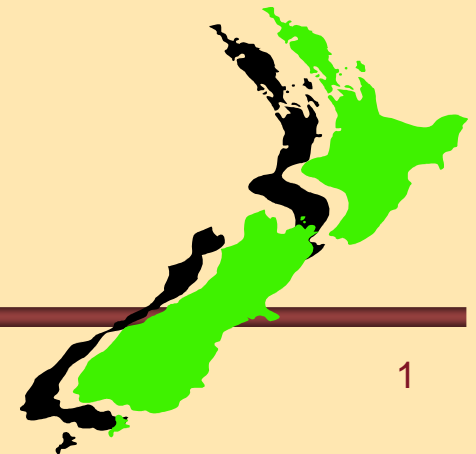


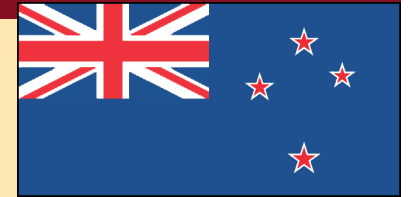


Problem Gambling & Suicidality

Causality, catalyst or common factor?

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School of Psychology





Presentation outline

1. What do we know about extent of gambling?
2. What do we know about the causal links between gambling, depression, & suicidality?
3. Implication for public health policies & treatment interventions



Take away message

- 1. Elevated rates of depression are found in pathological gamblers**
- 2. Clinicians should assess for suicidality particularly where prior comorbid mental health problems exist**
- 3. The causal relationship between suicidality & gambling is complex & remains unknown**
- 4. Predictors of suicidality are typical of those found in the general population**



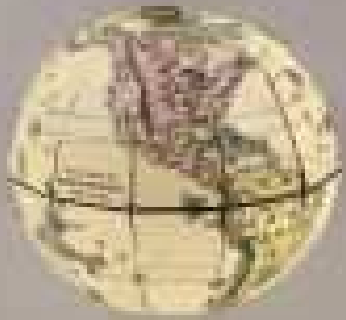
Gambling is popular & evolving

- **We know that most people gamble at least once in their lifetime**
- **Lotteries are popular**
- **Mean adult per capita expenditure = \$996**
- **In Australia, there are 199,930 EGMs**
 - **Average takings per machine = \$46,300**
 - **56% total takings of all gambling**
 - **Casino takings represented 17%**



Attitudinal changes

- Risk factor for adolescent gambling is parental acceptance of gambling (Derevensky & Gupta: McGill Uni)
- Targeting younger technologically sophisticated audience: *skill*
- Advertising: *fun*
- Glamorization: *identification*



International prevalence rates for gambling & problem gambling

	Population	Pathological	Problem
USA	68-95%	0.1-1.9%	3.0%
Canada	67-93%	0.3-1.7%	2.2%
Australia	85-90%	1.2%	2.7%
Sweden		0.6%	2.2%
Switzerland		0.8%	2.2%
UK		0.7%	
Spain		1.7%	



Higher rates in gambling populations

- Rates of PG among:
 - Hotel patrons = 28%
 - Club patrons = 16%



New Zealand rates for gambling & PG

	Lifetime	Current	Weekly
1991	2.7%	1.2%	48%
1995		0.4%	
1999	1%	0.5%	40%
	EGM exp (Million)	EGM exp (Million)	
1991	\$575	\$107	
1999	\$1,167	654	

(Max Abbott & Rachel Volberg reviews of epidemiological studies)



Problem gambling in NZ

- Problem gamblers = 15,400 – 30,700
- Pathological gamblers = 7,300 - 20,100



Interpretation of data

- **Exposure model: supported by early data**
- **Social adaptation model suggested by replication studies**
 - **Montana, Nth Dakota, Oregon, Washington:**
increase/decrease determined by presence of treatment services



Two interesting findings

- 1. Pathological gambling is not a chronic, progressive disorder**
- 2. Only 10% of those who meet criteria are in treatment at any one time**



Why do people gamble?

- **Everyone knows the answer!!!**
 - **Fun**
 - **Excitement**
 - **Winning**
 - **Social**
 - **Boredom**
 - **Emotional escape**



Conflicting message

- **Gaming machines are recreational devices on which you spend money**
- **It is possible to win in the short-term**
- **In the long term, in all but the most unusual cases & extraordinary circumstances, this outcome is virtually impossible**
- **Yet the advertising focuses on WINNING LARGE PRIZES**



What do we know about gambling, depression & suicidality?

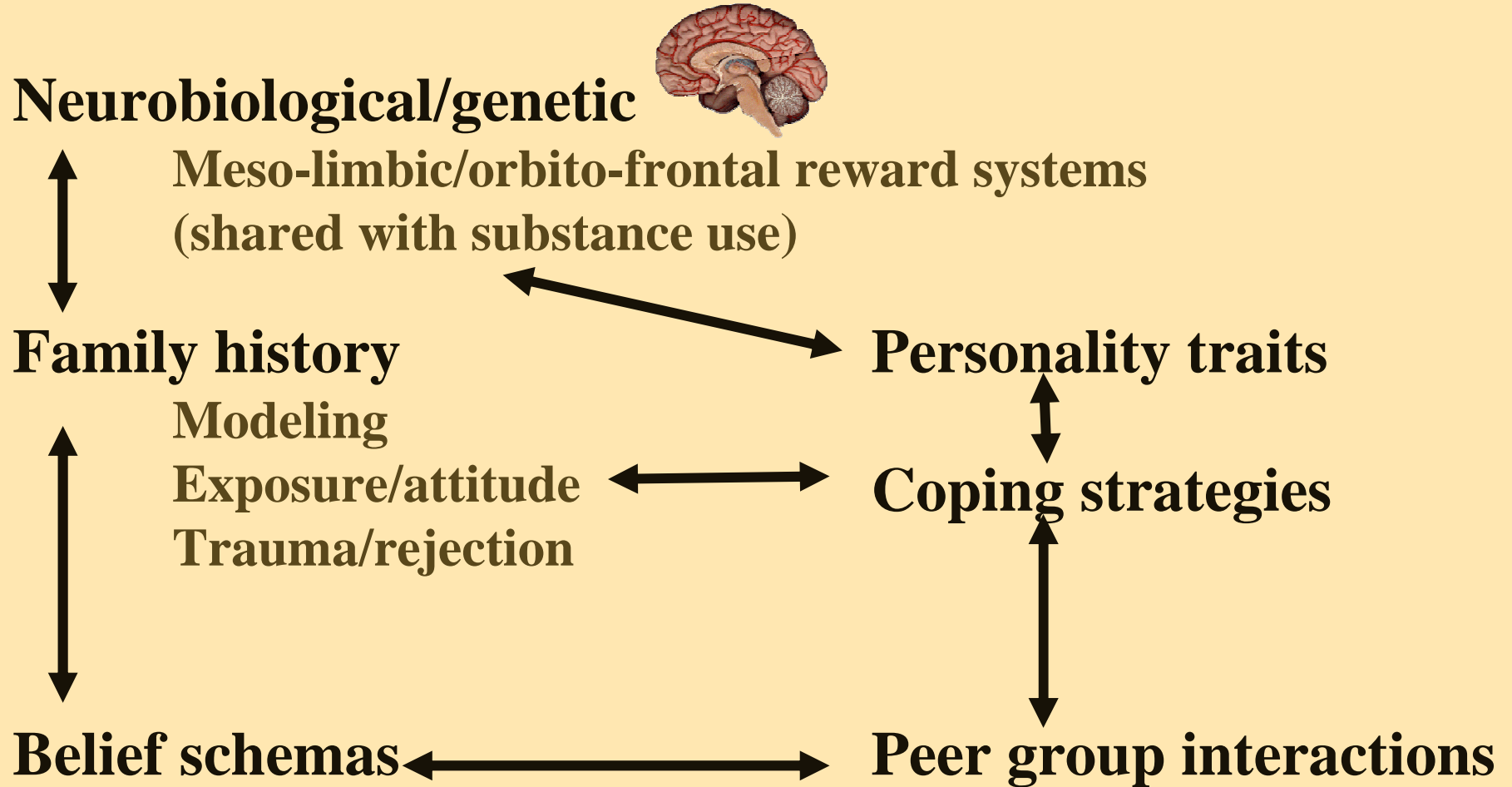


Several important questions

- **Who is at risk for:**
 - Problem gambling
- **What is the causal relationship between the problem gambling & suicide?**
 - Cause or catalyst



Precursors: Multiple interactive vulnerability factors





Risk factors for problem gambling

- **Environmental factors**
 - Access to venues, ease of accessing money (ATM), advertising, community/cultural inducements
- **Age:**
 - Adolescence & young adults
 - Age at onset predictive of problem gambling
- **Male gender**
 - Impulsivity, substance use, risk-taking behaviours



Risk factors for problem gambling

- **Ethnicity/minority populations**
 - Maori & Pacific Islanders 3-6 risk compared to European descent (Abbott & Volberg, 2000)
 - Recent migrants, refugee status
- **Lower socioeconomic status**
 - (poverty, unemployment & poor housing)

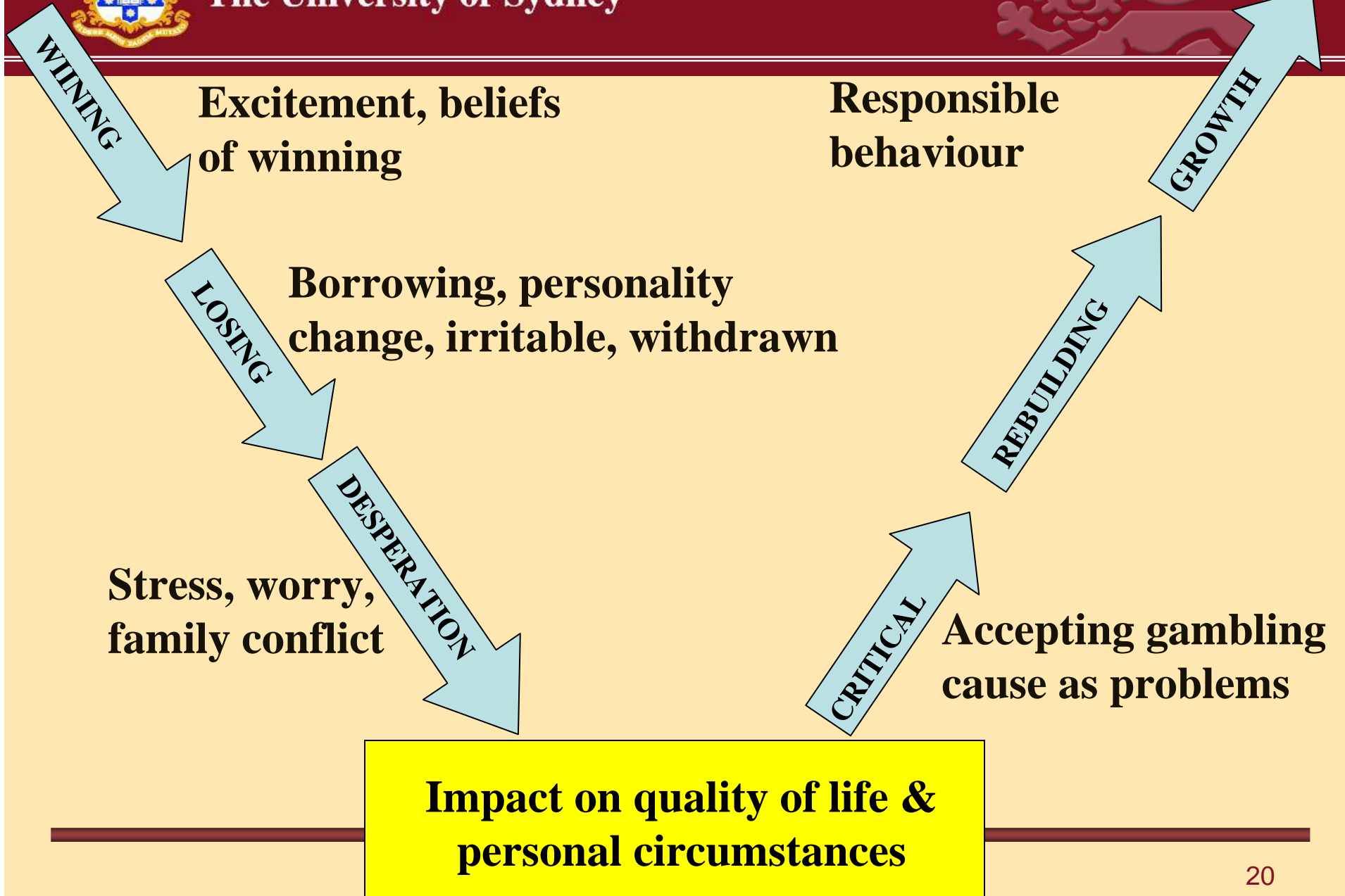


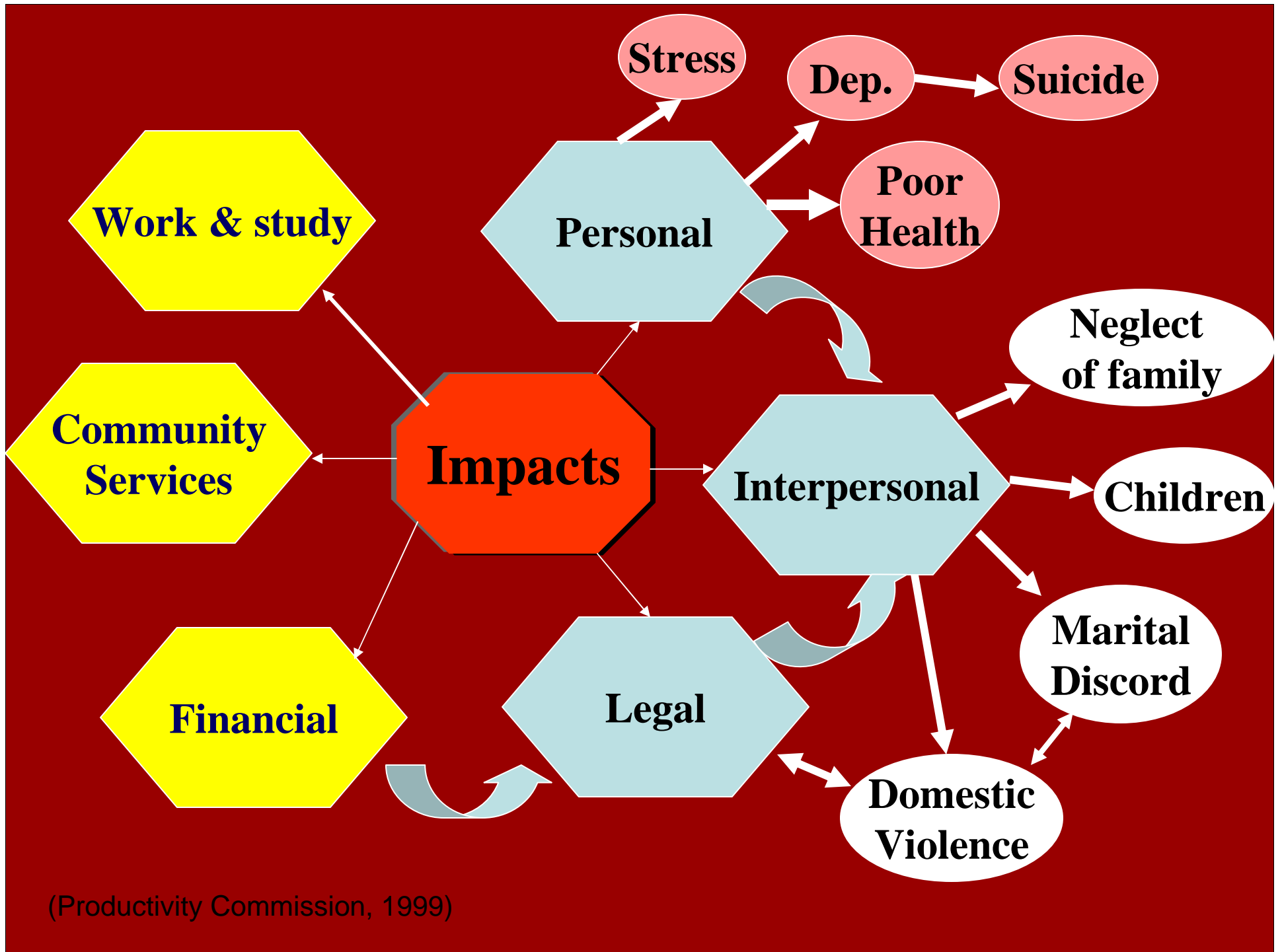
- **Forms of gambling**

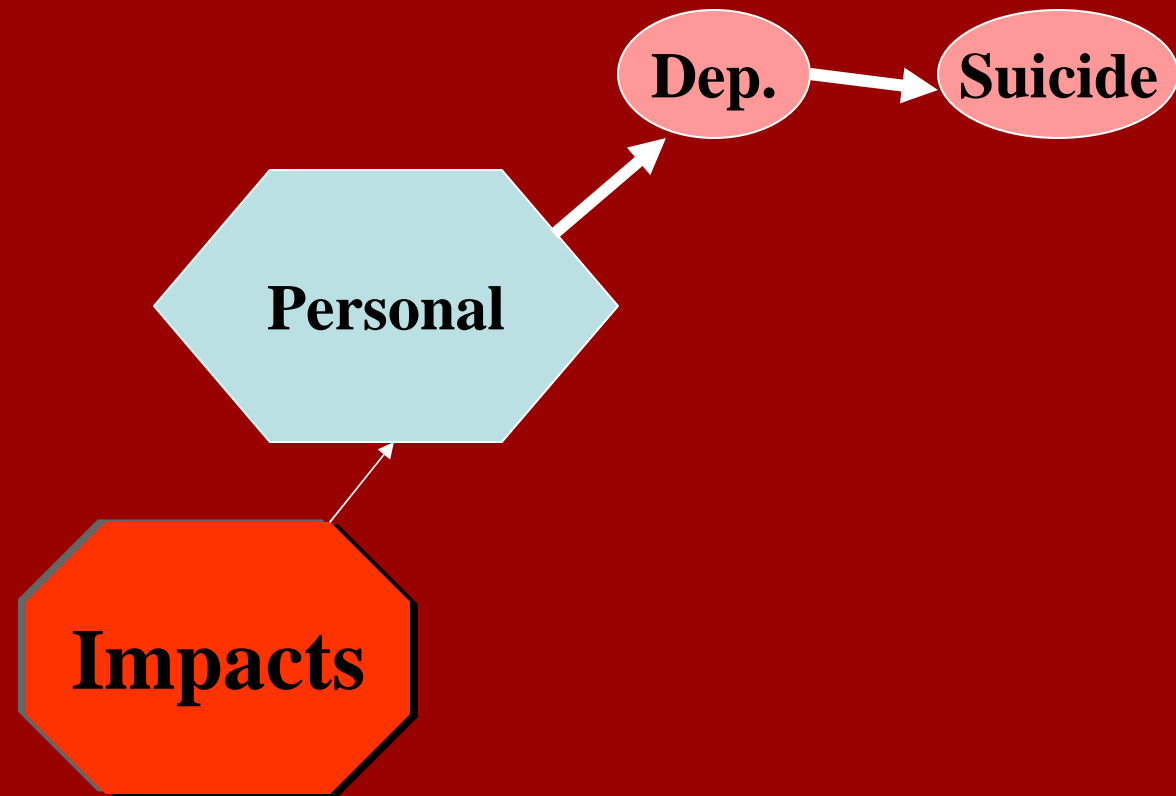
- **EGMs associated with problem gambling**

- **Structural characteristics**

- Continuous, rapid cycle, minimal skill, near wins, erroneous beliefs
 - Rapidity of onset of “addiction”







Two most consistent research finding:

75% of PGs meet criteria for major depression
30 - 40% co-morbid substance abuse



Community Studies: Inconsistent

- **Phillips, Welty & Smith (1997)**
 - reviewed mortality data 1969-1991: Las Vegas, Reno & Atlantic City
 - elevated rates for visitor & non-visitor suicides
 - concluded gambling or some factor associated with gambling linked to abnormally elevated risk of suicide



- **McCleary, Chew, Feng et al (1998)**
 - Reviewed similar data-set as Phillips et al (1997)
 - Las Vegas (21 per 100,000) higher than non-gambling Salt Lake City (17 per 100,000) but lower than Atlantic City (9 per 100,000)
 - Nevada rates similar to other counties in surrounding regions



- **Marfels (1998)**
 - evaluated 206 Las Vegas adult visitor suicides 1990-1997
 - depression/mental problems, relationship problems, substance abuse leading causes
 - 6% gambling related
 - ranked 6th as cause
- **St. Louis Epidemiological Study** (Cunningham-Williams, 1998)
 - No difference between PG & Non-PG



- **Australia (Productivity Commission, 1999)**
 - **9.2% of lifetime PGs had suicidal ideation vs. 0.3% for non-gamblers & 5.4% in general population**



Emergency departments (Penfold et al, 2006)

- **N = 70 (from 189 admissions)**
- **17% scored 4+ on EIGHT gambling screen**
- **50% of these had previous suicide/self harm attempt**
- **58% of PG had psychiatric problems compared to 60% of non-PG**
- **? Causal relationship between psychiatric problems, gambling & suicide not known**



Suicidality in clinical samples of PG

Country	Ideation	Attempt
North America	13-48	7-24
Australia	40-60	13
New Zealand	80	4
Austria	70	8



Completed suicides: psychological autopsy method

Blaszczynski & Farrell (1998) (Victorian Institute of Forensic Medicine & State Coroner's Court)

- **Period: 1990-97**
 - 44 suicides classified gambling related
 - **Productivity Commission (1999)** estimated that 1.7% of all Australian suicides 1994-97 were gambling-related



Characteristics of Completed Suicides:

Blaszczynski & Farrell, 1998

- **Majority males (88%)**
- **Mean age 40 yrs**
- **Low socioeconomic background (84%)**
- **15% postmortem alcohol > 0.05 per 100 ml**
- **Previous attempts reported by 31%**
- **Sought previous mental health assistance for gambling by 25%**



Causal model

Impulsivity



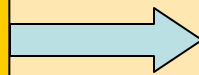


Catalyst model

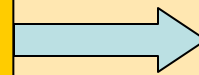
**Impulsivity
Dissociation**



**Depression
Low self-esteem
Childhood traumas
Sense of rejection**



**Gambling
&
severity**



**Distress
Unemployment
Psychic angst
Relationships**



Risk factors for suicidality in PG

- **Hodgins, Mansley & Thygesen (2006)**
 - **N = 101** media recruited PG
 - **Suicide module:** *Semi-structured Assessment for the Genetics of Alcoholism*
 - **Sample classified according to self-reported ideation & attempts**



Findings

- **Subgroups**
 - 38% ideators
 - 32% attempters
 - 28% Nil suicidality
- **Ideators:**
 - Onset of ideation = 22 yrs
 - Onset gambling problems = 33yrs



Findings

- **Attempters**
 - 60% made more than one attempt
 - 97% made attempt when depressed
 - 60% attempt under influence of alcohol/drug
 - 21% (n=7) reported gambling as reason (7% of total sample)
 - Ideation preceded gambling in n = 6 of these 7
 - All 6 had lifetime mood disorder, & 5 met criteria for lifetime alcohol dependence



Findings

- **Did not discriminate three subgroups**
 - Age of onset of gambling problems
 - Age of onset of mood & substance disorders
 - Income
 - Gender
 - Marital status
 - Type of gambling
 - History of gambling treatment



Findings

- **Did discriminate subgroups**
 - Mood disorder: Suicidality from Nil Suicidality
 - Substance use: Attempters from other two groups
 - Six fold increase in risk
 - Total SOGS scores (severity of gambling) related to suicidality



Conclusions

- Suicidality rates are high in PGs
- Gambling-related suicides are relatively rare
- Attempts associated with depression
- Substance abuse increases risk for attempts

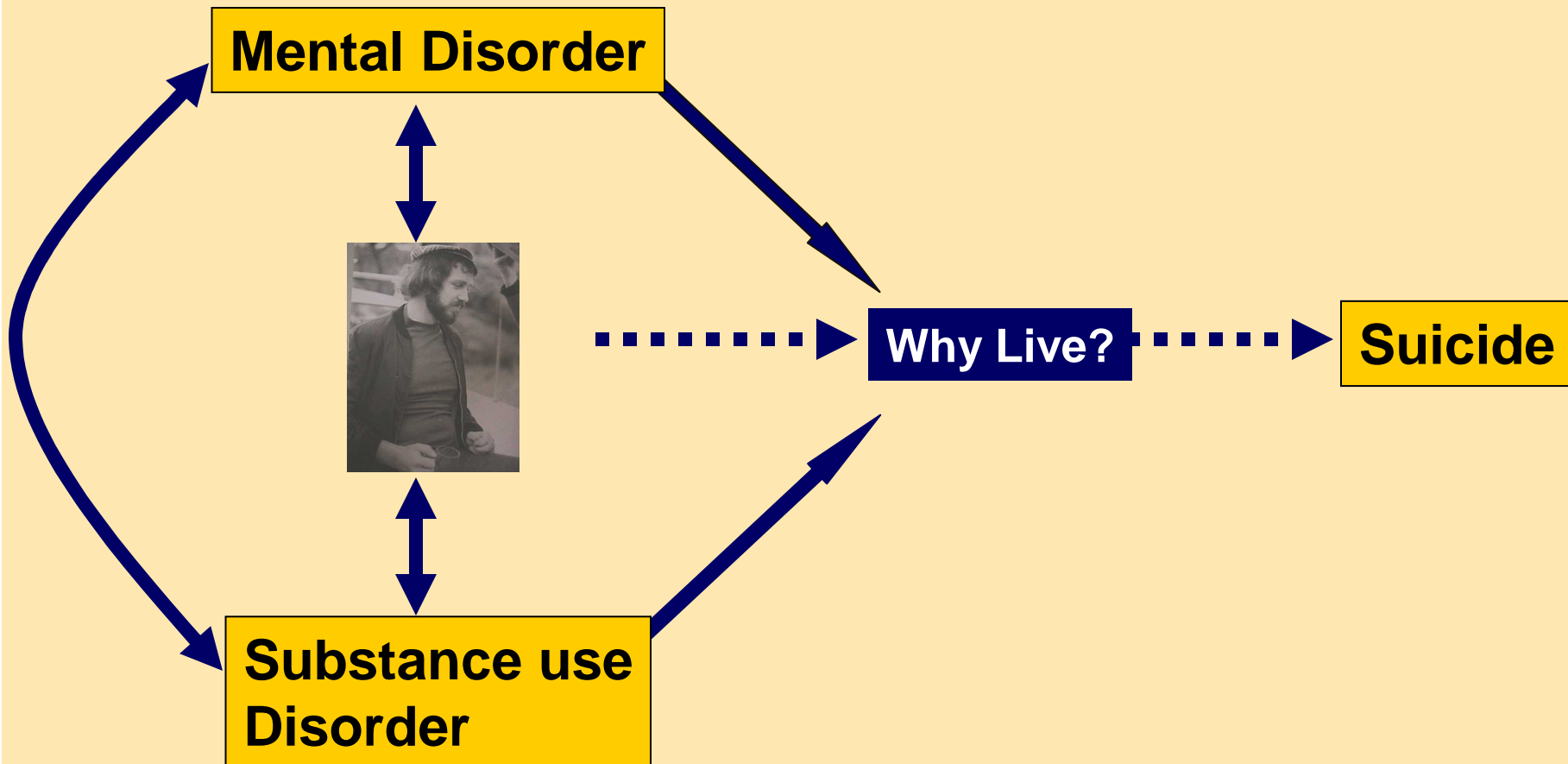


Conclusions

- **Suicidality of gamblers is related to prior mental health disorders**
 - Clinicians should regard presence of prior co-morbidity/psychiatric disorder as distinct risk factor for suicidality
 - History of prior suicidality & substance use must be assessed in PGs as predictive risk-factors



Common factor model





Implications for treatment

- **Suicide management primary**
- **Once stabilized assess**
 - **Prior mental health/substance use history**
 - **Determine temporal sequence of suicidality, depression & gambling**
 - **Causal, catalyst or common factor**
 - **Understand the PG's financial predicament**



Questions to consider

- **Is there an impending disclosure or discovery of debt or criminal activity?**
- **Is there a sense of financial hopelessness coupled with serious loss of assets (home), marital/familial relationships?**
- **What is the extent of personal shame, social embarrassment & loss of status?**



Public health policy, gambling & suicide

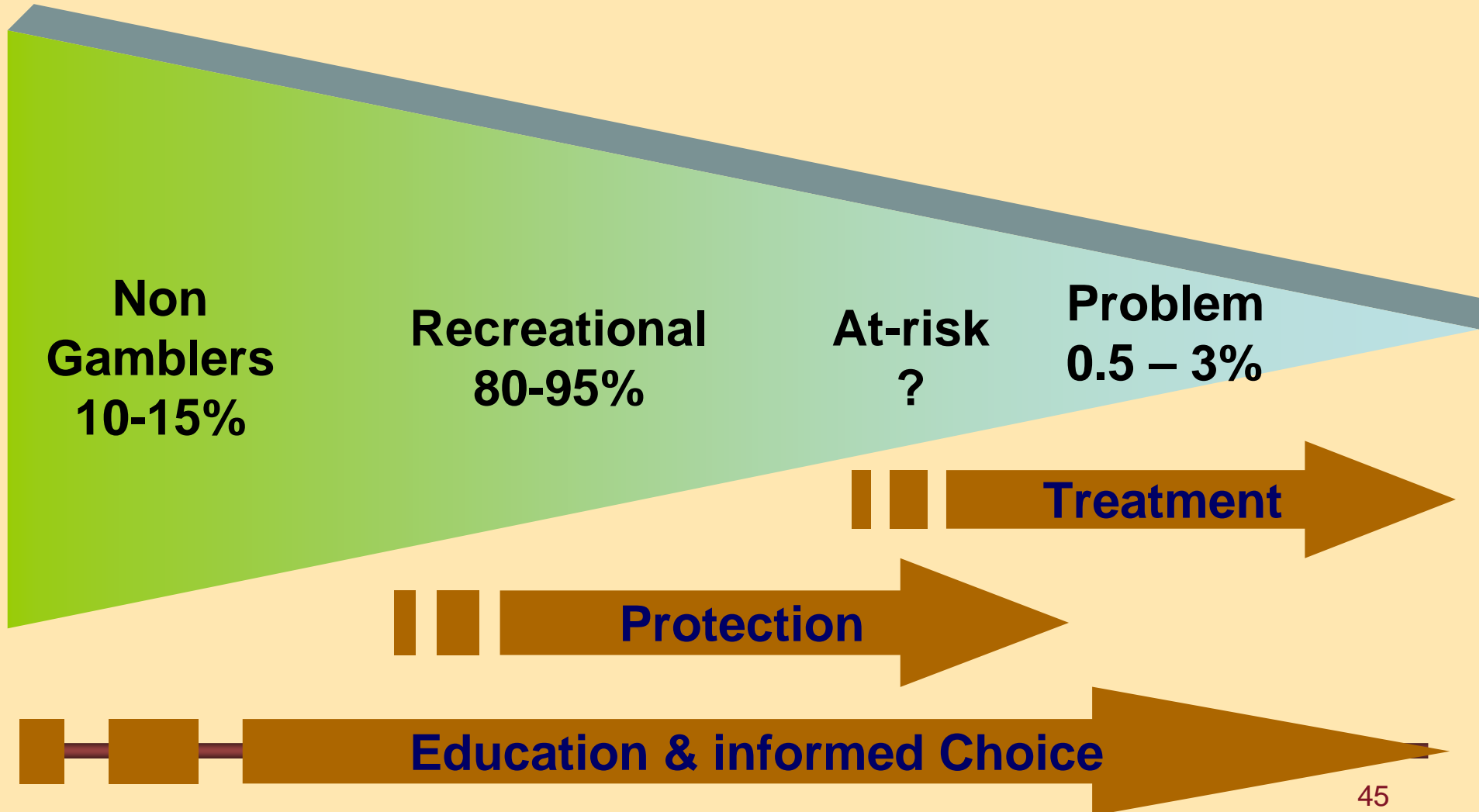


Strategies

- **Improve general mental health services**
 - Differential/falling rates of problem gambling prevalence associated with treatment services & responsible gambling initiatives
- **Target whole of community to promote responsible gambling**



Whole of community approach





Three-tiered Strategic Plan

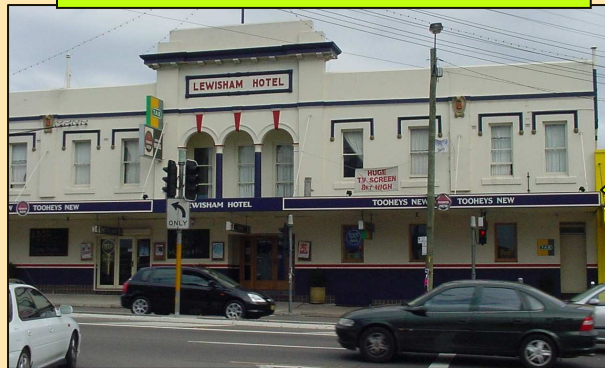
Primary prevention

Secondary prevention

Tertiary prevention

Responsible gambling environment & products

Education/attitudes



Rehabilitation



Counselling Services



Promoting responsible gambling

Responsible gambling is achievable

- Effective & enforced regulations, policies & procedures
 - Explicit industry commitment with clear objectives

Focus on:

- Socially responsible revenue
- Prevention (incidence)
- Truth in advertising & information
- Effective treatment & rehabilitation