Menopause and Alcohol Consumption

Study Report

2025

Northern Sydney LHD

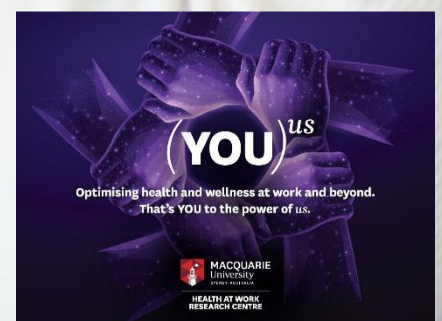
Population Health Promotion

Alcohol & Tobacco Program Team

Authors: Professor Rebecca Mitchell, Professor Jun Gu, Professor Cynthia Webster and Lu Xing.

Macquarie University Health at Work Research Centre.

Macquarie School of Business



GLOSSARY OF KEY TERMS

Term	Definition
Brief information intervention	A short message added to standard menopause information stating that alcohol can aggravate menopausal symptoms.
Information intervention	Providing targeted information about the link between alcohol use and menopausal symptoms through the brief message.
Control group	Participants who received only the general menopause health information, without the brief alcohol message.
Treatment group	Participants who received the general menopause information plus the additional message about alcohol and symptoms.
Random assignment	Allocating participants to the control or treatment group by chance so that the groups are comparable.
Baseline covariates	Background characteristics measured before the intervention, such as age, education, work status and drinking patterns.
Intention to reduce alcohol consumption	How likely participants say they are to reduce their alcohol use in the future.
Drinking Reduction Intention	Intention to cut down the amount of alcohol consumed.
Drinking Avoidance Intention	Intention to avoid drinking alcohol in future situations where alcohol is available.
Drinking Avoidance Effort Intention	Intended effort to refrain from drinking or to resist alcohol.
Overall Intention to Reduce Alcohol Consumption	A combined indicator that summarises the three specific intention measures above.
Menopausal symptoms	Physical and emotional symptoms related to the menopausal transition, such as hot flushes, sleep problems and mood changes.
Escapist drinking motives	Using alcohol to forget worries, relieve stress or cope with negative emotions.
Avoidant coping style	Dealing with stress through distraction or substance use rather than addressing problems directly.
NSLHD	Northern Sydney Local Health District (including the Local Government Areas of Hornsby, Hunters Hill, Ku-ring-gai, , Lane Cove, Mosman, North Sydney, Northern Beaches, Ryde, Willoughby)

EXECUTIVE SUMMARY

This report presents results from a randomized survey experiment investigating alcohol consumption in women aged 40 years and over living in NSLHD and the broader Sydney region. The study tests a brief information message that links alcohol use to menopausal symptoms and examines changes in intentions to reduce drinking, avoid alcohol and make an effort to avoid alcohol, as well as a combined overall measure of intention to reduce alcohol consumption. Based on a final sample of **347** participants, with a **control group (n = 165)** and a **treatment group (n = 182),** the main findings are as follows :

- As predicted, greater menopausal symptom severity is associated with lower intentions to reduce alcohol consumption ($\beta = -0.161$, $p = 0.079$) prior to the intervention.
- After receiving the brief intervention i.e. information that alcohol worsens menopausal symptoms, stronger intention to decrease alcohol consumption is found for all outcome measures: Drinking Reduction Intention ($\beta = 0.231$, $p < 0.10$), Drinking Avoidance Intention ($\beta = 0.353$, $p < 0.01$), Drinking Avoidance Effort Intention ($\beta = 0.223$, $p < 0.10$), and Overall Intention to Reduce Alcohol Reduction ($\beta = 0.269$, $p < 0.01$).
- Menopausal symptoms increase escapist drinking motives ($\beta = 0.189$, $p = 0.035$). Stronger escapist drinking motives are associated with lower intention to reduce alcohol consumption ($\beta = -0.098$, $p = 0.069$), indicating an indirect pathway from symptoms to intentions.
- A stronger Avoidant Coping Style is associated with higher escapist drinking motives ($\beta = 2.117$, $p < 0.001$). It also strengthens the relationship from menopausal symptoms to escapist drinking motives (interaction $\beta = 0.144$, $p < 0.05$).
- The brief information intervention attenuates the negative link between escapist drinking motives and the intention to decrease alcohol consumption (interaction $\beta = 0.142$, $p < 0.023$), implying moderated mediation.
- Despite differences in demographics, drinking motivations and health knowledge between the NSLHD subgroup and total sample, the impact of the brief information intervention was the same. The intervention was consistently effective in NSLHD and full sample.
- Robustness checks using alternative estimation methods confirm that the findings robustly support the conclusion that the message intervention increases the intention to reduce alcohol consumption.

BACKGROUND AND INTRODUCTION

While overall alcohol consumption is declining across many demographic groups in Australia, women aged 40 years and over are increasing their intake and now rank among the nation's heaviest consumers. Importantly, many women in this cohort are not fully aware of alcohol-related harms. This is concerning, as there is limited research into the drivers of higher consumption in this group and which strategies are most likely to support reduction.

In parallel, recognition of the impact of menopause on women aged 40 years and over is growing. Attention centres on how symptoms affect health and wellbeing, and on the stigma and stereotyping that accompany menopause. At national and international levels, initiatives to raise awareness and support women during the menopausal transition are expanding.

Menopause and alcohol use are interrelated. Evidence suggests some women increase consumption as a coping response to anxiety during the menopausal transition, and that higher alcohol use can exacerbate vasomotor and other menopausal symptoms. Addressing menopause-related concerns may therefore present an opportunity to reduce alcohol use, particularly given anecdotal reports that many women are motivated to adopt behaviours that lessen symptoms.

This report summarises the finding of a collaborative project that aimed to produce intelligence regarding the potential to influence the alcohol consumption of women aged 40 years and over. Initial survey data provide timely, preliminary insights into women's knowledge of the relationship between menopause and alcohol consumption. We also provide insights into participants predicted intention to decrease alcohol consumption consequent to a brief information intervention designed to increase knowledge of the relationship between alcohol consumption and menopausal symptoms.

1.0 Research Design and Implementation

This study surveyed women aged 40 years and over to evaluate an information intervention that made explicit in menopause health materials that alcohol worsens menopausal symptoms. The analytic sample consists of **347** participants, randomly assigned to a ***control group*** **(n = 165)** and a ***treatment group*** **(n = 182).** The control group received general menopause health information, and the treatment group received the same materials with the added statement that alcohol worsens symptoms. Validated scales and open-ended questions were used to

measure drinking behavior, menopausal symptoms, knowledge, attitudes, and behavioural intentions**.**

The two groups (treatment and control) ***did not differ systematically across baseline covariates***, including ***age, education, employment status, ethnicity, language, caregiving responsibilities, life disruptions, drinking frequency and quantity, drinking motivations, menopause knowledge, and symptom items***. Any differences fall within the range expected from random variation. This indicates that random assignment worked effectively, baseline covariates are largely balanced, and subsequent causal inference is supported.

2.0 The effect of brief information intervention

Exposure to the brief information intervention, i.e. information that alcohol aggravates menopausal symptoms, increased intention to decrease alcohol consumption on all outcome measures. It increased ***Drinking Reduction Intention*** **(β =0.231, p<0.10)**, ***Drinking Avoidance Intention*** **(β =0.353, p<0.01),** and ***Drinking Avoidance Effort Intention*** **(β =0.223, p<0.10).** Based on the combined measure, the message also increased ***Overall Intention to Reduce Alcohol Consumption*** **(β =0.269, p<0.01).**

3.0 Mechanism through which the information intervention affects intention to reduce alcohol consumption

To examine how the brief information intervention works to improve drinking behavior among women aged 40 years and over, we analysed the relationship among ***menopausal symptoms, escapist drinking motives, avoidance coping style***, and ***intention to reduce alcohol consumption***.

The results show that greater severity of menopausal symptoms is associated with lower ***intention to reduce alcohol consumption*** **(β = -0.161, p < 0.1).** At the same time, ***menopausal symptoms*** have a significant ***positive effect*** on ***escapist drinking motives***, defined as the tendency to drink to ***forget worries, relieve stress***, or ***ease negative emotions*** **(β = 0.189, p < 0.05).** Stronger ***escapist drinking motives*** are associated with lower ***intention to reduce alcohol consumption*** **(β = -0.098, p < 0.1).** This suggests that menopausal symptoms may indirectly weaken intention to reduce alcohol consumption by increasing escapist drinking motives.

Avoidant coping style**,** understood as a tendency to handle stress by distraction or substance use, is also positively and significantly associated with ***escapist drinking motives*** **(β = 2.117,**

p < 0.001). In addition, ***avoidant coping style*** significantly moderates the relationship between ***menopausal symptoms*** and ***escapist drinking motives*** **(interaction β = 0.144, p < 0.05)**. Among people who tend to use an avoidant coping style, greater symptom severity is associated with stronger escapist drinking motives.

The brief information intervention directly increases ***intention to reduce alcohol consumption*** **(β = 0.171, p < 0.05).** This indicates that when women connect drinking with the clear negative consequence of worsening their ongoing symptoms, their tendency to drink is reduced.

The ***information interventio***n also significantly moderates the relationship between ***escapist drinking motives*** and ***intention to reduce alcohol consumption*** **(interaction β = 0.142, p < 0.05).** Stronger escapist drinking motives are associated with lower intention to reduce alcohol consumption. For participants who received the brief information intervention, this negative association is weakened.

In sum, the brief information intervention i.e. information that alcohol aggravates menopausal symptoms not only increases intention to reduce alcohol consumption directly but also changes the psychological pathways through which symptoms shape behavioural intentions. The information intervention appears to counteract maladaptive responses to menopausal symptoms and encourages individuals to reduce alcohol consumption.

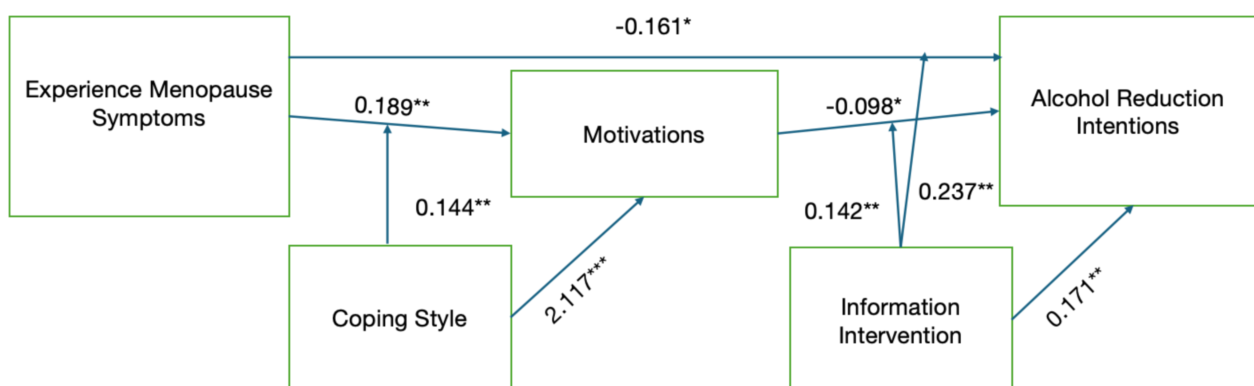


Figure 1. *Mechanism of the information intervention's effect on the intention to reduce drinking (named abstinence intention in this diagram)*

*Notes: * p<0.1, ** p<0.05, *** p<0.01.*

This diagram shows:

1) Experience of menopausal symptoms significantly decreases the intention to reduce alcohol consumption.

2) Experience of menopausal symptoms significantly increases escapist motivations.

3) Escapist motivations decrease the intention to reduce alcohol consumption. This means that menopausal symptoms decrease the intention to reduce alcohol consumption direction and also through the mediator of escapist motivations.

4) Having an avoidant coping style increases the strength of the positive relationship between the experience of menopausal symptoms and escapist motivations.

5) The brief information intervention directly increases the intention to reduce alcohol consumption.

6) The marginal effect of the brief information intervention is larger for women with more significant menopause symptoms. This means that the intervention helps those with 'worse' menopause symptoms more. This pattern is the standard "buffering" type moderation effect that is often discussed in the stress and coping literature.

7) The marginal effect of the brief information intervention is larger for women with higher escapist motives.

The intervention helps those with stronger escapist motives more. Again, this pattern is the "buffering" type moderation effect.

4.0 Comparison of NSLHD Respondents with the Rest of the Sample

Despite some differences described below, the brief information intervention produced no statistically significant different effects in NSLHD participants compared to the total sample. All outcome measures, intention to reduce drinking, intention to avoid drinking, intention to make efforts to abstain, and overall intention to reduce alcohol consumption **(all interaction terms $p > 0.10$)** demonstrate consistent effects.

To further compare behavioural, psychosocial, and demographic characteristics between NSLHD and other areas, we analysed the sample from *NSLHD* (N = 206) and from *other areas* (N = 141), with a total sample of 347.

For population and social structure, NSLHD participants are *younger* ($\Delta = -2.294$, $p < 0.01$) and have higher *education* ($\Delta = 0.630$, $p < 0.01$). The proportion identifying as *Australian* is higher ($\Delta = 0.318$, $p < 0.01$), while the proportions with *Asian* ($\Delta = -0.107$, $p < 0.01$), *European* ($\Delta = -0.150$, $p < 0.01$), and *Middle Eastern* ($\Delta = -0.021$, $p < 0.10$) are lower. The proportion using English is higher (Language: English, $\Delta = 0.096$, $p < 0.01$). *Employment* is higher ($\Delta = 0.131$, $p < 0.01$). The proportion with caregiving focused on children only is higher (*Caregiving: children only*, $\Delta = 0.105$, $p < 0.10$). The proportion reporting any life disruption is lower (*Any life disruption*, $\Delta = -0.189$, $p < 0.01$). These results indicate that the NSLHD subgroup is younger, has higher education and employment, focuses caregiving more on children, and experiences greater stability in daily life.

For drinking motives, NSLHD participants score higher on several motives. Motive to *drink to forget worries* is higher ($\Delta = 0.626$, $p < 0.01$). Motive to *drink to have fun* is higher ($\Delta = 0.256$, $p < 0.05$). Motive to *drink to cheer up* is higher ($\Delta = 0.611$, $p < 0.01$). Motive to drink to *cope with stress* is higher ($\Delta = 0.600$, $p < 0.01$). For respondents in NSLHD, drinking behavior is more strongly driven by immediate stress and current emotional needs.

For menopause-related knowledge, NSLHD participants score higher on *knowledge of emotional effects* ($\Delta = 0.569$, $p < 0.01$), *knowledge of hormonal changes* ($\Delta = 0.367$, $p < 0.01$), and *knowledge of non-hormonal treatment* ($\Delta = 1.079$, $p < 0.01$). This indicates a stronger health knowledge base.

Overall, the NSLHD subgroup is younger, has higher education and employment, uses English more often, has stronger social and emotional motives for alcohol consumption, and has higher menopause-related knowledge.

Key findings

Random assignment produced balanced baseline characteristics between the control group and the treatment group, which supports causal interpretation of the information intervention. The brief information intervention, which adds a short statement that alcohol aggravates menopausal symptoms to general menopause information, is associated with higher intention to decrease alcohol use. Drinking Reduction Intention, Drinking Avoidance Intention, Drinking

Avoidance Effort Intention and the Overall Intention to Reduce Alcohol Consumption index are all higher in the treatment group than in the control group.

Mechanism analysis shows that more severe menopausal symptoms are associated with lower intention to reduce alcohol consumption and with stronger escapist drinking motives. Stronger escapist drinking motives are associated with lower intention, which indicates an indirect pathway from menopausal symptoms to intention through escapist motives. Avoidant coping style is positively related to escapist drinking motives and strengthens the link between menopausal symptoms and escapist motives. The brief information intervention reduces escapist drinking motives and weakens the negative association between escapist drinking motives and intention to reduce alcohol consumption.

Open ended responses on the role of alcohol

The survey includes 347 women. Of these, 344 provided a response to an open-ended question on the role of alcohol in their life, including when and with whom they usually drink and how mood or stress may trigger drinking.

Based on these responses, we identify several overlapping themes. Social and celebratory drinking is mentioned by 196 women, typically in the context of meals, gatherings or special occasions with family and friends. A total of 117 women describe alcohol primarily as a way to relax or unwind, often at the end of the day or on weekends. For 77 women, alcohol use is associated with managing stress, low mood or sleep difficulties. By contrast, 23 women state that alcohol plays only a minor role in their life and that they drink rarely or only on special occasions. A smaller group of 18 women report heavier or more problematic use, such as drinking to intoxication or relying on alcohol on a regular basis to cope. In addition, 6 women explicitly indicate that they are cutting down or limiting alcohol because of health, fitness or menopause related concerns, and 52 women provide brief or mixed responses that do not fall clearly into these categories.

Taken together, these patterns indicate that alcohol functions mainly as a social or relaxing activity for many women, serves as a coping strategy for some women, and for a smaller group is a source of concern that motivates efforts to reduce drinking for health and wellbeing.

Appendix A: Study Results

Table 1. The Effect of Exposure to Message on Intention to Reduce Alcohol Consumption

Variable	Reduction Intention		Avoidance Intention		Avoidance Effort		Overall Intention	
	Coef	SE	Coef	SE	Coef	SE	Coef	SE
Exposure to message	0.231*	(0.121)	0.353***	(0.113)	0.223*	(0.116)	0.269***	(0.100)
Age	-0.018	(0.015)	-0.019	(0.013)	-0.018	(0.014)	-0.018	(0.012)
Education	0.111*	(0.065)	0.087	(0.058)	0.155***	(0.059)	0.118**	(0.053)
Asian	0.039	(0.413)	-0.317	(0.366)	-0.493	(0.325)	-0.257	(0.325)
Australian	-0.284	(0.362)	-0.322	(0.294)	-0.64***	(0.247)	-0.416	(0.266)
European	-0.535	(0.388)	-0.610*	(0.323)	-0.92***	(0.288)	-0.687**	(0.292)
Middle Eastern	-1.072	(0.761)	-1.331*	(0.703)	-1.74***	(0.623)	-1.380**	(0.678)
Language English	-0.208	(0.302)	-0.119	(0.312)	0.069	(0.282)	-0.086	(0.266)
Employment	0.071	(0.192)	-0.132	(0.184)	0.081	(0.188)	0.007	(0.159)
Caregiving: children	-0.082	(0.140)	0.187	(0.130)	0.191	(0.139)	0.099	(0.117)
Caregiving: parents	-0.537	(0.342)	-0.063	(0.247)	-0.123	(0.204)	-0.241	(0.193)
Any life disruption	0.018	(0.134)	-0.048	(0.137)	-0.049	(0.140)	-0.026	(0.116)
Drinking frequency	-0.024	(0.082)	-0.241***	(0.078)	-0.30***	(0.077)	-0.19'***	(0.069)
Standard drinks a day	0.064	(0.066)	-0.020	(0.062)	0.026	(0.062)	0.023	(0.055)
Drink to forget worries	0.132	(0.093)	0.203**	(0.089)	0.166*	(0.088)	0.167**	(0.079)
Drink to have fun	-0.138**	(0.070)	-0.103	(0.066)	-0.143**	(0.068)	-0.128**	(0.059)
Drink to cheer up	-0.002	(0.075)	-0.027	(0.071)	0.009	(0.070)	-0.007	(0.061)
Drink to cope	-0.142*	(0.073)	-0.117	(0.075)	-0.067	(0.074)	-0.109*	(0.064)
Knowledge stage	0.271***	(0.081)	0.096	(0.077)	0.115	(0.082)	0.161**	(0.068)
Knowledge symptoms	-0.122*	(0.069)	-0.078	(0.071)	0.017	(0.073)	-0.061	(0.062)
Knowledge emotions	-0.064	(0.074)	-0.049	(0.071)	-0.078	(0.083)	-0.063	(0.066)
Knowledge hormonal	-0.040	(0.071)	-0.001	(0.072)	-0.065	(0.075)	-0.035	(0.063)
Knowledge non-hormonal treatment	0.065	(0.060)	0.117**	(0.056)	0.087	(0.055)	0.090*	(0.050)
Symptoms lightheaded	0.068	(0.082)	0.110	(0.080)	0.067	(0.077)	0.082	(0.067)
Symptoms of anxiety	0.043	(0.078)	0.005	(0.077)	0.047	(0.077)	0.032	(0.066)
Symptoms of tiredness	0.065	(0.072)	-0.151**	(0.076)	-0.107	(0.076)	-0.064	(0.063)
Symptoms of joint pains	-0.133*	(0.072)	-0.023	(0.069)	-0.050	(0.072)	-0.068	(0.060)
Symptoms of facial hair	0.041	(0.075)	-0.019	(0.072)	-0.049	(0.074)	-0.009	(0.063)
N	347		347		347		347	

Notes: * p<0.1, ** p<0.05, *** p<0.01.

Table 2. Mediation and Moderation Tests for Alcohol Reduction Intention (SEM)

Role	Component	Coefficient	p_value
Path	Menopause Symptoms → Alcohol Reduction Intention	-0.161	0.079
Mediation	Menopause Symptoms → Escapist Motivations	0.189	0.035
Mediation	Escapist Motivations→ Alcohol Reduction Intention	-0.098	0.069
Path	Avoidance Coping Style → Escapist Motivations	2.117	<0.001
Path	Symptoms_x_Coping Style → Escapist Motivations	0.144	0.040
Path	treatment→ Abstinence Intention	0.171	0.031
Path	Motivations_x_ treatment → Abstinence Intention	0.142	0.023
Path	Symptoms_x_ treatment → Abstinence Intention	0.237	0.015
mod-mediation	Menopause Symptoms → Escapist Motivations	0.189	0.035
mod-mediation	Motivations_x_ treatment → Abstinence Intention	0.142	0.023

Notes: * p<0.1, ** p<0.05, *** p<0.01.

Table 3. Comparison of NSLHD Respondents with the Rest of the Sample

Variable	**Other Areas**		**NSLHD**		**Mean Difference**	
	Mean	SE	Mean	SE	Mean	SE
Age	48.887	(0.417)	46.592	(0.371)	-2.294***	(0.558)
Education	4.234	(0.102)	4.864	(0.065)	0.630***	(0.121)
Asian	0.156	(0.031)	0.049	(0.015)	-0.107***	(0.034)
Australian	0.546	(0.042)	0.864	(0.024)	0.318***	(0.048)
European	0.199	(0.034)	0.049	(0.015)	-0.150***	(0.037)
Middle Eastern	0.021	(0.012)	0.000	(0.000)	-0.021*	(0.012)
Other ethnicity	0.078	(0.023)	0.039	(0.013)	-0.039	(0.026)
Language: English	0.879	(0.028)	0.976	(0.011)	0.096***	(0.030)
Employment	0.801	(0.034)	0.932	(0.018)	0.131***	(0.038)
Caregiving: children only	0.404	(0.041)	0.510	(0.035)	0.105*	(0.054)
Caregiving: parents only	0.028	(0.014)	0.053	(0.016)	0.025	(0.021)
Any life disruption	0.660	(0.040)	0.471	(0.035)	-0.189***	(0.053)
Drinking frequency	3.319	(0.090)	3.461	(0.061)	0.142	(0.109)
Standard drinks a day	2.766	(0.120)	2.816	(0.064)	0.050	(0.136)
Drink to forget worries	2.539	(0.096)	3.165	(0.074)	0.626***	(0.122)
Drink to have fun	3.589	(0.074)	3.845	(0.073)	0.256**	(0.104)
Drink to cheer up	2.801	(0.098)	3.413	(0.073)	0.611***	(0.123)
Drink to cope with stress	2.759	(0.101)	3.359	(0.082)	0.600***	(0.130)
Knowledge stage	3.014	(0.089)	3.121	(0.071)	0.107	(0.114)
Knowledge symptoms	3.326	(0.092)	3.165	(0.075)	-0.161	(0.118)
Knowledge emotions	2.688	(0.089)	3.257	(0.078)	0.569***	(0.118)
Knowledge hormonal	2.759	(0.094)	3.126	(0.071)	0.367***	(0.117)
Knowledge on non-hormonal treatment	2.043	(0.088)	3.121	(0.093)	1.079***	(0.128)
Lightheaded feelings	2.191	(0.077)	2.461	(0.066)	0.270***	(0.102)
Anxiety	2.546	(0.082)	2.524	(0.066)	-0.022	(0.105)
Tiredness	2.681	(0.079)	2.306	(0.071)	-0.375***	(0.106)
Joint pains	2.468	(0.086)	2.602	(0.071)	0.134	(0.112)
Facial hair	1.901	(0.084)	2.150	(0.071)	0.250**	(0.110)

Notes: * p<0.1, ** p<0.05, *** p<0.01.

Appendix B: Robustness checks

To assess whether the brief information intervention, that is the message that alcohol worsens menopausal symptoms, remains effective when we change estimation methods, we conducted a set of robustness checks. The table reports three approaches: ***baseline OLS, OLS after median imputation of missing covariates with missingness indicators, and AIPW***. The estimated treatment effect is very similar across the three methods, with point estimates around **0.35** in each case. This shows that the main result does not depend on any single estimation procedure and that the conclusion is robust to alternative ways of handling missing data and selection.

Table 4. *Comparison of three estimation methods*

Spec	Coef/Effect	SE	N
OLS (HC1), complete-case	0.353***	(0.113)	347
OLS (HC1), median-impute controls + flags	0.353***	(0.113)	347
AIPW (ATE)	0.342***	(0.118)	347
Randomization Inference p-value	0.0020		
Placebo-Treatment p-value	0.0022		

Notes: * p<0.1, ** p<0.05, *** p<0.01.

In addition, we ran a placebo test to assess whether the result could arise from random chance. Assuming no effect, we repeatedly assigned a ***fake*** message and obtained a distribution of placebo effects centred near zero, whereas the observed effect is about **0.35** and lies to the far right of this distribution. The randomization inference test gives **p = 0.0020**, and the placebo test gives **p = 0.0022**. In sum, evidence across different tests is highly consistent, and the very small p values indicate that the observed effect is very unlikely to be due to chance. Therefore, the findings robustly support the conclusion that the message increases the intention to reduce alcohol consumption.

Appendix C: Survey questionnaire

Section A. Background and screening

Participants first read the "Participant Information and Consent Form" describing the purpose of the study, procedures, potential risks and benefits, confidentiality and voluntary participation. Proceeding with the survey indicated consent.

What is your age?

Response format: open numeric response (years).

What gender do you identify with?

Response options in the realised sample:

Female

(The study targeted women aged 40 years and above.)

Section B. Alcohol use

Q1. Frequency of alcohol consumption

How often do you have a drink containing alcohol? (single choice):

- Never, I don't drink alcoholic beverages
- Monthly or less
- 2 - 4 times a month
- 2 - 3 times a week
- 4 or more times a week

Q2. Typical quantity on a drinking day

Thinking about the typical day when you do drink alcohol, how many standard drinks would you usually have? (single choice):

One standard drink is approximately a typical schooner of beer, 100 ml of wine or one shot of spirits.

- Less than 1 a day
- 1 standard drink a day
- 2 standard drinks a day
- 3 standard drinks a day
- More than 3 standard drinks a day

Q3. Binge drinking

How often do you have six or more drinks on one occasion? Response options (single choice):

- Never
- 1 or 2 times a year
- 1 or 2 times a month
- 1 time a week
- 2 or more times a week

Section C. Drinking motives and the role of alcohol *(Response scale: Never; Rarely; Sometimes; Often; Always)*

Q4. Drinking motivations

How often do you drink alcohol for the following reasons?

- To forget worries or problems
- To have fun and celebrate
- To help you relax
- To forget everything
- When you feel pressured by others
- To cheer up when you are in a bad mood
- When you are tense and nervous
- To cope with stress or negative emotions
- To feel more confident in social gatherings

Q5. Open question on the role of alcohol

What role does alcohol play in your life? Please describe when, where and with whom you usually drink, and how your mood, stress or other feelings may trigger you to drink. Feel free to provide examples.

Response format: open ended text.

Section D. Coping with stress

Q6. Coping strategies when dealing with stress

When dealing with stress or challenging situations, how often do you do the following?

- Seek emotional support from others
- Focus on work to take your mind off things
- Blame yourself for what happened
- Search online for useful information or instructional videos
- Use alcohol, smoke, vape, or take other substances to feel better

- Distract yourself with activities like watching TV, scrolling social media, reading, daydreaming, sleeping, or shopping
- Seek professional advice (e.g. from a GP, therapist, financial advisor, trainer or coach)
- Get help or advice from friends, family, co-workers or neighbours
- Criticize yourself
- Seek comfort and understanding from someone
- Use alcohol or other substances to help you get through it
- Engage in activities like exercising, meditating, cooking or cleaning to cope

Q7. Physical activity

How often do you engage in physical activity (e.g., walking, exercising)?

- Never
- Rarely
- Occasionally
- Regularly
- Very frequently

Section E. Knowledge about menopause

Q8. Menopause-related knowledge

Please rate your knowledge on the following topics *(Response scale: Very little; Somewhat; Moderate; Quite a bit; A great deal)*:

- Menopause and its stages (perimenopause, menopause, postmenopause)
- Common menopausal symptoms (e.g. hot flushes, night sweats, mood swings)
- The effect of alcohol, tobacco and other substances on menopause and its symptoms
- Natural remedies or lifestyle changes for menopause relief
- Emotional or psychological effects of menopause
- Hormonal changes during menopause
- Hormonal treatments for menopause, such as Hormone Replacement Therapy (HRT)
- Non-hormonal prescription treatments for menopause (e.g. antidepressants, clonidine)

Section F. Menopausal symptoms

Q9. Experience of menopausal symptoms in the last 12 months *(Response scale: None; Mild; Moderate; Severe)*

In the last 12 months, have you experienced any of the following symptoms?

- Hot flushes
- Lightheaded feelings
- Headaches
- Irritability
- Depression
- Rage
- Anger
- Anxiety
- Mood changes
- Sleeplessness
- Unusual tiredness
- Backache
- Joint pains
- Muscle pains
- New facial hair
- Dry skin
- Crawling feelings under the skin
- Less sexual feelings
- Dry vagina
- Uncomfortable intercourse
- Urinary frequency

Section G. Treatment for menopause

Q10. Menopause treatments

Have you accessed treatment or medication to help you manage menopause symptoms?

- Yes
- No

Section H. Intentions to reduce alcohol use

Q11. Intention to reduce alcohol consumption

Do you intend to reduce your alcohol consumption?

- I don't drink alcohol
- Very unlikely
- Unlikely

- Neutral
- Likely
- Very likely

Q12. Intention to avoid alcohol

Do you plan to avoid alcohol consumption?

- I don't drink alcohol
- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

Q13. Effort to avoid alcohol

Do you plan to make an effort to avoid alcohol consumption?

- I don't drink alcohol
- Definitely not
- Probably not
- Might or might not
- Probably yes
- Definitely yes

Section I. Reasons for continuing to drink

Q14. Reasons for continuing current level of drinking *(Response scale: Very unlikely; Unlikely; Neutral; Likely; Very likely)*

If you choose to keep drinking at the same level as before, how likely is it that you would do so to help cope with the following?

- Anxiety
- Stress
- Insomnia
- Mood swings
- Irritability
- Fatigue

Section J. Socio-demographic characteristics and life context

Q15. Education

What is your highest level of education?

- No formal education
- Some high school
- High school graduate or equivalent
- Some college or university
- Bachelor's degree
- Master's degree
- Doctoral or professional degree

Q16. Area of residence

Where do you currently live? Please answer by including your postcode below.

Response format: open numeric postcode.

Q17. Ethnicity

What is your ethnicity?

- Aboriginal or Torres Strait Islander
- African
- Asian
- Australian
- European
- Middle Eastern
- Other (please specify)

Q18. Language spoken at home

What language is primarily spoken at home?

- Response options:
- English
- Other (please specify)

Q19. Employment status

What is your current employment status?

- Employed full time
- Employed part time
- Self-employed

- Student, employed full-time
- Student, employed part-time
- Student, not employed
- Unemployed looking for work
- Unemployed not looking for work
- Retired
- Volunteer

Q20. Occupation

What is your current occupation?

Response format: open ended text.

Q21. Workplace support for menopause

What support options are available in your workplace to assist with menopause? (Select all that apply.)

- Additional types of leave, such as personal leave
- Flexible work arrangements, such as working from home
- Organisational awareness and policy guidelines
- Support network (e.g. employee assistance programs, mentoring)
- Health and wellness programs (e.g. counselling, workshops)
- Access to medical or wellness resources (e.g. health insurance, on-site clinics)
- Regular health check-ins or consultations
- Adjustments to workload or responsibilities
- Other (please specify)

Q22. Caregiving responsibilities

Do you currently have primary caregiving responsibilities for children or parents?

- No, I do not have primary caregiving responsibilities
- Yes, for children
- Yes, for parents
- Yes, for both children and parents

Q23. Major life disruptions

Have you experienced any major life disruptions, such as a serious illness, loss of a loved one, job loss or significant relationship issues?

- No, I have not experienced any of these disruptions
- Yes, within the last year
- Yes, within the last 1-3 years
- Yes, more than 3 years ago

Macquarie University is a vibrant hub of intellectual thinkers, all working towards a brighter future for our communities and our planet.

A PLACE OF INSPIRATION

Macquarie is uniquely located in the heart of Australia's largest high-tech precinct, a thriving locale which is predicted to double in size in the next 20 years to become the fourth largest CBD in Australia.

Our campus spans 126 hectares, with open green space that gives our community the freedom to think and grow. We are home to fantastic facilities with excellent transport links to the city and suburbs, supported by an on-campus train station.

RENOWNED FOR EXCELLENCE

We are ranked among the top two per cent of universities in the world, and with a 5-star QS rating, we are renowned for producing graduates that are among the most sought after professionals in the world.

A PROUD TRADITION OF DISCOVERY

Our enviable research efforts are brought to life by renowned researchers whose audacious solutions to issues of global significance are benefiting the world we live in.

BUILDING SUCCESSFUL GRADUATES

Our pioneering approach to teaching and learning is built around a connected learning community: our students are considered partners and co-creators in their learning experience.

FIND OUT MORE

Macquarie University NSW 2109 Australia
T: +61 (2) 9850 7111
mq.edu.au

ABN 90 952 801 237
CRICOS Provider 00002J