

Harm from someone else's gambling

Affected others in the Australian population, 2024

Aino Suomi, Markus Hahn, Nicholas Biddle

1

ANU Centre for Gambling Research
POLIS@ANU - The Centre for Social Policy Research
Research School of Social Sciences
College of Arts and Social Sciences

The Australian National University
Canberra ACT 2600 Australia
www.anu.edu.au

TEQSA Provider ID: PRV12002 (Australian University)

CRICOS Provider Code: 00120C

About POLIS

The Centre for Social Research and Methods has been rebranded as *POLIS: The Centre for Social Policy Research*. As part of this change, the Centre for Aboriginal Economic Policy Research (CAEPR) has joined POLIS and is being renamed the Centre for Indigenous Policy Research.

POLIS – which draws from the Ancient Greek for the administrative centre of the City-State – is designed to provide a designated space at the ANU for discussion, debate and research on the formulation of social policy. The rebrand will allow POLIS to better capture and market the key work of the centre in providing research and expertise on social policy in response to community and federal and state/territory government needs and requirements.

POLIS delivers exceptionally robust data and evidence driven insights into the key challenges facing contemporary Australia. This provides the foundational cornerstones of informed social policy development amongst leading stakeholders within our modern policy: government, community groups, business representatives, and educators.

POLIS is home to seven research centres:

- Centre for Indigenous Policy Research
- Centre for Social Research
- Centre for Educational Equity
- Centre for Crime and Restorative Justice
- Centre for Gambling Research
- Centre for Data, Analytics, and Evaluation
- Social Impact Hub

Contents

About POLIS	3
Contents	4
Gambling harm experienced by affected others	6
Data and methods	8
Measures	8
Analysis	9
Results	9
Affected others and their demographic and psychosocial profiles	9
Prevalence and demographic profile of affected others	12
Psychosocial wellbeing of affected others	12
Gambling harm in the family context	13
Conclusion	14
References	15

Acknowledgment of Country

The research for this report took place in various locations, and all on unceded Aboriginal lands. The authors acknowledge and pay respects to the Elders past and present and recognise how the continuity of knowledge nurtures community and Country – including this research. Always was and always will be Aboriginal land.

Other Acknowledgements

The authors would like to thank a number of people who were involved in the development of the ANUpoll questionnaires, including Diane Herz, Dr Benjamin Phillips, Dr Paul Myers, Matilda Page, Diana Nguyen, Anna Lethborg and Charles Dove from the Social Research Centre, and Professor Ian McAllister, Professor Matthew Gray, and Professor Ben Edwards from the ANU. Financial support for the ANU COVID-19 Impact Monitoring Survey Program has been provided by the Australian Institute of Health and Welfare. The survey data is available for download through the Australian Data Archive.

Gambling harm experienced by affected others

Gambling harm

Gambling harm entails any negative consequences of a person's own or someone else's gambling to the wellbeing of an individual, family unit, community or population (Langham et al., 2016). Gambling harms can be experienced by all individuals who gamble but also by non-gambling family members and friends. These are commonly referred to in the gambling literature as *affected others* (Delfabbro & King, 2017, 2019; Dowling et al., 2021).

Affected others on population level

Internationally, estimates from published general population surveys indicate that 2% to over 20% of the adult population are negatively affected by someone else's gambling, and can be classified as affected others (Castrén et al., 2021; Dowling, et al., 2021; Lind et al., 2022). A handful of Australian state- and territory-wide general population studies on gambling have specifically asked about the types of negative impacts of someone else's gambling. In Australia, the most recent past year prevalence estimates for affected others range from 5% to 8% of the adult population of Australian jurisdictions (Acil Allen Consulting et al., 2017; Hing et al., 2022; Paterson et al., 2019; Rockloff et al., 2020; Stevens et al., 2019). Lifetime estimates of being exposed to someone else's gambling range from 12% in Queensland in which only gambling of immediate family members were considered (Queensland Department of Justice and Attorney-General, 2018) to 47% in NSW in which gambling of any person was considered (Browne et al., 2020). Further research employing larger national samples of affected others recruited from the general population is however required to enhance our understanding of the extent of affected others at the population level.

Gambling harms experienced by affected others

Gambling-related harms that are most likely to be experienced by affected others include financial and psychological distress, and negative impacts on family and relationship functioning (Bellringer et al., 2013, Cowlishaw & Kessler, 2016, Hodgins et al., 2007, Langham et al., 2016). Intimate partners and dependent children are most vulnerable to these harms and they report high levels of relationship dissatisfaction, conflict, reduced trust, poor communication, financial deprivation, and confusion of family roles and responsibilities (Cowlishaw et al., 2016; Dowling et al., 2009; Hodgins et al., 2007; Kalischuk, et al., 2006; Suomi et al., 2022a, 2022b, 2023, 2024a, 2024b). Studies also indicate high rates of family violence in families experiencing gambling harm (Dowling et al., 2014, 2016, 2018; Suomi et al., 2013, 2019).

Who are affected others?

There is little population-level data about the demographic characteristics of affected others. The extant literature demonstrates mixed results in relation to demographics such as sex, age, marital status and education, which is likely explained by the different definitions of affected other status employed in these studies (Dowling et al., 2021).

Most Australian studies have found no significant associations with gender (Hing et al., 2022; Rockloff et al., 2020; Stevens et al., 2019; Woods et al., 2018) and most surveys report that affected others are more likely to be in younger and middle-age groups, rather than in older age groups (Hing, Russell, Browne, et al., 2022; Paterson et al., 2019; Rockloff et al., 2020). Other factors that may predict affected other status are low and very high income (Rockloff et al., 2020) and having never married (Hing et al., 2022).

The 2019 ACT Gambling Survey found that both married and single people are affected by the gambling of others at relatively high rates compared with people reporting other relationship statuses (de facto/in a relationship, separated, divorced or widowed) (Paterson et al., 2019). There is consistent evidence from these Australian surveys that harm resulting from someone else's gambling is also associated with own gambling participation (Hing et al., 2022; Rockloff et al., 2020). This is the case particularly in relation to electronic gaming machines (EGM) gambling (Stevens et al., 2019), and one's own risk for problem gambling (Hing et al., 2022; Paterson et al., 2019; Queensland Department of Justice and Attorney-General, 2018; Rockloff et al., 2020).

Current paper

The current paper establishes the first Australian national prevalence rate for 'affected others' (i.e individuals who are negatively affected by someone else's gambling) in the post-COVID-19 era, with demographic and wellbeing profiles of affected others in the Australian adult population.

Data and methods

Life in Australia (LinA) is a longitudinal, probability-based panel infrastructure where a broadly representative sample of Australian adults are invited to participate in monthly surveys either online or through Computer Assisted Telephone Interviewing (CATI).

ANUpoll is an approximately quarterly survey of Australian public opinion, placing public opinion in a broad policy context. Since October 2017 the ANUpoll series of surveys has been collected through LinA, with seven waves of data collection between October 2017 and January 2020. Between April 2020 and January 2023, the ANUpoll series had a particular focus on COVID-19 outcomes, with 14 waves of data collection as part of the ANU Centre for Social Research and Methods, COVID-19 Impact Monitoring series. Since January 2023, four waves of data have been collected as part of the ANUpoll series, with the continuation of a number of tracking questions, as well as new or repeated modules.

In this paper we use data from the January 2024 wave of ANUpoll (n=4,057). Data used in this paper are available in unit-record format through the Australian Data Archive. Data in the paper is weighted to population benchmarks.

Measures

Affected other status. We asked all participants: "have you been personally affected by someone else's gambling in the past 12 months".

Health and wellbeing We use the Kessler six-item scale (K6) to measure psychological distress as a screener for possible mental health conditions (Kessler et al., 2002; Prochaska et al., 2012). Those with a K6 total score of 19 or higher are categorized as experiencing severe psychological distress consistent with having a 'probable serious mental illness'. Loneliness is assessed asking how often the respondent felt lonely in the past week on a scale from 1 ('rarely or none of the time [less than 1 day]') to 4 ('most or all of the time [5–7 days]') (Abbasi-Shavazi et al., 2022).

Demographic information. Demographic and psychosocial information included gender (male, female), age (six categories), highest level of education (not finished high school, finished high school diploma/certificate, university degree), current employment and household status (single person, couple with/without children, single parent and other).

Problem gambling risk was measured by the 9-item Problem Gambling Severity Index (PGSI; Ferris & Wynne 2001). The PGSI asks about the negative consequences and behavioural symptoms of gambling over the previous 12 months, e.g., "Have you bet more than you could really afford to lose?" with response options ranging from 0=never to 4=often.

The risk thresholds used in the current study were consistent with Currie et al (2010): (1) non-gamblers (not gambled in the past 12 months); (2) non-problem (PGSI score 0); (3) 'low risk' (PGSI score 1-2); and (4) 'high risk gambling' (PGSI 3+) consistent with other studies (Afifi et al. 2010; Suomi et al., 2024b)."

Gambling frequency was asked from everyone who had gambled in the past 2 months with three categories as (1) monthly or less, (2) at least monthly but less than weekly; and (3) weekly or more.

Analysis

We present weighted proportions of cross sectional data in 2024 for affected others to establish the affected other prevalence rate. After this, we present proportional data across demographic and psychosocial characteristics and affected other status, to examine the bivariate relationships between sociodemographic and wellbeing characteristics and affected other status.

Results

This brief paper presents data from the most recent wave of ANUpoll survey, nationally representative sample of Australian adults, that was collected in January 2024. In this section, we report:

- Prevalence rate and population estimate for affected others in the Australian general adult population
- 2. Sociodemographic and psychosocial profiles of affected others in Australia

Affected others and their demographic and psychosocial profiles

5.8% of Australian adults reported being personally affected by someone else's gambling in the past 12 months, and classified as affected others. This number equates to an estimated 1.2 million individuals in the Australian population.

Table 1 shows the key demographic and psychosocial characteristics of Australian adults who were, and who were not affected by someone else's gambling in the past 12 months. Of the demographic characteristics, it shows that there are proportionately more affected others in the youngest age group (21.1%) compared to not affected others (10.8%). There were proportionately fewer (2.7%) affected others in the oldest age group compared to not affected others (7.4%). Compared to not affected others, there was also a higher proportion of affected others in the lowest income group with annual household earnings less than \$52,885 (43.7% vs 31.8%), and lower proportion of affected others in the highest household income group with earnings more than \$168,689 (6.9% vs 13.0%).

Affected others reported double the rate of severe psychological distress (22.3% vs 10.6%) and double the rate of 'mostly' feeling lonely in the past week

(10.9% vs 4.7%) compared to not affected others. In addition, affected others in the current sample reported higher rates of high risk gambling (14.1%) compared to not affected others (4.9%). They also reported higher rates of low risk gambling (13.9%) compared to not affected others (7.2%). Conversely, individuals who were not affected others reported higher rates of non-problem gambling (49.9%) than individuals who were affected others (36.3%).

In summary, these results show that individuals who were affected by someone else's gambling tended to be younger, earning a lower income, experiencing problems related to their own gambling and, higher levels of loneliness and severe psychological distress compared to individuals who were not personally affected by someone else's gambling.

Table 1. Sociodemographic characteristics of affected others in Australian population

	Affected others %	Not affected others %	Total population %
Gender Female	54.7	50.0	50.2
Age			
18-24 years	21.1 ^a	10.8 ^b	11.4
25-34 years	18.4	18.7	18.7
35-44 years	18.8	17.7	17.8
45-55 years	12.6	16.0	15.8
55-64 years	13.3	14.6	14.5
65-74 years	13.2	14.7	14.7
75+ years	2.7 ^b	7.4 ^a	7.1
Highest educational qualification			
Bachelor degree or higher	34.9	33.6	33.6
Post school certificate/diploma	42.2	40.2	40.3
Year 12	13.0	14.1	14.1
Less than year 12	9.9	12.1	12.0
Employment status			
Employed full-time	34.4	39.7	39.4
Employed part-time	26.2	22.2	22.4
Unemployed	4.3	3.3	3.3
Not in the labour force	31.7	33.2	33.1
Household type			
Single person	9.1	9.3	9.3
Couple without children	25.5	31.6	31.3
Single parent	12.1	6.9	7.2
Couple with children	38.0	41.0	40.8
Group household/other	15.4	11.2	11.4
Household income			
\$0 to \$52,884	43.7ª	31.8 ^b	32.6
\$52,885 to \$109,304	29.8	36.0	35.6
\$109,305 to \$168,688	19.6	19.2	19.2
\$168,689 or more	6.9 ^b	13.0°	12.6
Severe psychological distress	22.3ª	10.6 ^b	11.3
Felt lonely in the past week			
Rarely	55.6	63.8	63.3
Sometimes	19.1	22.5	22.3
Occasionally	14.3	9.1	9.4
Mostly	10.9ª	4.7 ^b	5.0
Gambling risk (PGSI)			
Non-gambling	35.8	38.0	37.8
Non-problem gambling (PGSI 0)	36.3 ^b	49.9°	49.1
Low risk gambling (PGSI1-2)	13.9°	7.2 ^b	7.6
High risk gambling (PGSI 3+)	14.1 ^a	4.9 ^b	5.4

Note! **Bolded** cells are significantly different between affected/not-affected others at p<.05; a=higher; b=lower.

Discussion

Prevalence and demographic profile of affected others

This paper presents nationally representative data on the rate of affected others in the Australian adult population. It shows that 5.8% of Australian adults were personally affected by someone else's gambling in the 12 months preceding January 2024, which equates to more than 1.2 million individuals. These rates are similar to the national prevalence of affected others prior to COVID-19 (Hing et al., 2022; Rockloff et al., 2020; Stevens et al., 2019), suggesting that while gambling participation has reduced in Australia over time, the proportion of affected others on population level has remained the same. This could reflect the fact that the level of problem gambling has remained stable, whilst the level of non-gamblers or non-problem gamblers has declined.

In terms of demographic profiles, our findings suggest that affected others in Australia are likely to be of younger age, and earning a low income, in line with previous Australian studies (Hing et al., 2022; Paterson et al., 2019; Rockloff et al., 2020; Woods et al., 2018). Our findings are also consistent with most Australian studies that have found no significant associations with gender and affected other status (Hing et al., 2022; Rockloff, 2020; Stevens et al., 2019).

Psychosocial wellbeing of affected others

Affected others in the current data reported significant psychosocial issues, including higher rates or severe psychological distress, as well as feeling lonely. The main findings showed that more than 1 in 5 affected others reported current severe psychological distress, when comparable rate in general population was 1 in 10. While the current study did not include detailed questions about specific types of gambling harm, affected others in general experience financial and psychological distress, and negative impacts on family and relationship functioning (Bellringer et al., 2013; Cowlishaw & Kessler, 2016, Hodgins et al., 2007, Langham et al., 2016). The severity of harm experienced by affected others depends on various factors: relationship to the gambler, cohabiting status, the severity of the gambling problem, and their own psychological difficulties, with intimate partners and dependent children the most affected (Dowling et al., 2022; Suomi et al., 2023). Friends are, however, the most commonly reported relationship by affected others to the person whose gambling had harmed them (Browne et al., 2020; Hing et al., 2022; Paterson et al., 2019; Stevens et al., 2019). This likely reflects the higher number of friends people have compared to any other type of relationship, as well as the possibility of reduced stigma in disclosing a friend's gambling as compared to that of a partner or family member (Paterson et al., 2019). In these Australian data, spouses/partners were also commonly nominated as the source of the gambling harm and intergenerational harm was observed from grandparents,

parents, and children (Browne et al., 2020; Hing et al., 2022; Paterson et al., 2019; Stevens et al., 2019).

Using the same question "have you been personally affected by another person's gambling in the 12 months", state based studies reveal that individuals positively endorsing this question report high levels of psychological distress and anger as well as relationship tension over that person's gambling (Rockloff et al., 2020). While higher rates of loneliness have been previously associated with person's own gambling participation and problem gambling severity, we identified one other population study where loneliness for both men and women was associated with higher likelihood of being affected other in a Finnish sample (Salonen et al., 2019). Affected others also tend to experience less contact with family and friends than the general population, which might lead to isolation and loneliness in the longer term (Wenzel et al., 2008). Additionally, in Svensson and colleagues' (2013) study, affected others reported higher rates of depression and feelings of melancholy, interpersonal arguments, and more sick leave from work compared to the general population. All of the above experiences have the potential to directly increase feelings of loneliness, as well as exacerbate co-occurring mental health problems.

Just over one quarter (28%) of affected others in the current data also experienced negative consequences from their own gambling in the past 12 months (as opposed to 13% in general population), supporting previous findings that harm resulting from someone else's gambling is also associated with own gambling participation, and problem gambling (Hing et al., 2022; Rockloff et al., 2020; Paterson et al., 2019). These findings point to a substantial group of individuals in Australian population with an ongoing need for psychosocial supports.

Gambling harm in the family context

Recent research suggests that intimate partners and dependent children are the most negatively affected family members (Suomi et al., 2022b). The current study did not ask about the type of relationship the person was affected by but it is likely that many of these include intimate partners, and experience many of the negative relationship correlates of gambling, family dysfunction, trust issues, conflict, poor communication, financial deprivation, and in very extreme cases, to family violence (Cowlishaw et al., 2016; Dowling, Smith, & Thomas, 2009; Hodgins et al., 2007; Kalischuk et al., 2006; Suomi et al., 2013, 2019, 2022a, 2022b, 2023, 2024a). The current data also shows that half of affected others had dependent children living in their household, who might be impacted by a family member's gambling.

In addition to adult affected others, previous Australian research on children exposed to parental gambling problems (Suomi et al., 2022a) show that 14% of all Australian families with dependent children are currently exposed to some level of gambling risk due to parental gambling, and nearly 4% of families with

children are exposed to high risk parental gambling. These data equate to almost 200,000 children each year living with a parent with serious gambling problems and 645,000 children exposed to some risk for parental gambling problems. Including estimates from the current adult, and previous child data in Australian general population, there may be as many as 1.9 million individuals in Australia experiencing gambling harm as a result someone else's gambling in any one year. These numbers are concerning given that about one third of the nearly 2 million individuals are dependent children, and the detrimental impacts of gambling on close family members, further highlighting the need for appropriate supports embedded in an evidence-based public health strategy for affected others.

Conclusion

This paper provides the most up-to-date population data on how many Australians are personally affected by someone else's gambling. It points to a substantial number of Australian adult population who are affected others and their demographic and psychosocial profiles. These data shows that in addition to being harmed by someone else's gambling, affected others experience psychosocial difficulties including psychological distress, loneliness, and their own gambling problems, and may be vulnerable to economic harms (young age, low income). Our findings can be used to guide future studies on affected other's wellbeing, and the extent of their wellbeing that can be attributed to someone else's gambling. More detailed national level data on affected others can help understanding their support needs and guide targeted public health strategies to reduce gambling harm in the Australian community.

References

- Abbasi-Shavazi, A., Biddle, N., Edwards, B., Jahromi, M.. (2022). Observed effects of the COVID-19 pandemic on the life satisfaction, psychological distress and loneliness of Australian carers and non-carers. International Journal of Care and Caring. 6(1–2), 179-209.
- Afifi, T. O., Brownridge, D. A., MacMillan, H., & Sareen, J. (2010). The relationship of gambling to intimate partner violence and child maltreatment in a nationally representative sample. Journal of Psychiatric Research, 44(5), 331-337.
- ACIL Allen Consulting, Deakin University, Central Queensland University, & The Social Research Centre. (2017). Fourth social and economic impact of gambling in Tasmania. Volume 2: Prevalence study. Tasmanian Government Department of Treasury and Finance.
- Bellringer, M., Fa'amatuainu, B., Taylor, S., Coombes, R., Poon, Z., & Abbott, M. (2013). Exploration of the impact of gambling and problem gambling on Pacific families and communities in New Zealand.
- Browne, M., Rockloff, M., Hing, N., Russell, A., Boyle, C., & Rawat, V. (2020). NSW gambling survey, 2019. NSW Responsible Gambling Fund.
- Castrén, S., Lind, K., Hagfors, H., & Salonen, A. H. (2021). Gambling-related harms for affected others: A Finnish population-based survey. International Journal of Environmental Research and Public Health, 18(18), 9564.
- Cowlishaw, S., & Kessler, D. (2016). Problem gambling in the UK: Implications for health, psychosocial adjustment and health care utilization. European Addiction Research, 22(2), 90-98.
- Currie, S. R., Casey, D. M., & Hodgins, D. C. (2010). Improving the psychometric properties of the Problem Gambling Severity Index. Ottawa: Canadian Consortium for Gambling Research.
- Delfabbro, P., & King, D. (2017). Prevention paradox logic and problem gambling: Does low-risk gambling impose a greater burden of harm than high-risk gambling?. Journal of Behavioral Addictions, 6(2), 163-167.
- Delfabbro, P., & King, D. L. (2019). Challenges in the conceptualisation and measurement of gambling-related harm. Journal of Gambling Studies, 35, 743-755.
- Dowling, N., Smith, D., & Thomas, T. (2009). The family functioning of female pathological gamblers. International Journal of Mental Health and Addiction, 7, 29-44.
- Dowling, N. A., Jackson, A. C., Suomi, A., Lavis, T., Thomas, S. A., Patford, J., ... & Bellringer, M. E. (2014). Problem gambling and family violence: Prevalence and patterns in treatment-seekers. Addictive Behaviors, 39(12), 1713-1717.
- Dowling, N. A., Ewin, C., Youssef, G. J., Merkouris, S. S., Suomi, A., Thomas, S. A., & Jackson, A. C. (2018). Problem gambling and family violence: Findings from a population-representative study. Journal of Behavioral Addictions, 7(3), 806-813.
- Dowling, N. A., Hawker, C. O., Merkouris, S. S., Rodda, S. N., and Hodgins, D. C., 2021, Addressing gambling harm to affected others: a scoping review, Victorian Responsible Gambling Foundation, Melbourne.

- Dowling, N., Suomi, A., Jackson, A., Lavis, T., Patford, J., Cockman, S., ... & Abbott, M. (2016). Problem gambling and intimate partner violence: A systematic review and meta-analysis. Trauma, Violence, & Abuse, 17(1), 43-61.
- Ferris, J. A., & Wynne, H. J. (2001). The Canadian problem gambling index (pp. 1-59). Ottawa, ON: Canadian Centre on substance abuse.
- Hing, N., Russell, A., Browne, M., Rockloff, M., Greer, N., Rawat, V., Stevens, M., Dowling, N.A., Merkouris, S., King, D., Breen, H., Salonen, A., & Woo, L. (2021). The Second National Study of Interactive Gambling in Australia (2019-2020). Gambling Research Australia.
- Hodgins, D. C., Shead, N. W., & Makarchuk, K. (2007). Relationship satisfaction and psychological distress among concerned significant others of pathological gamblers. The Journal of Nervous and Mental Disease, 195(1), 65-71.
- Kalischuk, R. G., Nowatzki, N., Cardwell, K., Klein, K., & Solowoniuk, J. (2006). Problem gambling and its impact on families: A literature review. International Gambling Studies, 6(1), 31-60.
- Kessler, R. C., Andrews, G., Colpe, L. J., et al (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychological Medicine. 32(6), 959 976.
- Langham, E., Thorne, H., Browne, M., Donaldson, P., Rose, J., & Rockloff, M. (2016). Understanding gambling related harm: A proposed definition, conceptual framework, and taxonomy of harms. BMC Public Health, 16(1), 80.
- Lind, K., Hagfors, H., & Salonen, A. H. (2024). Gambling behavior and criminal convictions: a register-based investigation. Addiction Research & Theory, 32(3), 167-177.
- Paterson, M., Leslie, P., & Taylor, M, (2019). 2019 ACT Gambling Survey. Centre for Gambling Research.
- Prochaska, J. J., Sung, H. Y., Max, W., Shi, Y., & Ong, M. (2012). Validity study of the K6 scale as a measure of moderate mental distress based on mental health treatment need and utilization. International Journal of Methods in Psychiatric Research. 21(2), 88–97.
- Queensland Department of Justice and Attorney-General. (2018). Queensland household gambling survey.
- Rockloff, M., Browne, M., Hing, N., Thorne, H., Russell, A., Greer, N., Tran, K., Brook, K., & Sproston, K. (2020). Victorian population gambling and health study 2018–2019. Victorian. Responsible Gambling Foundation.
- Stevens, M., Gupta, H., & Flack, M. (2019). The Northern Territory gambling and wellbeing survey report, 2018. Menzies School of Health Research, Charles Darwin University.
- Suomi, A., Dowling, N. A., Thomas, S., Abbott, M., Bellringer, M., Battersby, M., ... & Jackson, A. C. (2019). Patterns of family and intimate partner violence in problem gamblers. Journal of Gambling Studies, 35, 465-484.
- Suomi, A., Jackson, A. C., Dowling, N. A., Lavis, T., Patford, J., Thomas, S. A., ... & Cockman, S. (2013). Problem gambling and family violence: family member reports of prevalence, family impacts and family coping. Asian Journal of Gambling Issues and Public Health, 3, 1-15.
- Suomi, A., Lucas, N., Dowling, N., & Delfabbro, P. (2024a). Gambling harm experienced by children exposed to parental gambling: An online survey of Australians. Journal of gambling studies, 40(1), 181-200.

- Suomi, A., Kim, J., Hahn, M. H., & Biddle, N. (2024b). Gambling participation and risk after COVID-19: Analysis of a population representative longitudinal panel of Australians. Addiction.
- Suomi, A., Watson, N., & Butterworth, P. (2022a). How many children are exposed to at-risk parental gambling in Australia? Results from a representative national sample. Addictive Behaviors, 130, 107305.
- Suomi, A., Lucas, N., Dowling, N., & Delfabbro, P. (2022b). Parental problem gambling and child wellbeing: Systematic review and synthesis of evidence. Addictive behaviors, 126, 107205.
- Suomi, A., Bailey, M., Lucas, N., Dowling, N., & Delfabbro, P. (2023). "It's like you're not even there...": Gambling harm experienced by children of gambling parents. Children and Youth Services Review, 145, 106800.
- Svensson, J., Romild, U., & Shepherdson, E. (2013). The concerned significant others of people with gambling problems in a national representative sample in Sweden a 1 year follow-up study. BMC Public Health. 13, 1087-
- Wenzel, H. G., Øren, A., & Bakken, I.J. (2008). Gambling problems in the family A stratified probability sample study of prevalence and reported consequences. BMC Public Health. 8, 412-

i https://srcentre.com.au/our-research/life-in-australia-study

Additional support for lowering the PGSI cut point comes from a recent study which shows that while the PGSI 8+ cut point has a specificity of 99 % (almost no false positives), it only identifies 49 % of the problem gamblers based on clinical ratings and therefore generated many false negatives (Williams and Volberg 2014).