



# EVIDENCE ON THE PREVENTION PARADOX WITH RESPECT TO GAMBLING-RELATED HARM

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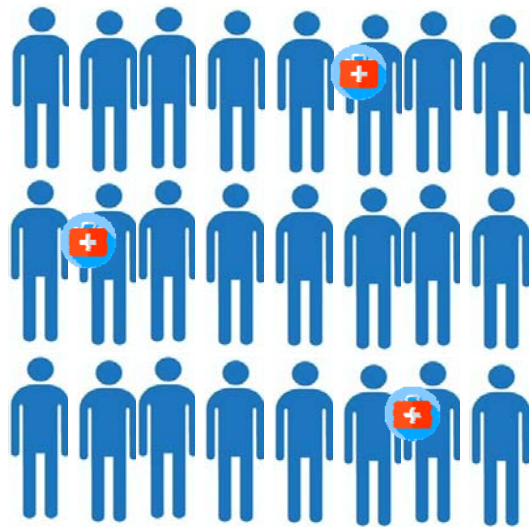
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# THE PREVENTION PARADOX



Which group accounts for more adverse consequences?

Large low-risk group



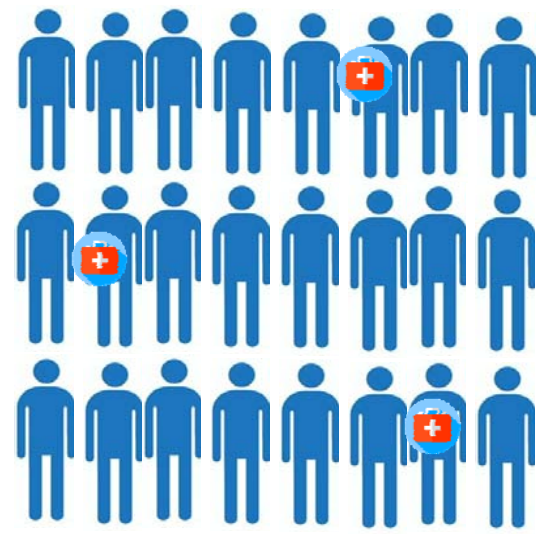
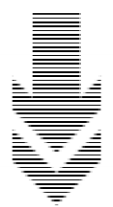
Small high-risk group

# WHY DO WE CARE?

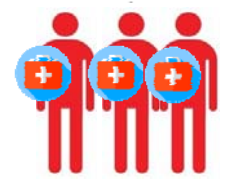
To minimise harm, we need to resource interventions appropriately



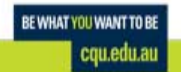
Product safety,  
regulation, broad-scale  
campaigns.



Identification, acute  
intervention and  
treatment



Small high-risk  
group



# THE PP AND GAMBLING



- Raisamo et al (2015) noticed significant harms at low-mid spectrum
  - Suggested more attention be paid to these categories
- Canale et al (2016) observed harms occurring across LR, MR, PG groups
- Browne et al (2016, 2017) found:
  - Significantly higher per-person impact for PGs
  - Significantly higher pop-level impact for LR and MR gamblers
- Delfrabbo & King (2017) made a critical review of the PP wrt gambling
  - Different answers depending on which consequence considered
  - Importance of focusing on genuine, significant consequences
  - Using standard threshold for (PGSI) risk categories

# CHALLENGE



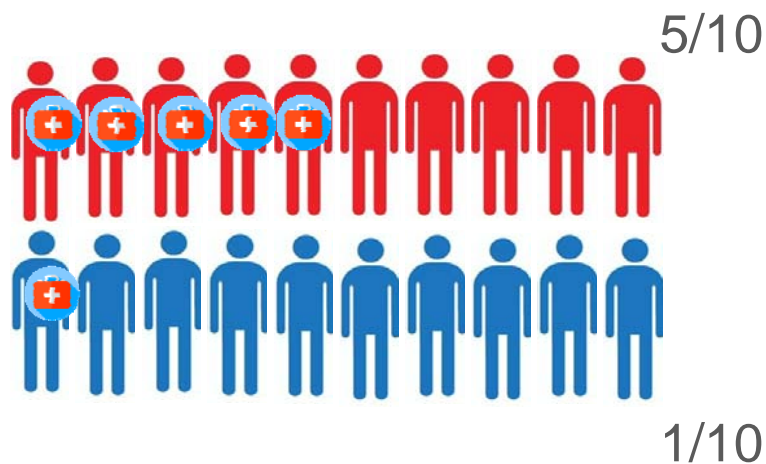
- We need detailed information on harmful consequences, that is population representative
- A recent population study cost \$894k, but yielded on 23/5000 PG cases
- Population samples
  - Too expensive to include long instruments
  - Not enough cases at the severe end of spectrum
- Stratified / convenience samples
  - Easy to get severe cases
  - Ability to collect detailed information
  - Not representative
- Our method resolves this problem, via one reasonable assumption



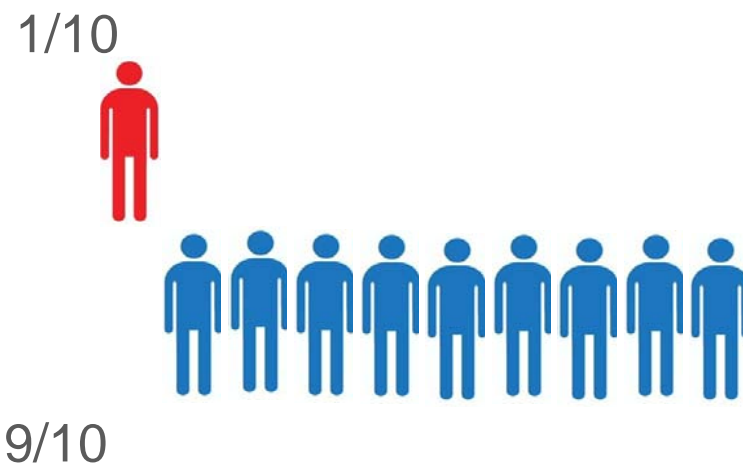
# METHOD



Stratified sample of harms



Population prevalence of risk-groups



X

$$\hat{p}(H) = p(H | C)p(C)$$

## WHAT'S THE CATCH?

- Key assumption –  $p(H|C)$  in sample is the same as  $p(H|C)$  in the population
- E.g. A PG in the sample has the same probability of 'increased credit card debt' as a PG in the population

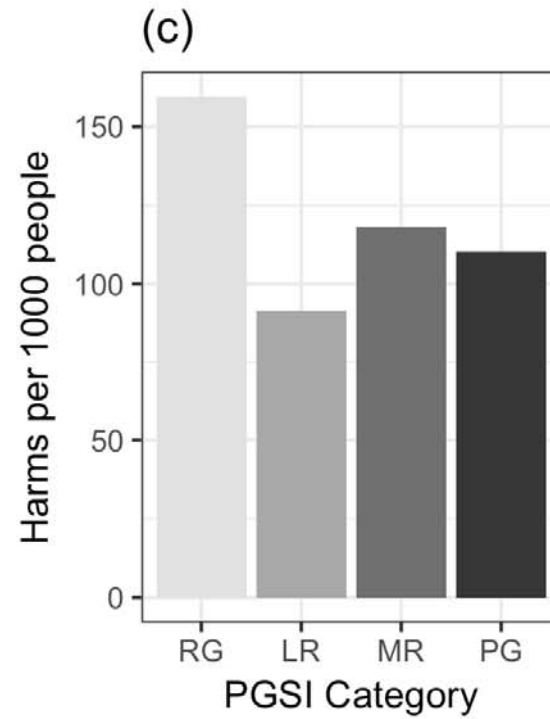
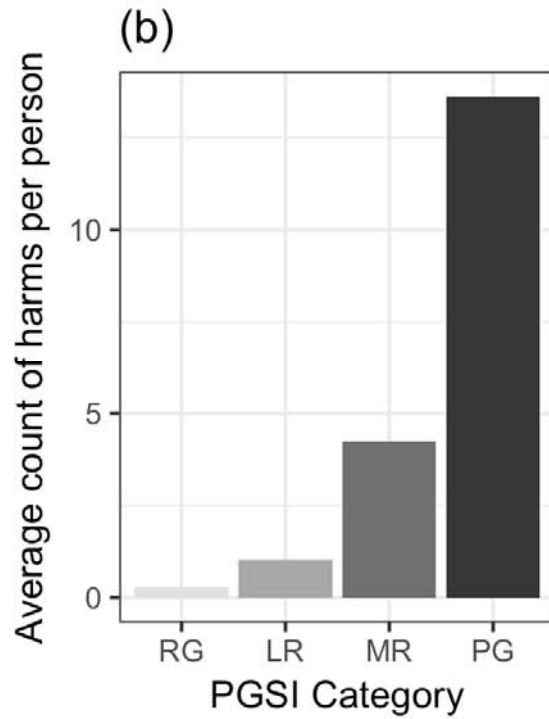
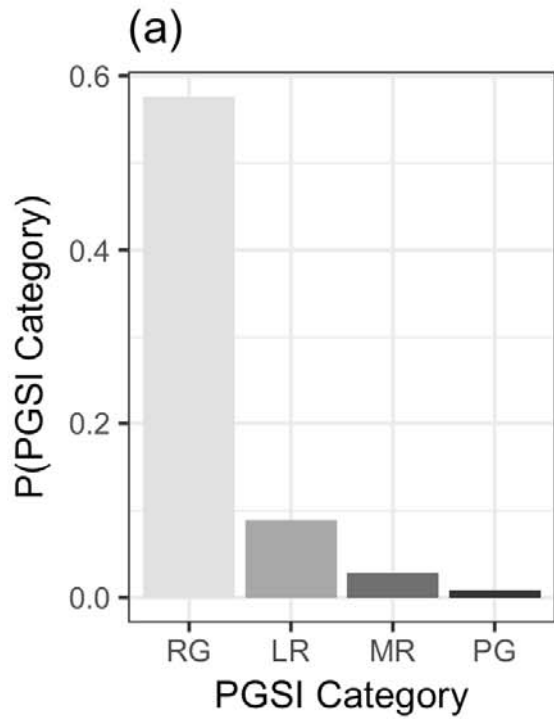
# METHOD



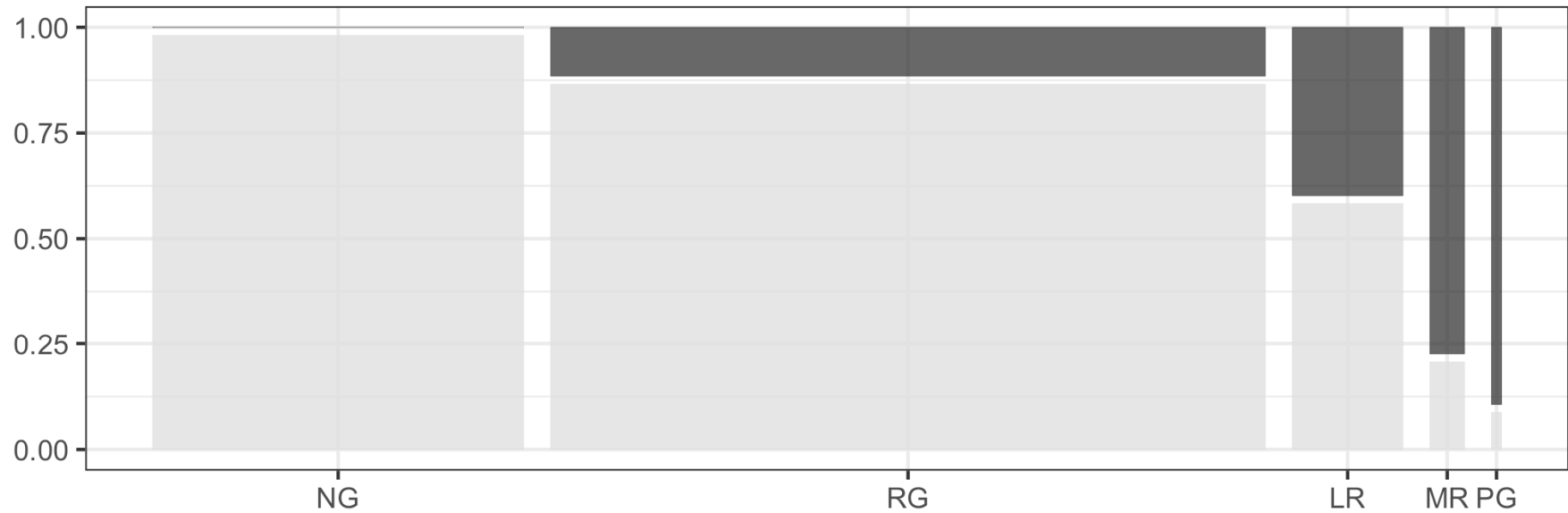
- Sample estimates of harms  $p(H|C)$ 
  - 1524 regular gamblers
  - Oversampling higher risk categories: 39.5% RG, 22.3% LR, 17.4% MR, and 20.6% PG
  - Demographics (age, gender, ethnic background, education) similar to general population
  - PGSI using standard scoring
  - 72 item harms checklist (Browne et al, 2016)
- Population estimates of risk category prevalence  $p(C)$ 
  - PGSI using standard scoring
  - Hare's (2015) recent prevalence survey
  - RG .5759, LR .0891, MR .0279 and PG .0081



# INCIDENCE OF HARMS BY PGSI CATEGORY



# PROPORTION OF POPULATION REPORTING 1+ HARM

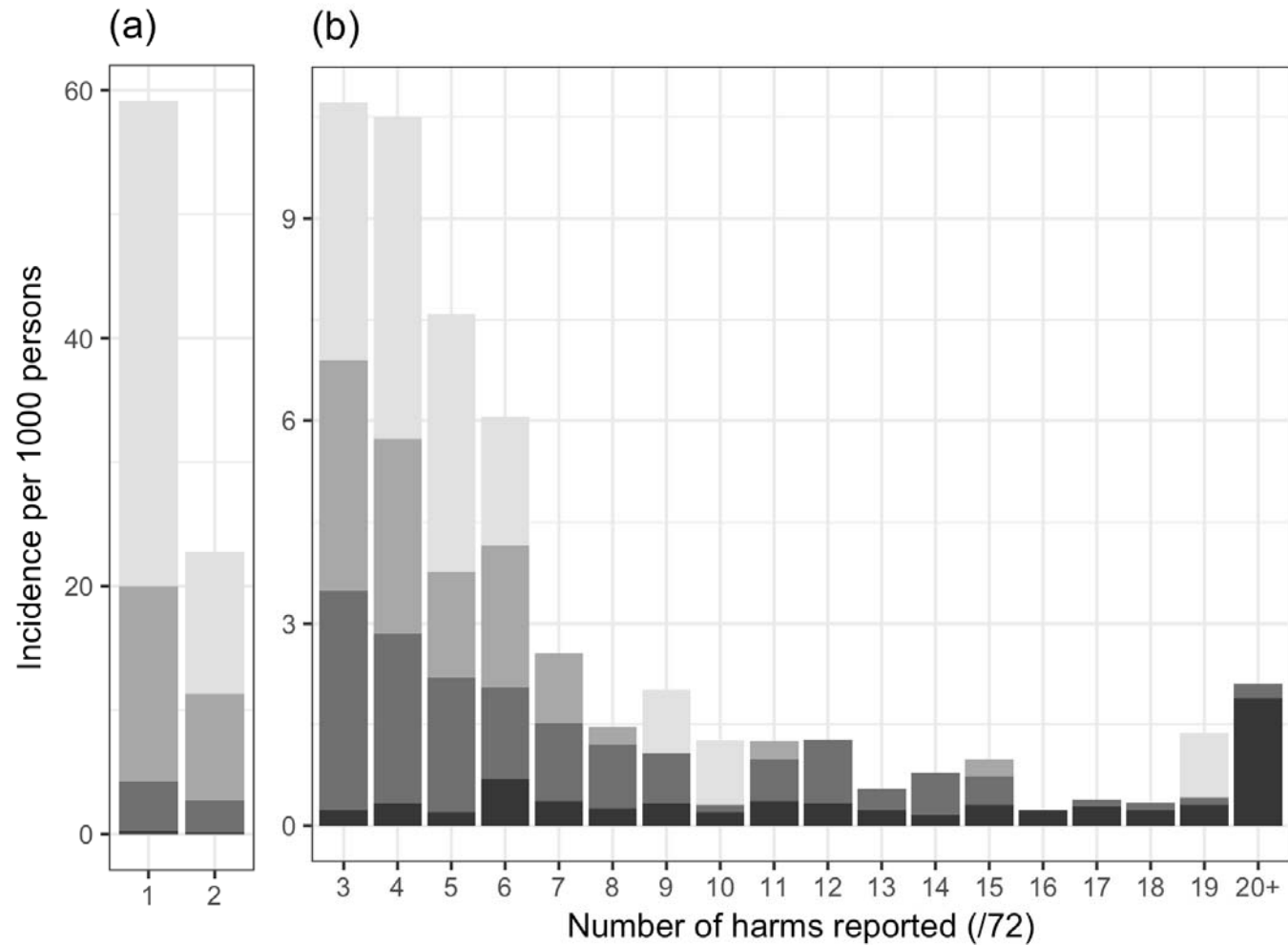


1+ Harms indicated  No  Yes



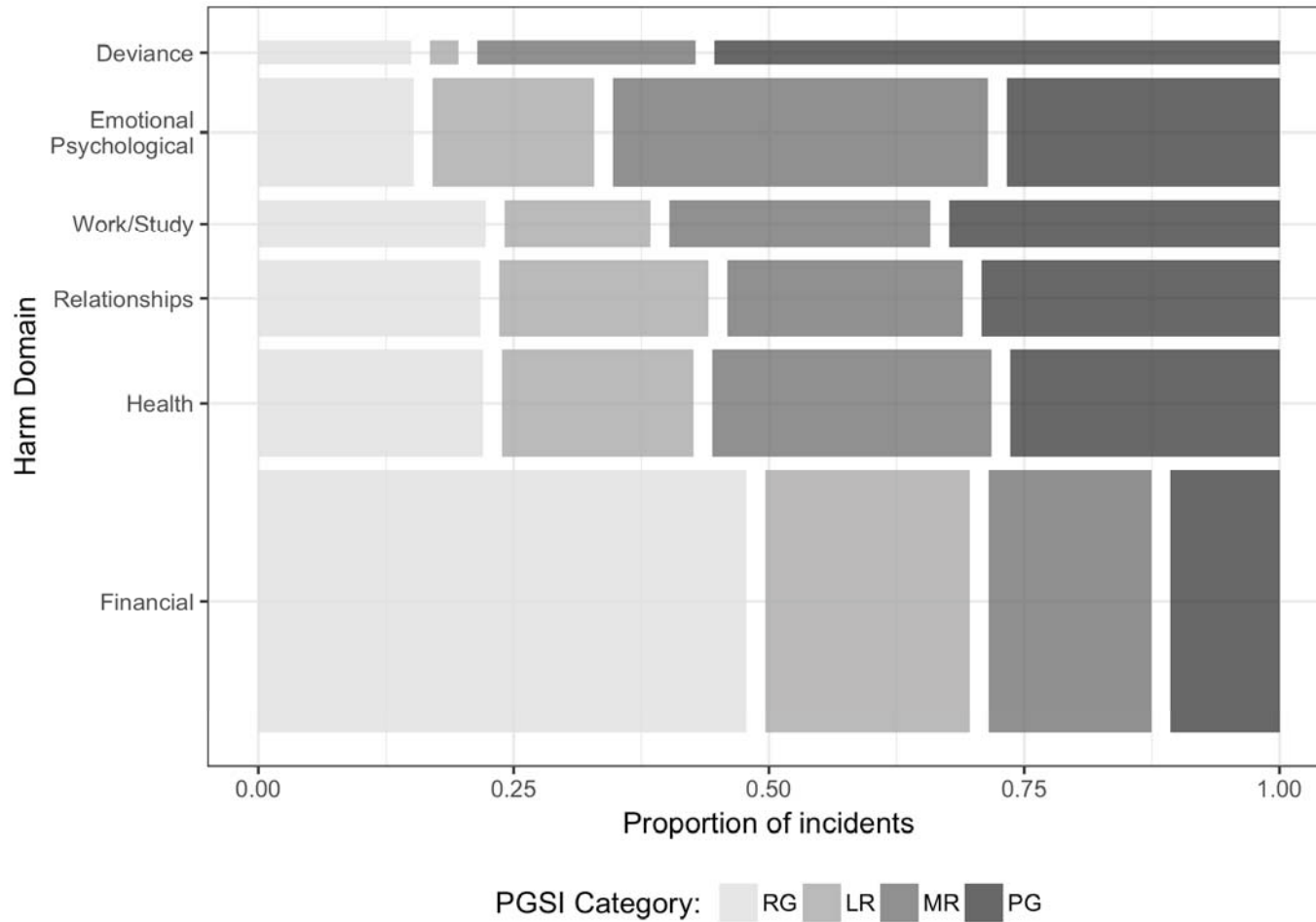
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# NUMBER OF HARMS PER PERSON



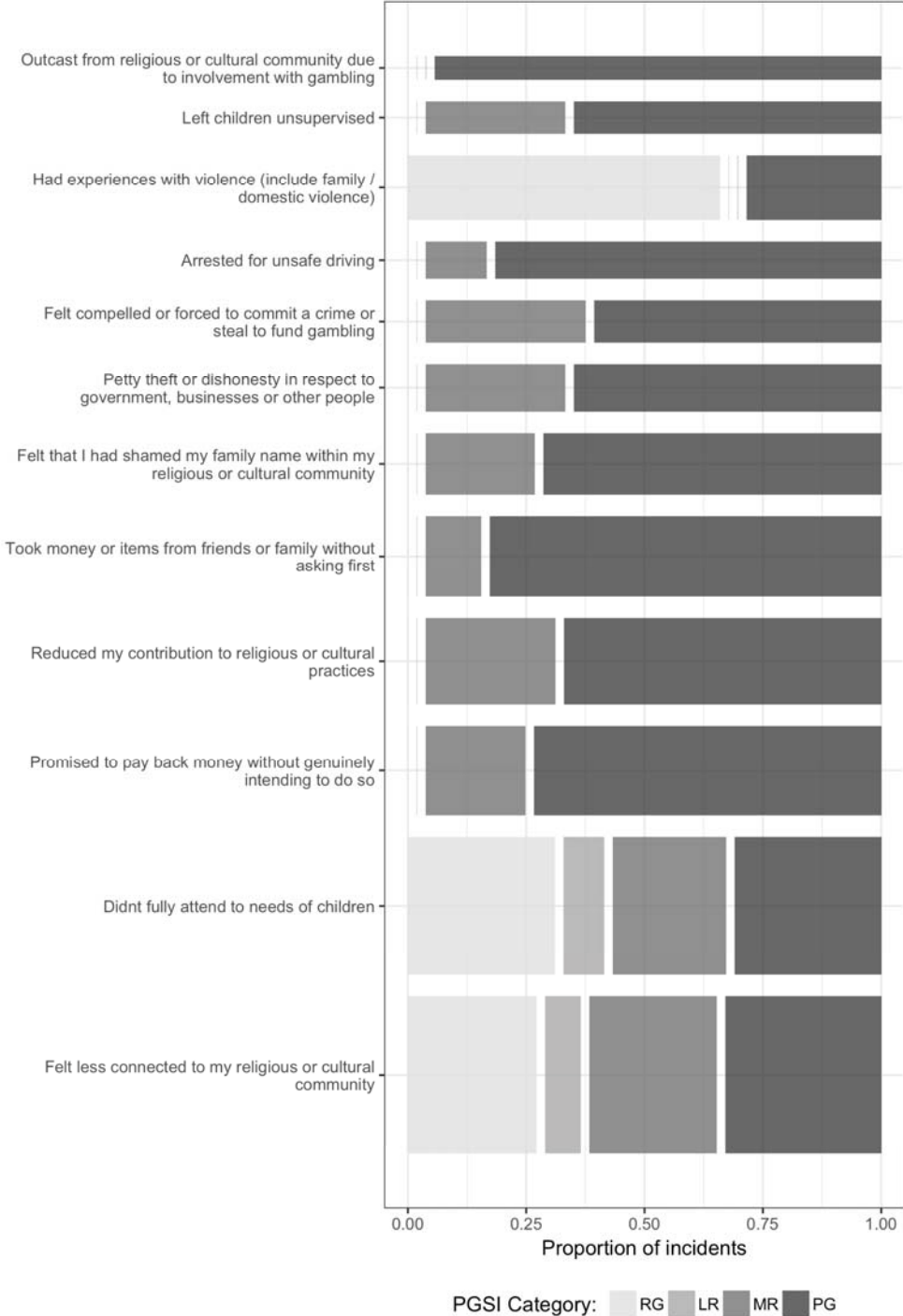
PGSI Category: RG LR MR PG

# INCIDENCE OF HARMS BY RISK AND DOMAIN

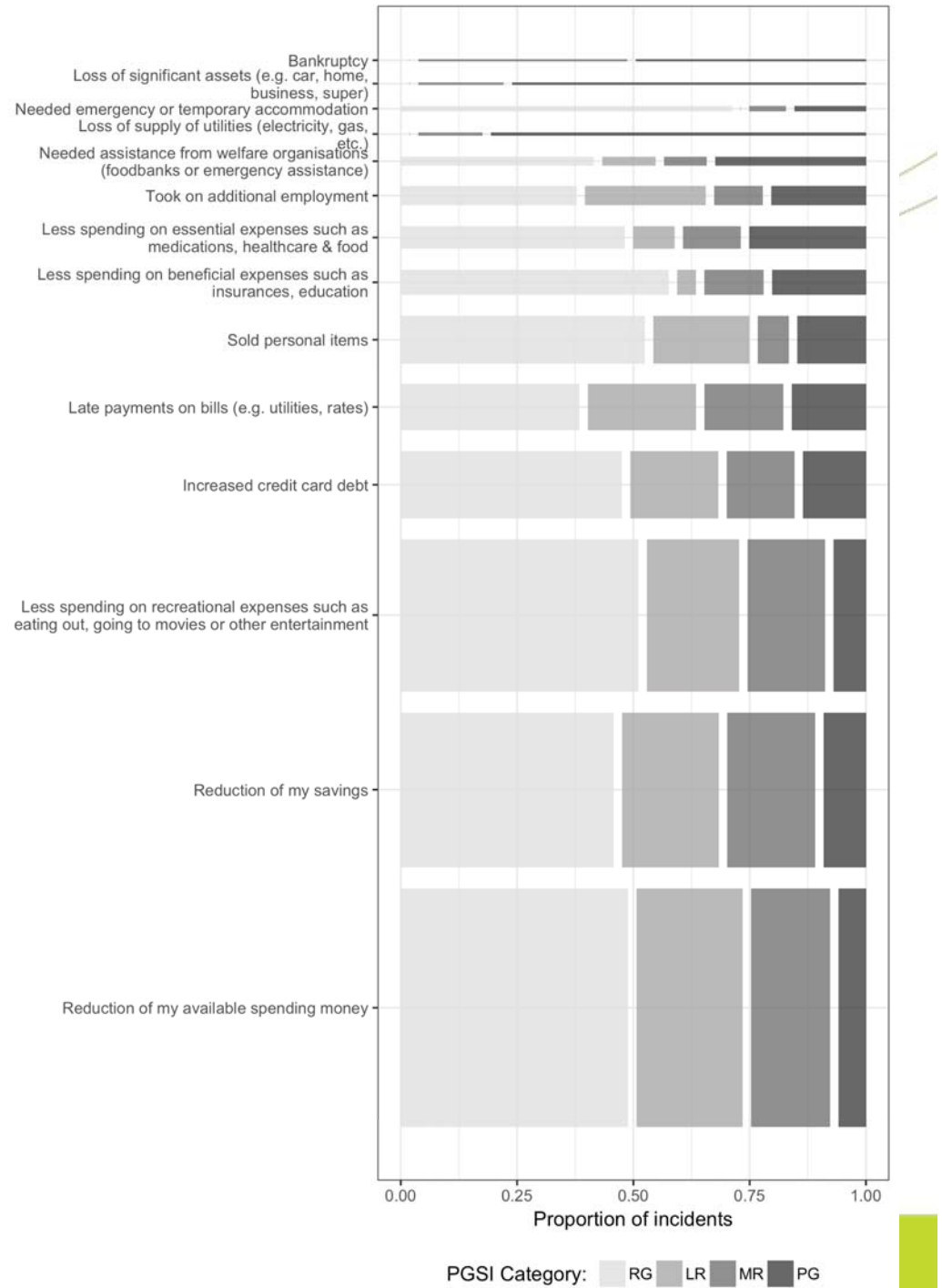


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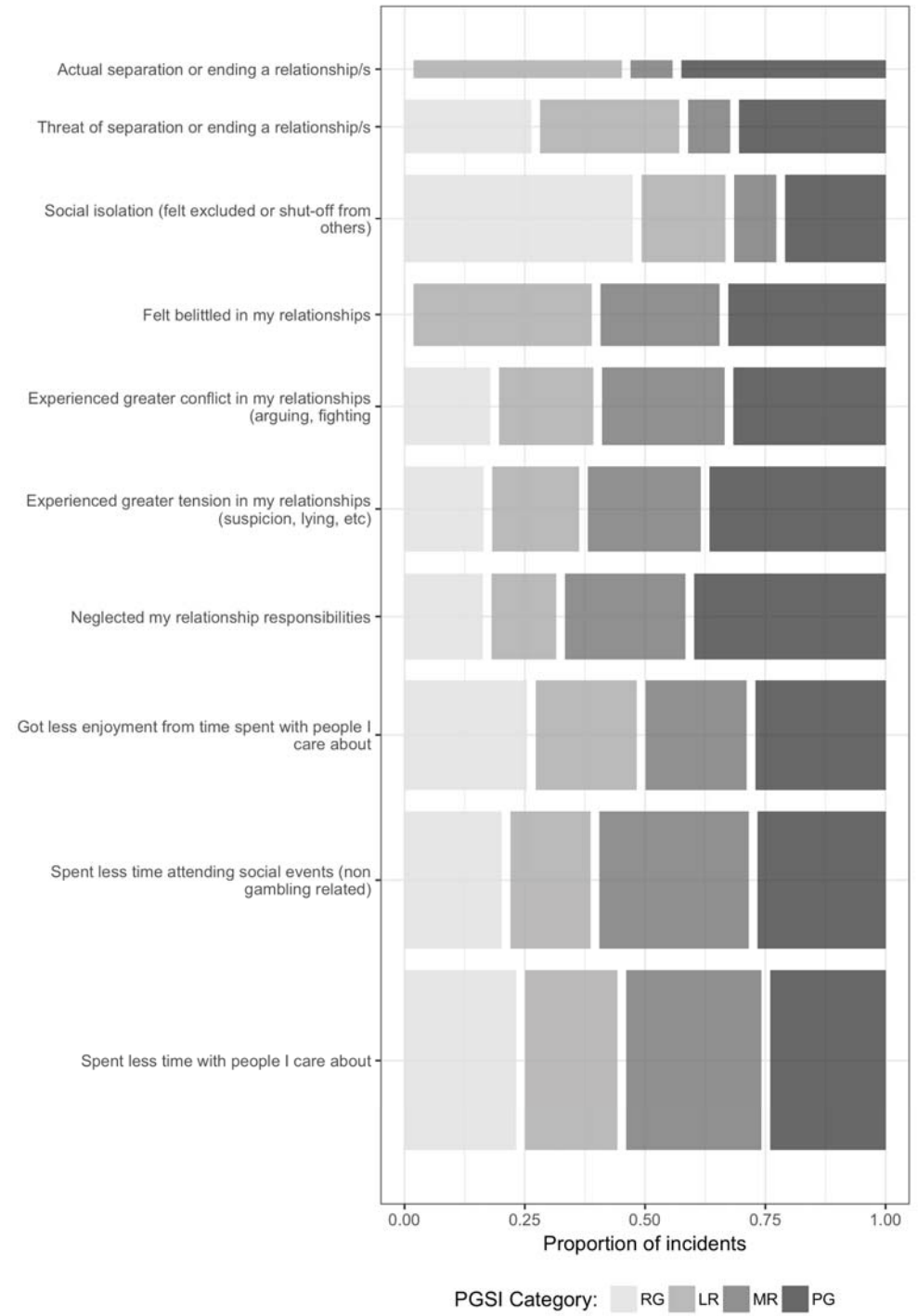
# RELATIVE INCIDENCE OF SPECIFIC DEVIANCE HARMS



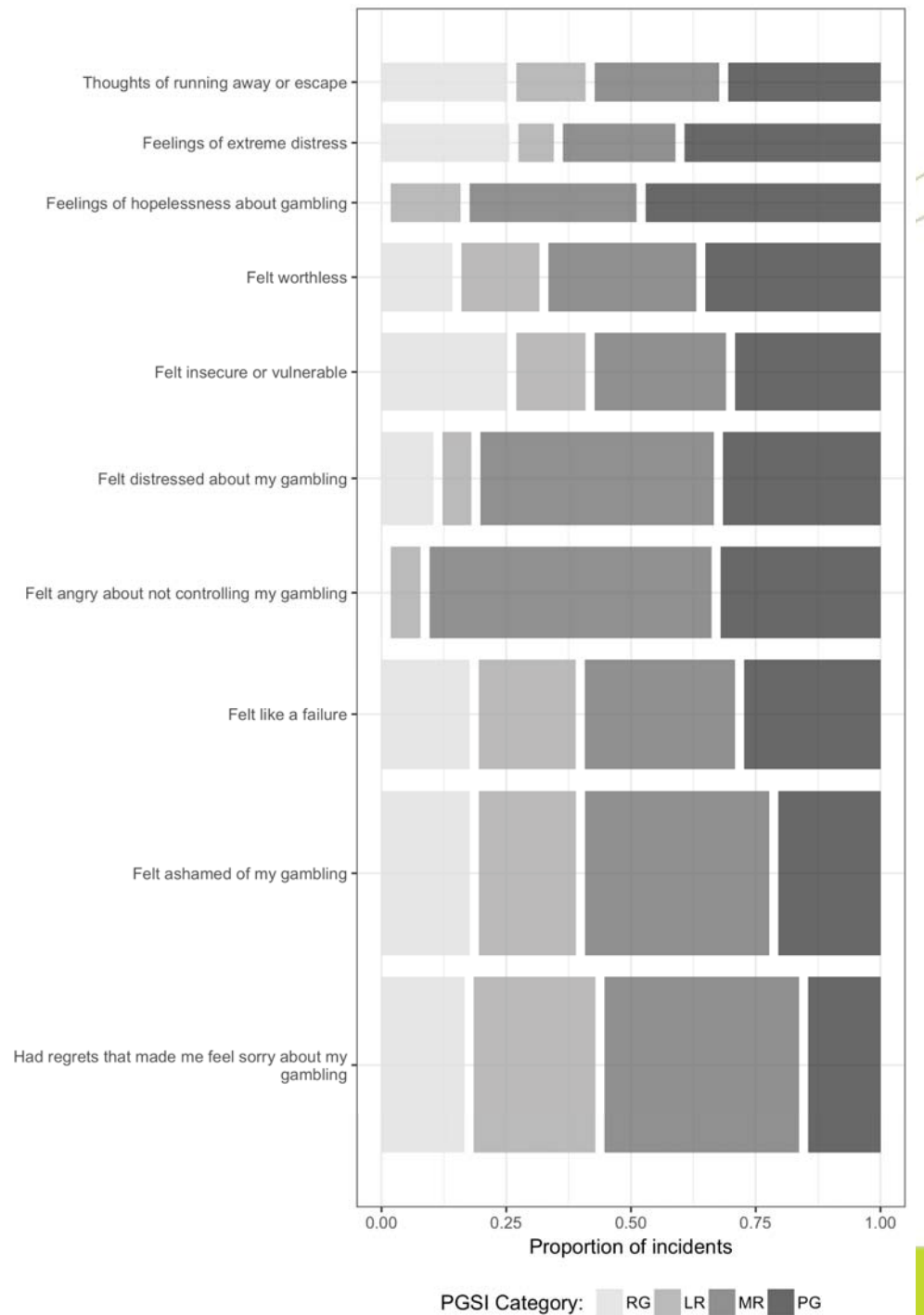
# RELATIVE INCIDENCE OF SPECIFIC FINANCIAL HARMS



# RELATIVE INCIDENCE OF SPECIFIC RELATIONSHIP HARMS

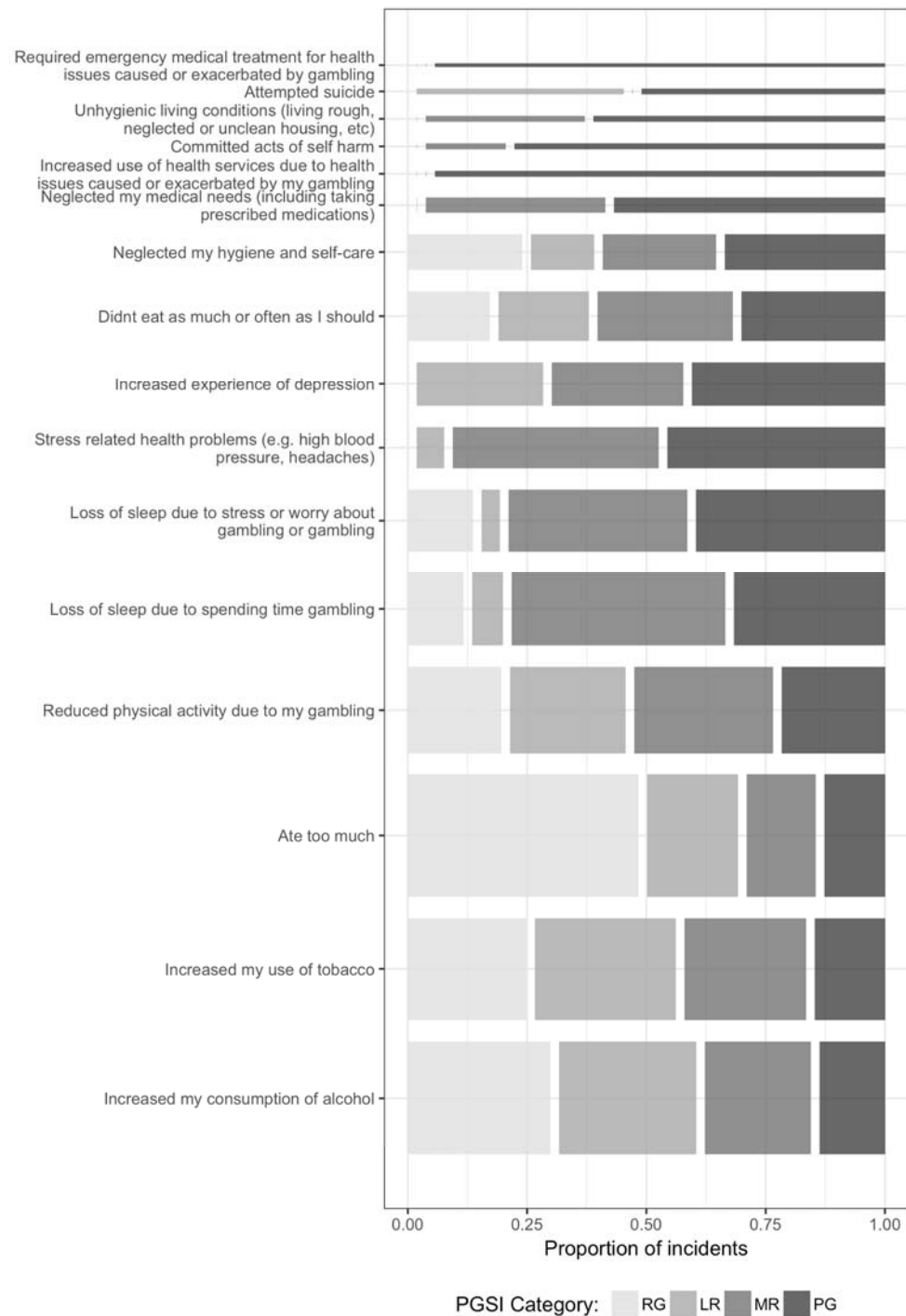


# RELATIVE INCIDENCE OF SPECIFIC EMOTIONAL / PSYCHOLOGICAL HARMS





# RELATIVE INCIDENCE OF SPECIFIC HEALTH HARMS



# DISCUSSION



- The PP is not supported in certain specific cases
  - Very rare, severe harms (e.g. bankruptcy, criminal activity)
  - These include many ‘social deviance’ consequences (crime, violence, neglect, etc)
  - However, these make up a small proportion of the total impact
- The PP is supported for the vast majority of harmful consequences
  - Including moderately severe harms (e.g. threat of separation, selling personal items)
  - Across all domains, except social deviance
- Aggregate impact is spread across all PGSI categories
  - Accords with findings from the public health method (Browne et al, 2016, 2017)
  - Accords with findings from the economic costing method (Browne et al, 2017)

# RECOMMENDATIONS



- My view is that comparisons with alcohol harm are very apt
  - Individuals with alcohol use disorder account for only a portion of total harm
- Monitoring gambling impact from prevalence studies must change
- Psychological addiction is distinct from harmful consequences
  
- A political focus on the (low) prevalence of PGs is unhelpful and potentially misleading
- Efforts to reduce impact should include a strong focus on population-wide interventions
  - Product safety (\$1 bets anybody?), limitation of availability, cultural norms, etc
- A public health model is more helpful than a medical / psychological addiction model

# ACKNOWLEDGEMENT



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