Perceived Barriers to Decreasing Alcohol Use Among Villagers in Rural Eastern Taiwan: Aohua and Mayuan

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Introduction

- The National Health Insurance covers over 99% of the Taiwanese population, yet Taiwanese aboriginals' life expectancy is shorter than the national average by 8.6 years.

- Populations with a higher density of aboriginal people are associated with higher risks of alcohol-related mortality.

- **Hypothesis**: Cultural values and poor health education contribute to high prevalence of alcohol use among Taiwanese aboriginals, and sociocultural factors are the predominant barrier to decreasing alcohol use.

Methods

- Interviews were conducted during medical outreach at two villages in Taiwan with significant aboriginal populations: Aohua (Yilan county) and Mayuan (Hualien county).

- Subjects were interviewed on current use, perceived consequences, and sociocultural factors pertaining to alcohol. All responses, including when subjects provided more than one answer per question, were recorded by interviewers.

- Exclusion criteria included subjects who were unable to recall their alcohol use, aged 17 or younger, and those who did not complete the interview.

Taiwan
★ Aohua, Yilan County
★ Mayuan, Hualien County

Figure 1. Participants' Association with Aboriginal Tribe

- Non-Aboriginal 34.6%
- Atayal 34.6%
- Truku 11.5%
- Amis 11.5%
- Bunun 3.8%
- Hakka 3.8%
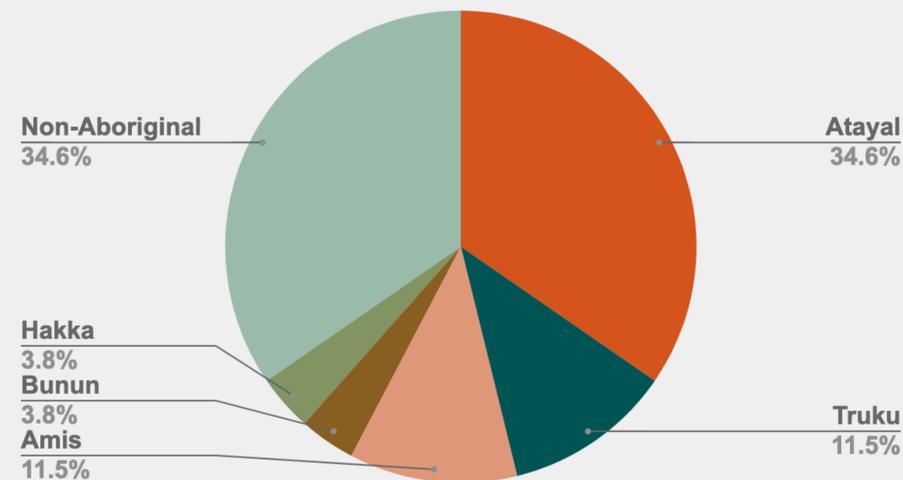
Results

- **Subjects:** N = 25, with 48% male and 52% female; 64% identified as aboriginal

- **Prevalence of alcohol use:** More than half reported having >2 drinks per week, and 60% reported having >3 drinks per day

- **Triggers for alcohol use:** *Most subjects (84%) reported social cue as a trigger. 40% reported emotional cue as a trigger.*

- **Barriers to alcohol use:** 44% reported daily responsibilities, 20% reported health consequences, and 20% reported lack of usual drinking companions.

- **Advantages of alcohol use:** Most subjects (76%) identified stress relief as an advantage. 52% reported that alcohol use has social advantages.

- **Disadvantages of alcohol use:** 68% reported risk of disease as a disadvantage.

- **Perceived approval and disapproval of alcohol use:** 60% reported that friends approved of their alcohol use. *60% reported that no one disapproved of their alcohol use.*

Discussion

- The identification of social and emotional cues as the most common triggers for alcohol use may direct future culturally appropriate interventions.

- Despite recognition of disease risk by majority of respondents, there exists a widespread perception that alcohol use is permissive.

- Our results support high prevalence of alcohol use among Taiwanese aboriginals due to social factors, despite majority awareness of risk of disease. This suggests a need for future interventions to focus on health education and/or social accountability strategies, perhaps by partnering with community leaders.

- The high prevalence of alcoholism identified by this pilot may be attributed to small sample size and types of subjects recruited at outreach clinics.

Conclusion

- Our study supports the high prevalence of alcohol use in Taiwanese villages with significant aboriginal populations. We suspect that the barriers to decreasing alcohol use are insufficient health education and/or lack of social accountability. Future efforts may focus on these two areas for a more targeted intervention.

TAP TO RETURN TO KIOSK MENU

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Table 1: Screening Questions
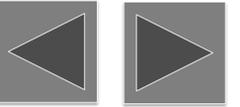
	All Subjects	All Male	All female	Ages 18-49	Ages 50+
	total(%)	total(%)	total(%)	total(%)	total(%)
Total number in category (gender distribution)	N=25 (12 male, 13 female)	N=12	N=13	N=5 (3 male, 2 female)	N=20 (9 male, 11 female)
Do you associate with an aboriginal tribe?	16(64%)	6(50%)	9(69.23%)	3(60%)	13(65%)
Which tribe?	N=16	N=6	N=9	N=3	N=13
Atayal	9(60%)	4(66.67%)	5(55.56%)	2(66.67%)	7(53.85%)
Truku	3(20%)	1(16.67%)	2(22.22%)	1(33.33%)	2(15.38%)
Amis	3(20%)	2(33.33%)	1(11.11%)	1(33.33%)	2(15.38%)
Bunun	1(6.67%)	0(0%)	1(11.11%)	0(0%)	1(7.69%)
Hakka	1(6.67%)	1(16.67%)	0(0%)	0(0%)	1(7.69%)
Do you currently drink alcohol?	N=25	N=12	N=13	N=5	N=20
Current drinkers	11(44%)	6(50%)	5(38.46%)	4(80%)	7(35%)
How often do or did you drink?	N=25	N=12	N=13	N=5	N=20
Never	3(12%)	0(0%)	3(23.08%)	0(0%)	3(15%)
Monthly (1 or less)	7(28%)	3(25%)	4(30.77%)	2(40%)	5(25%)
2 to 4 times a month	2(8%)	2(16.67%)	0(0%)	0(0%)	2(10%)
2 to 3 times in a week	6(24%)	2(16.67%)	4(30.77%)	2(40%)	4(20%)
4 or more times a week	7(28%)	5(41.67%)	2(15.38%)	1(20%)	6(30%)
How many drinks do you drink in one day?	N=25	N=12	N=13	N=5	N=20
1 to 2 drinks	7(28%)	3(25%)	4(30.77%)	2(40%)	5(25%)
3 to 4 drinks	4(16%)	3(25%)	1(7.69%)	0(0%)	4(20%)
5 to 6 drinks	6(24%)	3(25%)	3(23.08%)	1(20%)	5(25%)
7 to 9 drinks	3(12%)	2(16.67%)	1(7.69%)	1(20%)	2(10%)
10 or more drinks	2(8%)	1(8.33%)	1(7.69%)	1(20%)	1(5%)
What do you drink?	N=25	N=12	N=13	N=5	N=20
Beer	15(60%)	8(66.67%)	7(53.85%)	3(60%)	12(60%)
Gaoliang jiu	8(32%)	6(50%)	2(15.38%)	1(20%)	7(35%)
Millet wine	7(28%)	7(58.33%)	0(0%)	0(0%)	7(35%)
Whisbi	3(12%)	1(8.33%)	2(15.38%)	1(20%)	2(10%)
Foreign Hard liquor (e.g. whiskey, vodka, rum, gin)	4(16%)	2(16.67%)	2(15.38%)	3(60%)	1(5%)
Wine	2(8%)	1(8.33%)	1(7.69%)	2(40%)	0(0%)
Mixed cocktails	2(8%)	2(16.67%)	0(0%)	2(40%)	0(0%)
Sake	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)
Bao li da	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)
Self-made medicinal	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)
Shaoxing jiu	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)

Perceived Triggers for Alcohol Use

Easy access	Social cues	Emotional cues	Personal cues	Location cues	Health benefits
0%	84%	40%	20%	0%	4%

Perceived Barriers to Alcohol Use

Difficult access	Fear of negative judgments	Lack of drinking companions	Lack of food one usually drinks with	Activities of daily living	Health consequences	Legal consequences	Time of day	Upbringing	Not feeling physically or emotionally well	None
0%	8%	20%	0%	44%	20%	4%	4%	8%	20%	4%
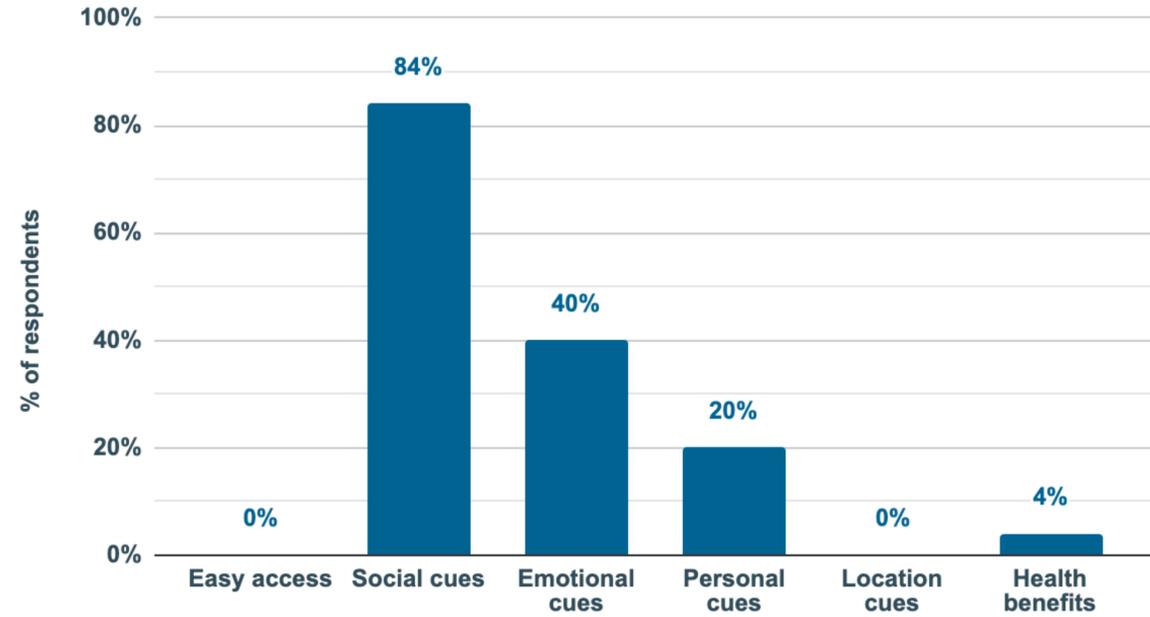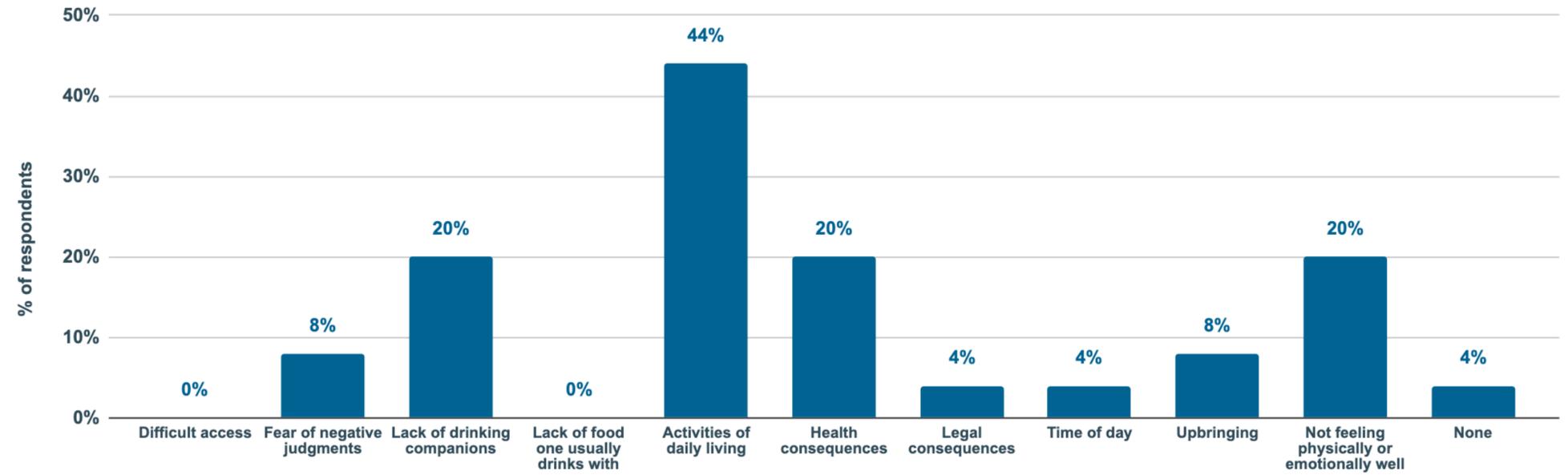
Perceived Approval of Alcohol Use

Friends	Family	Work colleagues	Other community members	No one
60%	12%	16%	12%	32%
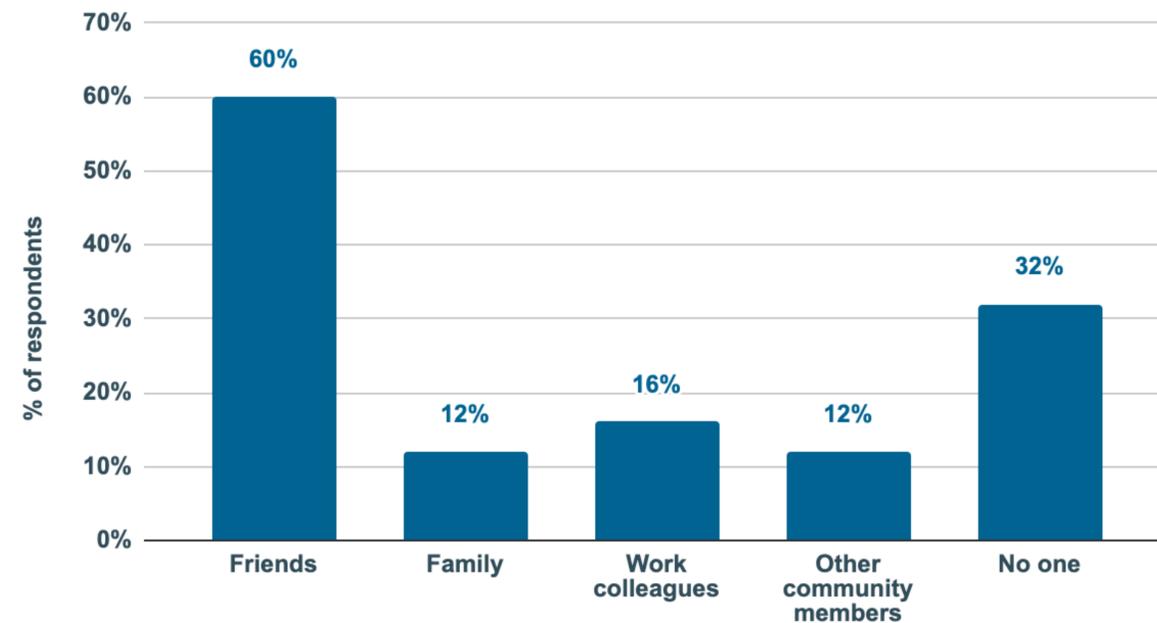
Perceived Disapproval of Alcohol Use

Friends	Family	Work colleagues	Other community members	No one
12%	36%	4%	4%	60%
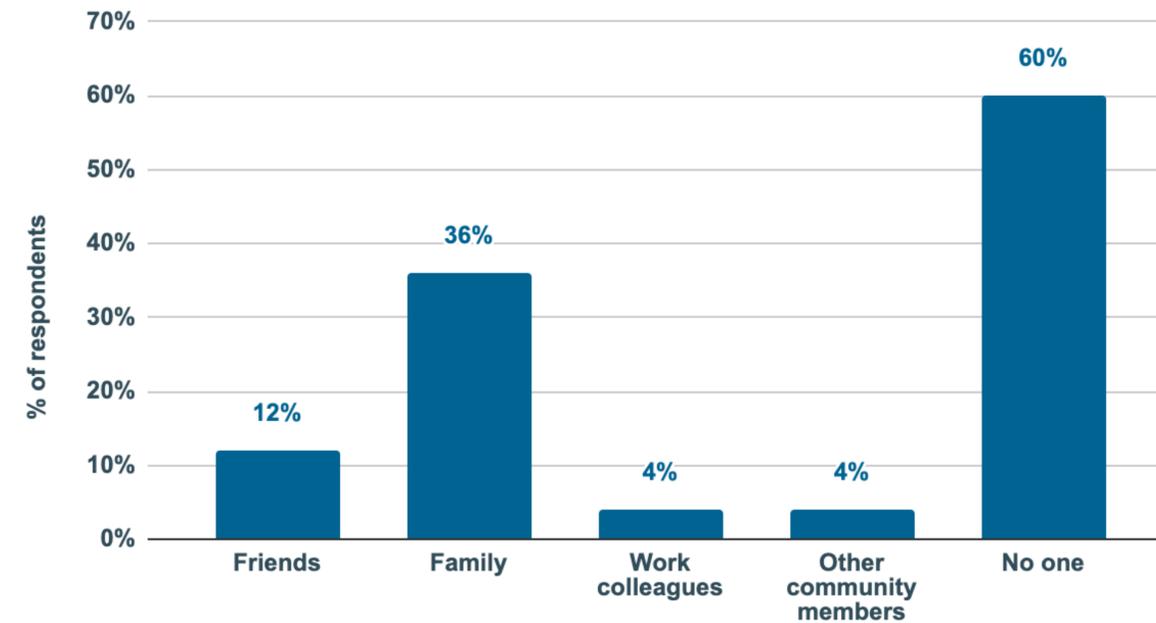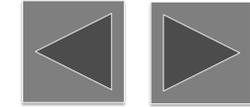
Perceived Advantages of Alcohol Use
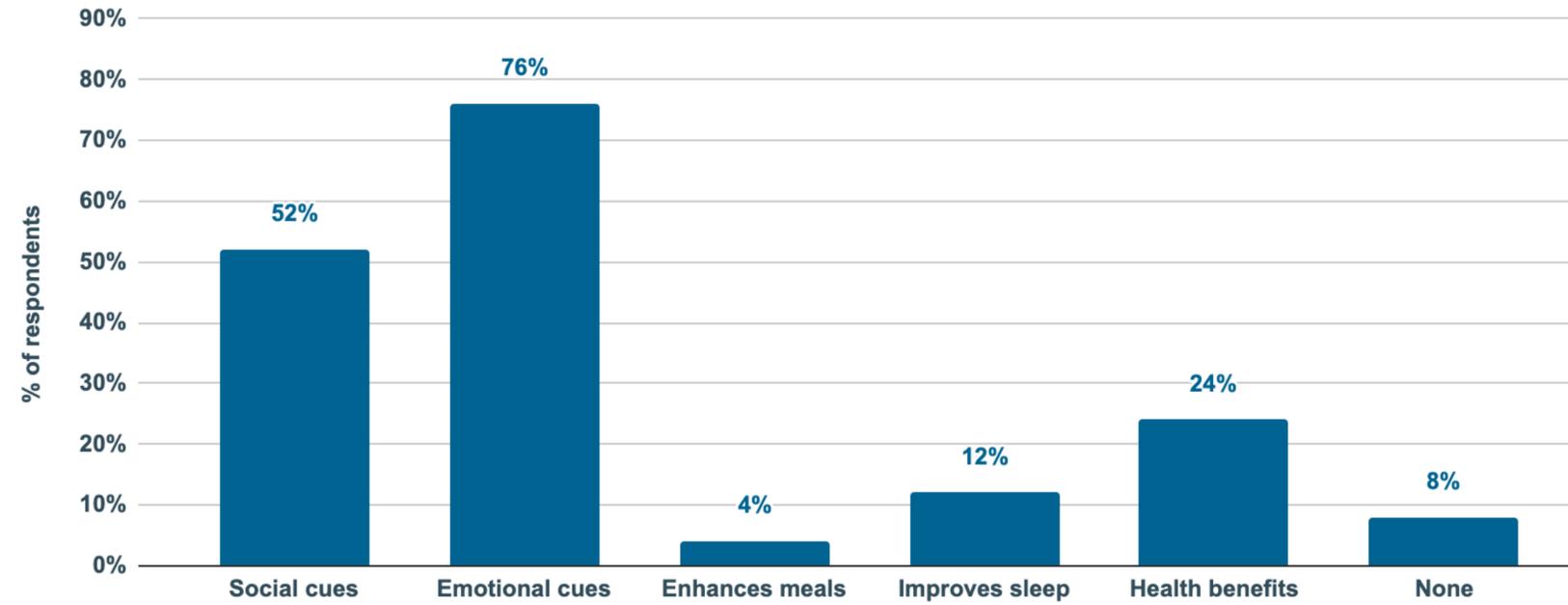
Perceived Disadvantages of Alcohol Use
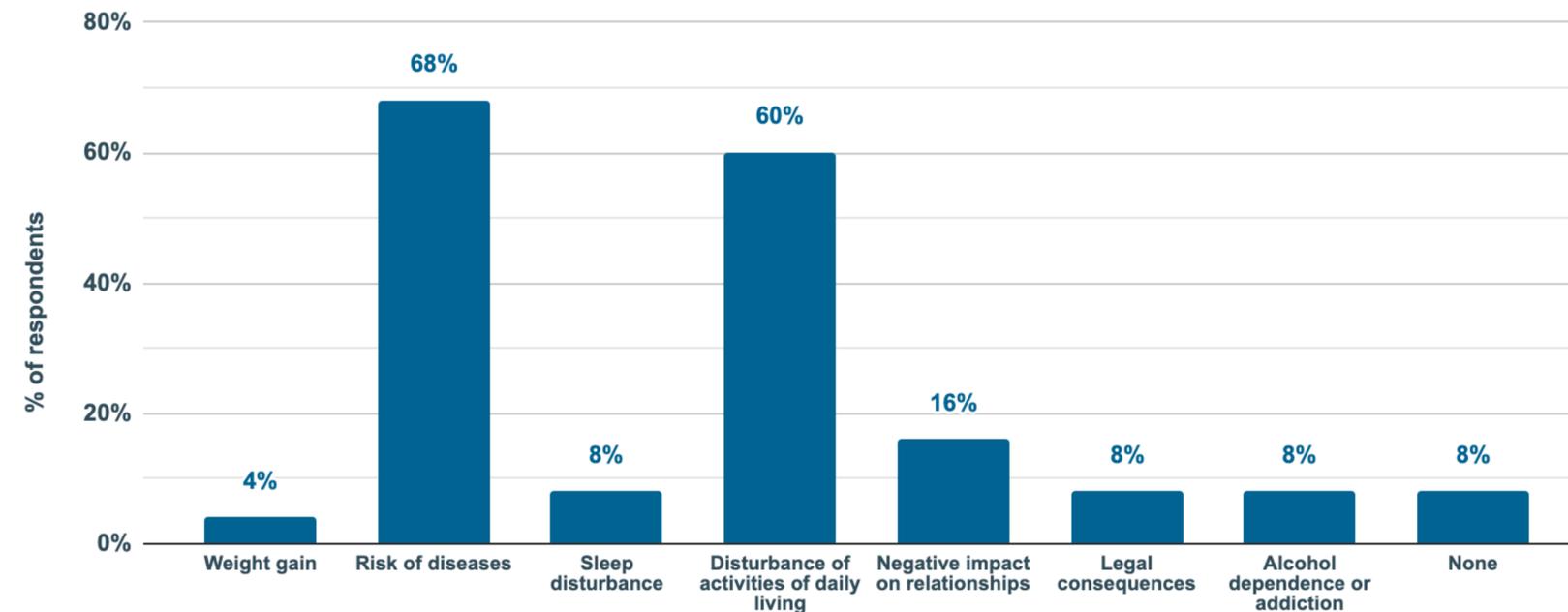
	All Subjects	All Male	All Female	Ages 18-49	Ages 50+
What makes it easy for you to drink? (For non-drinkers: what would make it easy for you to drink?)	N=25	N=12	N=13	N=5	N=20
Easy access (e.g. affordable, readily available)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Social cues: if others around me are drinking, ritual, etc.	21(84%)	9(75%)	12(92.31%)	5(100%)	16(80%)
Emotional cues: stress, boredom, etc (pain)	10(40%)	4(33.33%)	6(46.15%)	2(40%)	8(40%)
Personal cues: habit, food	5(20%)	2(16.67%)	3(23.08%)	2(40%)	3(15%)
Location cues: being at home	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Health benefit	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)
What makes it difficult for you to drink? (For non-drinkers: what would make it difficult for you to drink?)	N=25	N=12	N=13	N=5	N=20
Low access/lack of money (i.e. not affordable)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Fear of negative judgements	2(8%)	1(8.33%)	1(7.69%)	1(20%)	1(5%)
Not being around people you usually drink with	5(20%)	1(8.33%)	4(30.77%)	1(20%)	4(20%)
Not having food you usually drink with	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
ADL/daily responsibilities	11(44%)	8(66.67%)	3(23.08%)	2(40%)	9(45%)
Health consequences	5(20%)	3(25%)	2(15.38%)	0(0%)	5(25%)
Legal consequences (i.e. DUI)	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)
Time of day	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)
Upbringing	2(8%)	1(8.33%)	1(7.69%)	0(0%)	2(10%)
Not feeling well (physically or emotionally)	5(20%)	4(33.33%)	1(7.69%)	3(60%)	2(10%)
Nothing	1(4%)	0(0%)	1(7.69%)	0(0%)	1(5%)
What are the advantages of drinking?	N=25	N=12	N=13	N=5	N=20
Social cues: Provides opportunity to socialize with others, gain others' approval	13(52%)	5(41.67%)	8(61.54%)	3(60%)	10(50%)
Emotional cues: Helps me destress, be less bored	19(76%)	9(75%)	10(76.92%)	4(80%)	15(75%)
Makes food taste better/meals feel more complete	1(4%)	0(0%)	1(7.69%)	0(0%)	1(5%)
Makes me sleep better	3(12%)	3(25%)	0(0%)	0(0%)	3(15%)
Health benefits	6(24%)	3(25%)	3(23.08%)	1(20%)	5(25%)
None	2(8%)	1(8.33%)	1(7.69%)	0(0%)	2(10%)
What are the disadvantages of drinking?	N=25	N=12	N=13	N=5	N=20
Weight gain	1(4%)	1(8.33%)	0(0%)	1(20%)	0(0%)
Risk of diseases	17(68%)	8(66.67%)	9(69.23%)	5(100%)	12(60%)
Sleep disturbance	2(8%)	0(0%)	2(15.38%)	0(0%)	2(10%)
Disturbance of ADLs (i.e. hangover, fall)	15(60%)	9(75%)	6(46.15%)	3(60%)	12(60%)
Negative impacts on relationships	4(16%)	2(16.67%)	2(15.38%)	1(20%)	3(15%)
Legal consequences (i.e. DUI)	2(8%)	2(16.67%)	0(0%)	0(0%)	2(10%)
Alcohol dependence/addiction	2(8%)	1(8.33%)	1(7.69%)	0(0%)	2(10%)
None	2(8%)	1(8.33%)	1(7.69%)	0(0%)	2(10%)
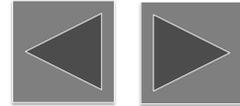
	All Subjects	All male	All Female	Ages 18-49	Ages 50+
Who disapproves of you drinking? (For non-drinkers: who would disapprove of you drinking?)	N=25	N=12	N=13	N=5	N=20
Friends	3(12%)	1(8.33%)	2(15.38%)	1(20%)	2(10%)
Family	9(36%)	4(33.33%)	5(38.46%)	2(40%)	7(35%)
Work colleagues	1(4%)	0(0%)	1(7.69%)	0(0%)	1(5%)
Other members of the community	1(4%)	0(0%)	1(7.69%)	0(0%)	1(5%)
No one	15(60%)	7(58.33%)	8(61.54%)	2(40%)	13(65%)
Who approves of you drinking? (For non-drinkers: who would approve of you drinking?)	N=25	N=12	N=13	N=5	N=20
Friends	15(60%)	8(66.67%)	7(53.85%)	5(100%)	10(50%)
Family	3(12%)	1(8.33%)	2(15.38%)	0(0%)	3(15%)
Work colleagues	4(16%)	2(16.67%)	2(15.38%)	1(20%)	3(15%)
Other members of the community	3(12%)	1(8.33%)	2(15.38%)	1(20%)	2(10%)
No one	8(32%)	3(25%)	5(38.46%)	0(0%)	8(40%)
How likely is it that if you keep drinking, you will get some disease or worsen your current disease?	N=24	N=11	N=13	N=5	N=19
Very likely	9(37.5%)	3(27.27%)	6(46.15%)	4(80%)	5(26.32%)
Somewhat likely	7(29.17%)	5(45.45%)	2(15.38%)	1(20%)	6(31.58%)
Not at all likely	8(33.33%)	3(27.27%)	5(38.46%)	0(0%)	8(42.11%)
Do you think God or other supernatural deity/entity wills individuals to have liver disease?	N=25	N=12	N=13	N=5	N=20
Yes	1(4%)	1(8.33%)	0(0%)	0(0%)	1(5%)
No	12(48%)	4(33.33%)	8(61.54%)	3(60%)	9(45%)
Maybe	12(48%)	7(58.33%)	5(38.46%)	2(40%)	10(50%)
Are there any cultural rules or taboos against drinking? (e.g. Aboriginal culture, social circles)	N=25	N=12	N=13	N=5	N=20
Yes	3(12%)	2(16.67%)	1(7.69%)	0(0%)	3(15%)
No	19(76%)	9(75%)	10(76.92%)	5(100%)	14(70%)
Maybe	3(12%)	1(8.33%)	2(15.38%)	0(0%)	3(15%)
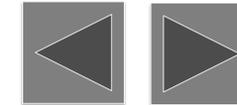
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