



Examining Changes in Problem Gambling Prevalence Over Time

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Some definitions

- **Epidemiology** is the study of the distribution and determinants of health-events in populations
- **Prevalence** refers to the percentage or number of people who have an illness or disorder at one point in time
- **Incidence** refers to the percentage or number of people who develop a problem over a given period of time (“new cases”)

The changing face of problem gambling

- Early population surveys in numerous jurisdictions identified the following risk factors:
 - Male gender
 - Age under 30
 - Low income
 - Single marital status
 - Low occupational status
 - Less formal education
 - Residing in large cities
- “Feminization of problem gambling”
- “Bimodal groups”
 - African Americans in US
 - Pacific Islanders in New Zealand
 - Eastern European immigrants in Sweden

Exposure vs. adaptation: Framing the issue

- Is the relationship between exposure and harm a straightforward one?
- Does the “total consumption/single distribution” model apply to gambling?
- Relevant in other areas of public health
 - Alcohol & tobacco consumption
 - Obesity
 - High blood pressure
- Researchers have proposed a modified formulation that includes both exposure & adaptation



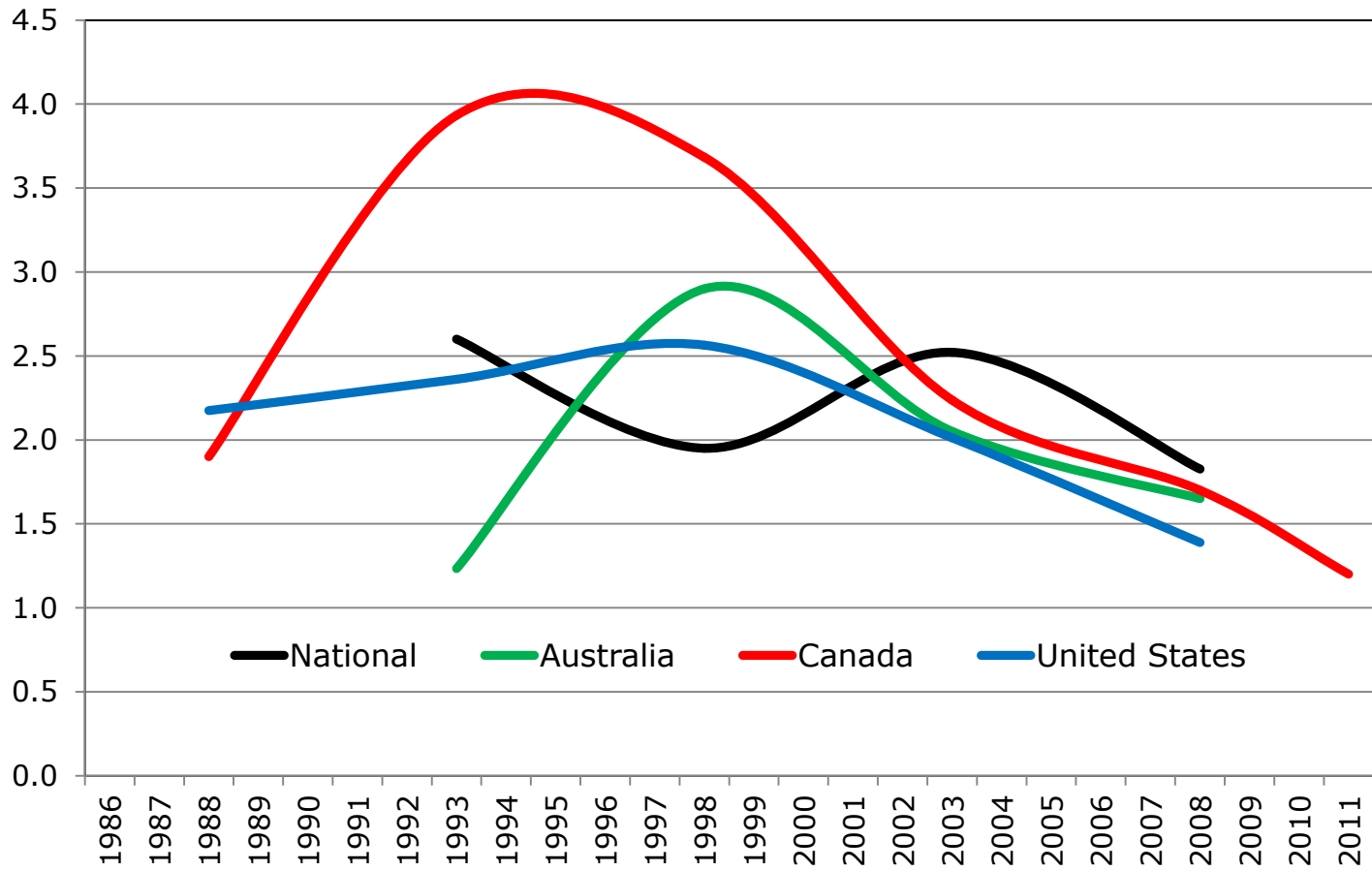
Standardization study

- Comprehensive compilation of all published & unpublished studies that have included a jurisdiction-wide adult prevalence survey
- Prevalence rates were standardized to facilitate comparison of rates between jurisdictions & within same jurisdiction over time
- Enabled analysis of changes in standardized PG prevalence rates over time

Data & methods

- 202 studies extracted
 - 68 national
 - 27 Australian states/territories
 - 40 Canadian provinces
 - 67 U.S. states
- Five primary methodological variants for which weights were developed & applied
 - Differences in PG **assessment instrument** & differing thresholds to designate PG for the same instrument
 - Differences in **time frame** used to assess PG
 - Differences in method of **survey administration**
 - Differences in how survey is **described** to potential participants
 - Differences in the **threshold** for administering PG questions
 - Differences in **response rates** over time, administration method
- Did not correct for differences in sampling strategy, weighting of survey data

Changes w/in jurisdictions over time

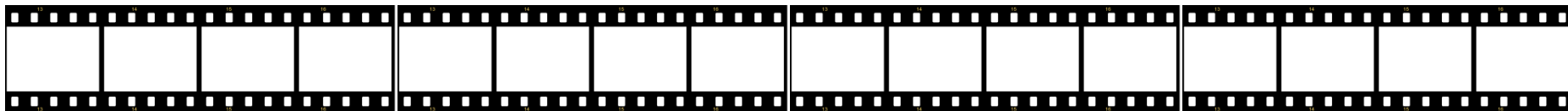
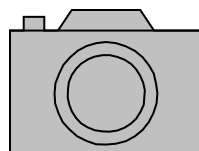


Standardized PG Prevalence Rates Over Time (5 Year Smoothed)

Findings

- Results support both exposure & adaptation
- Adaptation can occur at different levels
 - Individual (recovery, professional intervention)
 - Community (novelty wears off, increased awareness of risks)
 - Population (“natural selection” & removal of unsuccessful gamblers)
- Different levels of adaptation suggest distinct policy approaches

Prevalence surveys provide 'snapshots' of a dynamic process



PG status can change over time

Table 4: Transitions between PGSI groups Wave One to Wave Two (n=5003)

		Wave Two						
		Completed 2009	NG	NPG	LR	MR	PG	Shifted 2009
Wave One	NG	1024	464	526	24	9	1	560
	NPG	3569	240	3131	169	24	5	438
	LR	274	9	144	81	38	2	193
	MR	96	3	20	26	39	8	57
	PG	40	0	2	0	9	29	11
	Total	5003	716	3823	300	119	45	1259
				No Movement				
				Transition Up				
				Transitions Down				

Risk factors predicting PG development

- Gambling in the past year on EGMs, casino table games, Internet
- Betting weekly on horse/dog races

- Poor health (physical, mental)
- Smoking
- Risky drinking habits

- Difficulties at work
- Changes in working conditions
- Loss of a close relative
- Changes in personal/HH finances