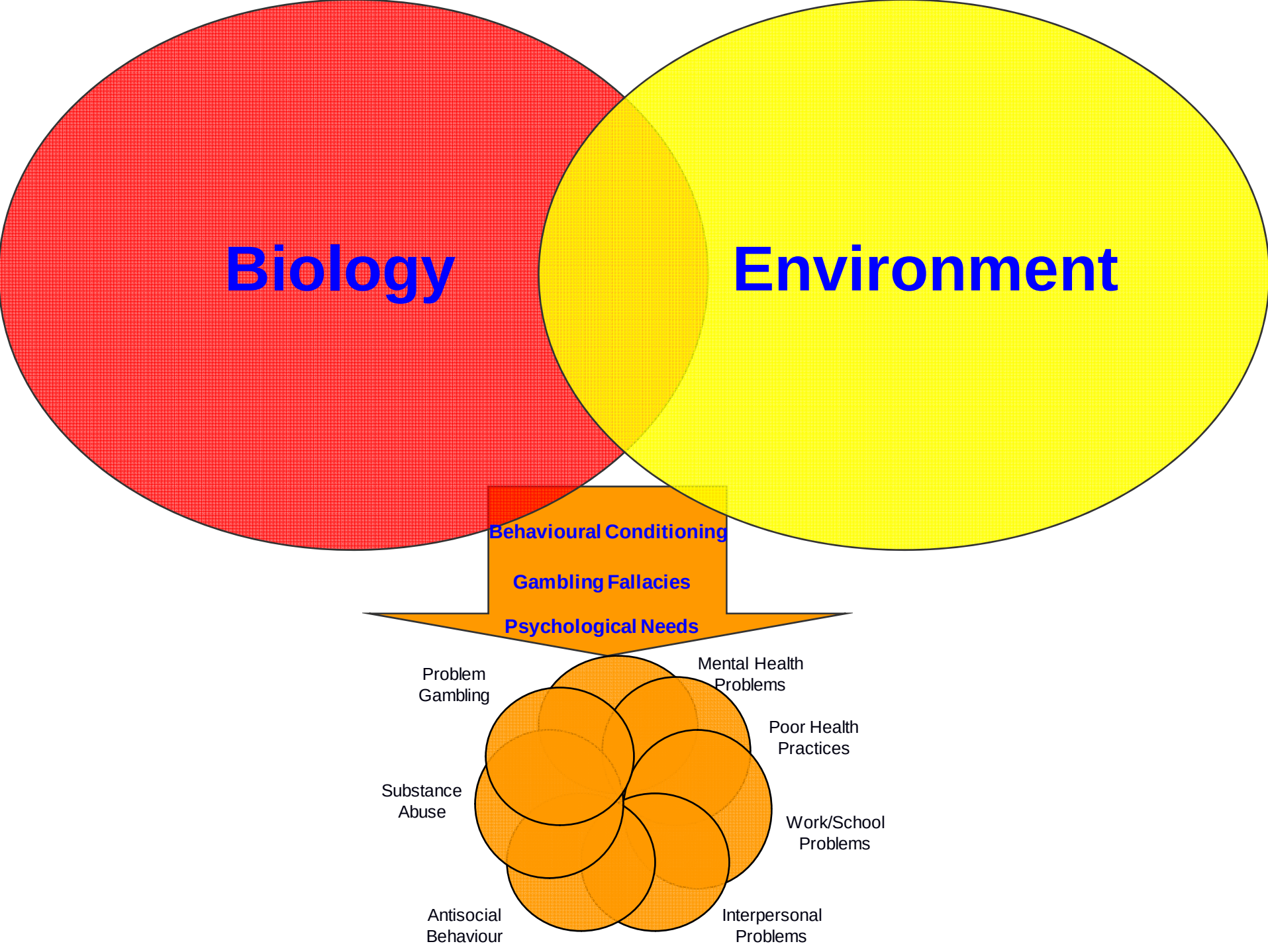
Biology
Environment
Behavioural Conditioning
Gambling Fallacies
Psychological Needs
Problem Gambling
Mental Health Problems
Poor Health Practices
Substance Abuse
Work/School Problems
Antisocial Behaviour
Interpersonal Problems

EDUCATIONAL INITIATIVES

Upstream' Interventions

- e.g., strengthening families (e.g., improving parenting skills); having children exposed to well-socialized peers; provision of good schooling

➢ Untested for Problem Gambling

➢ However, consistently identified as the most powerful way of reducing adolescent problem behaviour (with beneficial effects in adulthood)

Information/Awareness Campaigns

- e.g., ‘know your limits’; ‘gamble responsibly’; true odds; dispelling fallacies; help lines; signs of PG
- on gambling product; posters at venue; PSAs; service provider websites; presentations at schools

- Limited research with mixed results indicating these messages can temporarily improve knowledge and change attitudes

- However, a) most people don’t attend to them and b) actual effect on gambling behaviour is unknown.

- In other prevention fields, *behavioural change* is uncommon, and only occurs if info is personally relevant, behaviour easy to change, and consequences of not changing are significant (e.g., cholesterol, sodium, birth control pills, HIV testing)

School-Based Statistical Instruction

- e.g., teaching the expected value, odds and mathematical principles underlying gambling (and either directly or indirectly dispelling gambling fallacies)

➢ Several studies, with mixed results

➢ Fairly reliable impacts on knowledge and gambling fallacies, inconsistent impacts on subsequent gambling behaviour

Comprehensive School-Based Prevention Programs

- "Don't Bet On It" in S.Australia; "Gambling: Minimising Health Risks" in Queensland; "Facing the Odds" in Louisiana;; "Kids Don't Gamble…Wanna Bet" in Minnesota; "Youth Making Choices" in Ontario; "Gambling: A Stacked Deck" in Alberta
- statistical knowledge; gambling fallacies; addictive nature of gambling; building self-esteem, social problem-solving to avoid high risk activities; peer resistance training; etc.

➢ Only 4 empirical studies: Reliable impacts on knowledge and gambling fallacies, inconsistent impacts on behaviour

➢ School-based prevention programs in other fields (smoking, drug use, etc.) have found similar results

On-Site Information/Counselling Centres (RGICs)

- Info about gambling/PG & referral to, or actual provision of counselling
- Since 2002; Australia, Canada, S. Korea

➢ No evaluation of effectiveness, although some info concerning utilization rates: 8000 for Manitoba 2003-2006; 4600 for Ontario in 1.5 yrs

➢ However, 10,000 people visit MB venues every day and 118,000 per day in Ontario

➢ Has not resulted in higher rates of treatment provision

POLICY INITIATIVES

Restrictions on the General Availability of Gambling

Restricting the Number of Gambling Venues

- Positive correlation between local PG rate and proximity to gambling venue in U.S., N.Z., & Canada (NGISC, 1999; Welte, 2004; Lester, 1994; NZ Ministry of Health, 2008)

- Significant correlation between Canadian provincial PG prevalence rates in 2002 and casinos/racinos per capita

Casino/Racinos	*r* = .74*
Horse Racing Venues	*r* = .56
Bingo Halls	*r* = .53
EGM Locations	*r* = -.02
Lottery Outlets	*r* = -.50

- Opening of new venues has also generally been associated with subsequent increases in rates of PG

Restricting More Harmful Types of Gambling

- Strong relationship between EGMs per capita and PG rates both between countries and within countries:
  - e.g., Australia has highest EGM ratio (~1 per 99), and also one of the world's highest rates of PG
  - Significant correlation between Canadian provincial PG rates and EGM's per capita: $r = .68$
- Modest EGM reductions do not produce much effect on PG rates (e.g., Victoria; Nova Scotia)
- However, total EGM elimination in South Dakota (1994) and South Carolina (2000) reduced PG. Recent bans in North Carolina, Trinidad & Tobago, Latvia, & Portugal will provide more data.

Limiting Gambling Opportunities to Gambling Venues

- Theoretically sensible, but lacks empirical support

- In Canada, there is no relationship between # EGM locations per capita and provincial PG rates in 2002 (r = -.01).

- For the 5 U.S. states that allow EGM's outside gambling venues, 2 have above average PG rates (Nevada, Louisiana) and 2 have below average (Montana, Oregon)

Restricting the Location of Gambling Venues

- Historically, casinos in Europe & U.S. placed in tourist destinations away from urban centres and poorer areas (still largely the case in Asia & Africa)

- Poorer neighborhoods tend to have an association with PG (although 'poverty' may not be the relevant correlate)

- Canadian provincial PG prevalence rates are *best* predicted by proportion of the provincial population with Aboriginal ancestry (r = .93*). Almost as strong is relationship between provincial rates of alcohol dependence and PG prevalence (r = .74*).

Limiting Gambling Venue Hours

- Common policy in some countries
- Has good support in the alcohol policy field

- Reduction in hours in jurisdictions that have done this (i.e., Nova Scotia, Australia) had minor effects probably because the magnitude of the reduction was small

POLICY INITIATIVES

Restrictions on Who can Gamble

Prohibition of Youth Gambling

- Interesting to note that despite almost worldwide underage prohibition:
  - underage youth may still have significant rates of PG
  - countries with permissive attitudes toward youth gambling (U.K., Nordic countries), have lower rates of adult PG compared to other countries

- Could early exposure have beneficial effects?

➢ Important lessons from the alcohol field (China, southern Europe, Israel vs. France & Aboriginal populations)

Restricting Venue Entry to Non-Residents

e.g. France, Bahamas, Malaysia, Vietnam, Nepal, Papua New Guinea, Australia (online), S. Korea (1 venue)

- Theoretically sound, but no evidence

Restricting Venue Entry to Higher Socioeconomic Groups

- e.g. dress codes (Europe); income test (Panama; Singapore); significant entrance fees (Papua New Guinea)

➢ Effectiveness unknown, although income is a relatively weak predictor of PG status in western countries

POLICY INITIATIVES

Restrictions on How Gambling is Provided

Employee PG Awareness Training

- Began in Holland in late 80s, now common

- The few ‘satisfaction’ or ‘knowledge’ evaluations have been positive

- However, in alcohol field, training of alcohol servers has had mixed behavioural effects due to the conflict with profits, lack of enforcement, and personal drinking habits which are inconsistent with the policy

Modifying EGM Parameters

- Reinforcement pattern; Speed; Near misses; # play lines; Bill acceptors; Bet size; Maximum win; Interactive features; Pop-up messages; Clock; Mandatory cash out; Privacy; $ versus credits; Time/spending limits (‘smart cards’)

- Evidence of some utility for: slower speed, decreasing maximum win size, reducing near misses, reducing number of betting lines, reducing the interactive features, and presenting pop-up messages.

- However, in all cases, the magnitude of the effect is small (cf. Norway’s smart cards?)

Restricting Access to Money

- House credit banned throughout Europe, Australia, Canada (except ONT); U.S. only country where common
- ATMs typically permitted at gambling venues (c.f., South Africa); withdrawal limits in some places

- ➢ ATM use is much higher for PGs, and PGs often report that restricting ATM availability would be quite helpful
- ➢ No empirical research investigating impacts of monetary restriction

Restrictions on Concurrent use of Alcohol & Tobacco

- Free and/or low cost alcohol common in U.S., eastern Europe, and some Australian states
- Smoking most commonly permitted in Aboriginal casinos and non-western countries

- Very strong association with PG, thus, restrictions may serve as a strong preventative measure

➢ Evidence of this indirectly seen in significant reduction in gambling revenue occurring in jurisdictions that instituted smoking bans

➢ Puzzle concerns the mechanism by which this revenue has recovered

Restricting Advertising and Promotional Activities

Makes theoretical sense considering that:

- PGs report that advertising is a common trigger to gamble
- exposure to alcohol + tobacco ads promotes subsequent youth involvement
- Anti-alcohol and anti-tobacco advertising does not counter the above effect

➢ Prohibiting misleading advertising also important

Gambling Venue Design

- ‘Vegas-style’ design believed to encourage gambling both by venue developers and by gamblers

- Empirically, there is some support for this contention

- However, even if true, it is not a strong effect, as EGM revenues tend to be fairly similar regardless of where they are located (convenience stores, casinos, restaurants, bars, hotels)

Increasing the Cost of Gambling

- Effective policy for preventing alcohol & tobacco use and abuse

- However, unclear whether this would be effective for gambling, as little relationship between ‘expected return’ and gambling game preference

Independence Between Gambling Regulator and Provider

- Conflict of interest exists when provider and regulator part of the same organization

- Theoretically, this conflict is more likely to impede effective regulation and implementation of policies that interfere with revenue generation

SUMMARY

- Large array of initiatives exist, most with very little direct empirical evidence about effectiveness and very few with behavioural measures of effectiveness.

- However:
  - Some evidence on most of these initiatives
  - Vast literature in other prevention fields to guide PG prevention efforts.
  - Biopsychosocial model of addiction provides important direction
  - Need to make educated guesses about the most promising approaches now

SUMMARY

- Most commonly implemented measures tend to be least effective ones (e.g., awareness campaigns, employee training, EGM modifications, self-exclusion, etc.)
- Furthermore, when potentially more effective measures are implemented (e.g., reduced EGMs, reduced hours), reductions too minor to have major effect
- **Unrealistic desire to implement effective prevention policies that do not reduce revenues or inconvenience non-problem gamblers**

BEST PRACTICES IN PROBLEM GAMBLING PREVENTION

- Evidence would suggest that there is almost nothing that is not helpful to some extent and perhaps nothing with huge potential to prevent harm on its own

- External Controls (policy) can be just as effective as Internal Knowledge (education).

BEST PRACTICES IN PROBLEM GAMBLING PREVENTION

- However, some individual initiatives have more potential to reduce PG than others:
  - Primary prevention compared to tertiary prevention
  - ‘upstream interventions’
  - Limiting the number of casinos/racinos
  - Restrictions on the availability of more harmful forms (i.e., EGMs)
  - Restricting the location of gambling venues
  - Restricting venue entry to nonresidents
  - Restrictions on concurrent use of tobacco and alcohol

BEST PRACTICES IN PROBLEM GAMBLING PREVENTION

- Other initiatives that may not be as potent, but may still have some value:
  - Information/Awareness campaigns
  - School-based statistical instruction
  - Comprehensive school-based programs
  - RGICs
  - Limiting gambling to gambling venues
  - Limiting gambling venue hours of operation
  - Intervention for at-risk gamblers at the venue
  - Restricting access to money
  - Restricting advertising and promotional activities
  - Independence between provider and regulator

BEST PRACTICES IN PROBLEM GAMBLING PREVENTION

- However, individual initiatives are insufficient, as the biopsychosocial model and evidence from the general field of prevention tells us that effective prevention requires pervasive and coordinated initiatives in all areas

- Prevention efforts have to be sustained and long lasting to have the desired effect.

For more information

- **Williams, R.J**., West, B., and Simpson, R. (2007b). *Prevention of Problem Gambling: A Comprehensive Review of the Evidence.* Report prepared for the Ontario Problem Gambling Research Centre, Guelph, Ontario, Canada. Dec 1, 2007. http://hdl.handle.net/10133/414