

# Gambling Spending and Gambling Harms

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# Today

- We using mass transaction data as a new lens on the relationship between spend and harm
- We dismiss the problem gambler narrative, showing harm increases smoothly with gambling spend
- We find reported harm is unconnected to spend, which is puzzling.
- We find gambling displaces savings and investments, and is not a substitute for leisure activity (industry narrative) or essential spending (lived experience narrative).
- We conclude gambling is best treated as a population-level public health issue

# Context

## Money

In 2019, over 24 million UK individuals lost £14.5 billion to bookmakers, casinos, lotteries, etc.

In the UK, gambling losses are about the same size as the cost of credit cards

## People

The number of active online gambling accounts in the UK nearly doubles from 16 million in 2008 to 30 million in 2019

8.8 million households have a mortgage

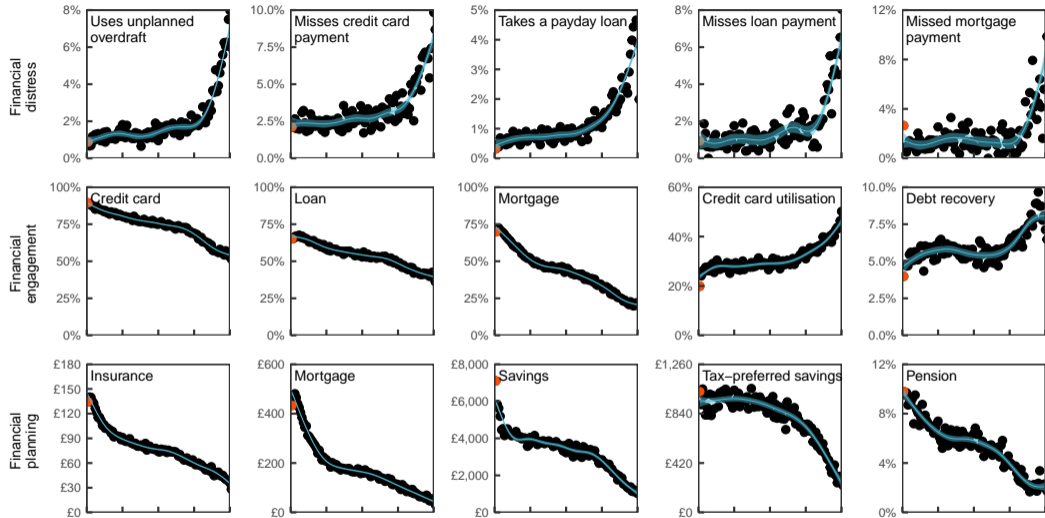
35 million people in the UK have at least one credit card

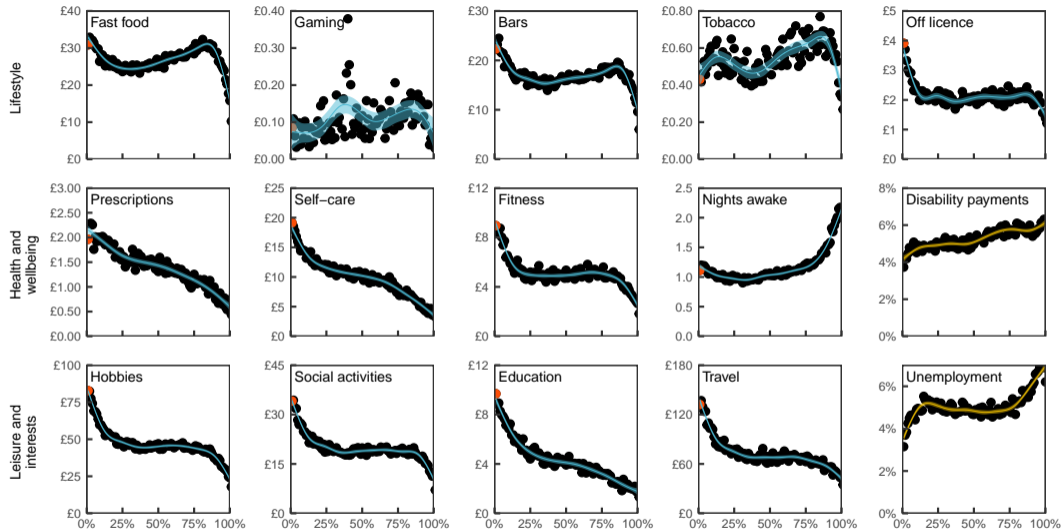
Part I: The association between gambling and financial, social, and health outcomes in big financial data  
(Muggleton et al., 2021)

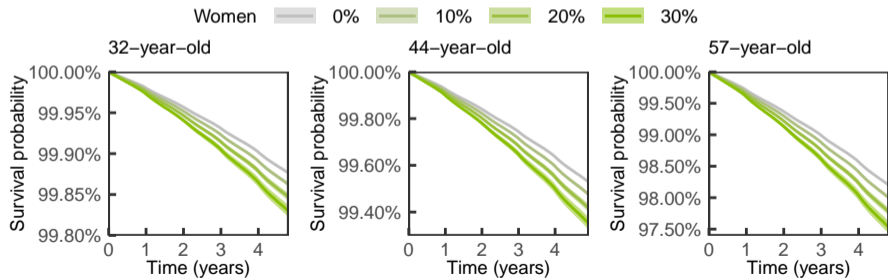
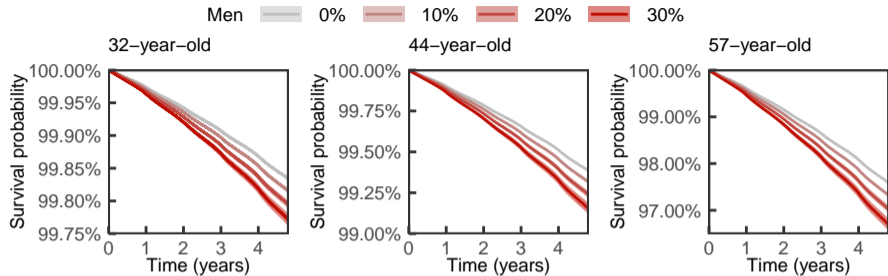
We use bank statement data to understand gambling and associated harms

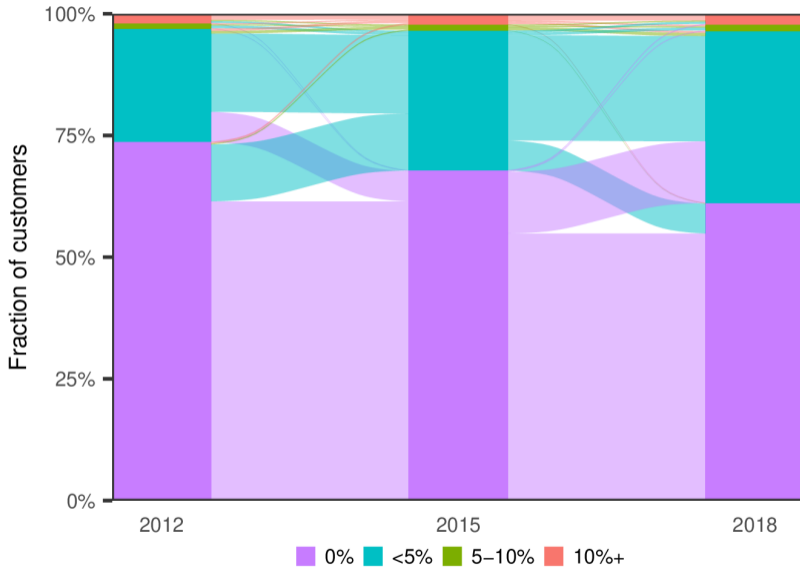
Merchant	Category	Spending		
		£	%	
Sainsbury's	Supermarket	90	.45	
Ladbrokes	Gambling	20	.10	.10
Red Lion	Bars and pubs	10	.05	
Shell	Petrol	20	.10	+
McDonalds	Fast food	20	.10	
William Hill	Gambling	10	.05	.05
Pure Gym	Fitness	30	.15	=
	Total	200	1.00	.15

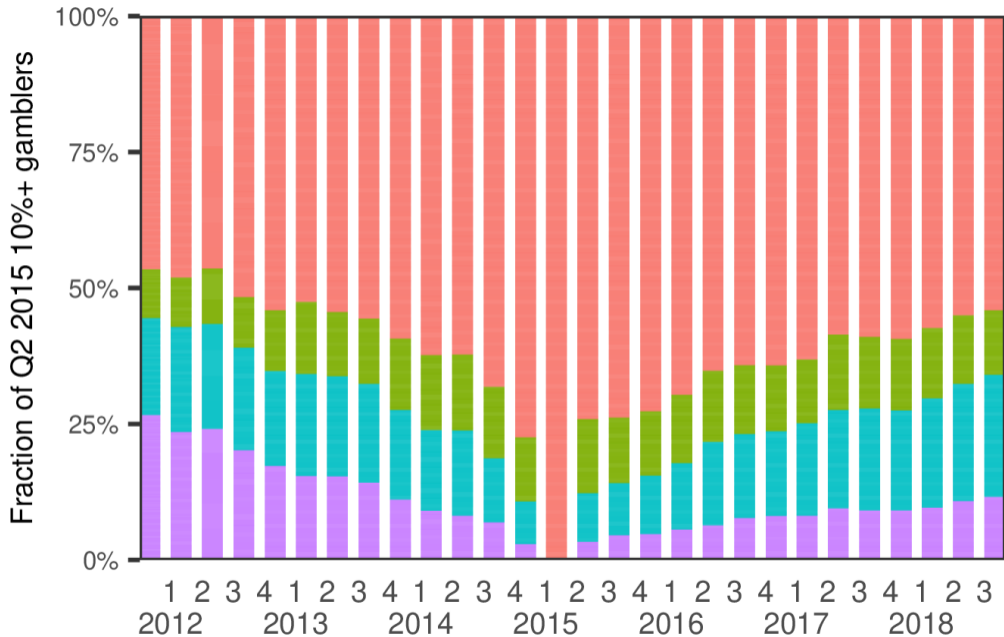
We use data samples of 100,000 people over one year – 6.5 million people over 6 years



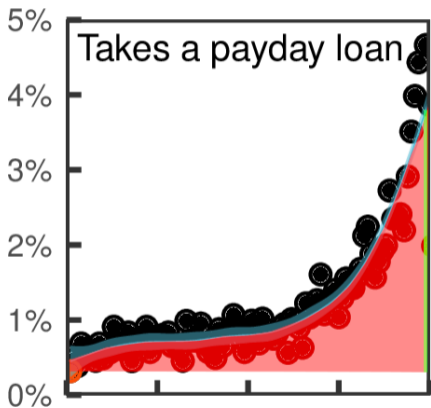








What if we use our magic wands to cure those who gamble the most?



## Interim Conclusion

Gambling is associated with financial, social, and health harms

Even at low levels of gambling, those gambling more experience more harm

Either:

- Gambling *causes* harm
- Those experiencing the most harm also gamble

Only large retail banks have this view across the breadth of behaviour and outcomes

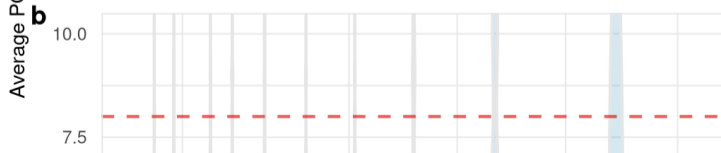
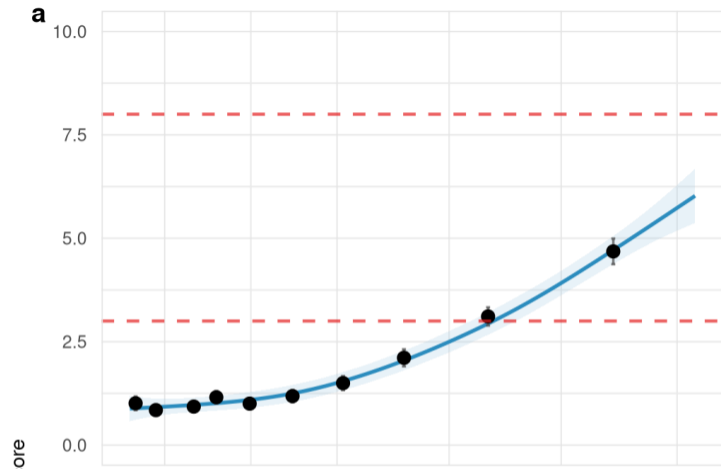
Part II: Gambling spending is a poor predictor of individual harm risk despite strong population-level associations  
(Abdelnabi, Murphy, Muggleton, & Stewart, 2026)

# The Problem Gambling Severity Index

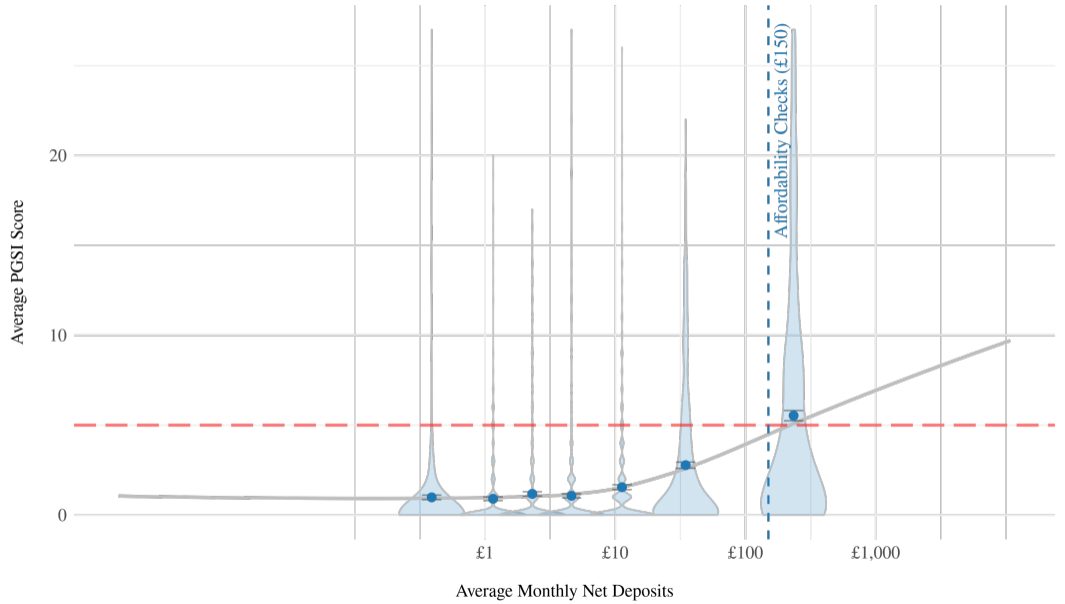
**Instructions:** Thinking about the last 12 months, please answer each item using the response scale below

Scoring: Never (0) — Sometimes (1) — Most of the time (2) — Almost always (3)

- 1 Have you bet more than you could really afford to lose?
- 2 Have you needed to gamble with larger amounts of money to get the same feeling of excitement?
- 3 When you gambled, did you go back another day to try to win back the money you lost?
- 4 Have you borrowed money or sold anything to get money to gamble?
- 5 Have you felt that you might have a problem with gambling?
- 6 Has gambling caused you any health problems, including stress or anxiety?
- 7 Have people criticized your betting or told you that you had a gambling problem?
- 8 Has your gambling caused any financial problems for you or your household?
- 9 Have you felt guilty about the way you gamble or what happens when you gamble?



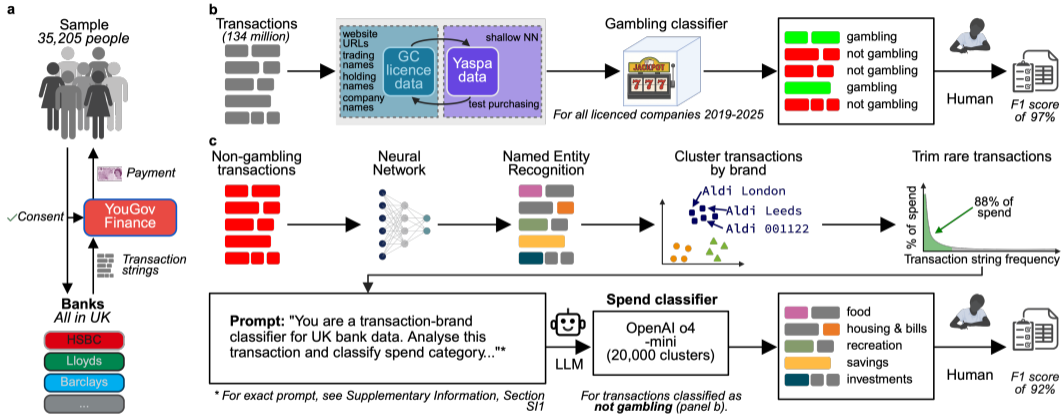
# Relationship Between Average Monthly Net Deposits and PGSI Score

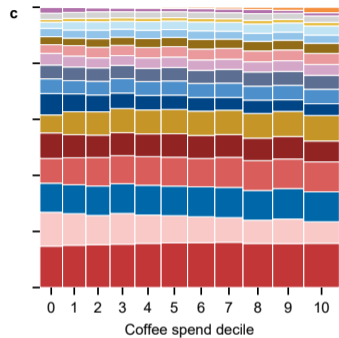
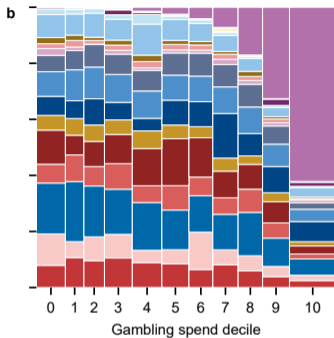
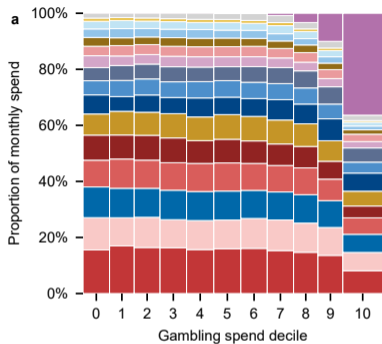


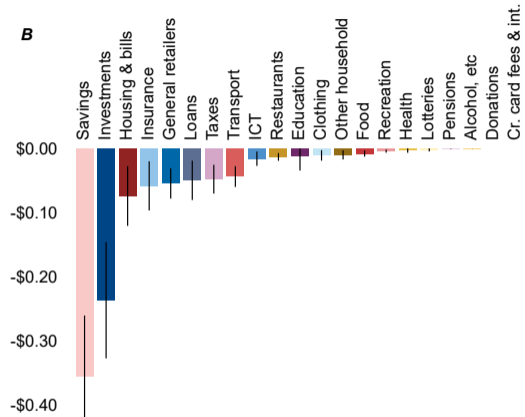
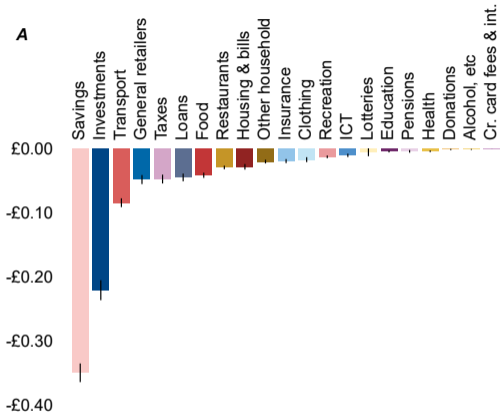
## Predicting PGSI

Variable	$R^2$
Net Gambling Deposits	0.097
Gross Gambling Spend	0.087
Withdrawn Gambling Winnings	0.054
Gambling Frequency	0.048
Frequency of Topups	0.052
Frequency of Withdrawals	0.021
Number of Operators	0.025
Number of Brands	0.025
Transaction Time Variability (CV)	0.088

Part III: Gambling displaces savings and investments rather than  
consumption in bank transaction records  
(Murphy, Ferridge, Gathergood, Stewart, & Muggleton, 2026)







## Interim Conclusion

57% of estimated displacement falls on savings and investment contributions. Individuals trade future financial security for immediate risk taking for negative expected returns

Gambling expenditure is not primarily associated with reductions in essentials or other discretionary spending

Patterns replicate remarkably across 35,205 UK and 11,133 US account holders

The reallocation of spending toward gambling increase measured UK economic output by £1.4 billion—an apparent macroeconomic gain that must be weighed against reduced household resilience

We suggest reframe gambling as an intertemporal financial decision rather than a leisure choice

# Conclusion

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## References

- Abdelnabi, M., Murphy, S., Muggleton, N., & Stewart, N. (2026). *Gambling spending is a poor predictor of individual harm risk despite strong population-level associations*. Unpublished.
- Muggleton, N., Parpart, P., Newall, P., Leake, D., Gathergood, J., & Stewart, N. (2021). The association between gambling and financial, social, and health outcomes in big financial data. *Nature Human Behaviour*, 5, 319–326. Retrieved from <https://rdcu.be/chkDJ> doi: 10.1038/s41562-020-01045-w
- Murphy, S., Ferridge, G., Gathergood, J., Stewart, N., & Muggleton, N. (2026). *Gambling displaces savings and investments rather than consumption in bank transaction records*. Manuscript submitted for publication.