



Factors associated with alcohol use disorder among ethnic minority young adults: A cross-sectional Study

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INTRODUCTION

- Alcohol use disorder (AUD) is a significant and fatal problem among ethnic minority young adults (Vaeth et al., 2017).
- Defined as inability to control alcohol use despite social, psychological, physical, and occupational consequences (NIAAA, 2024)
- Diagnosis: Based on DSM-5 criteria (≥ 2 of 11 symptoms), categorized by severity as mild (2–3 symptoms), moderate (4 – 5 symptoms), and severe (6 or more symptoms)

Why focus on young adults?

- Early alcohol initiation quadruples AUD risk (Margret and Ries, 2016).
- Prevalence disparities: higher rates in ethnic minorities (Glass et al., 2020; Caetano et al., 2014).

Research gaps

- Ethnic minorities face unique risks overlooked in the existing literature (Vaeth et al., 2017).
- Limited evidence on culturally specific factors in ethnic minorities (Mendoza-Sassi and B ria, 2003; Barros et al., 2007; Soboka et al., 2014; Necho et al., 2020
- Our previous qualitative findings showed culture, family separation, and coping mechanisms drive AUD. However, the strength and quantitative association of these factors remains unaddressed.

To address the gap in existing literature, the current study aimed to identify factors and measure the association with AUD among ethnic minority young adults.

METHODS

STUDY DESIGN and SAMPLING

- Community-based cross-sectional study

Setting

- Hong Kong: conducted from May to October 2024

Participants

Inclusion criteria

- Ethnic minority young adults
- Able to speak English
- Voluntary to participate

Sample size

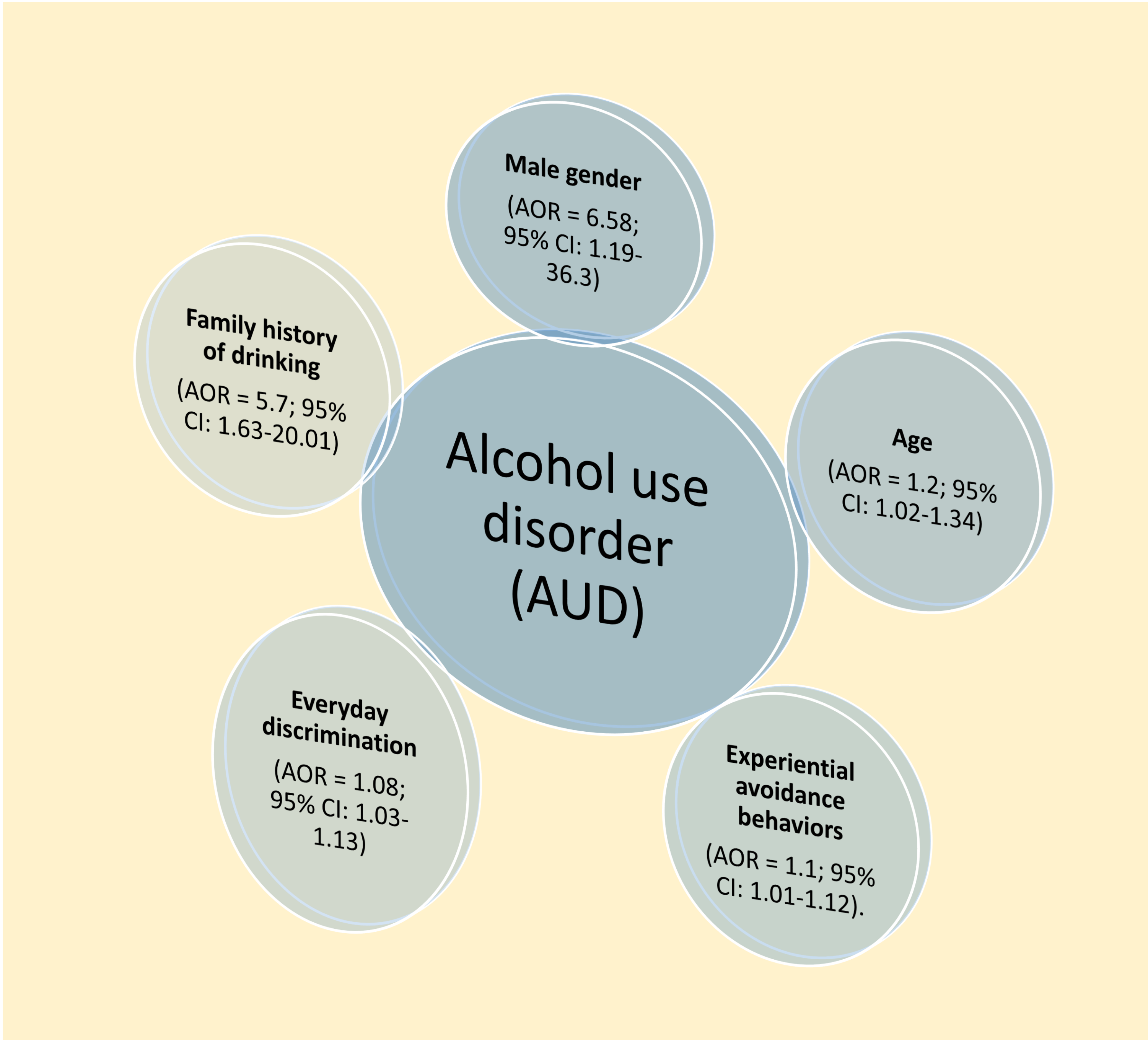
- Calculated: 203 (based on 15.6% lifetime AUD prevalence)
- Final sample size=254 (accounting for 25% attrition/ missing data)

Data Collection & Analysis

- Recruitment:** Partnered with major ethnic minority-serving NGO (posters, referrals).
- Snowball Sampling:** Participants referred peers
- Online Survey:** Consent → QR code access → Google Forms.
- Analysis:** A hierarchical binary logistic regression model was used to identify factors associated with AUD

Ethical clearance

- Ethical clearance was obtained from PolyU (Reference number: HSEARS20240210001).
- Informed consent was obtained from each participant, and the data were kept secure



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RESULTS

- A total of 202 participants were analyzed.
- The overall prevalence of AUD was found to be 19.8% (95%CI: 14.4-24.8).

Prevalence of AUD



Variables	Model 1 AOR (95% CI)	H&L test (p=0.32)	Model 2 AOR (95% CI)	H&L test (p=0.983)	Model 3 AOR (95% CI)	H&L test (p=0.983)	Model 4 AOR (95% CI)	Model 5 AOR (95% CI)	H&L test (p=0.965)	Significant	
Age	1.09(0.96-1.23)	P=0	1.1(0.98-1.25)	P=0.09	1.12(0.98-1.27)	P=0.086	1.13(0.99-1.28)	P=0.07	1.2(1.02-1.34)	P=0.024	**
Gender											
Male	6.65(1.3-34.0)	P=0	5.77(1.09-30.49)	P=0.039	6.8(1.24-37.43)	P=0.027	6.89(1.25-37.9)	P=0.026	6.58(1.19-36.3)	P=0.031	**
Female	1		1		1		1		1		
Religion											
Catholic	1.03(0.32-3.30)	P=0	0.92(0.28-2.97)	P=0.88	0.72(0.21-2.48)	P=0.6	0.7(0.20-2.48)	P=0.5	0.62(0.17-2.23)	P=0.4	
Muslim	0.42(0.09-2.04)	P=0	0.31(0.06-1.58)	P=0.16	0.31(0.06-1.63)	P=0.16	0.29(0.05-1.54)	P=0.14	0.18(0.03-1.16)	P=0.07	
Christians	1	1	1	-	1	1	1	1	1		
Marital status											
Single	0.23(0.05-1.12)	P=0	0.24(0.05-1.20)	P=0.08	0.25(0.05-1.29)	P=0.09	0.27(0.05-1.36)	P=0.11	0.27(0.05-1.39)	0.11	
Married	0.24(0.05-1.19)	P=0	0.22(0.04-1.14)	P=0.07	0.26(0.05-1.44)	P=0.12	0.25(0.04-1.44)	P=0.12	0.27(0.05-1.58)	0.14	
Separated/divorced/widowed	1	1	1	1	1		1	1	1		
Educational status											
Below ≤8 grade	1		1	1	1	1	1	1	1		
9-12 grade	2.3(0.59-8.75)	P=0.23	1.82(0.46-7.17)	P=0.39	2.1(0.51-8.77)	P=0.30	1.77(0.41-7.55)	P=0.4	1.55(0.36-6.69)	P=0.5	
Colleges and universities	2.14(0.54-8.54)	P=0.28	1.88(0.47-7.56)	P=0.37	1.78(0.44-7.18)	P=0.41	1.69(0.42-6.80)	P=0.4	1.59(0.39-6.43)	P=0.5	
Employment											
Unemployed	1.01(0.17-5.99)	P=0.9	0.8(0.133-4.84)	P=0.8	0.71(0.12-4.34)	P=0.70	0.68(0.11-4.41)	P=0.6	0.7(0.10-4.93)	P=0.72	
Employed	1		1		1	1	1	1	1		
Parental family status	2.39(0.82-6.95)	p=0.1	2.7(0.89-7.95)	P=0.07	2.2(0.74-6.67)	P=0.15	2.02(0.67-6.04)	P=0.21	2.23(0.72-6.89)	P=0.16	
Peer pressure	1.23(0.45-3.36)	P=0.6	1.2(0.42-3.26)	P=0.75	1.02(0.36-2.95)	P=0.9	0.93(0.31-2.73)	P=0.8	0.88(0.29-2.67)	P=0.8	
History of parental drinking	5.5(1.67-18.07)	P=0	5.6(1.71-18.49)	P=0.04	5.8(1.71-19.85)		5.4(1.56-18.68)	P=0.008	5.7(1.63-20.01)	P=0.006	**
Parental drinking-related health problems	0.36(0.14-0.93)	P=0	0.37(0.14-0.97)	P=0.04	0.42(0.16-1.11)	P=0.08	0.45(0.17-1.19)	P=0.10	0.45(0.17-1.23)	P=0.11	
Acculturation stress	#	#	1.02(1.00-1.05)	P=0.057	1.02(0.99-1.05)	P=0.20	1.01(0.99-1.04)	P=0.33	1.02(0.97-1.04)	P=0.88	
Depression symptoms (PHQ9 score)	#	#	#	#	1.02(0.93-1.12)	P=0.6	0.98(0.88-1.09)	P=0.7	0.96(0.85-1.10)	P=0.47	
Everyday discrimination	#	#	#	#	1.08(1.03-1.13)	P=0.01	1.08(1.03-1.13)	P=0.01	1.08(1.03-1.13)	P=0.01	**
Avoidant coping	#	#	#	#	#	#	1.1(0.96-1.25)	P=0.16	1.1(0.93-1.22)	P=0.35	
Experience avoidance behavior (AAQ2 score)	#	#	#	#	#	#	#	#	1.1(1.01-1.12)	P=0.047	**

DISCUSSION

- Higher AUD prevalence due to: Acculturation stress & discrimination
- Experience avoidance behaviors**
 - ✓ suppress their negative thoughts and feelings via drinking or even self-intoxication until blackout. Nevertheless, such behavior is unable to solve the problem and results in more unpleasant emotions, which provoke continuous drinking.
- Every day discrimination**
 - ✓ Marginalized and discriminated groups turn to alcohol as a maladaptive coping mechanism to alleviate feelings of anxiety, depression, or social isolation resulting from discrimination (Burke, 2024).

Limitations

- Self-reported questionnaires are subject to social desirability bias and underreporting
- Most participants were Filipino residents; the findings might not be generalizable to all ethnic minorities in Hong Kong.
- Small sample size may reduce the statistical power of the study
- Convenience sampling limits the generalizability of the findings.

FUTURE DIRECTION

- We confirmed that the experience of discrimination and avoidance coping behaviors were significant factors contributing to AUD.
- These insights suggest that the future of interventions for ethnic minorities with AUD should focus on these two components.
- One of the viable treatment options is acceptance and commitment therapy (ACT), which establishes a meaningful life that aligns with personal life goals via accepting the inevitable pain and suffering.
- Therefore, future research should explore interventions ACT to assess their effectiveness in promoting alcohol abstinence within this population segment.