GENDER EFFECTS IN THE INFLUENCE OF PARENTAL ALCOHOL USE ON CHILDREN'S FUTURE DRINKING BEHAVIOUR

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The authors declare no conflicts of interest

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BACKGROUND

- Heavy alcohol use increases risk of adverse mental and physical health[1]

- Younger people are disproportionately affected by alcohol
- \> 13% of total deaths in people aged 20-39 are attributable to alcohol[1]

- Emerging adulthood (18-24) is a critical period for the onset, development and entrenchment of alcohol use disorders[2,3]

1. Anderson et al. (2023). Health and cancer risks associated with low levels of alcohol consumption. *Lancet Public Health*.
2. Slade et al (2021). DCM-5 and ICD-11 alcohol use disorder criteria in young adult regular drinkers. *Drug and Alcohol Dependence*.
3. Slade, O'Dean et al (2024). The key role of specific DSM-5 criteria in the early development of alcohol use disorder. *ACER*.

PARENTAL ALCOHOL USE:
AN IMPORTANT, MODFIABLE RISK FACTOR

Children of parents who drink heavily are more likely to:

– Begin drinking earlier

– Drink more frequently & in greater amounts

– Develop AUD

1. Rossow et al (2016). Does parental drinking influence children's drinking? A systematic review of prospective cohort studies. *Addiction*

DOES PARENT GENDER MATTER?

Few studies have explored parent gender-specific effects in the influence of alcohol use behaviours.

- Evidence is mixed

Even fewer studies have explored whether the gender of the child moderates these effects.

- 2 studies report paternal drinking is associated with greater problems for daughters than sons.

- Other studies report no child gender effects

1. Alati et al (2014). The role of parental alcohol use, parental discipline and antisocial behavior on adolescent drinking trajectories. *Drug and Alcohol Dependence*

2. Coffelt et al (2006). A longitudinal examination of the link between parent alcohol problems and youth drinking: The moderating roles of parent and child gender. Addictive behaviors

3. Haughland et al (2015). Intergenerational hazardous alcohol use and area factors: the HUNT Study, Norway. *Substance Use and Misuse*

4. Hommel & Warren (2019). The Relationship Between Parent Drinking and Adolescent Drinking: Differences for Mothers and Fathers and Boys and Girls. *Substance Use and Misuse*

5. Kelly et al (2016). What influences 11-year-olds to drink? Findings from the Millennium Cohort Study. *BMC Public Health*

6. Poelen et al (2007). Drinking by parents, siblings, and friends as predictors of regular alcohol use in adolescents and young adults: a longitudinal twin-family study. *Alcohol & Alcoholism*

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OBJECTIVES

1. How does maternal and paternal problematic alcohol use during late-childhood (8-12 years) influence alcohol initiation and harmful drinking behaviors at legal drinking age (18-19 years) in Australia?

2. Are these effects moderated by the gender of the child?

METHODS

- Data from the K cohort of the Longitudinal Study of Australian Children (LSAC)

- N = 2110 participants who completed the alcohol use outcomes at wave 8 (aged 18-19)
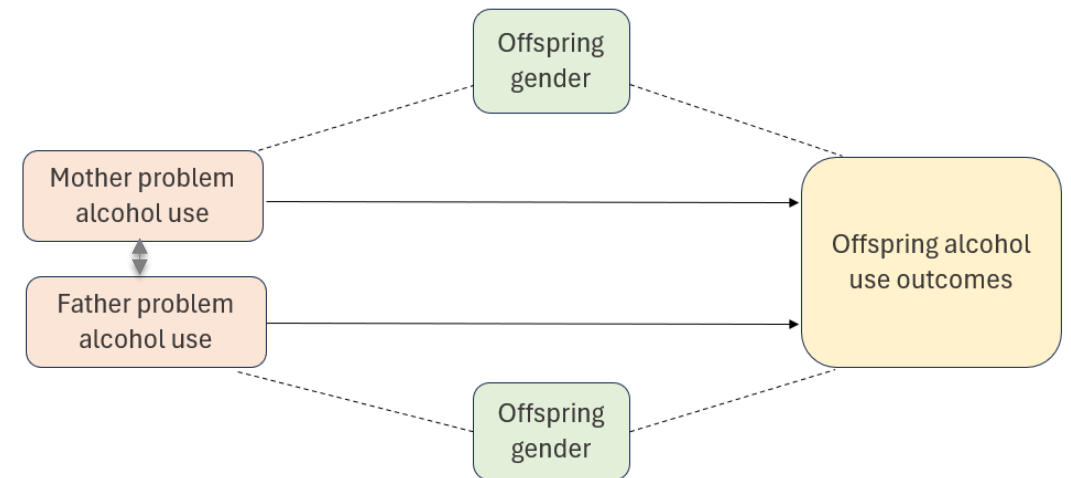
METHODS

Exposure
(waves 3-5, child aged 8-12)

- <u>Parental problematic alcohol use</u>: - **Heavy daily alcohol consumption** (>4 drinks for men, >2 drinks for women)

  and/or

  - **Frequent binge drinking** (7+ drinks for men, 5+ for women, at least 2-3 times a month)

Outcomes
(wave 8, aged 18-19)

- Age of first full drink
- <u>Harmful alcohol use</u>: **10+** standard drinks in the past 7 days
- <u>Alcohol-related harms:</u> arguments with family members, trouble at school/work; being violent or getting in a fight; injuries or accidents; regretful sexual encounters

METHODS
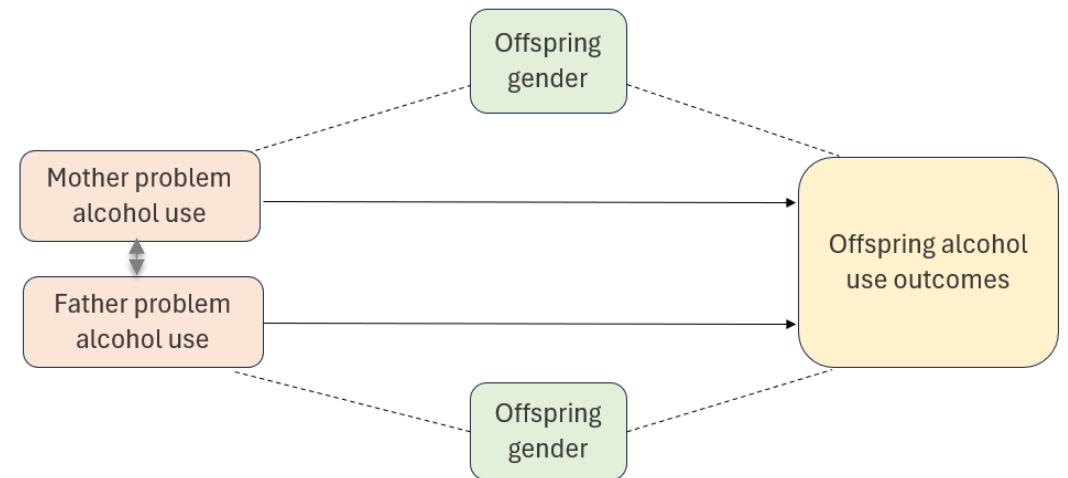
- Weighted linear and logistic regression models in a stepped approach:

  A: Unadjusted
  B: Adjusting for other exposures
  C: Adjusting for other exposures and covariates
  D: Interaction models with child gender

RESULTS

THE SAMPLE (and their parents)

Table 1. Sample characteristics (N = 2110)	
Study child	
Age (M(SD))	18.4 (0.5)
Gender (N(%))	
Female	1056 (50.9%)
Male	991 (47.8%)
Gender diverse	28 (1.3%)
Age first alcoholic drink	16.2 (1.5)
Past 4-week alcohol consumption (N(%))	1794 (86.4%)
Past 7-day harmful alcohol consumption (N(%))	447 (21.2%)
Alcohol related harms age 18-19 (M(SD))	5.6 (1.0)
Mothers	
Age (wave 3)	39.5 (5.0)
Problematic alcohol use (waves 3-5)	390 (18.7%)
Psychological distress (M(SD))	9.1 (3.7)
CALD background	501 (24.4%)
Fathers	
Age (wave 3)	42.1 (6.0)
Problematic alcohol use (waves 3-5)	506 (29.2%)
Psychological distress (M(SD))	8.6 (3.0)
CALD background	486 (26.4%)

- Mean age of first alcoholic drink for study children was 16.

- 21% met criteria for past 7-day harmful alcohol use aged 18-19.

- 19% of mothers and 29% of fathers reported problematic alcohol use over waves 3-5.

KEY FINDINGS: ALCOHOL INITIATION

Table 2. Summary of weighted linear regression models investigating effects of parental problematic alcohol use on **age of drinking onset**

	A. Unadjusted models		B. Models adjusting for other independent variables		C. Models adjusting for IVs and covariates[1]		D. Models of interactions between parent and child gender[1]	
	B (95% CI)	**p**	**B (95% CI)**	**p**	**B (95% CI)**	**p**	**B (95% CI)**	**p**
Mother problematic alcohol use	-0.54 (-0.71, -0.36)	< .001	-0.46 (-0.65, -0.27)	< .001	-0.41 (-0.60, -0.23)	< .001		
Father problematic alcohol use	-0.40 (-0.57, -0.23)	< .001	-0.30 (-0.49, -0.12)	0.002	-0.20 (-0.38, -0.01)	0.036		
Child Gender (Male ref)	0.07 (-0.06, 0.21)	0.294	0.07 (-0.07, 0.20)	0.330	0.05 (-0.09, 0.18)	0.519		
Mother problematic alcohol use * Male child							0.21 (-0.15, 0.53)	0.278
Father problematic alcohol use * Male child							0.15 (-0.19, 0.49)	0.382

CI = Confidence Interval. 1 = covariates included in the model were: mother and father age, psychological distress, CALD background, parents living separately, regional/remote location, household SEIFA decile, financial hardship, child psychological distress age 18-19, hyperactivity and conduct problems at 12-13 years of age.

KEY FINDINGS: HARMFUL CONSUMPTION

Table 3. Summary of weighted logistic regression models investigating effects of parental problematic alcohol use on **harmful drinking age 18-19**.

	A. Unadjusted Models		B. Models adjusting for other independent variables		C. Models adjusting for IVs and covariates[1]		D. Models of interactions between parent and child gender[1]	
	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p	OR (95% CI)	p
Mother problematic alcohol use	1.64 (1.24, 2.17)	< .001	1.52 (1.13, 2.07)	0.007	1.53 (1.12, 2.09)	0.006		
Father problematic alcohol use	1.37 (1.04, 1.82)	0.028	1.31 (0.97, 1.77)	0.085	1.20 (0.88, 1.64)	0.249		
Child Gender (Male ref)	2.55 (1.99, 3.26)	< .001	2.60 (1.99, 3.27)	< .001	2.75 (2.11, 3.58)	< .001		
Mother problematic alcohol use * Male child							1.45 (0.79, 2.67)	0.226
Father problematic alcohol use * Male child							1.20 (0.65, 2.19)	0.558

OR = Odds Ratio, CI = Confidence Interval. 1 = covariates included in the model were: mother and father age, psychological distress, CALD background, parents living separately, regional/remote location, household SEIFA decile, financial hardship, child psychological distress age 18-19, hyperactivity and conduct problems at 12-13 years of age.

KEY FINDINGS: ALCOHOL-RELATED HARMS

Table 4. Summary of weighted linear regression models investigating effects of parental problematic alcohol use on **alcohol related harms age 18-19**.

	A. Unadjusted models		B. Models adjusting for other independent variables		C. Models adjusting for IVs and covariates[1]		D. Models of interactions between parent and child gender[1]	
	B (95% CI)	p	B (95% CI)	p	B (95% CI)	p	B (95% CI)	p
Mother problematic alcohol use	0.18 (0.05, 0.30)	0.006	0.14 (0.005, 0.27)	0.042	0.14 (0.006, 0.27)	0.040		
Father problematic alcohol use	0.16 (0.04, 0.28)	0.011	0.13 (0.002, 0.25)	0.048	0.09 (-0.04, 0.21)	0.180		
Child Gender (male ref)	-0.06 (-0.16, 0.04)	0.221	-0.06 (-0.16, 0.04)	0.221	-0.009 (-0.11, 0.09)	0.859		
Mother problematic alcohol use * Male child							0.15 (-0.10, 0.40)	0.236
Father problematic alcohol use * Male child							0.04 (-0.20, 0.29)	0.737

CI = Confidence Interval. 1 = covariates included in the model were: mother and father age, psychological distress, CALD background, parents living separately, regional/remote location, household SEIFA decile, financial hardship, child psychological distress age 18-19, hyperactivity and conduct problems at 12-13 years of age.

CONCLUSIONS & FUTURE DIRECTIONS

- Parents alcohol use is an important risk factor for young adult drinking behaviour, but these effects were consistent regardless of child gender.

- Some evidence that these effects were greater or more consistent for maternal drinking, but paternal problematic drinking was more common than maternal.

- More screening and greater support for parents, or primary caregivers who are experiencing problems with their alcohol use

- Future research should investigate whether gender effects in parental influence change across developmental stages.

- Limitation – the data available doesn't allow us to adequately model and understand the experiences of gender diverse participants

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&

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