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Alcohol-related behaviours, beliefs, and knowledge regarding cancer risk related to alcohol in the New South Wales LGBTQ+ community

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Alcohol-related behaviours, beliefs, and knowledge regarding cancer risk related to alcohol in the New South Wales LGBTQ+ community

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Participants

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Contributors

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We acknowledge the traditional custodians of the lands in NSW, on which the work for this report was undertaken, and pay our respects to Elders past and present. NDARC and ACON are located on the unceded territories of the Gadigal and Bedegal peoples, who are the Traditional Owners of these lands.

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List of Abbreviations

ARR	adjusted rate ratio
AUDIT	Alcohol Use Disorders Identification Test
CI	confidence interval
Cis	cisgender
DMQ-R	Drinking Motives Questionnaire-Revised
IQR	interquartile range
LGBTQ+	lesbian, gay, bisexual, transgender, queer, and other diverse gender and sexual identities
NDARC	National Drug and Alcohol Research Centre
NDSHS	Nation Drug Strategy Household Survey
NHMRC	National Health and Medical Research Council
NSW	New South Wales
PL3	Private Lives 3 survey
SD	standard deviation
SODA+	Study Of Drinking and health Among LGBTQ+ people
Trans	transgender

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Executive Summary

People who identify as lesbian, gay, bisexual, transgender, queer, and other diverse gender and sexual identities (LGBTQ+) are a priority for cancer control because of interactions with cancer risk factors and lower participation in cancer screening and services. There is also limited sexuality and gender inclusive data concerning lifestyle behaviours that contribute to cancer risk among people who identify as LGBTQ+.

The Study Of Drinking and health Among LGBTQ+ people (SODA+) is a cross-sectional survey of sexuality and/or gender diverse adults who reside in New South Wales (NSW). Over a 4-week period from November to December 2022, participants were recruited via social media advertisements and word-of-mouth to complete an online questionnaire. The results of this study are not representative of all LGBTQ+ adults in NSW.

Sample Characteristics

Nearly three-in-five (58%) of the 1,499 participants identified as female (55% cisgender female, 3% transgender female) and one-in-four (26%) participants identified as male (22% cisgender male, 4% transgender male). Around one-in-six (17%) participants identified as non-binary. Half of the participants identified as gay or lesbian, 30% identified as bisexual, and 20% identified as queer, pansexual, asexual, heterosexual, or another term. The average age was 34 years, with 40% of cisgender participants and 66% of transgender and non-binary participants being aged 18-29 years. Most participants (79%) were born in Australia, with 34% living in regional, rural, or remote areas of NSW. Around one-in-ten (12%) spoke a language other than English at home. Over half (55%) were currently in a relationship or relationships. Nearly three-in-five (59%) had a Bachelor's degree or higher level of education, and around half (51%) had an annual income of AUD$65,000 or more.

Alcohol consumption

Most participants (90%) had consumed alcohol in the past 12 months. Nearly half (47%) of these participants consumed alcohol weekly or more often. About a quarter (24%) of these participants consumed more alcohol than the National Health and Medical Research Council (NHMRC) weekly guideline (< 11 standard drinks in a typical week) in the past 12 months. Around three-in-ten (31%) participants who had consumed alcohol in the past 12 months consumed more alcohol than the NHRMC single-day guideline (< 5 standard drinks on any one day). Around one-in-seven (15%) participants who had consumed alcohol in the past 12 months consumed alcohol more than the weekly and single-day NHMRC guidelines. Most participants perceived their own alcohol use to be less than that of other adults (59%), other LGBTQ+ adults (69%), and other same-aged LGBTQ+ adults in NSW (65%).

Around half (51%) of the participants who had consumed alcohol in the past 12 months had an Alcohol Use Disorders Identification Test

(AUDIT) score that was considered moderate to very high risk. Participants who scored in the very high-risk AUDIT category compared to low risk were more likely to be aged 40-49 years ($p<0.001$) and more likely to be aged 50-59 years ($p=0.01$) than to be aged 18-24 years. Participants who scored in the moderate risk AUDIT category compared to low risk were less likely to be transgender male ($p=0.04$) and less likely to be non-binary ($p<0.001$) than to be cisgender male. Participants who scored in the moderate risk ($p<0.001$), high risk ($p<0.001$), or very high-risk ($p=0.03$) categories compared to low risk were less likely to be cisgender female than to be cisgender male.

Perceived health risks of alcohol

Around two-in-five (39%) participants who exceeded the NHMRC single-day guideline but not the weekly guideline thought that their alcohol use was harmful to their health. Around two-in-three (66%) participants who exceeded the NHMRC weekly guideline but not the single-day guideline thought that their alcohol use was harmful. Around three-in-four (76%) participants who exceeded both NHMRC guidelines thought that their alcohol use was harmful.

When participants were asked to list health conditions that they thought were associated with alcohol consumption, the three most common conditions named were liver conditions (75%), heart conditions (35%), and cancer (33%). When subsequently prompted with a list of health conditions and asked to select those that they thought were associated with alcohol consumption, liver disease (96%), depression and anxiety (91%), and being overweight or obese (88%) were the most common ones selected. Cancer was the ninth most common health condition to be selected, with two-in-three participants (66%) selecting cancer. Around one-in-three participants (34%) were completely unaware that cancer is a health risk of alcohol consumption. Participants who had unprompted awareness of alcohol-related cancer risk rather than prompted awareness were more likely to have exceeded the weekly guideline than to have consumed alcohol within the guidelines ($p=0.02$), more likely to be aged 25-59 years than to be aged 18-24 years ($p<0.05$), and more likely to be cisgender female than to be cisgender male ($p<0.05$).

Among participants who were aware of alcohol-related cancer risk, liver cancer was the most commonly cited type of cancer caused by alcohol consumption (85%), followed by stomach cancer (77%). Awareness of other cancers of the digestive tract was also common (i.e., colon and rectal, mouth and throat; 56%). Awareness of the association between breast or chest cancer and alcohol consumption (22%) was cited less often than several other cancers with less established evidence with regards to the role of alcohol, including pancreas (57%), bladder (56%), brain (42%), and thyroid (29%).

Alcohol-related negative consequences

More than two thirds of participants who consumed alcohol in the past 12 months

reported they felt drunk (67%) and had a headache or experienced nausea (70%) while drinking within the past 12 months. Around half of participants who consumed alcohol in the past 12 months reported getting into a verbal argument (53%), having sex they regretted (48%), or physically injuring themselves (47%) in their lifetime. Compared to participants aged 18-24 years, experience of alcohol-related negative consequences was more common among participants aged 25-29 years ($p=0.02$), participants aged 30-39 years ($p<0.001$), and participants aged 50-59 years ($p=0.01$). Additionally, experience of alcohol-related negative consequences was more common among participants who exceeded NHMRC guidelines compared to participants who consumed alcohol within guidelines ($p<0.01$).

Help seeking to reduce alcohol consumption

One-in-ten participants who consumed alcohol within NHMRC guidelines in the past 12 months thought about seeking help to reduce their alcohol use. Nearly two-in-five (37%) participants who exceeded NHMRC guidelines in the past 12 months thought about seeking help to reduce their alcohol use. Many participants (64-68%) who thought about seeking help to reduce their alcohol consumption followed through and sought help, and most participants (84-91%) who sought help actually received help.

Among participants who consumed alcohol within NHMRC guidelines in the past 12 months but did not seek help to reduce alcohol consumption, the most common barriers to seeking help were thinking that they had reduced their alcohol without seeking help (68%), not perceiving their current alcohol use as being harmful (55%), and feeling embarrassed, ashamed, or judged about seeking help (22%). Among participants who exceeded NHMRC guidelines in the past 12 months but did not seek help to reduce alcohol consumption, the most common barriers to seeking help were thinking that they had reduced their alcohol without seeking help (43%), feeling embarrassed, ashamed, or judged about seeking help (36%), and not feeling ready to seek help (31%).

Among participants who consumed alcohol within NHMRC guidelines in the past 12 months and sought help to reduce alcohol consumption, the most common facilitators of seeking help were concerns about future health problems (62%), having health problems at the time when they sought help (42%), and wanting to improve their fitness (38%). Among participants who exceeded NHMRC guidelines in the past 12 months and sought help to reduce alcohol consumption, the most common facilitators of seeking help were concerns about future health problems (73%), wanting to improve their fitness (49%), and wanting to lose weight (41%).

Among participants who consumed alcohol within NHMRC guidelines in the past 12 months and sought help to reduce alcohol consumption, the most common methods of help sought were partners, friends, and/or family members (42%), one-to-one sessions

with a mental health professional (35%), and non-government websites (35%). Among participants who exceeded NHMRC guidelines in the past 12 months and sought help to reduce alcohol consumption, the most common methods of help sought were: one-to-one sessions with a mental health professional (42%), partners, friends, and/or family members (40%), and doctors (37%). Medications, specialist alcohol clinics/centres, and detox clinics/centres were the least common (≤12%) methods of help sought among all participants who had sought help to reduce their alcohol consumption.

Among all participants who had consumed alcohol in the past 12 months, the most common methods of help that would likely be used in the future were one-to-one sessions with a mental health professional (52% among those within NHMRC guidelines, 58% among those who exceeded guidelines), partners, friends, and/or family members (55%), and doctors (46% among those within NHMRC guidelines, 48% among those who exceeded guidelines). Detox clinics/centres (11%), medications (9%), and pharmacists (8%) were the least common methods of help that participants who consumed alcohol within NHMRC guidelines would use in the future. Telephone helplines (17%), detox clinics/centres (12%), and pharmacists (8%) were the least common methods of help that participants who exceeded guidelines would use in the future.

Conclusions

Our findings from this survey of LGBTQ+ adults in NSW suggests that there is an opportunity and a need to address harmful levels of alcohol consumption in this population to reduce alcohol-related health risks, particularly in cisgender men and those aged 40+ years.

Knowledge around alcohol-related cancer risk in the LGBTQ+ community needs improvement, especially among young adults. Additionally, there is a need to increase awareness in the LGBTQ+ community regarding the types of cancer that are associated with alcohol consumption. In particular, there are some common cancer types that our participants had low awareness of, such as breast/chest cancer.

Raising awareness about what constitutes harmful levels of alcohol consumption, encouraging immediate action, and doing so in an empowering and non-judgemental manner may facilitate help-seeking behaviours to reduce alcohol consumption among LGBTQ+ people who drink at risky levels. Similarly, raising awareness of risky alcohol consumption levels among the broader community and encouraging health professionals to discuss alcohol consumption with LGBTQ+ people who may be at risk will support help seeking behaviours among LGBTQ+ people who drink at risky levels.

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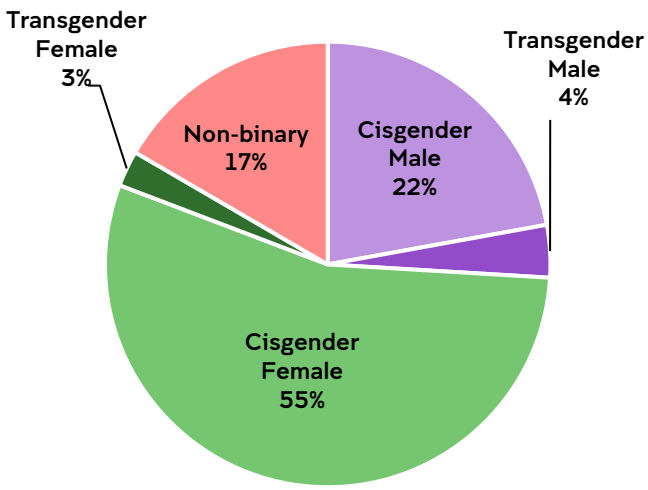
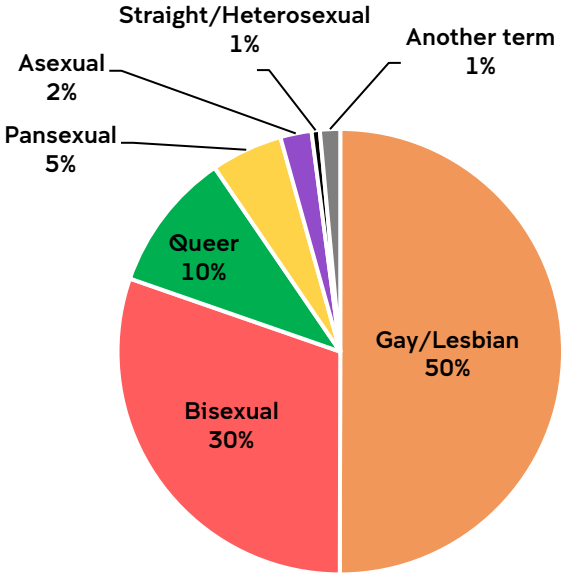
Infographic summary

1,499 participants

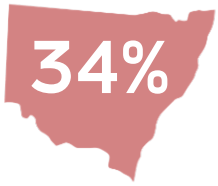
34 years average age





born in Australia

12% spoke a language other than English



living in regional, rural, or remote NSW

55% currently in relationship(s)

had Bachelor's or higher level of education

51% had $65,000+ annual income

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99%
consumed alcohol in their lifetime

90%
consumed alcohol in past 12 months

10%
consumed alcohol **daily or almost daily**

31%
consumed alcohol **5+ drinks** on a typical drinking day

exceeds NHMRC single-day guideline !

47%
consumed alcohol **at least once a week**

24%
consumed alcohol **11+ drinks** in a typical week

most common among participants aged **40-69 years**

exceeds NHMRC weekly guideline !

9%
had a very high-risk AUDIT score

High-risk AUDIT scores were most common among participants aged **40-59 years**

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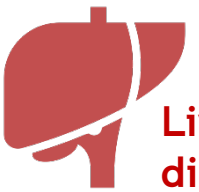
Most common health risks perceived to be associated with alcohol:



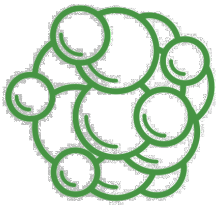
Liver disease

Depression and anxiety

Being obese or overweight

66%

were aware that alcohol increases risk of cancer



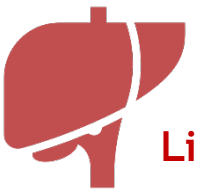
33%

were able to name cancer as an alcohol-related health risk without being prompted

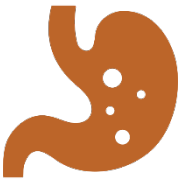
most common among participants who **exceeded weekly guideline**

most common among participants aged **25-59 years**

Most common cancers perceived to be associated with alcohol:



Liver



Stomach

Pancreas

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10%
of participants who drank within NHMRC guidelines thought about seeking help to reduce their alcohol use

37%
of participants who exceeded NHMRC guidelines thought about seeking help to reduce their alcohol use

64%
of participants who drank within NHMRC guidelines and thought about seeking help actually went to seek help

68%
of participants who exceeded NHMRC guidelines and thought about seeking help actually went to seek help

84%
of participants who drank within NHMRC guidelines and sought help actually received help

91%
of participants who exceeded NHMRC guidelines and sought help actually received help

Common barriers to seeking help among participants who exceeded NHMRC guidelines:

Believed that they've reduced their drinking without seeking help

Felt embarrassed, ashamed, or judged about seeking help

Did not feel ready to seek help

Common facilitators of seeking help:

Concerned about future health problems

To improve fitness

To lose weight

Common methods of help that have been used or would be likely to use in the future:

Doctors and/or mental health professionals

Partner(s), friends, and/or family

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1. Background & Methods

1.1. Background

In Australia, LGBTQ+ (lesbian, gay, bisexual, transgender, queer, and other diverse gender and sexual identities) people are a priority population for cancer control[1]. This is because of interactions with cancer risk factors (higher smoking and alcohol consumption[2]) and lower participation in cancer screening and services [3, 4]. The evidence base on LGBTQ+ inequities in cancer control is growing, but there is currently limited sexuality and gender inclusive data concerning lifestyle behaviours that contribute to cancer risk among LGBTQ+ people.

Alcohol consumption is a well-established modifiable risk factor for many types of cancer, including cancers of the throat and mouth, liver, and breast/chest[5-7]. Nationally and internationally, people who identify as LGBTQ+ tend to have higher rates of alcohol consumption and riskier patterns of consumption compared to the general population[2, 8-11]. These risky patterns of alcohol consumption are likely due to reasons such as coping with stress from interpersonal and societal discrimination, experiences of victimisation, as well as cultural expectations to drink within the LGBTQ+ community and alcohol industry targeting[11-13]. Among LGBTQ+ people who drink at risky levels, common reasons for not seeking help to reduce alcohol consumption include stigma, discrimination, and lack of LGBTQ-specific knowledge from healthcare providers[14-16]. However, this area is still relatively under-researched, with a lack of studies that examine motivations for alcohol consumption, both barriers to and facilitators of seeking help to reduce alcohol consumption, and methods of help that would likely be used among LGBTQ+ people.

Compounding these alcohol-related cancer risks, people who identify as LGBTQ+ often have lower screening rates for cancer compared to people who are cisgender and heterosexual[3, 4, 17], likely leading to later diagnoses and poorer outcomes. Barriers to cancer screening unique to the LGBTQ+ community include lack of knowledge among LGBTQ+ people and health professionals around LGBTQ-inclusive cancer screening guidelines, perceived discrimination or fear of discrimination from providers, and lack of gender-affirming care by health professionals[18]. This is exacerbated by a lack of inclusive and representational messaging in public health campaigns and information. For example, in published screening guidelines, mainstream breast cancer messaging is targeted towards cisgender women and is not inclusive of transgender men and women[18]. Additionally, public awareness of alcohol as a risk factor for cancer is generally poor, particularly when unprompted (i.e., when asked to name health conditions related to alcohol without cues or suggestions as to potential conditions)[19-21]. Knowledge around alcohol as a risk factor for specific

types of cancer, such as breast/chest cancer, is also poor[22]. Though alcohol- and screening-related cancer risks in the LGBTQ+ community are well-established, it is unclear whether LGBTQ+ people are typically aware that alcohol is a risk factor for cancer.

In sum, research around alcohol-related beliefs, knowledge of alcohol-related health risks, and alcohol-related help-seeking behaviours in the LGBTQ+ community is currently lacking. There is a need for research that can be used to inform campaigns aimed at improving cancer screening rates as well as encouraging health behaviours that lower risk of cancer in the LGBTQ+ community.

1.2. Aims

We aimed to investigate the following among a sample of adults who identify as lesbian, gay, bisexual, transgender, queer, or of diverse gender and/or sexual identity (LGBTQ+):

1) Alcohol use patterns, including single occasion and lifetime risky consumption.
2) Perception of own alcohol use in relation to others in the community.
3) Common motivations for drinking alcohol.
4) Awareness of long-term harms of alcohol use (e.g., cancer).
5) Types of cancer perceived to be most/least commonly associated with alcohol.
6) Perceptions of health harms associated with different levels of alcohol use and knowledge of current Australian guidelines to reduce health risks from drinking alcohol.
7) Types of commonly experienced alcohol-related negative consequences.
8) Help seeking to reduce alcohol use.
9) Common barriers to and motivations for alcohol-related help seeking.

Additionally, we investigated whether these aspects were associated with age, gender, and sexual identity.

1.3. Methods

1.3.1. Participants and Data

We conducted a cross-sectional online survey of LGBTQ+ adults, with recruitment beginning on November 24th 2022 and ending on December 16th 2022. Participants were eligible if they were aged 18 years or older, identified as LGBTQ+, and resided in NSW at the time of the survey. Recruitment was carried out via paid advertisements on social media (Facebook, Instagram), social media posts on official National Drug and Alcohol Research Centre (NDARC) and ACON accounts, and word of mouth. Due to a low response rate from men in the first week, we adjusted the targeting of recruitment advertisements on Facebook and Instagram to prioritise men. Paid advertisements consisted of stock images of LGBTQ+ adults accompanied by the text: "LGBTQ+ person living in NSW? We are looking for LGBTQ+ people to complete an online survey about alcohol consumption to help guide an ACON campaign." Variations of the advertisement replaced the phrase "LGBTQ+ person" with specific gender identities (Gay, bisexual, or queer man; Lesbian, bisexual, or queer woman; Trans or gender diverse person).

Potential participants who accessed the survey link were provided with information and invited to participate in a study that examines alcohol behaviours and beliefs regarding alcohol-related harm among the LGBTQ+ community, titled 'Study Of Drinking and health Among LGBTQ+ people' (SODA+). While one of the key aims was around cancer risk knowledge, we did not mention cancer in the study information to avoid priming participants with the knowledge prior to completing the survey. Indication of consent to participate was required before participants could proceed to the survey. As reimbursement for their time, participants were given the opportunity upon completion of the survey to enter a prize draw to win one of five Giftpay vouchers valued at $AUD100 each.

Of the 1,562 people who completed the survey, 63 provided invalid or suspicious responses and were thus excluded, resulting in a final sample size of 1,499 participants. The median time to complete the survey was 15 minutes.

Ethics approval was provided by the UNSW Human Research Ethics Committee (HC220721) and ACON Research Ethics Committee (RERC202221).

1.3.2. Measures

The questionnaire was developed by researchers at NDARC in collaboration with ACON Health and Cancer Institute NSW (see Appendix A for full questionnaire). Demographic questions for age, Aboriginal and/or Torres Strait Islander identity, country of birth, language(s) spoken other than English, highest qualification, annual income, relationship status, and remoteness of residence

were derived from common measures used in Australian national surveys (e.g., National Drug Strategy Household Survey [NDSHS]).

1.3.2.1. Gender identity

We used the recommended community indicators for research developed by ACON Health measure gender (Man or male; Woman or female; Non-binary; I use a different term [specify]) and sex assigned at birth (Male; Female; Another term [specify])[23]. For the purposes of statistical analyses, we created a recoded gender variable to combine gender and sex assigned at birth information, in addition to responses of 'Another term'. The recoded gender identity variable consisted of the following categories:

- Cisgender male:
    - Participants who selected 'Man or male' for gender and 'Male' for sex assigned at birth.
- Transgender male:
    - Participants who selected 'Man or male' for gender and 'Female' for sex assigned at birth.
    - Participants who selected 'Another term' for gender, specified a gender identity such as "trans male" or "male", and selected 'Female' for sex assigned at birth.
- Cisgender female:
    - Participants who selected 'Woman or female' for gender and 'Female' for sex assigned at birth.
- Transgender female:
    - Participants who selected 'Woman or female' for gender and 'Male' for sex assigned at birth.
    - Participants who selected 'Another term' for gender, specified a gender identity such as "trans female" or "female", and selected 'Male' for sex assigned at birth.
- Non-binary:
    - Participants who selected 'Non-binary' for gender.
    - Participants who selected 'Another term' for gender and specified at least one gender identity that was not binary such as "genderfluid".

1.3.2.2. Sexual identity

We used the recommended community indicators for research developed by ACON to measure sexual identity (Straight or heterosexual; Gay or lesbian; Bisexual; Another term [specify]; Don't know)[23]. There were a large number of responses for 'Another term' that specified "queer",

"pansexual", and "asexual", so we decided to create a recoded sexual identity variable that included these specific categories. For the purposes of the statistical analyses, if participants indicated multiple sexual identities and the identity that was named first was an existing category, they were recoded as such (e.g., 'Another term [asexual aromantic]' was recoded as 'Asexual', 'Another term [bisexual/pan/queer]' was recoded as 'Bisexual'). For the remaining identities where there were insufficient responses in order to form additional categories of appropriate size for statistical comparison, responses were not recoded from 'another term' (e.g., 'Another term [demisexual]' remained as 'Another term').

1.3.2.3. Alcohol consumption

To examine alcohol use, we used the Alcohol Use Disorders Identification Test (AUDIT)[24]. AUDIT items for quantity were adjusted so that it was possible to measure against Guideline 1 of the National Health and Medical Research Council (NHMRC) 2020 Australian guidelines to reduce health risks from drinking alcohol (no more than 10 standard drinks a week and no more than 4 standard drinks on any one day, where one standard drink is 10g of alcohol)[25]. A categorical variable was created to capture different levels of alcohol use against Guideline 1, consisting of: no alcohol use in the past 12 months, within NHMRC guidelines (< 5 standard drinks on a typical drinking day and < 11 standard drinks in a typical week), exceeded single-day guideline only (≥ 5 standard drinks on a typical drinking day and < 11 standard drinks in a typical week), exceeded weekly guideline only (< 5 standard drinks on a typical drinking day and ≥ 11 standard drinks in a typical week), and exceeded both guidelines (≥ 5 standard drinks on a typical drinking day and ≥ 11 standard drinks in a typical week).

1.3.2.4. Motivations for using alcohol

To examine motivations for using alcohol, we adapted the Drinking Motive Questionnaire-Revised (DMQ-R)[26] with additional items added that were relevant to the LGBTQ+ community and adults in the Australian context. These were: to help deal with stress/anxiety, because friends drink, because partner(s) drink, pressure from partner(s), because it is expected by others in the LGBTQ+ community, to express gender/sexual identity, because they like to drink when using tobacco, and because they like to drink when using other substances excluding tobacco. A score for each of the DMQ-R scales (social, enhancement, coping, conformity) was calculated by summing the items within each scale (range for each item 1-5, range for each scale 5-25; for information around items in each scale see Section 2.4.1).

1.3.2.5. Beliefs about own alcohol consumption

To examine beliefs around alcohol use levels in the community, we created measures on whether participants thought their alcohol use was more, less, or about the same as: 1) adults in NSW, 2) adults in the NSW LGBTQ+ community, and 3) adults in the NSW LGBTQ+ community who are the same as the participant. We also adapted items from the NDSHS that asked whether participants thought that their alcohol consumption was harmful, beneficial, or neither, as well as items that examined participant knowledge of NHMRC guidelines.

1.3.2.6. Knowledge of health risks associated with alcohol

To examine participants' knowledge of health risks associated with alcohol, participants were first presented with a free-text question where they could name the health conditions that they thought were related to excessive alcohol use. This was followed by a multiple response question with a list of health conditions (including some not related to alcohol use) that the participants were asked to select from which they thought were related to excessive alcohol use. From the health conditions selected, participants were then asked to rank the conditions in order of which they thought were most likely to result from excessive alcohol use. We created a three-level categorical variable for cancer awareness, consisting of: no awareness (did not mention cancer in free-text health risk question and did not select cancer in multiple response), prompted awareness (did not mention cancer in free-text health risk question but selected cancer in multiple response), and unprompted awareness (mentioned cancer in free-text health risk question).

To examine participants' perceptions of cancer types that are associated with alcohol, participants who had previously selected the 'cancer' option in the list of potential health conditions were presented with a list of different cancer types and asked to select the ones they thought were associated with excessive alcohol use. Similar to the health conditions, this was followed by a ranking question from the types of cancers they had selected.

1.3.2.7. Experience of alcohol-related negative consequences

To examine alcohol-related negative consequences, we asked participants whether they had experienced some common negative consequences based on literature and other existing measures (e.g., headaches, nausea, verbal/physical fights, injury to self/others; see Section 2.6 for full list)[27-30].

1.3.2.8. Help seeking to reduce alcohol consumption

To examine behaviours related to help-seeking to reduce alcohol use, we asked participants whether they had thought about seeking help, whether they had sought help (among those who

had ever thought about seeking help), and whether they had received help (among those who had ever sought help). We asked participants who had consumed alcohol in the past 12 months and had not sought help to indicate their perceived barriers to seeking help from a list. Among participants who had sought help, we asked them to indicate their perceived facilitators of seeking help from a list. Additionally, we asked participants who had ever consumed alcohol to indicate potential methods of help that they would use if they wanted to reduce their alcohol use from a list.

1.3.3. Analyses

We conducted all analyses using Stata 16.1[31] on unweighted data. We report descriptive statistics for all key measures, presented as percentages rounded to the nearest whole percentage and denominators provided. We present cross-tabulations by demographic (age group, gender, sexual identity) and alcohol use level in the past 12 months (none, within NHMRC guidelines, exceeds single-day guideline only, exceeds weekly guideline only, exceeds both guidelines) where appropriate. To protect participant confidentiality, we suppressed small cell sizes for cross-tabulations ($n \leq 5$ but not 0) and small cell sizes for percentage denominators ($n \leq 10$ but not 0).

For AUDIT and DMQ-R scores, we reported medians and interquartile ranges. To compare DMQ-R scores for each scale between participants who consumed alcohol within NHMRC guidelines and those who exceeded guidelines, we performed two-sample t-tests assuming unequal variances with an alpha level of 0.01 (due to there being eight comparisons, one for each of the four DMQ-R scales for within single-day guideline vs exceeded single-day guideline and one for each of the four DMQ-R scales for within weekly guideline vs exceeded weekly guideline).

We used multivariable multinomial logistic regression models to examine whether age group, gender, sexual identity, and, where appropriate, alcohol use level were associated with the following key outcomes (separate models for each outcome): 1) AUDIT risk level, 2) Alcohol-related cancer risk awareness, and 3) Experience of any alcohol-related negative consequence. Results are presented as adjusted risk ratios (ARR) with 95% confidence intervals (95% CIs) and rounded to 2 decimal places.

2. Findings

2.1. Demographics

Of the 1,499 participants, around half (54%; Table 1) were aged 30 years or older, with a mean age of 33.7 years (standard deviation [SD] = 12.3). Over half of the participants (54%) identified as cisgender female and half of the participants (50%) identified as gay or lesbian. Additional information around gender and sexual identity is reported below in Sections 2.1.1 and 2.1.2.

Very few participants (4%) identified as Aboriginal and/or Torres Strait Islander. The majority of participants (65%) resided in metropolitan New South Wales (NSW) and nearly four-in-five participants (79%) were born in Australia. Few participants (12%) spoke a language other than English at home. Over half of participants (59%) had a bachelor's degree or higher level of education, and half of participants (50%) had an annual income of $AUD65,000 or more. Two-in-five participants (40%) indicated that they were currently single and had never been married.

Table 1. Respondent demographics by gender.

Demographic	Total Sample (N = 1499)	Cis Male (n = 332)	Trans Male (n = 57)	Cis Female (n = 822)	Trans Female (n = 39)	Non-binary* (n = 249)
% Age group						
18-24 years	25	12	**53**	23	**41**	**42**
25-29 years	21	16	25	22	21	21
30-39 years	**28**	**35**	12	**26**	23	26
40-49 years	13	16	-	13	-	8
50-59 years	10	12	-	11	-	-
60-69 years	3	7	0	3	-	-
70-79 years	1	-	0	1	0	0
% Sexual Identity						
Straight/Heterosexual	1	0	-	0	-	-
Gay/Lesbian	**50**	**88**	21	**46**	23	24
Bisexual	30	9	**42**	37	**49**	**31**
Asexual*	2	0	-	2	-	6
Pansexual*	5	-	12	5	-	9
Queer*	10	2	14	8	-	27
Another term	1	-	0	1	-	3
% Aboriginal and/or Torres Strait Islander	4	3	-	5	-	6
% Remoteness of Residence						
Metropolitan	**65**	**77**	**51**	**63**	**72**	**60**
Regional	29	18	33	32	21	34

Demographic	Total Sample (N = 1499)	Cis Male (n = 332)	Trans Male (n = 57)	Cis Female (n = 822)	Trans Female (n = 39)	Non-binary* (n = 249)
Rural or remote	5	3	14	5	-	5
% Born in Australia	79	69	79	82	82	85
% Language other than English spoken at home	12	17	11	10	-	12
% Highest level of Education						
Less than Grade 12	3	3	11	2	0	-
Grade 12	16	12	25	15	26	24
Certificate or Diploma	21	23	**28**	20	**31**	19
Bachelor Degree	**30**	**30**	25	**31**	28	**31**
Graduate Diploma or Graduate Certificate	8	7	-	9	-	6
Postgraduate Degree	21	26	-	22	-	18
% Annual Income						
Nil or Negative	4	-	12	4	-	6
$1 - $41,599	**26**	13	**46**	24	**49**	**43**
$41,600 - $64,999	15	10	12	17	23	13
$65,000 - $90,999	20	20	11	22	-	18
$91,000 - $155,999	24	**37**	14	**25**	-	12
$156,000 or more	6	15	0	5	-	2
% Relationship Status						
Single, never married	**40**	41	**40**	37	**44**	**49**
Single, previously married	5	5	-	6	-	2
In relationship(s), but not married or living together	17	11	21	17	28	22
Married, de facto, or living with partner(s)	38	**43**	37	**40**	18	26

Note. Cis = cisgender. Trans = transgender. - = Percent suppressed due to small cell size (n≤5 but not 0). * = Includes participants who selected “Another term” for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. Presented as column percentages. Bolded cells indicate highest percentage of that column category. Responses that were missing, ‘Don’t know’, or ‘Prefer not to say’ were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.1.1. 'Another term' responses for gender identity

Around one-in-twenty participants (5%) indicated that they used another term to describe their gender identity that was different to those presented in the survey (Man or male; Woman or female; Non-binary). In the free-text response that was provided with the 'Another term' option, the three most common were "genderfluid" (n = 13; Figure 1), "genderqueer" (n = 8), and "trans" (n = 8).

Figure 1. Word cloud of text responses for gender among participants who selected "Another term".

2.1.2. 'Another term' responses for sexual identity

Around one-in-five participants (19%; Figure 2) indicated that they used a term to describe their sexual identity that was different to those presented in the survey (Straight or heterosexual; Gay or lesbian; bisexual). In the free-text response that was provided with the 'Another term' option, the three most common were "queer" (n = 154; Figure 2), "pansexual" (n = 77), and "asexual" (n = 38).

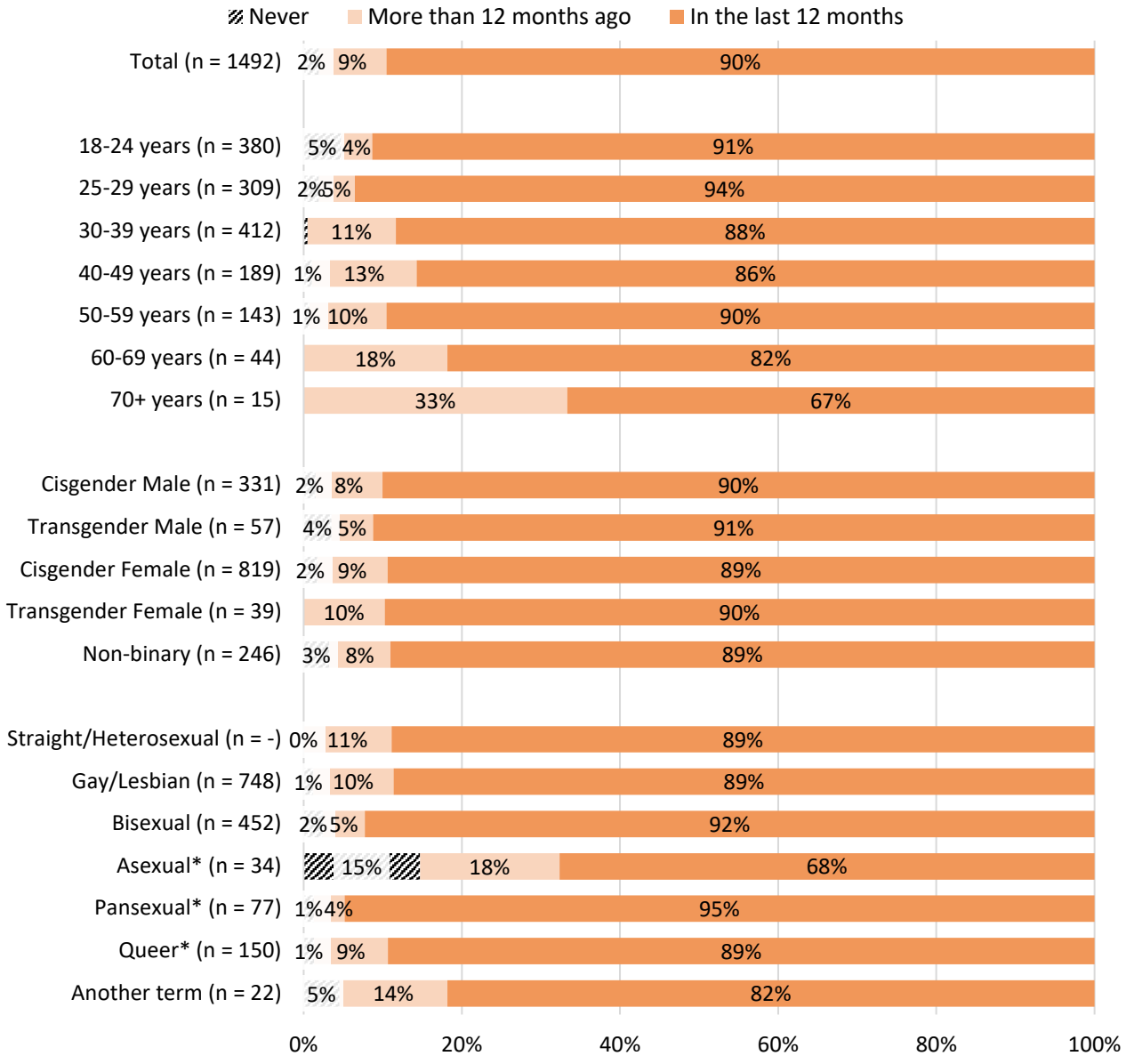
Figure 2. Word cloud of text responses for sexual identity among participants who selected "Another term".

2.2. Alcohol use patterns

2.2.1. Any alcohol consumption

Almost all participants had consumed alcohol in their lifetime (99%; Figure 3), with most participants having consumed alcohol within the past 12 months of the survey (90%).

Figure 3. Any alcohol consumption.



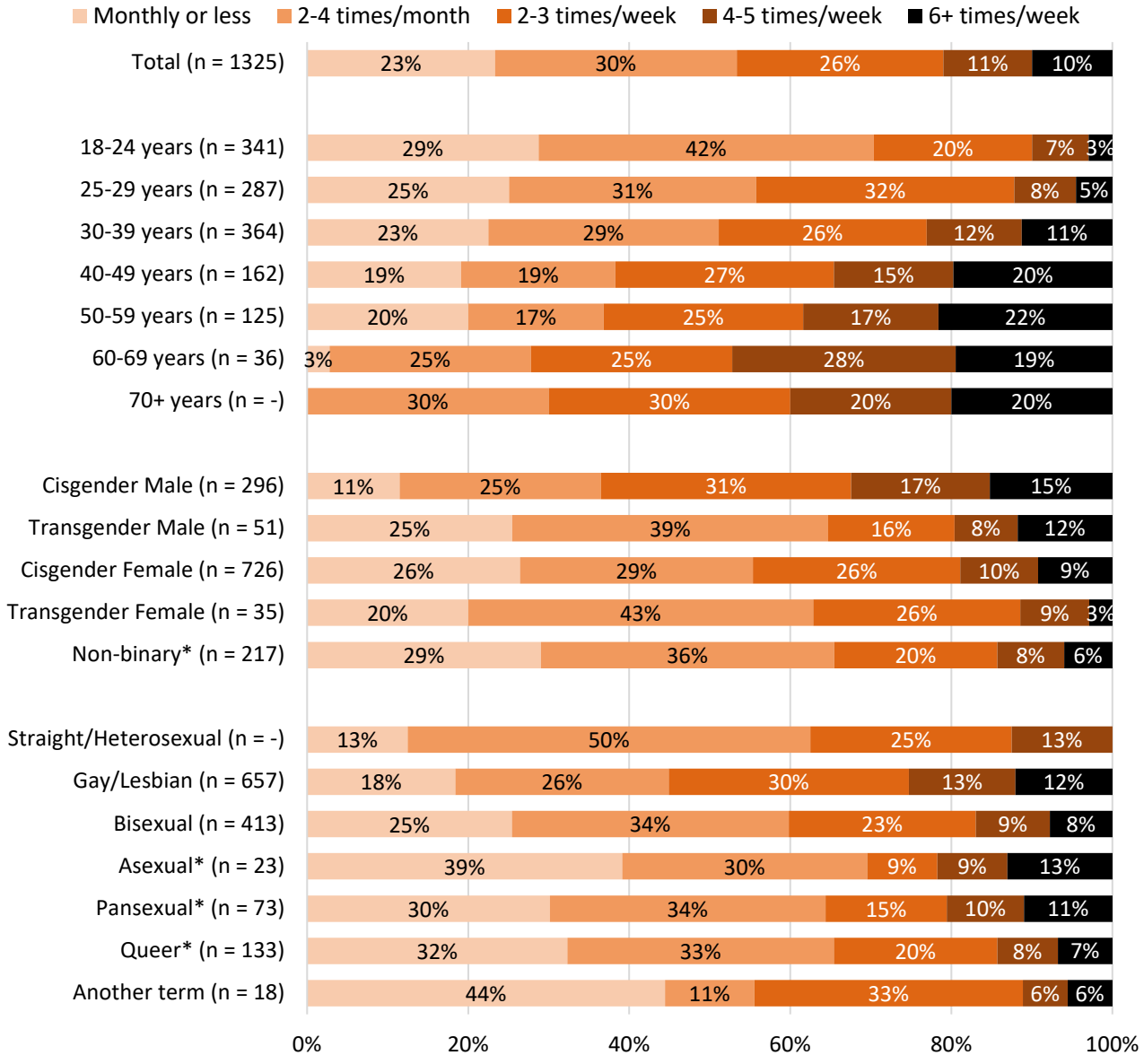
Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Responses that were missing, 'Don't know', or 'Prefer not to say' were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.2.2. Frequency of alcohol consumption

2.2.2.1. Frequency of any alcohol consumption

Less than half of participants who had consumed alcohol in the past 12 months (47%; Figure 4) reported drinking at least twice a week.

Figure 4. Frequency of any alcohol consumption among those who had consumed alcohol in the past 12 months.

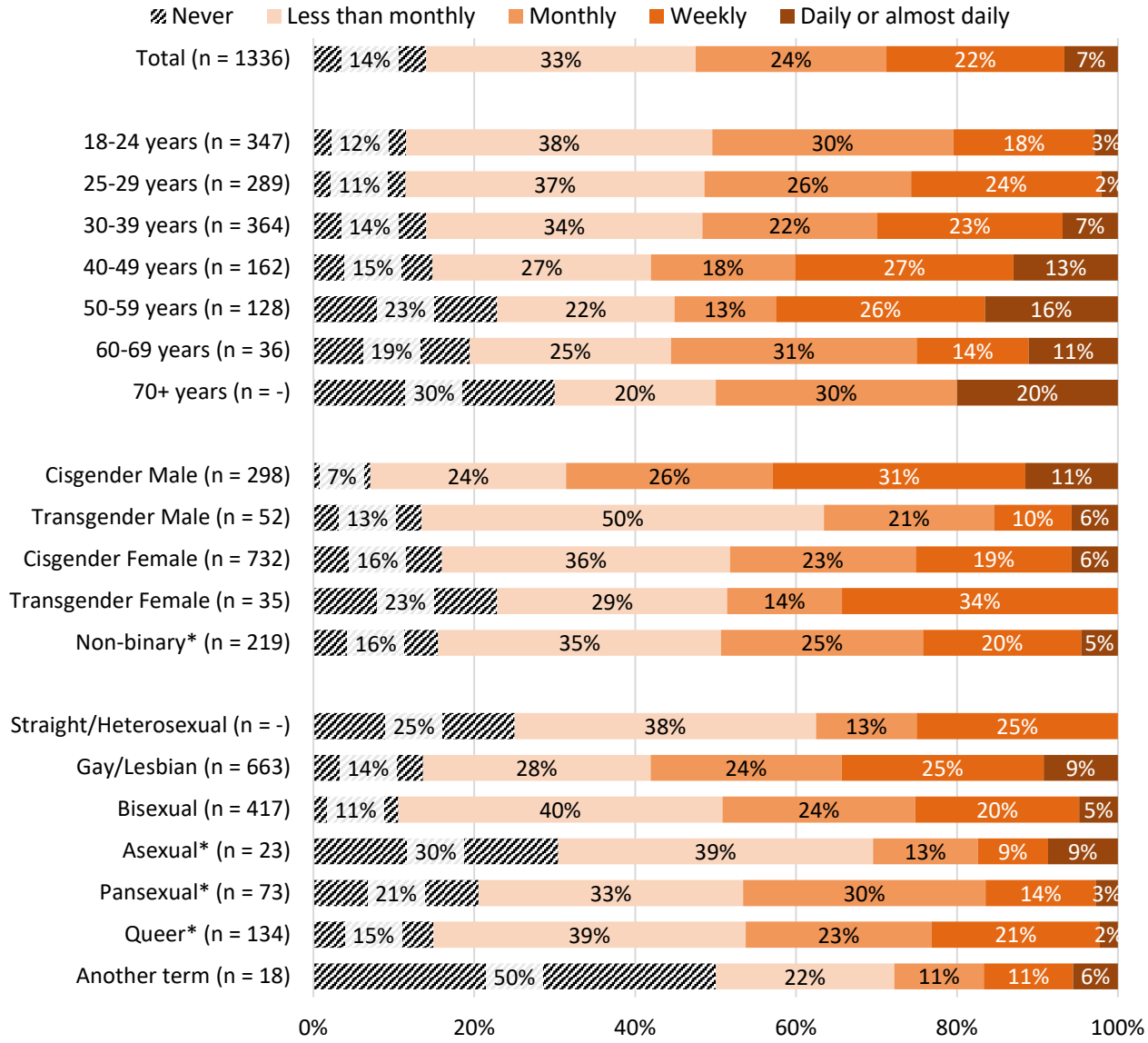


Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Responses that were missing, 'Don't know', or 'Prefer not to say' were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.2.2.2. Frequency of consuming four or more standard drinks on a single occasion

Around half of participants who had consumed alcohol in the past 12 months (53%; Figure 5) drank four or more standard drinks on a single drinking occasion on a monthly or more frequent basis.

Figure 5. Frequency of consuming four or more standard drinks on a single occasion among those who had consumed alcohol in the past 12 months.



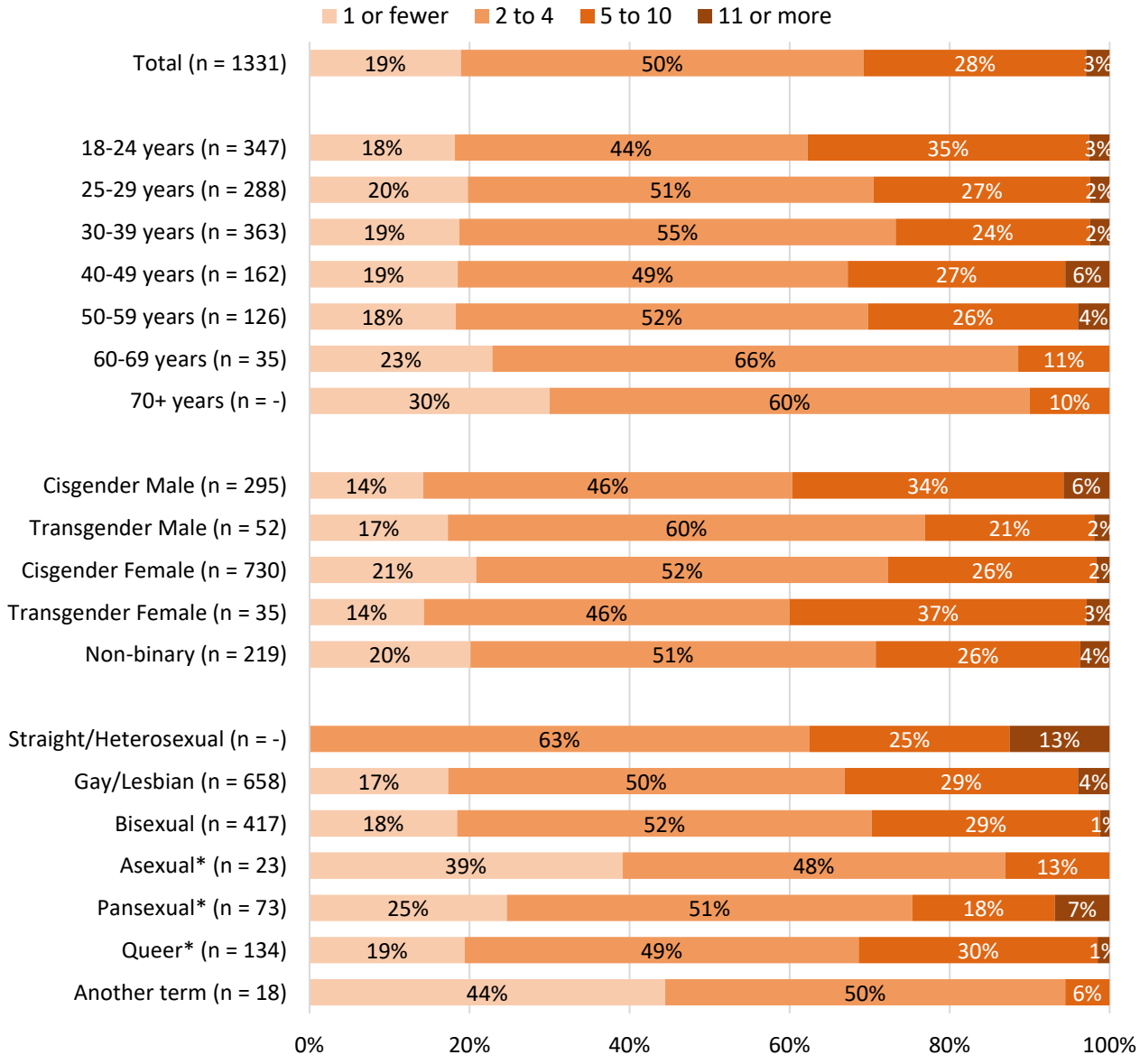
Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Responses that were missing, 'Don't know', or 'Prefer not to say' were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.2.3. Typical quantity of alcohol consumption

2.2.3.1. Quantity on a typical drinking day

Around one-in-three participants who had consumed alcohol in the past 12 months (31%; Figure 6) reported drinking five or more standard drinks on a typical drinking day.

Figure 6. Number of standard drinks consumed on a typical drinking day among participants who consumed alcohol in the past 12 months.

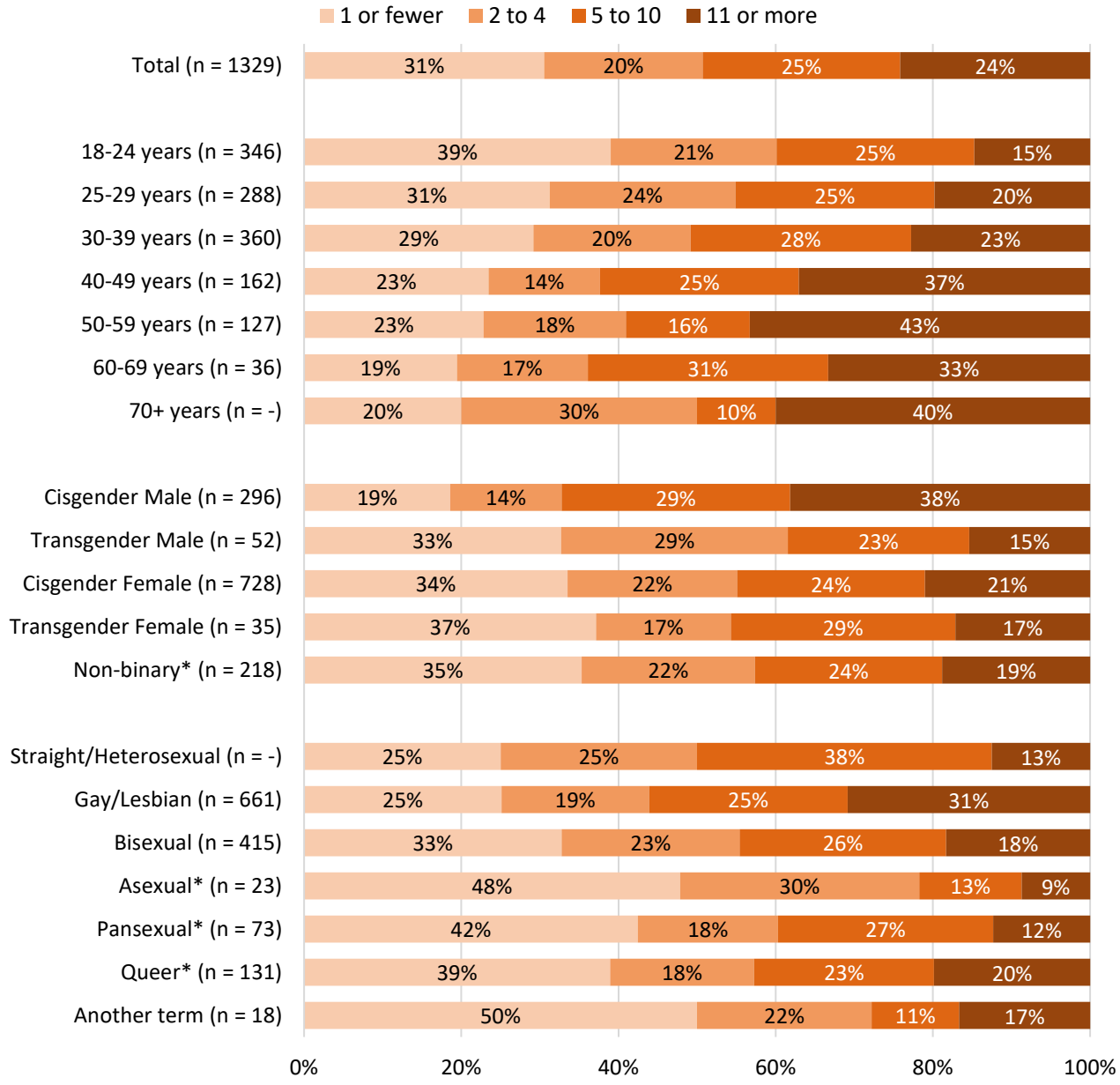


Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.2.3.2. Quantity in a typical week

Around one-in-four participants who had consumed alcohol in the past 12 months (24%; Figure 7) reported drinking eleven or more standard drinks in a typical week.

Figure 7. Number of standard drinks consumed in a typical week among participants who consumed alcohol in the past 12 months.



Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.2.4. Alcohol Use Disorders Identification Test (AUDIT)

2.2.4.1. AUDIT risk categories

Of the participants who consumed alcohol in the past 12 months and completed the full AUDIT scale (n = 1,261), around half (49%) had a score that was considered 'low risk' (0 to 7), one-in-three (33%) had a 'moderate risk' score (8 to 15), around one-in-ten (9%) had a 'high risk' score (16 to 19), and around one-in-ten (9%) had a 'very high risk' score (20+).

2.2.4.2. AUDIT scores

Of the participants who consumed alcohol within NHMRC guidelines in the past 12 months, the median AUDIT score was 5 (interquartile range [IQR] = 3-8). In comparison, participants who exceeded NHMRC guidelines in the past 12 months had a median AUDIT score of 14 (IQR = 11-19).

2.2.4.3. Correlates of AUDIT risk categories

Age group

Participants who scored in the very high risk AUDIT category compared to low risk were more likely to be aged 40-49 years (ARR = 3.37; 95% CI = 1.69, 6.70; Table 2) and more likely to be aged 50-59 years (ARR = 2.68; 95% CI = 1.24, 5.79) than to be aged 18-24 years.

Gender

Participants who scored in the moderate risk AUDIT category compared to low risk were less likely to be transgender male (ARR = 0.45; 95% CI = 0.21, 0.97; Table 2) and less likely to be non-binary (ARR = 0.48; 95% CI = 0.30, 0.77) than to be cisgender male. Participants who scored in the moderate risk, high risk, or very high-risk categories compared to low risk were less likely to be cisgender female than to be cisgender male.

Sexual identity

No substantial associations were found between AUDIT risk category and sexual identity (Table 2).

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Table 2. Factors associated with AUDIT risk category.

	Very high risk			High risk			Moderate risk			Low risk (REF)
	%	RR (95% CI)	P	%	RR (95% CI)	P	%	RR (95% CI)	P	%
Age group										
18-24 years (n = 325)	6	REF		9	REF		30	REF		55
25-29 years (n = 278)	8	1.50 (0.78, 2.90)	0.22	8	0.92 (0.49, 1.69)	0.78	36	1.22 (0.85, 1.75)	0.29	48
30-39 years (n = 342)	8	1.38 (0.72, 2.62)	0.33	9	1.06 (0.60, 1.88)	0.85	33	1.06 (0.74, 1.51)	0.77	49
40-49 years (n = 152)	**17**	**3.37 (1.69, 6.70)**	**<.001**	7	0.89 (0.40, 1.97)	0.77	34	1.23 (0.78, 1.94)	0.38	42
50-59 years (n = 119)	**14**	**2.68 (1.24, 5.79)**	**0.01**	13	1.93 (0.92, 4.05)	0.08	30	1.11 (0.66, 1.87)	0.69	42
60-69 years (n = 35)	-	0.63 (0.13, 2.97)	0.56	-	0.69 (0.19, 2.59)	0.59	26	0.57 (0.25, 1.33)	0.20	60
70+ years (n = 10)	-	1.37 (0.15, 12.65)	0.78	-	1.05 (0.11, 9.67)	0.96	-	0.86 (0.20, 3.74)	0.84	-
Gender										
Cisgender Male (n = 274)	13	REF		12	REF		39	REF		37
Transgender Male (n = 49)	-	0.53 (0.14, 2.04)	0.36	-	0.66 (0.22, 2.01)	0.47	**29**	**0.45 (0.21, 0.97)**	**0.04**	55
Cisgender Female (n = 701)	**8**	**0.57 (0.34, 0.95)**	**0.03**	**7**	**0.45 (0.27, 0.77)**	**<.001**	**32**	**0.57 (0.40, 0.81)**	**<.001**	52
Transgender Female (n = 34)	-	0.70 (0.17, 2.80)	0.61	-	0.91 (0.27, 3.06)	0.87	29	0.53 (0.22, 1.28)	0.16	50
Non-binary* (n = 203)	8	0.75 (0.36, 1.58)	0.46	9	0.58 (0.28, 1.21)	0.15	**29**	**0.48 (0.30, 0.77)**	**<.001**	55

Sexual identity										
Straight/Heterosexual (n = 8)	-	1.56 (0.13, 18.28)	0.72	0	N/A	N/A	-	2.60 (0.53, 12.69)	0.24	38
Gay/Lesbian (n = 617)	12	REF		10	REF		33	REF		46
Bisexual (n = 401)	8	0.82 (0.49, 1.36)	0.44	9	1.10 (0.66, 1.85)	0.71	33	1.07 (0.78, 1.47)	0.67	50
Asexual* (n = 22)	-	0.34 (0.04, 2.69)	0.31	-	0.36 (0.05, 2.87)	0.34	-	0.33 (0.09, 1.15)	0.08	77
Pansexual* (n = 68)	-	0.49 (0.16, 1.46)	0.20	9	0.93 (0.36, 2.40)	0.87	28	0.84 (0.46, 1.53)	0.57	57
Queer* (n = 128)	5	0.42 (0.17, 1.07)	0.07	8	0.93 (0.42, 2.04)	0.85	37	1.27 (0.81, 2.00)	0.30	51
Another term (n = 17)	-	0.38 (0.05, 3.07)	0.37	0	N/A	N/A	-	0.57 (0.18, 1.83)	0.35	71

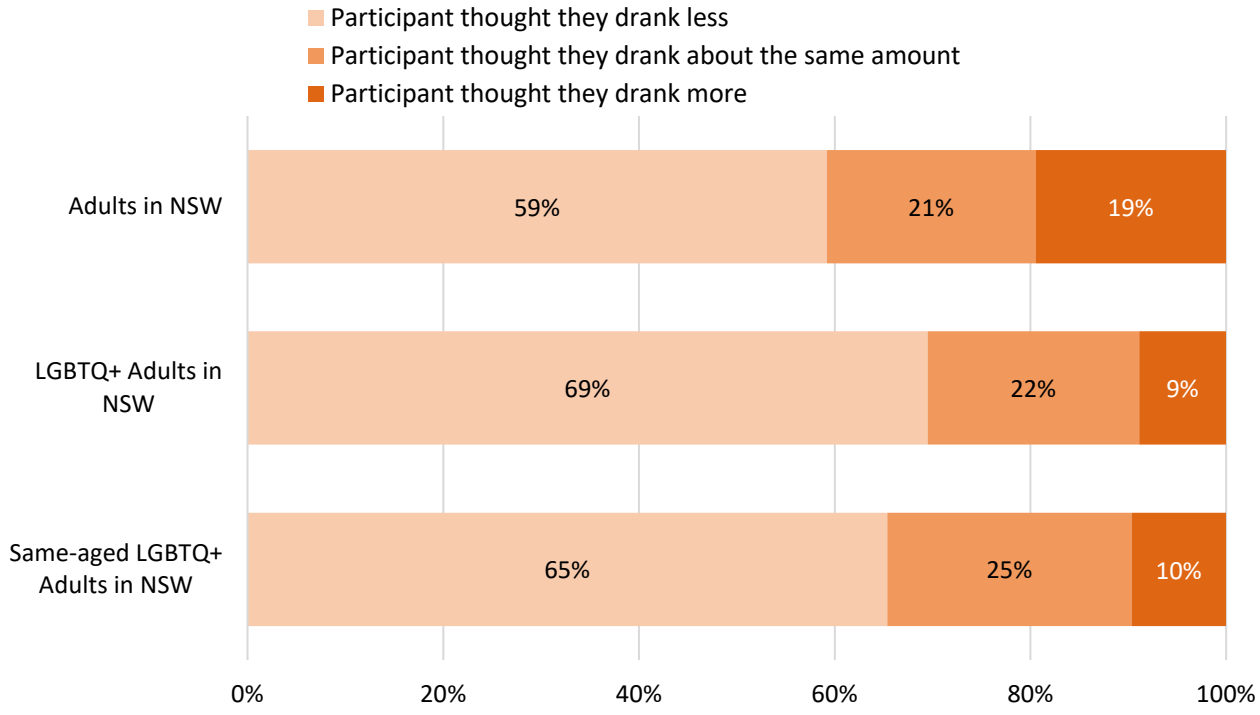
Note. CI = Confidence Interval. REF = reference category. - = Percent suppressed due to small cell size (n≤5 but not 0). N/A = omitted due to insufficient cell size. * = Includes participants who selected “Another term” for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. Based on multivariable multinomial logistic regression of AUDIT risk category on age group, gender, and sexual identity. Likelihood-ratio chi-squared(48)=73.33; p=.01. Bolded rows indicate P<.05. Figures are rounded to 2 decimal places, percentages are rounded to nearest whole percentage. Missing responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.3. Perceptions of alcohol consumption

2.3.1. Perceptions of own consumption in relation to others

Among participants who consumed alcohol in the past 12 months, the majority tended to perceive their own alcohol consumption as being less than: most adults in NSW (59%; Figure 8); LGBTQ+ adults in NSW (69%); and same-aged LGBTQ+ adults in NSW (65%). For further breakdowns by age group, gender, and sexual identity, see Figure 9, Figure 10, and Figure 11.

Figure 8. Perceptions of own alcohol consumption level in relation to other adults among participants who consumed alcohol in the past 12 months.



Note. N = 1,492. Rounded to whole percentages. Responses that were missing, 'Don't know', or 'Prefer not to say' were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

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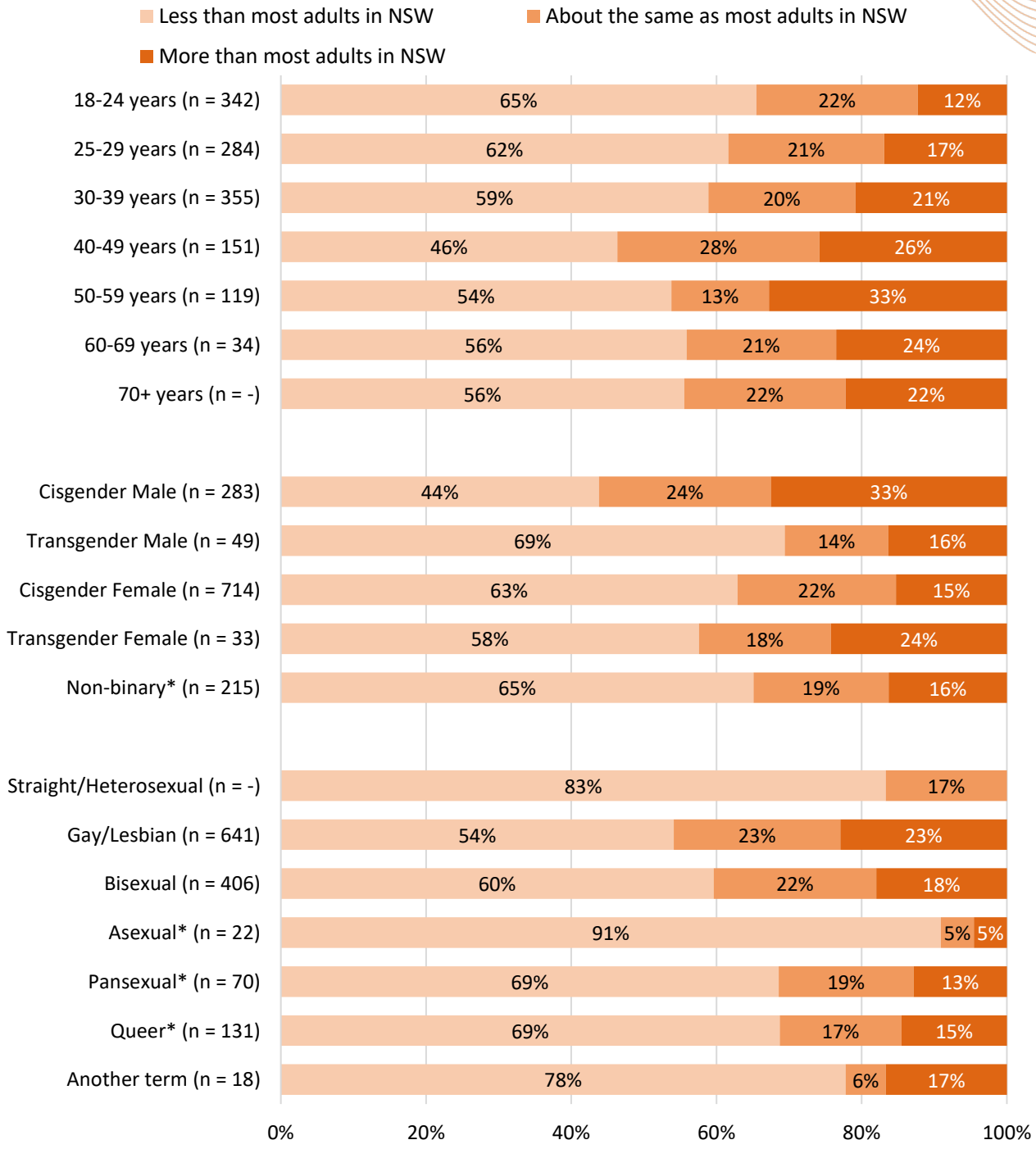
Figure 9. Perceptions of own alcohol consumption level in relation to adults in NSW among participants who consumed alcohol in the past 12 months.



Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Responses that were missing, 'Don't know', or 'Prefer not to say' were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

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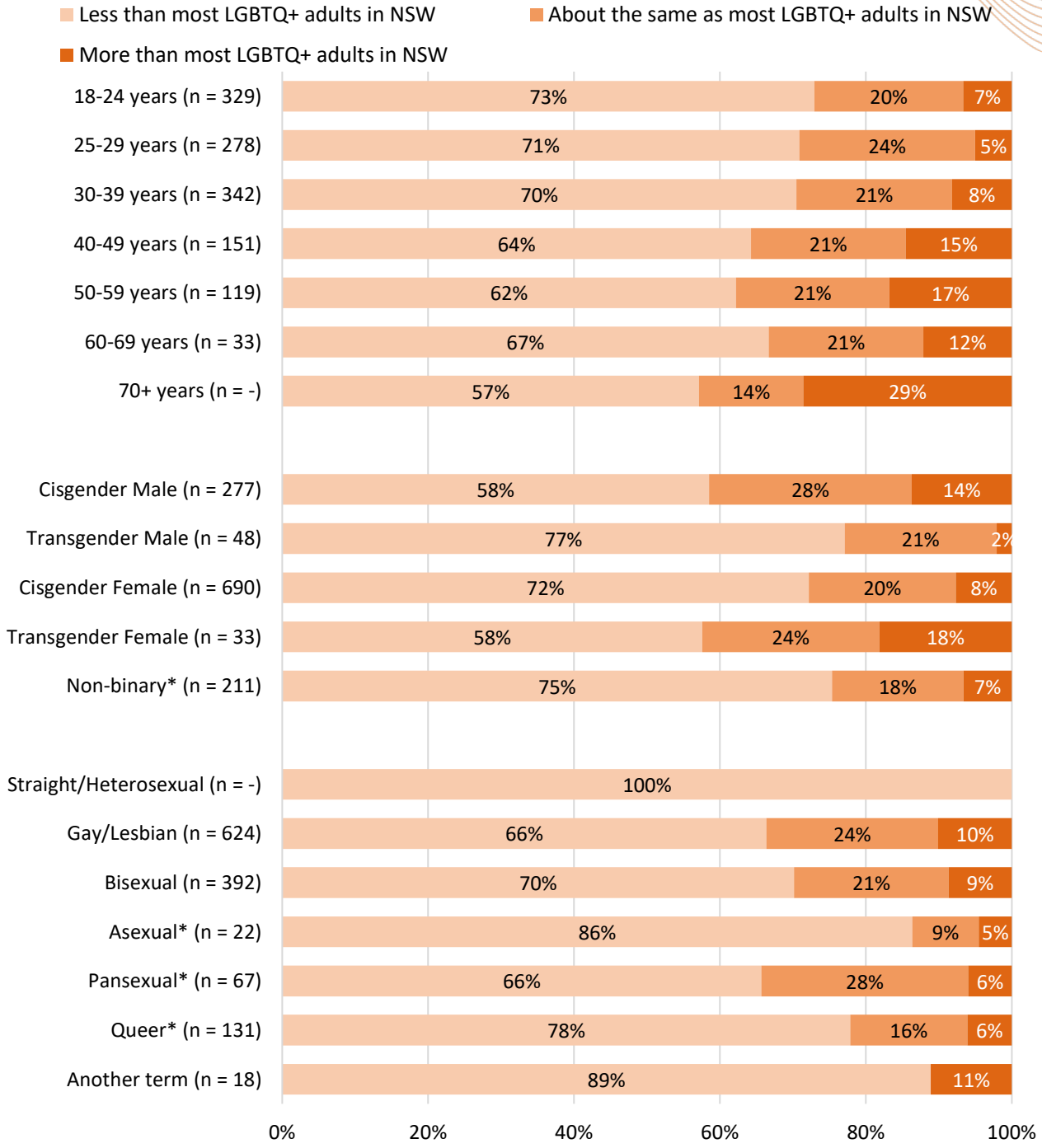
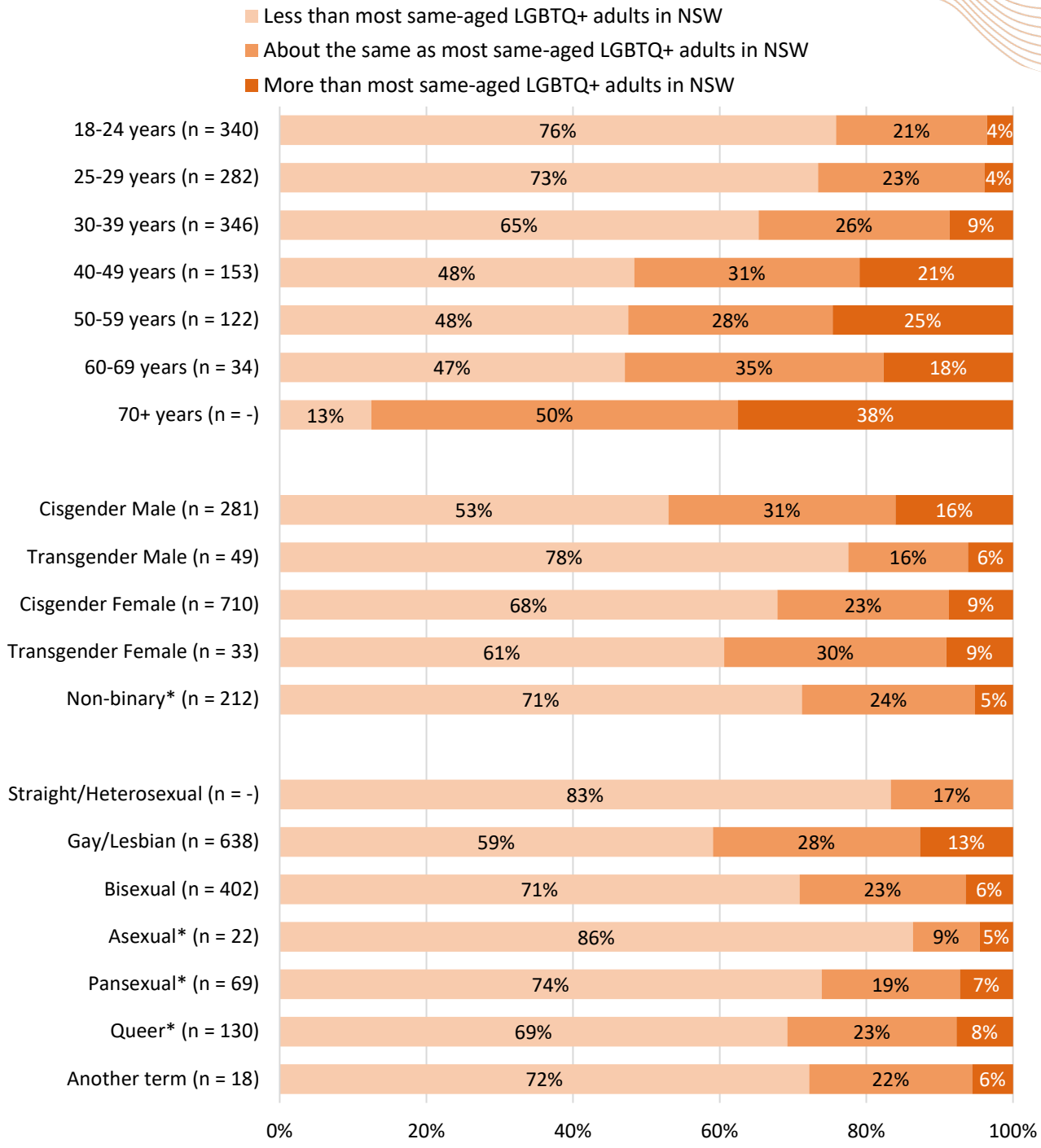
Figure 10. Perceptions of own alcohol consumption level in relation to LGBTQ+ adults in NSW among participants who consumed alcohol in the past 12 months.



Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Responses that were missing, 'Don't know', or 'Prefer not to say' were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

Figure 11. Perceptions of own alcohol consumption level in relation to same-aged LGBTQ+ adults in NSW among participants who consumed alcohol in the past 12 months.



Note. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Responses that were missing, 'Don't know', or 'Prefer not to say' were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.3.2. Perceptions of own alcohol use and harm to health

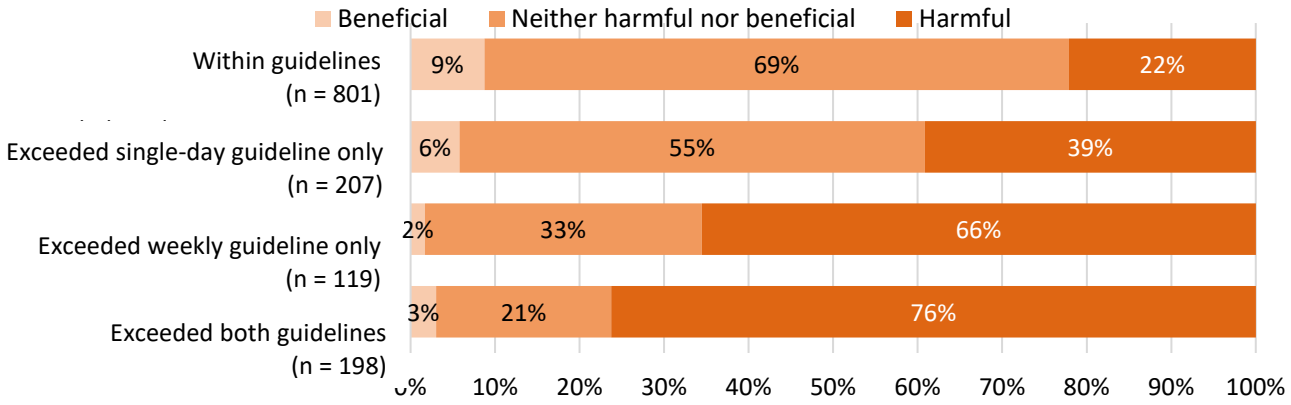
Among participants who consumed alcohol in the past 12 months but did not exceed any of the NHMRC guidelines (i.e., < 5 standard drinks on a typical drinking day and < 11 standard drinks in a typical week), the majority considered their level of alcohol consumption to be neither harmful nor beneficial (69%; Figure 12). For further breakdowns by age group, gender, and sexual identity, see Figure 13.

Among participants who exceeded the NHMRC single-day guideline without exceeding the weekly guideline (i.e., ≥ 5 standard drinks on a typical drinking day but < 11 standard drinks in a typical week), around two-in-five considered their level of alcohol consumption to be harmful (39%; Figure 12). For further breakdowns by age group, gender, and sexual identity, see Figure 14.

Among participants who exceeded the NHMRC weekly guideline without exceeding the single-day guideline (i.e., ≥ 11 or more standard drinks in a typical week but < 5 standard drinks on a typical drinking day), two-in-three considered their level of alcohol consumption to be harmful (66%; Figure 12). For further breakdowns by age group, gender, and sexual identity, see Figure 15.

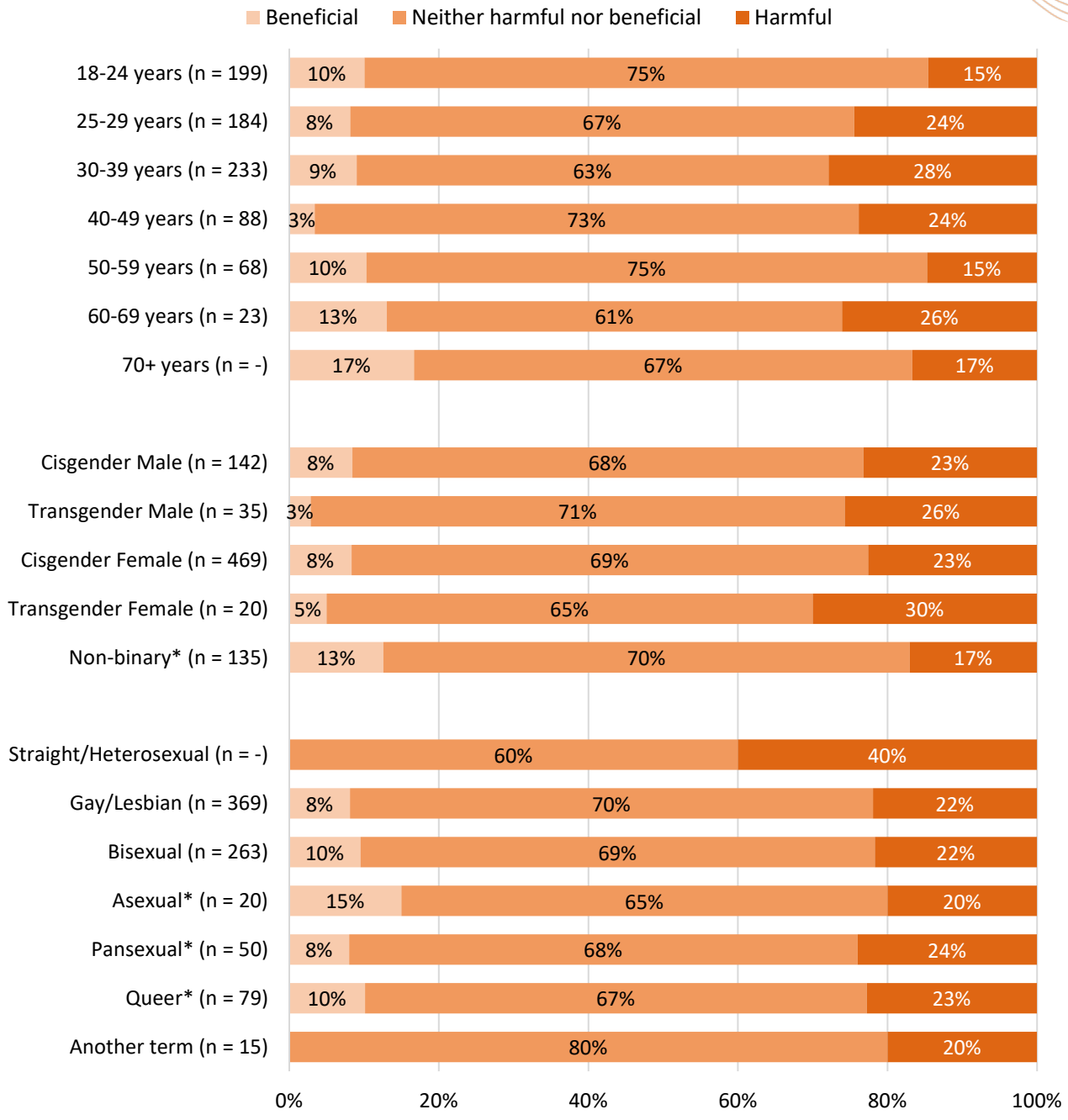
Among participants who exceeded both NHMRC guidelines (i.e., ≥ 5 or more standard drinks on a typical drinking day and ≥ 11 or more standard drinks in a typical week), three-in-four considered their level of alcohol consumption to be harmful (76%; Figure 12). For further breakdowns by age group, gender, and sexual identity, see Figure 16.

Figure 12. Health perceptions of own alcohol consumption among participants who consumed alcohol in the past 12 months.



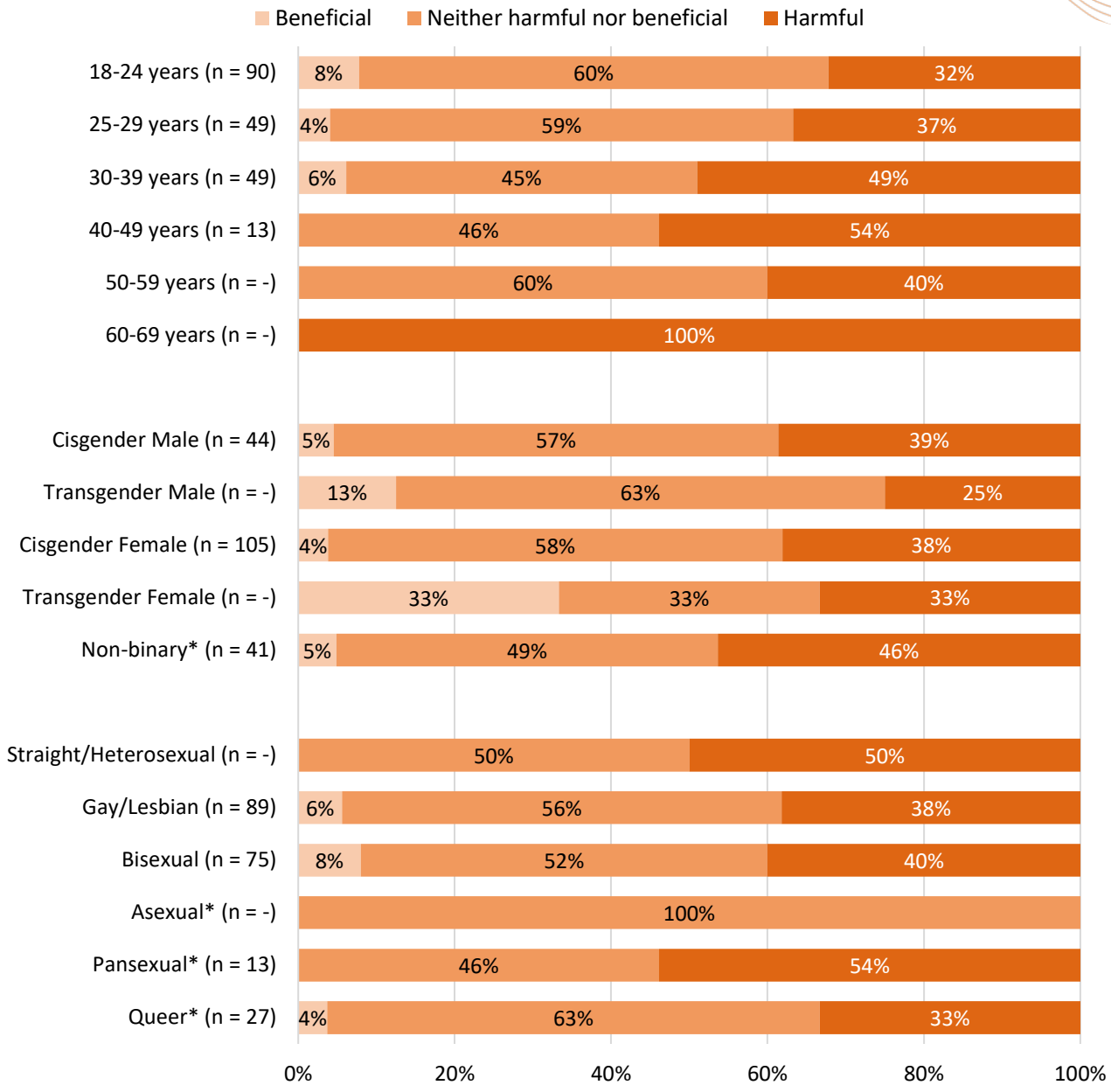
Note. N = 1325. Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. 'Beneficial' and 'Harmful' categories include responses of 'Very beneficial/harmful' and 'Somewhat beneficial/harmful' combined. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

Figure 13. Perceptions of whether respondent's own alcohol consumption is harmful or beneficial to health among participants who consumed alcohol in the past 12 months within NHMRC guidelines.



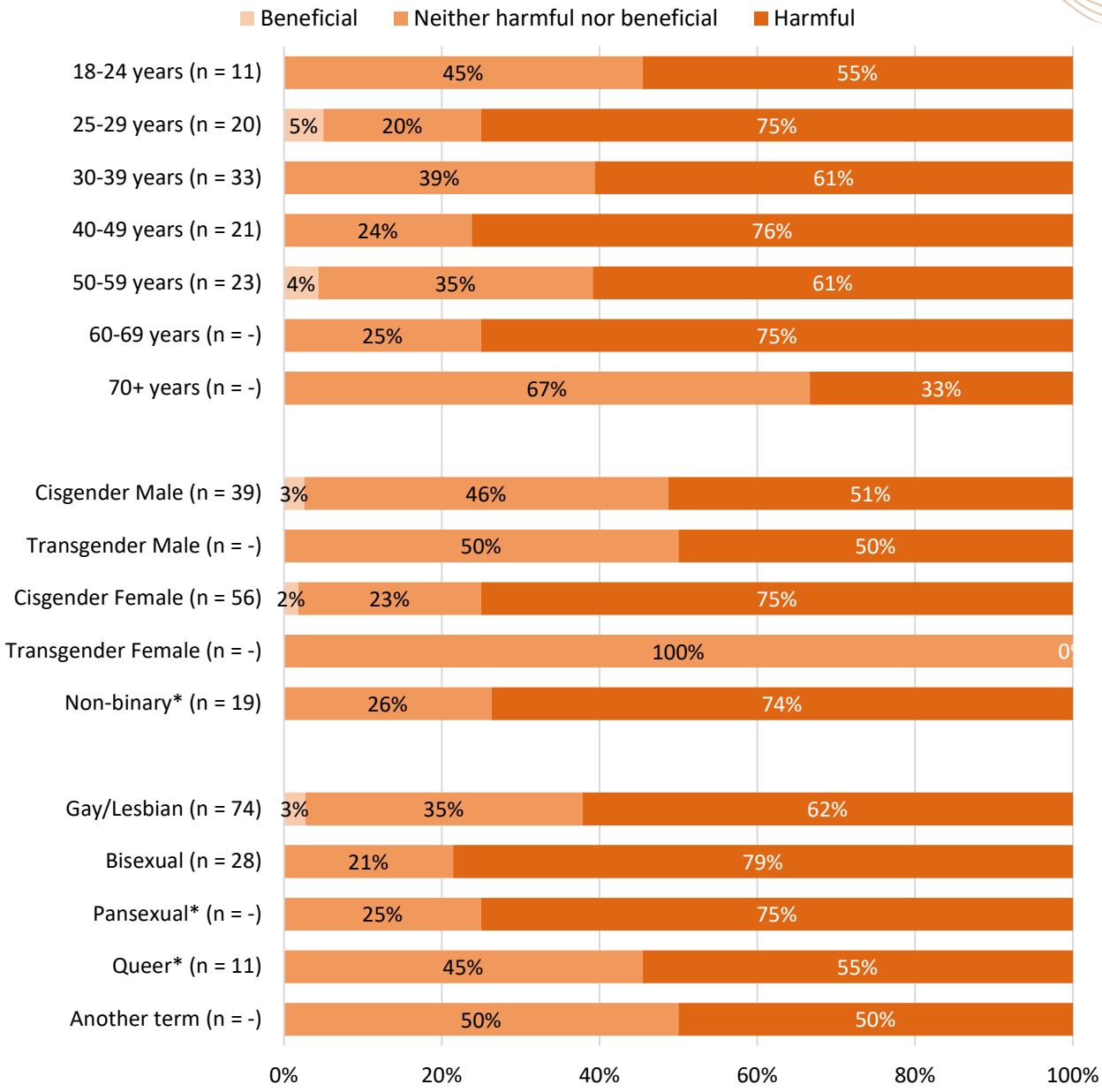
Note. N = 801. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). 'Beneficial' and 'Harmful' categories include responses of 'Very beneficial/harmful' and 'Somewhat beneficial/harmful' combined. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

Figure 14. Perceptions of whether respondent's own alcohol consumption is harmful or beneficial to health among participants who exceeded the NHMRC single-day guideline but consumed alcohol within the weekly guideline in the past 12 months.



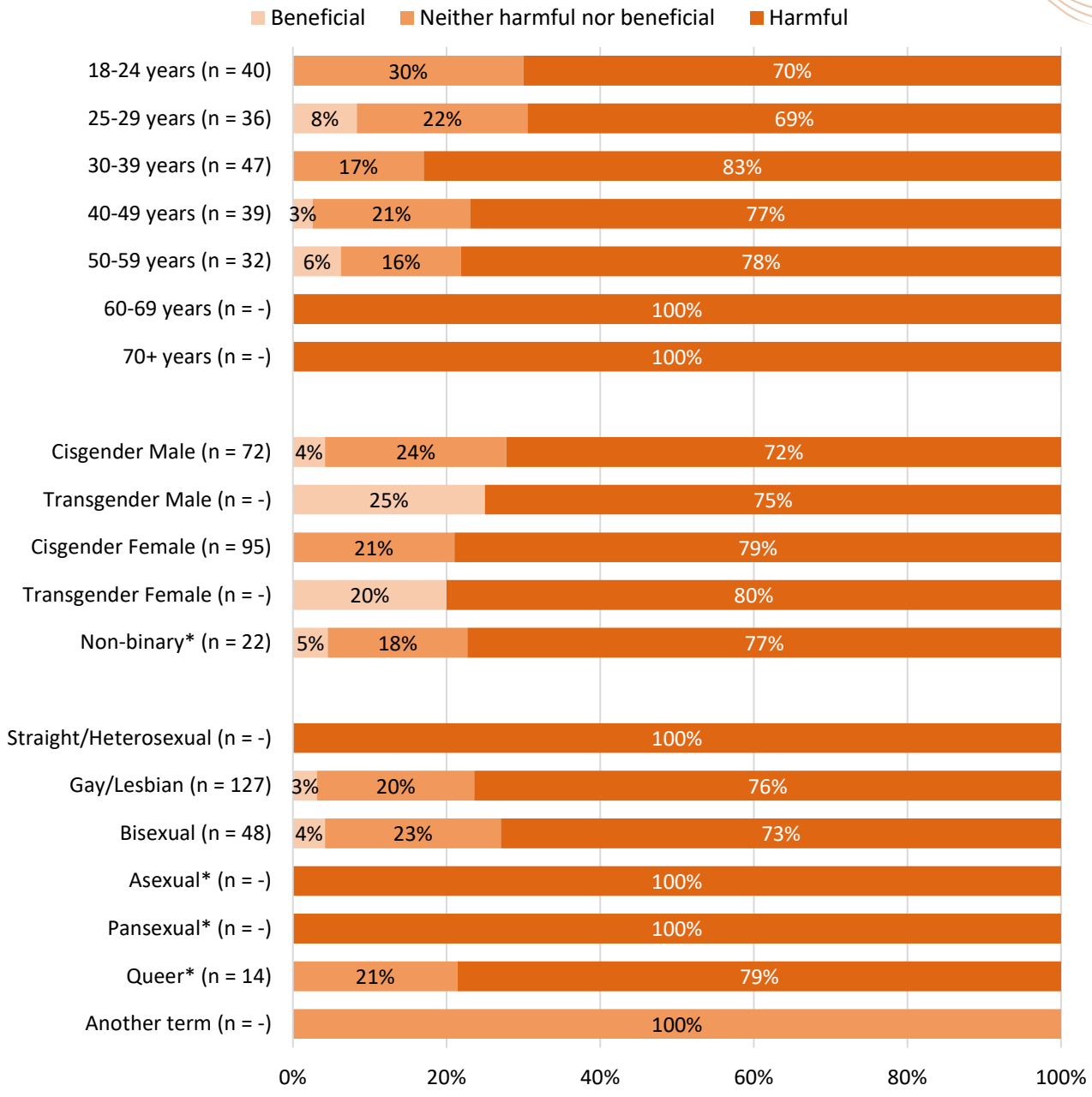
Note. N = 207. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. 'Beneficial' and 'Harmful' categories include responses of 'Very beneficial/harmful' and 'Somewhat beneficial/harmful' combined. There were no participants aged 70+ years and no participants who identified as another term for sexual identity who only exceeded the single-day guideline. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

Figure 15. Perceptions of whether respondent's own alcohol consumption is harmful or beneficial to health among participants who exceeded the NHMRC weekly guideline but consumed alcohol within the single-day guideline in the past 12 months.



Note. N = 119. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. 'Beneficial' and 'Harmful' categories include responses of 'Very beneficial/harmful' and 'Somewhat beneficial/harmful' combined. There were no participants who identified as straight/heterosexual or asexual who only exceeded the weekly guideline. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

Figure 16. Perceptions of whether respondent's own alcohol consumption is harmful or beneficial to health among participants who exceeded both NHMRC guidelines in the past 12 months.

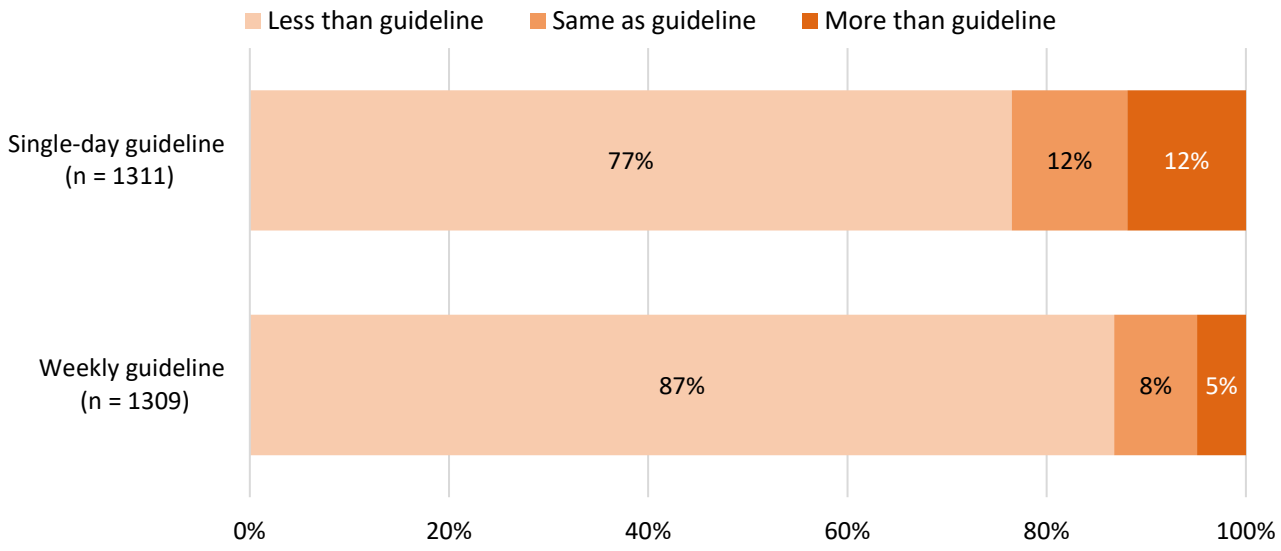


Note. N = 198. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. 'Beneficial' and 'Harmful' categories include responses of 'Very beneficial/harmful' and 'Somewhat beneficial/harmful' combined. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.3.3. Knowledge of NHMRC alcohol consumption guidelines

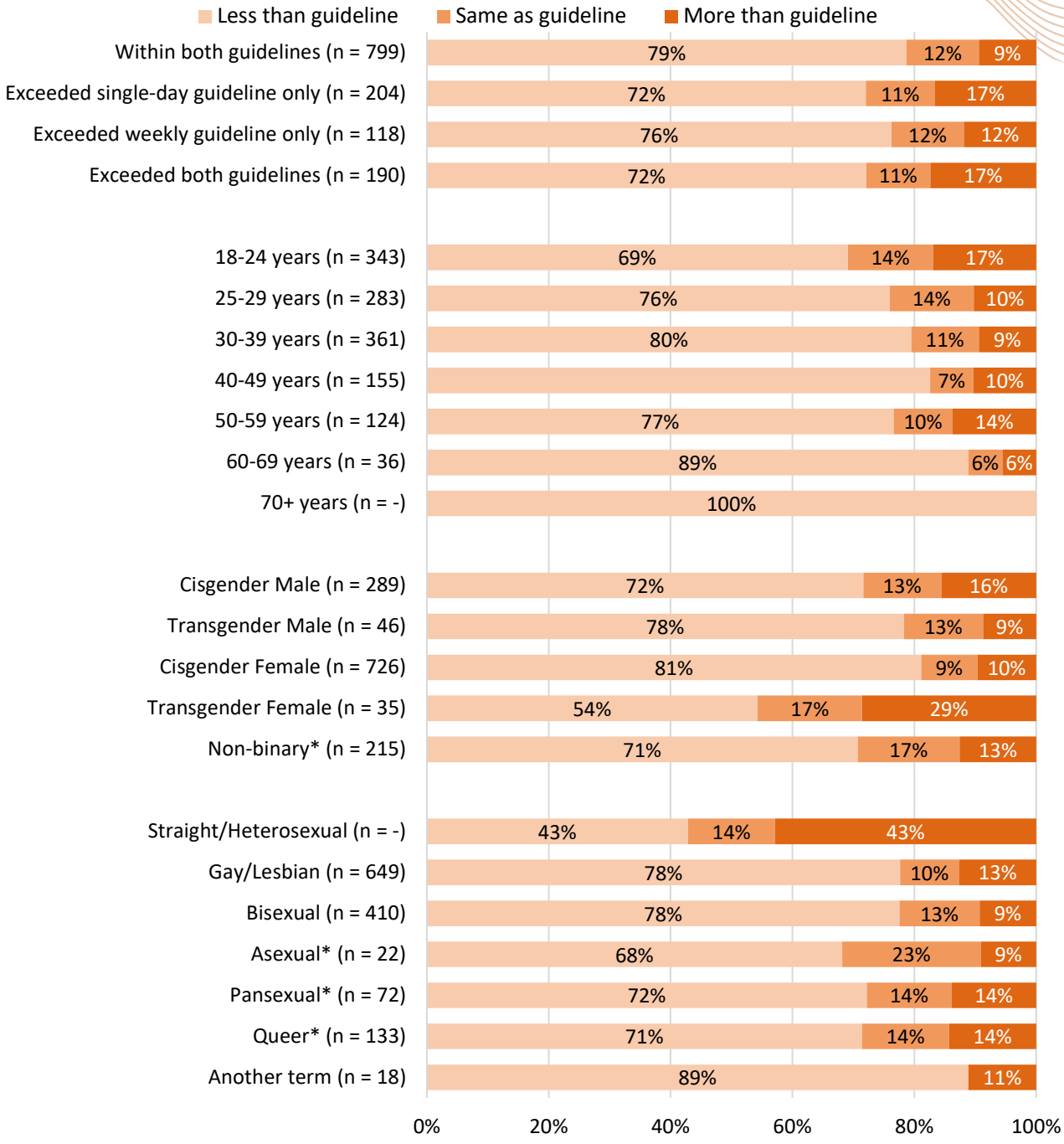
When asked about the NHMRC alcohol consumption guidelines, the majority of participants responded with a number of standard drinks that was either the same as or more conservative than the guideline for both single-day (77%; Figure 17) and weekly (87%) maximum use guidelines. There appear to be no substantial variations by alcohol consumption level, age group, gender, nor sexual identity (Figure 18, Figure 19).

Figure 17. Knowledge of NHMRC alcohol consumption guidelines among participants who consumed alcohol in the past 12 months.



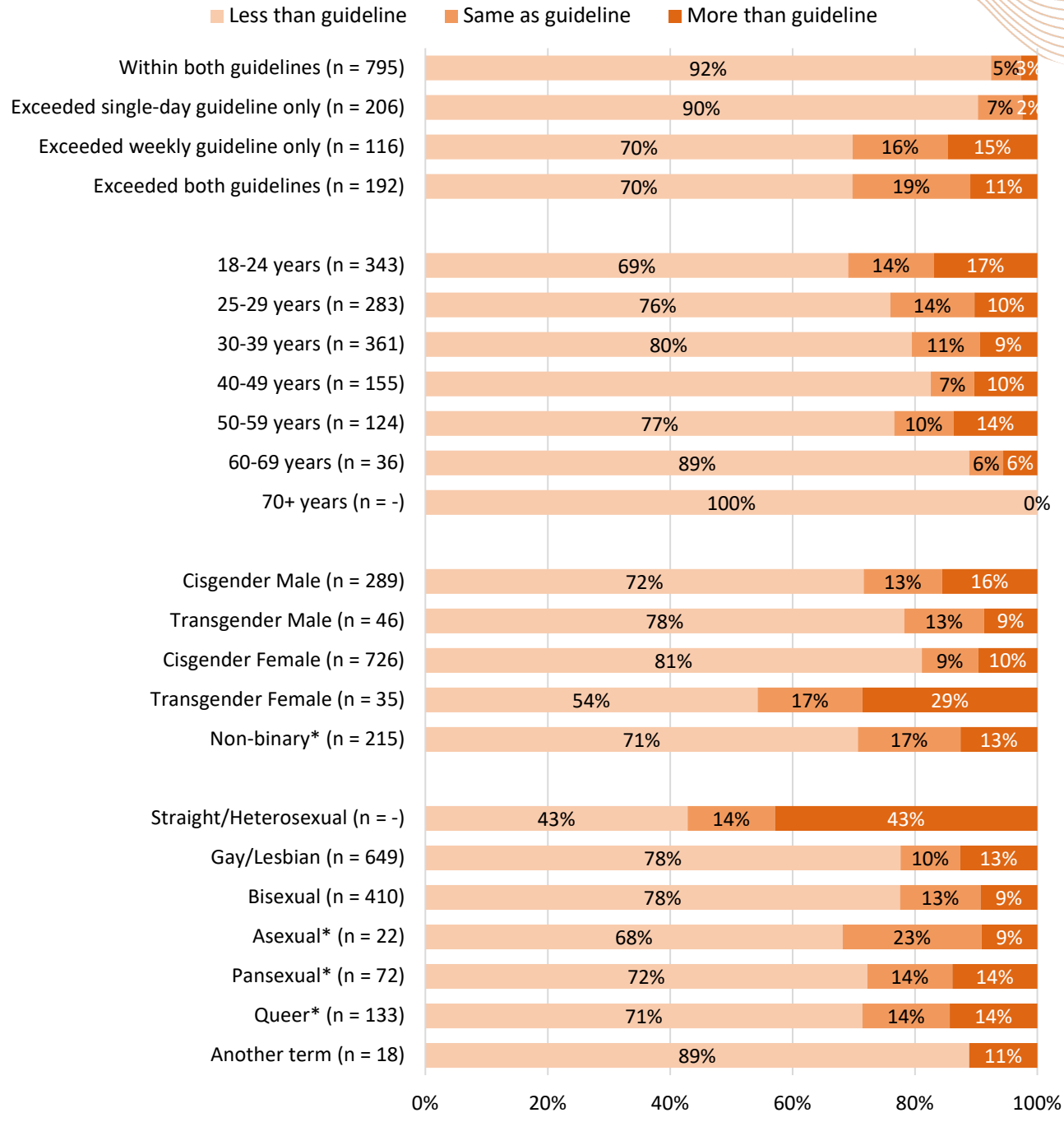
Note. Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

Figure 18. Knowledge of NHMRC single-day alcohol consumption guideline among participants who consumed alcohol in the past 12 months.



Note. N = 1311. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

Figure 19. Knowledge of NHMRC weekly alcohol consumption guideline among participants who consumed alcohol in the past 12 months.



Note. N = 1309. * = Includes participants who selected "Another term" for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.4. Alcohol consumption motivations

2.4.1. Motivations for drinking alcohol

Among participants who had consumed alcohol in the past 12 months, the five most common motivations for drinking alcohol were to celebrate social occasions (93% indicated this was a motivation to drink at least some of the time; Figure 20), to be sociable (86%), because it's fun (86%), because it gives a pleasant feeling (85%), and to make social gatherings more fun (84%).

2.4.2. Drinking Motives Questionnaire-Revised (DMQ-R) Scores

Scores on the DMQ-R were calculated for each scale category, where higher scores indicate greater motivation to use alcohol for reasons relating to the corresponding category (see Figure 20 for specific motivations corresponding to each category). Among participants who had consumed alcohol in the past year, the greatest motivation to consume alcohol was for social reasons (median score = 15; IQR = 10-19), followed by enhancement (median score = 13; IQR = 9-16), coping (median score = 9; IQR = 6-14), and conformity (median score = 6; IQR = 5-9).

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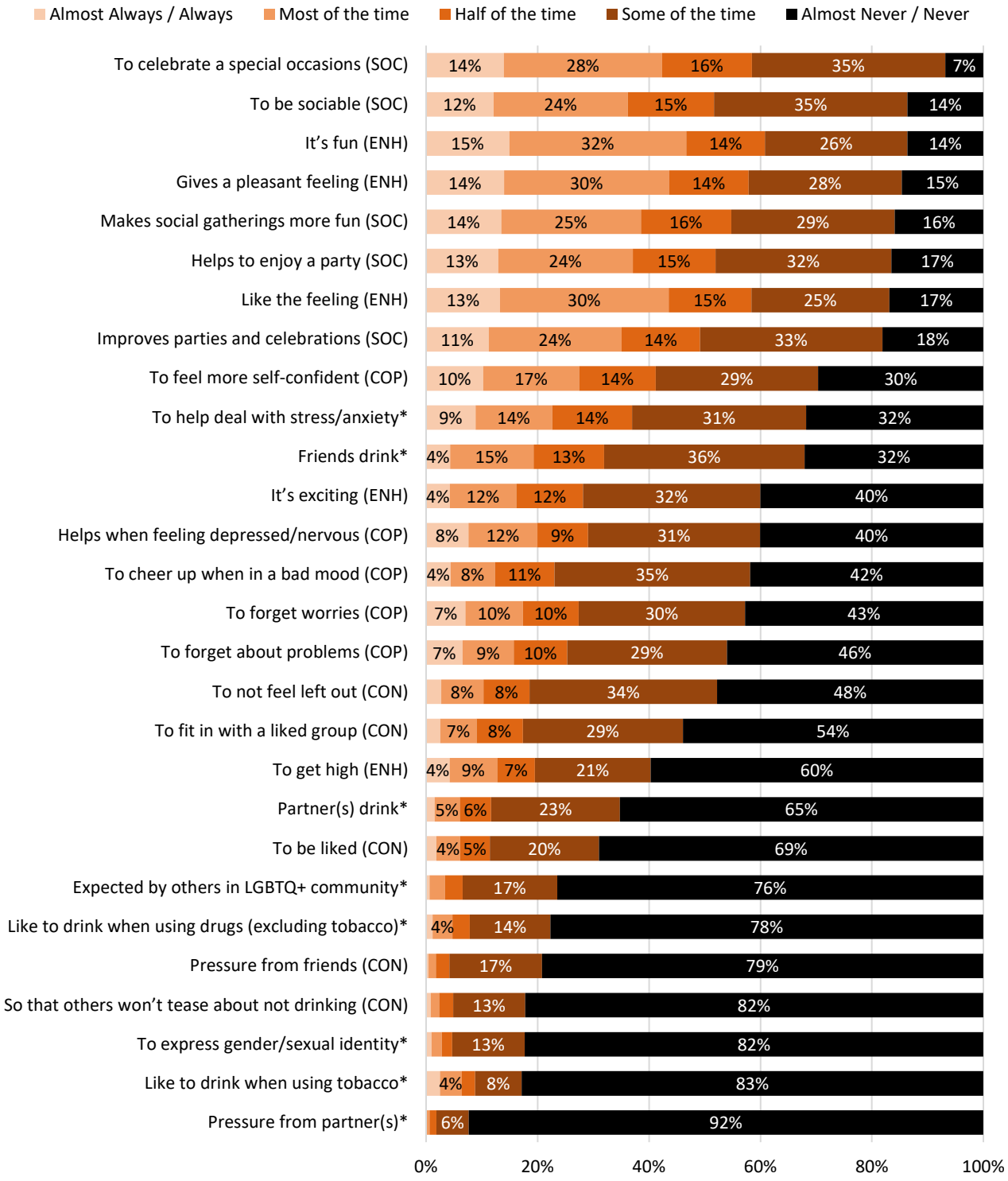
Figure 20. Motivations for drinking alcohol among participants who consumed alcohol in the past 12 months.



Note. N ≈ 1336. SOC = DMQ-R social scale. ENH = DMQ-R enhancement scale. COP = DMQ-R coping scale. CON = DMQ-R conformity scale. * = Item not part of the DMQ-R, created for the purposes of this study. Rounded to whole percentages, percentage values < 4 not shown. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.4.3. DMQ-R scores by alcohol consumption

There were substantial differences in DMQ-R scores between participants who consumed alcohol in the past 12 months within the NHMRC alcohol consumption guidelines and those who exceeded the guidelines. Participants who exceeded the single-day guideline had higher scores on all four DMQ-R scales compared to participants who did not exceed the single-day guideline (i.e., participants who exceeded the single-day guideline had greater social, coping, enhancement, and conformity motivations to consume alcohol; Table 3). Participants who exceeded the weekly guideline had higher scores on the social, coping, and enhancement scales compared to participants who did not exceed the weekly guideline but did not differ substantially on the conformity scale (Table 4).

Table 3. Comparisons of participants who were within the NHMRC single-day alcohol consumption guideline compared to those who exceeded the single-day guideline for each DMQ-R scale category.

DMQ-R Scale	Within single-day guideline Mean score (SD)	Exceeded single-day guideline Mean score (SD)	Mean difference (99% CI)	p
Social	**13.7 (4.9)**	**16.9 (4.9)**	**3.2 (2.4, 3.9)**	**<.001**
Coping	**9.5 (4.5)**	**13.3 (5.3)**	**3.8 (3.0, 4.6)**	**<.001**
Enhancement	**12.1 (4.5)**	**15.5 (4.2)**	**3.5 (2.8, 4.1)**	**<.001**
Conformity	**7.2 (2.9)**	**8.2 (3.5)**	**1.0 (0.4, 1.5)**	**<.001**

Note. T-test assuming unequal variances. Higher scores include greater motivation to use alcohol from the corresponding scale category, see Figure 20 for specific motivations. Single-day guideline = No more than 4 standard drinks on a single day. Bolded rows indicate P<.01. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded.

Table 4. Comparisons of participants who were within the NHMRC weekly alcohol consumption guideline compared to those who exceeded the weekly guideline for each DMQ-R scale category.

DMQ-R Scale	Within weekly guideline Mean score (SD)	Exceeded weekly guideline Mean score (SD)	Mean difference (99% CI)	p
Social	**14.3 (5.1)**	**16.1 (5.0)**	**1.8 (1.0, 2.6)**	**<.001**
Coping	**9.8 (4.6)**	**13.7 (5.3)**	**4.0 (3.1, 4.8)**	**<.001**
Enhancement	**12.3 (4.7)**	**15.7 (3.8)**	**3.4 (2.7, 4.0)**	**<.001**
Conformity	7.6 (3.2)	7.4 (3.0)	-0.1 (-0.6, 0.4)	0.75

Note. Assuming unequal variances. Higher scores include greater motivation to use alcohol from the corresponding scale category, see Figure 20 for specific motivations. Weekly guideline = No more than 10 standard drinks in a single week. Bolded rows indicate P<.01. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

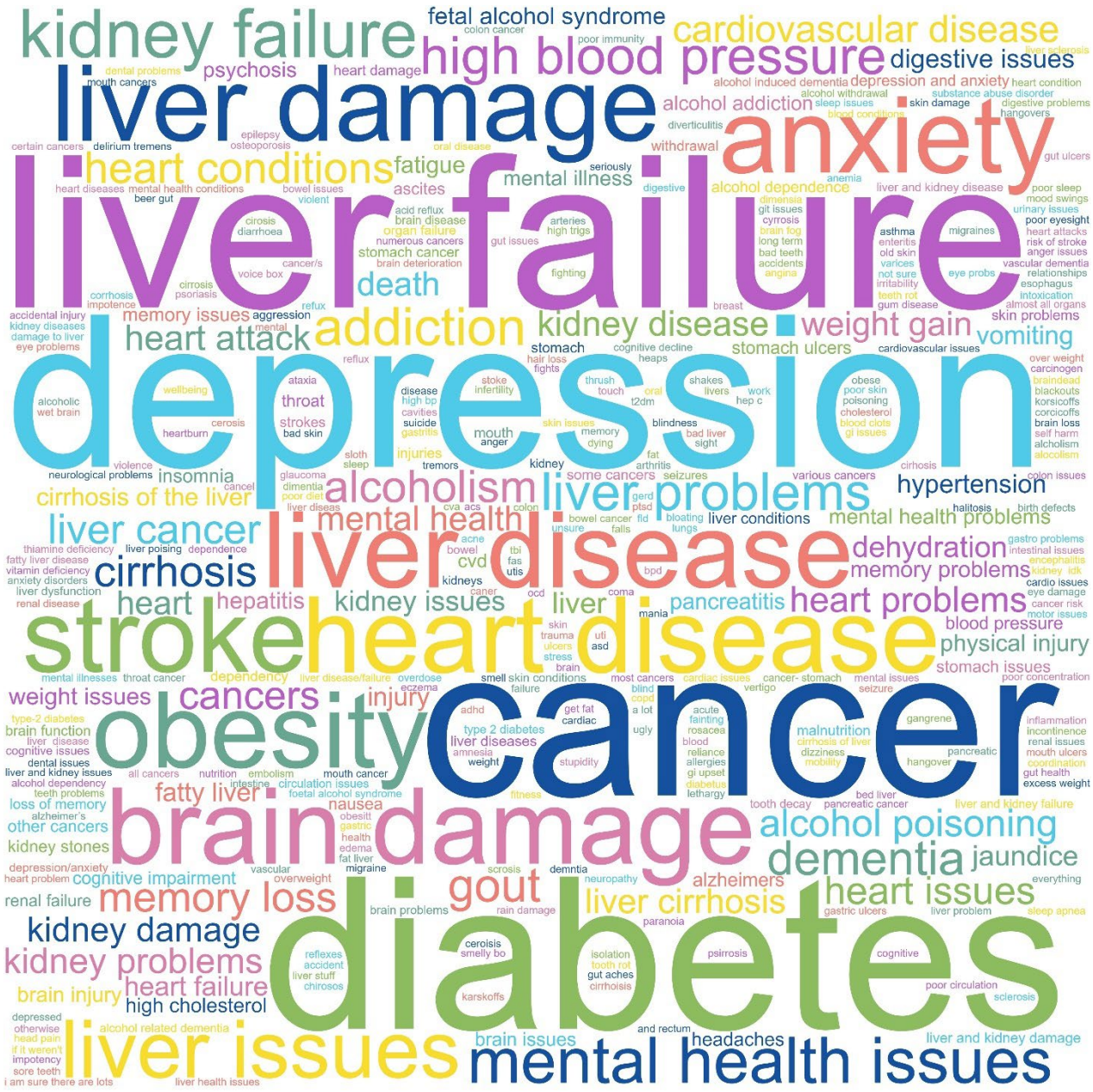
2.5. Awareness of the health risks of alcohol

2.5.1. Perceived health conditions

2.5.1.1. Alcohol-associated health conditions listed in free-text responses

When asked to list health conditions that are associated with alcohol consumption (i.e., free text, without any prompts), the most common responses included liver conditions (75%; see Figure 21), heart conditions (35%), cancer (33%), kidney conditions (21%), and depression (20%).

Figure 21. Word cloud of most common free-text responses for health conditions associated with alcohol consumption.

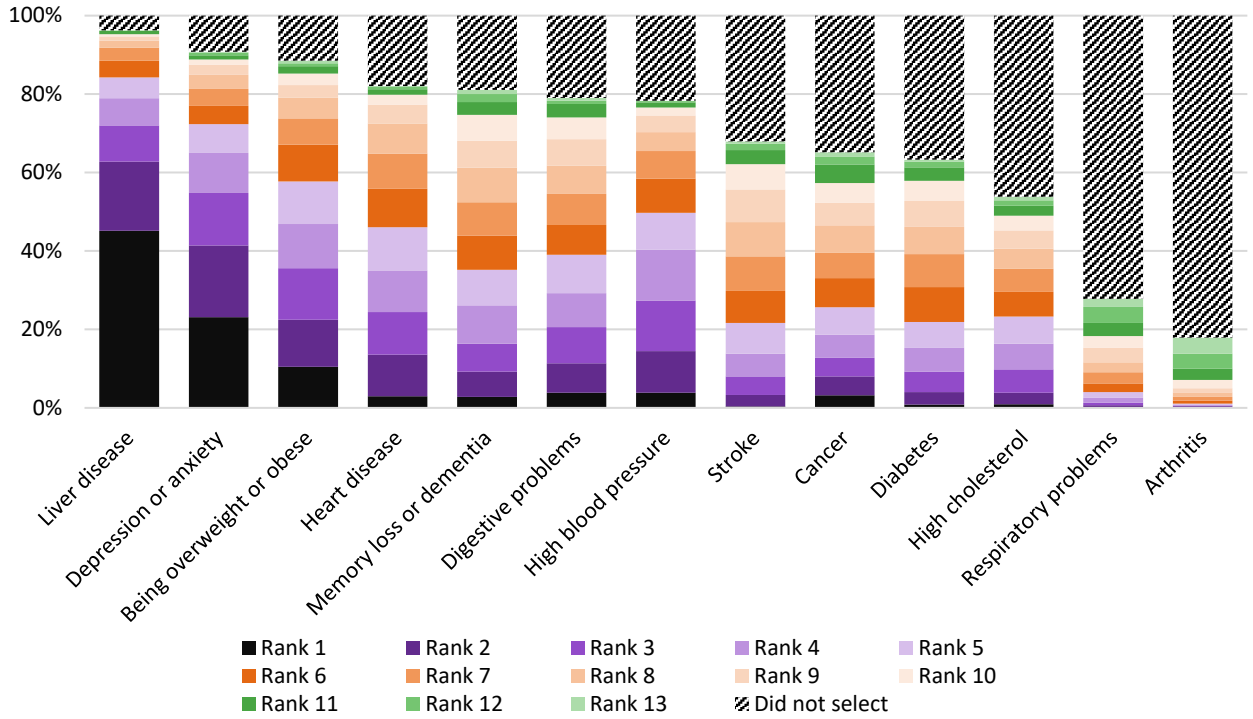


2.5.1.2. Alcohol-associated health conditions selected in multiple response and rankings

When provided with a list of 13 health conditions and asked which one(s) were associated with alcohol consumption (i.e., prompted awareness), the health condition that was most commonly selected was liver disease (96%), followed by depression and anxiety (91%; see Figure 22). Cancer was the 9th most common health condition nominated by participants, with around two-in-three (65%) indicating that they thought cancer was associated with alcohol consumption. Conditions that are typically not related to alcohol consumption were least commonly selected (e.g., respiratory problems [28%], arthritis [18%]).

When asked to rank the health conditions they had previously selected in order of which they thought were most closely associated with alcohol consumption, participants most commonly ranked liver disease as having the highest association, followed by depression and anxiety, being overweight or obese, and high blood pressure.

Figure 22. Awareness and rankings of health conditions perceived to be associated with alcohol consumption.



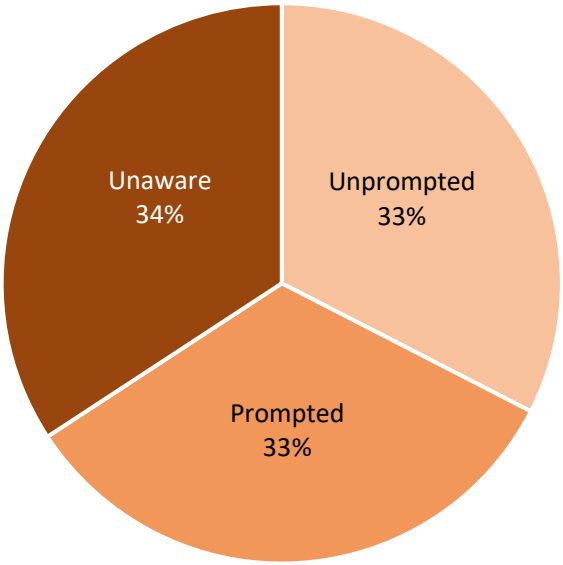
Note. N = 1,499. Rank 1 indicates the respondent perceives the health risk to most likely be associated with alcohol consumption and Rank 13 indicates least likely to be associated with alcohol consumption. A very small number indicated 'none of the above' (n≤5 but not 0). Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.5.2. Awareness regarding cancer risk

2.5.2.1. Overall cancer risk awareness

To examine different levels of cancer risk awareness, participants were grouped into one of three categories: 1) Unprompted awareness, i.e., they named cancer as a health risk of alcohol consumption without being prompted with a list of potential health conditions (see Section 2.5.1.1); 2) Prompted awareness, i.e., they selected cancer from a given list of potential health conditions (see Section 2.5.1.2); and 3) Unaware, i.e., they had neither unprompted nor prompted awareness. Participants were divided evenly with regard to levels of awareness of cancer risk related to alcohol (Figure 23). Around two-thirds of participants (66%) were aware that alcohol increases risk of cancer.

Figure 23. Awareness of cancer risk related to alcohol.



Note. 'Unprompted' indicates the respondent included the word 'cancer' in a free-text question that asked them to list health conditions related to alcohol consumption. 'Prompted' indicates the respondent did not mention 'cancer' in the free-text question, but did select the 'cancer' option when presented with a list of health conditions and asked to select those related to alcohol consumption. 'Unaware' indicates that the respondent neither mentioned the word 'cancer' in the free-text question and nor did they select the 'cancer' option in the multiple-response question. Rounded to whole percentages. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.5.2.2. Correlates of cancer risk awareness

Alcohol use

Participants who had unprompted awareness of alcohol-related cancer risk rather than prompted awareness were more likely to have exceeded the weekly guideline than to have consumed alcohol within the guidelines (ARR = 1.77; 95% CI = 1.09, 2.88; Table 5). Compared to participants with prompted awareness, participants who were unaware were less likely to have exceeded both guidelines rather than to have consumed alcohol within guidelines (ARR = 0.66; 95% CI = 0.44, 0.99).

Age group

Participants who had unprompted awareness of cancer risk rather than prompted awareness were more likely to be aged 25-59 years than to be aged 18-24 years (Table 5).

Gender

Participants who had unprompted awareness of cancer risk rather than prompted awareness were more likely to be cisgender female than to be cisgender male (ARR = 1.42; 95% CI = 1.00, 2.00; Table 5).

Sexual identity

No substantial associations were found between cancer risk awareness and sexual identity (Table 5).

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Table 5. Factors associated with cancer risk knowledge.

	Unaware			Unprompted			Prompted (REF)
	%	ARR (95% CI)	P	%	ARR (95% CI)	P	%
Alcohol consumption in past 12 months							
No alcohol in past year (n = 156)	37	1.21 (0.79, 1.87)	0.38	35	1.28 (0.82, 2.00)	0.27	28
Within both guidelines (n = 809)	36	REF		30	REF		34
Exceeds single-day guideline only (n = 208)	36	1.00 (0.69, 1.45)	0.99	28	1.09 (0.74, 1.62)	0.66	36
Exceeds weekly guideline only (n = 120)	29	1.00 (0.59, 1.69)	1.00	**45**	**1.77 (1.09, 2.88)**	**0.02**	26
Exceeds both guidelines (n = 199)	**25**	**0.66 (0.44, 0.99)**	**0.05**	39	1.20 (0.82, 1.75)	0.34	36
Age group							
18-24 years (n = 381)	38	REF		23	REF		39
25-29 years (n = 312)	38	1.29 (0.90, 1.85)	0.16	**29**	**1.50 (1.01, 2.22)**	**0.05**	33
30-39 years (n = 413)	30	0.95 (0.67, 1.35)	0.77	**36**	**1.82 (1.26, 2.62)**	**<.001**	34
40-49 years (n = 190)	30	1.27 (0.80, 2.02)	0.31	**43**	**2.68 (1.69, 4.24)**	**<.001**	27
50-59 years (n = 143)	34	1.66 (0.99, 2.79)	0.06	**40**	**2.56 (1.52, 4.32)**	**<.001**	26
60-69 years (n = 45)	40	1.70 (0.76, 3.79)	0.20	33	2.19 (0.95, 5.04)	0.07	27
70+ years (n = 15)	40	2.44 (0.59, 10.14)	0.22	40	3.18 (0.76, 13.33)	0.11	-
Gender							
Cisgender Male (n = 332)	34	REF		31	REF		35
Transgender Male (n = 57)	40	1.09 (0.53, 2.24)	0.83	28	1.57 (0.72, 3.42)	0.26	32
Cisgender Female (n = 822)	32	0.88 (0.63, 1.24)	0.47	**35**	**1.42 (1.00, 2.00)**	**0.05**	33
Transgender Female (n = 39)	38	0.80 (0.36, 1.79)	0.59	21	0.83 (0.33, 2.12)	0.71	41
Non-binary* (n = 249)	39	1.07 (0.68, 1.69)	0.76	29	1.41 (0.87, 2.27)	0.16	32
Sexual identity							
Straight/Heterosexual (n = 9)	-	1.95 (0.42, 8.93)	0.39	-	0.38 (0.04, 3.95)	0.42	-
Gay/Lesbian (n = 750)	31	REF		35	REF		34
Bisexual (n = 454)	34	1.17 (0.85, 1.61)	0.34	31	0.99 (0.72, 1.36)	0.93	35
Asexual* (n = 34)	38	1.64 (0.67, 4.03)	0.28	35	1.58 (0.63, 3.95)	0.33	26
Pansexual* (n = 78)	41	1.67 (0.92, 3.03)	0.09	31	1.09 (0.57, 2.06)	0.79	28

Queer* (n = 152)	40	1.49 (0.94, 2.36)	0.09	30	0.94 (0.58, 1.53)	0.81	30
Another term (n = 22)	50	1.95 (0.70, 5.47)	0.20	-	1.58 (0.63, 3.95)	0.33	27

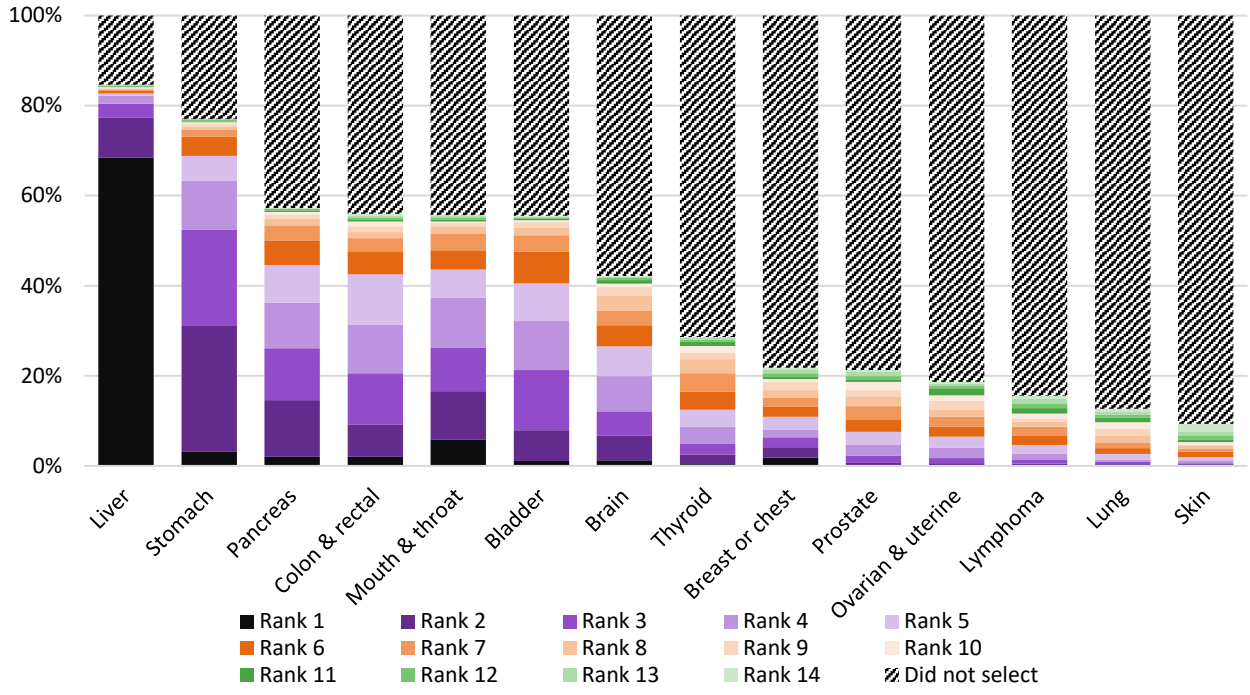
Note. ARR = Adjusted risk ratio. CI = Confidence Interval. REF = reference category. - = Percent suppressed due to small cell size (n≤5 but not 0). * = Includes participants who selected “Another term” for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. Based on multivariable multinomial logistic regression of cancer risk knowledge on alcohol consumption level, age group, gender, and sexual identity. Likelihood-ratio chi-squared(40)=77.78; p<.001. Figures are rounded to 2 decimal places, percentages are rounded to nearest whole percentage. Bolded rows indicate P<.05. Missing responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.5.2.3. Alcohol-associated cancer types selected in multiple response and rankings

Among participants who were aware of the association between alcohol consumption and cancer, the cancer type that was most commonly associated with alcohol consumption was liver cancer (85%; Figure 24), followed by stomach cancer (77%) and other cancers of the digestive tract (56%). Cancers that are typically not related to alcohol consumption were least selected (e.g., lung [13%], skin [9%]).

When asked to rank the cancers they had previously selected in order of which they thought were most closely associated with alcohol consumption, participants overwhelmingly ranked liver cancer as having the highest association with alcohol consumption, followed by stomach cancer and other cancers of the digestive tract (Figure 24).

Figure 24. Awareness and rankings of cancer types as associated with alcohol consumption among participants who were aware of alcohol-related cancer risk.



Note. N = 988. Rank 1 indicates the respondent perceives the cancer type to most likely be associated with alcohol consumption and Rank 13 indicates least likely to be associated with alcohol consumption. A very small number indicated 'none of the above' (n≤5 but not 0). Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

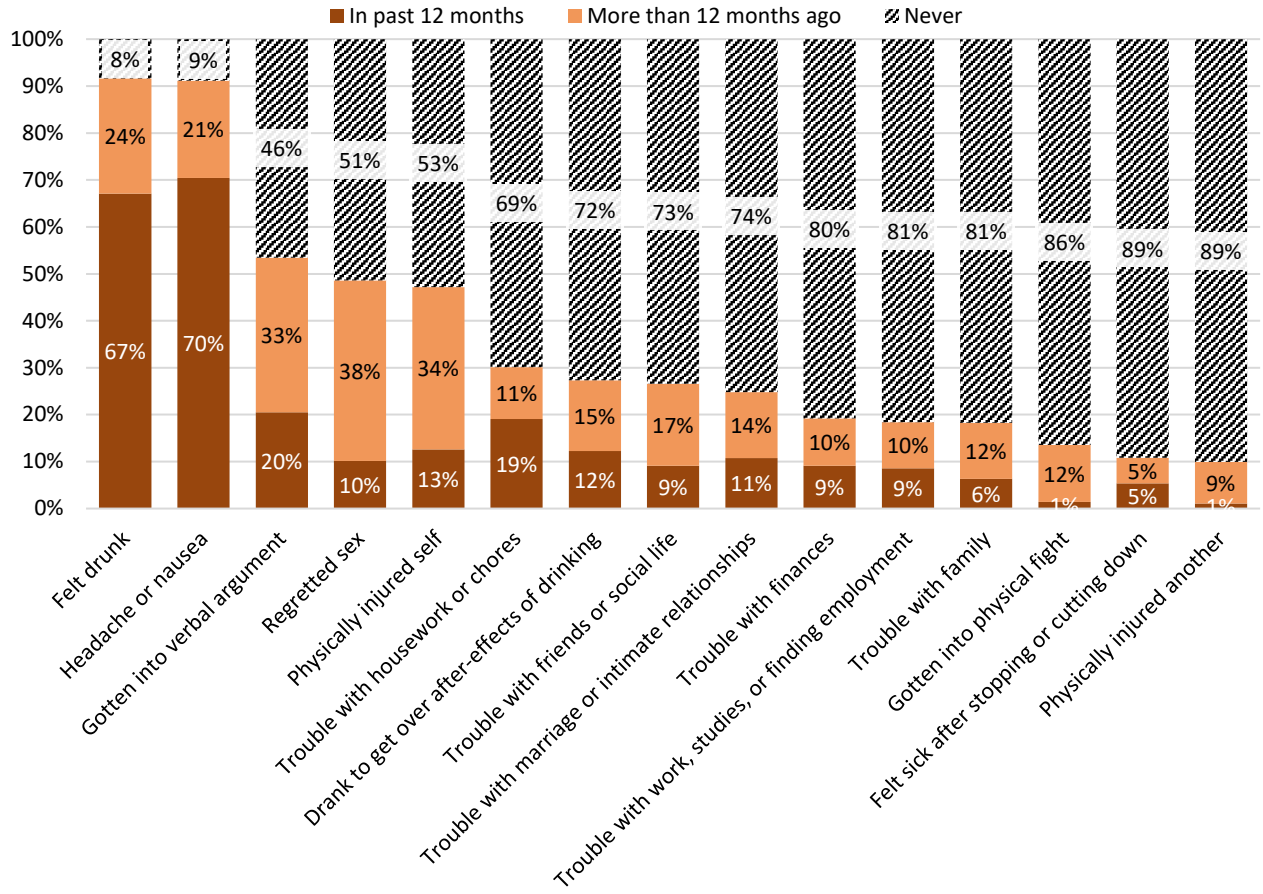
2.6. Experience of alcohol-related negative consequences

2.6.1. Percentage and recency of experiencing each negative consequence

Of the 15 alcohol-related negative consequences that participants who had used alcohol in the past 12 months were asked about, feeling drunk (91%; Figure 25) and experiencing headache or nausea (91%) were the most commonly reported. Getting into a verbal argument (53%), having sex that they regretted (48%), and physically injuring oneself (47%) were the next three most common negative consequences.

Except for feeling drunk, experiencing headache or nausea, and having trouble with housework, more participants reported experiencing all forms of negative consequences more than 12 months ago than within the past 12 months.

Figure 25. Lifetime experience of alcohol-related negative consequences as percentage of participants who consumed alcohol in the past 12 months.



Note. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.6.2. Factors associated with experiencing alcohol-related negative consequences

Alcohol consumption

Compared to participants who had never experienced alcohol-related negative consequences, those who experienced alcohol-related negative consequences in the past 12 months (ARR = 9.93; 95% CI = 2.34, 42.11; Table 6) or more than 12 months ago (ARR = 7.59; 95% CI = 1.79, 32.09) were more likely to have exceeded the daily guideline than to have consumed alcohol within the guidelines. All of the participants who exceeded weekly or both guidelines had experienced alcohol-related negative consequences in their lifetime.

Age group

Compared to participants who had never experienced alcohol-related negative consequences, those who experienced alcohol-related negative consequences more than 12 months ago were more likely to be aged 25-29 years (ARR = 2.17; 95% CI = 1.18, 5.20; Table 6) or 30-39 years (ARR = 5.74; 95% CI = 2.48, 13.29) than to be aged 18-24 years. Participants who experienced alcohol-related negative consequences in the past 12 months were less likely to be aged 50-59 years than to be aged 18-24 years (ARR = 0.26; 95% CI = 0.10, 0.72).

Gender

No substantial associations were found between experience of alcohol-related negative consequences and gender (Table 6).

Sexual identity

No substantial associations were found between experience of alcohol-related negative consequences and sexual identity (Table 6).

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Table 6. Factors associated with experiencing alcohol-related negative consequences.

	Experienced negative consequence(s) in past 12 months			Experienced negative consequence(s) more than 12 months ago			Never (REF)
	%	ARR (95% CI)	P	%	ARR (95% CI)	P	%
Alcohol consumption in past 12 months							
Within both guidelines (n = 809)	29	REF		64	REF		8
Exceeds daily guideline only (n = 208)	**43**	**9.93 (2.34, 42.11)**	**<.001**	**56**	**7.59 (1.79, 32.09)**	**0.01**	-
Exceeds weekly guideline only (n = 120)	37	N/A	N/A	63	N/A	N/A	0
Exceeds both guidelines (n = 199)	42	N/A	N/A	58	N/A	N/A	0
Age group							
18-24 years (n = 347)	57	REF		36	REF		7
25-29 years (n = 289)	30	0.72 (0.34, 1.53)	0.39	**66**	**2.47 (1.18, 5.20)**	**0.02**	4
30-39 years (n = 364)	26	1.27 (0.54, 2.97)	0.58	**72**	**5.74 (2.48, 13.29)**	**<.001**	2
40-49 years (n = 162)	25	0.42 (0.17, 1.09)	0.07	70	2.17 (0.88, 5.32)	0.09	5
50-59 years (n = 128)	**21**	**0.26 (0.10, 0.72)**	**0.01**	73	1.67 (0.65, 4.28)	0.28	6
60-69 years (n = 36)	-	0.56 (0.06, 5.43)	0.62	83	5.86 (0.72, 47.90)	0.10	-
70+ years (n = 10)	-	0.08 (0.00, 1.46)	0.09	80	1.13 (0.12, 10.68)	0.92	-
Gender							
Cisgender Male (n = 298)	33	REF		63	REF		4
Transgender Male (n = 52)	63	1.46 (0.38, 5.58)	0.58	29	0.57 (0.14, 2.27)	0.43	-
Cisgender Female (n = 732)	30	1.27 (0.59, 2.72)	0.54	65	1.58 (0.76, 3.30)	0.22	4
Transgender Female (n = 35)	40	0.78 (0.17, 3.63)	0.75	51	0.87 (0.19, 3.92)	0.86	-
Non-binary* (n = 219)	39	1.11 (0.41, 2.96)	0.84	56	1.28 (0.49, 3.32)	0.62	5
Sexual Identity							
Straight/Heterosexual (n = 8)	-	0.51 (0.04, 5.75)	0.58	-	0.29 (0.02, 3.65)	0.34	-
Gay/Lesbian (n = 663)	32	REF		63	REF		5
Bisexual (n = 417)	35	1.46 (0.70, 3.06)	0.31	61	1.66 (0.81, 3.42)	0.17	3
Asexual* (n = 23)	39	0.38 (0.10, 1.47)	0.16	43	0.29 (0.08, 1.09)	0.07	-
Pansexual* (n = 73)	42	0.99 (0.33, 2.94)	0.98	51	0.69 (0.23, 2.03)	0.50	-

Queer* (n = 134)	32	1.18 (0.40, 3.49)	0.76	64	1.42 (0.50, 4.05)	0.51	-
Another term (n = 18)	-	0.35 (0.07, 1.69)	0.19	56	0.29 (0.08, 1.09)	0.07	-

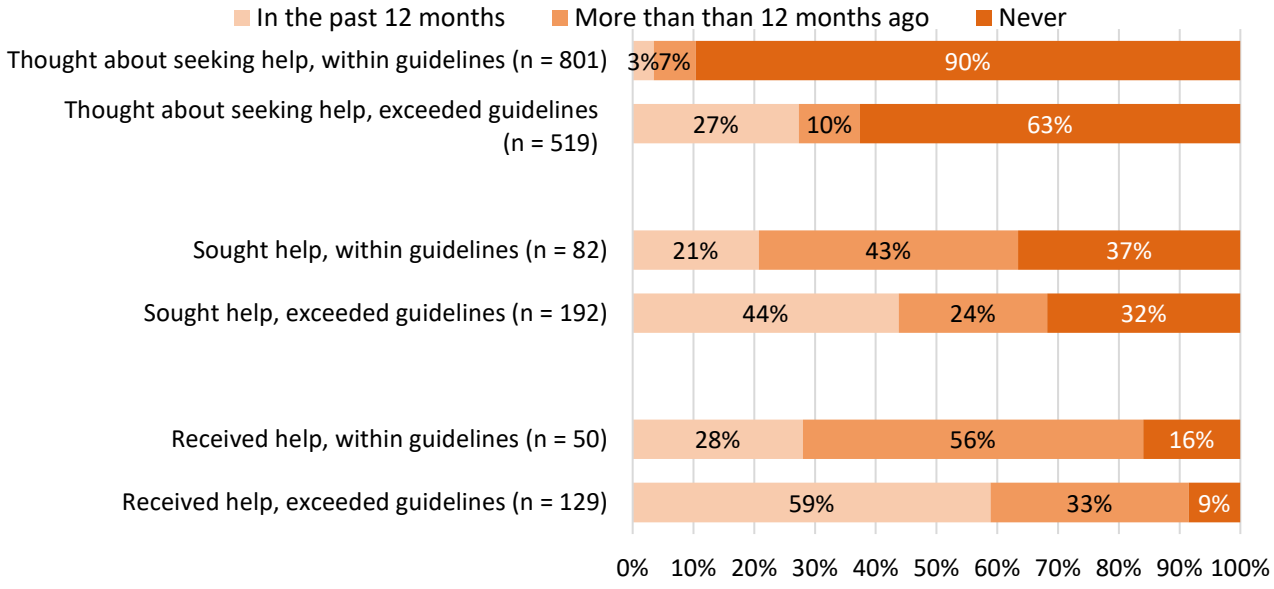
Note. ARR = Adjusted risk ratio. CI = Confidence Interval. REF = reference category. N/A = Excluded due to insufficient cell sizes in outcome. - = Percent suppressed due to small cell size (n≤5 but not 0). * = Includes participants who selected “Another term” for gender or sexual identity but were recoded, see Sections 1.3.2.1 and 1.3.2.2 for more information regarding recoding. Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. Based on multivariable multinomial logistic regression of any experience of alcohol-related negative consequences on alcohol consumption level, age group, gender, and sexual identity. Likelihood-ratio chi-squared(38)=244.19; p<.001. Figures are rounded to 2 decimal places, percentages are rounded to nearest whole percentage. Bolded rows indicate P<.05. Missing responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.7. Alcohol-related help seeking

2.7.1. Overview of help-seeking behaviours

One-in-ten participants who consumed alcohol in the past 12 months within NHMRC guidelines thought about seeking help to reduce their alcohol consumption (10%; Figure 26) and nearly two-in-five (37%) participants who exceeded NHMRC guidelines (either single-day, weekly, or both guidelines) thought about seeking help. Of the participants who consumed alcohol within NHMRC guidelines and thought about seeking help, nearly two-in-three did seek help (64%). Of the participants who exceeded NHMRC guidelines and thought about seeking help, over two-in-three did seek help (68%). Of the participants who consumed alcohol within NHMRC guidelines and sought help, over four-in-five received help (84%). Of the participants who exceeded NHMRC guidelines and sought help, the vast majority received help (92%). See below for breakdowns by alcohol use level, age group, gender, and sexual identity for thinking about seeking help (Figure 27) and seeking help (Figure 28). Due to low cell sizes, we have not presented alcohol use and demographic breakdowns for receiving help.

Figure 26. Thinking about seeking help, seeking help, and receiving help to reduce alcohol consumption among participants who consumed alcohol in the past 12 months.

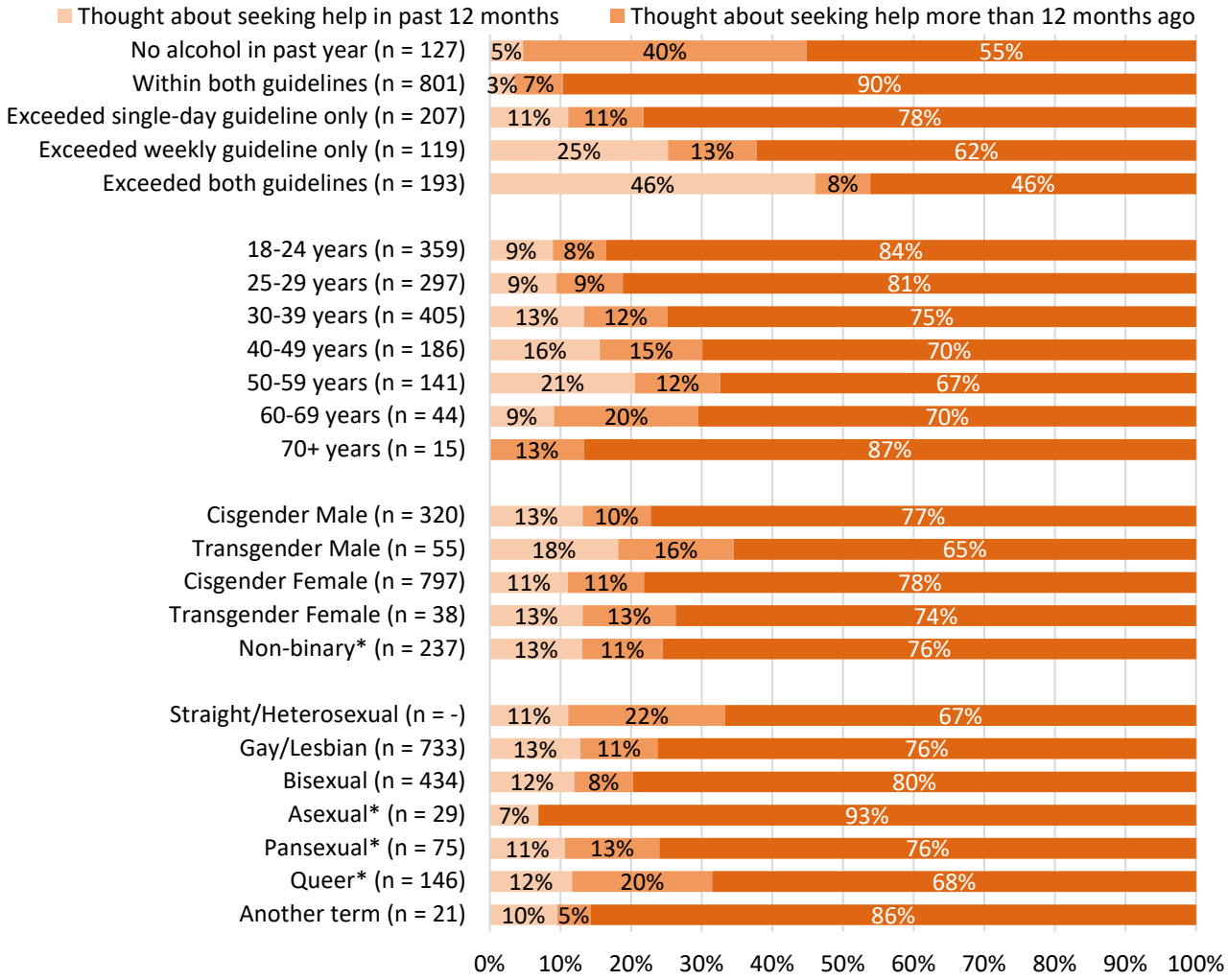


Note. 'Exceeded guidelines' includes participants who exceeded one or both NHMRC guidelines (no more than 4 drinks on a single day; no more than 10 drinks in a week). 'Sought help' was only asked of participants who indicated they had thought about seeking help. 'Received help' was only asked of participants who indicated they had sought help. Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.7.1.1. Thought about seeking help

Around half of participants who hadn't consumed alcohol in the past 12 months (45%; Figure 27) and participants who exceeded both NHMRC guidelines (54%) had ever thought about seeking help to reduce their alcohol consumption. Nearly two-in-five participants who exceeded the weekly NHMRC guideline but not the single-day guideline (38%) and around one-in-five participants who exceeded the single-day NHMRC guideline but not the weekly guideline (22%) had ever thought about seeking help. One-in-ten participants who consumed alcohol within guidelines had ever thought about seeking help.

Figure 27. Thought about seeking help to reduce alcohol consumption.

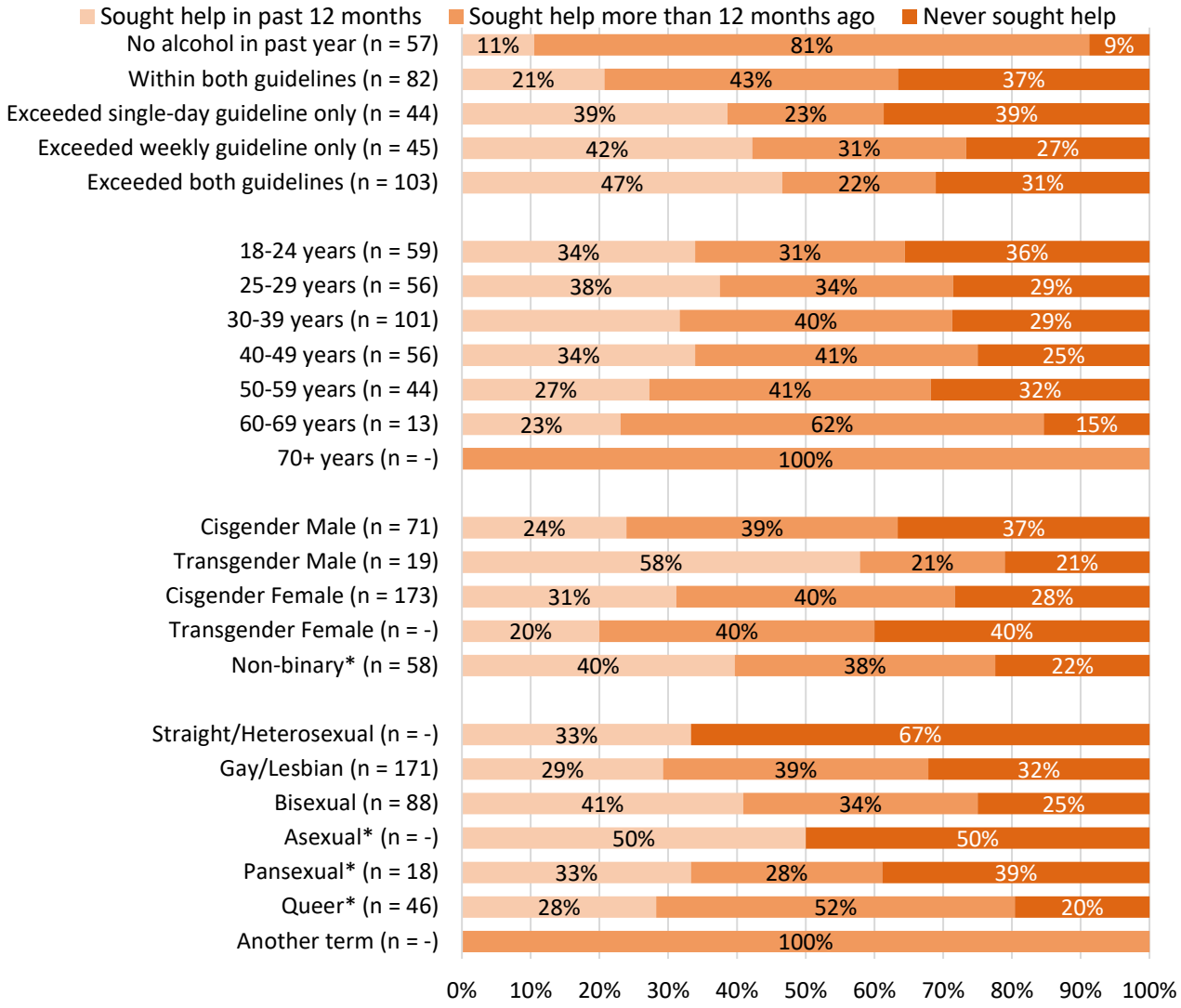


Note. Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.1.2. Seeking help among those who had thought about seeking help

Around four-in-five participants who hadn't consumed alcohol in the past 12 months (81%; Figure 28) sought help to reduce their alcohol consumption more than 12 months ago. Around two-in-five participants who exceeded one of the NHMRC guidelines had sought help in the past 12 months (39% single-day guideline only,42% weekly guideline only). Nearly half of participants who exceeded both guidelines (47%) had sought help in the past 12 months.

Figure 28. Seeking help to reduce alcohol consumption among participants who had thought about seeking help.



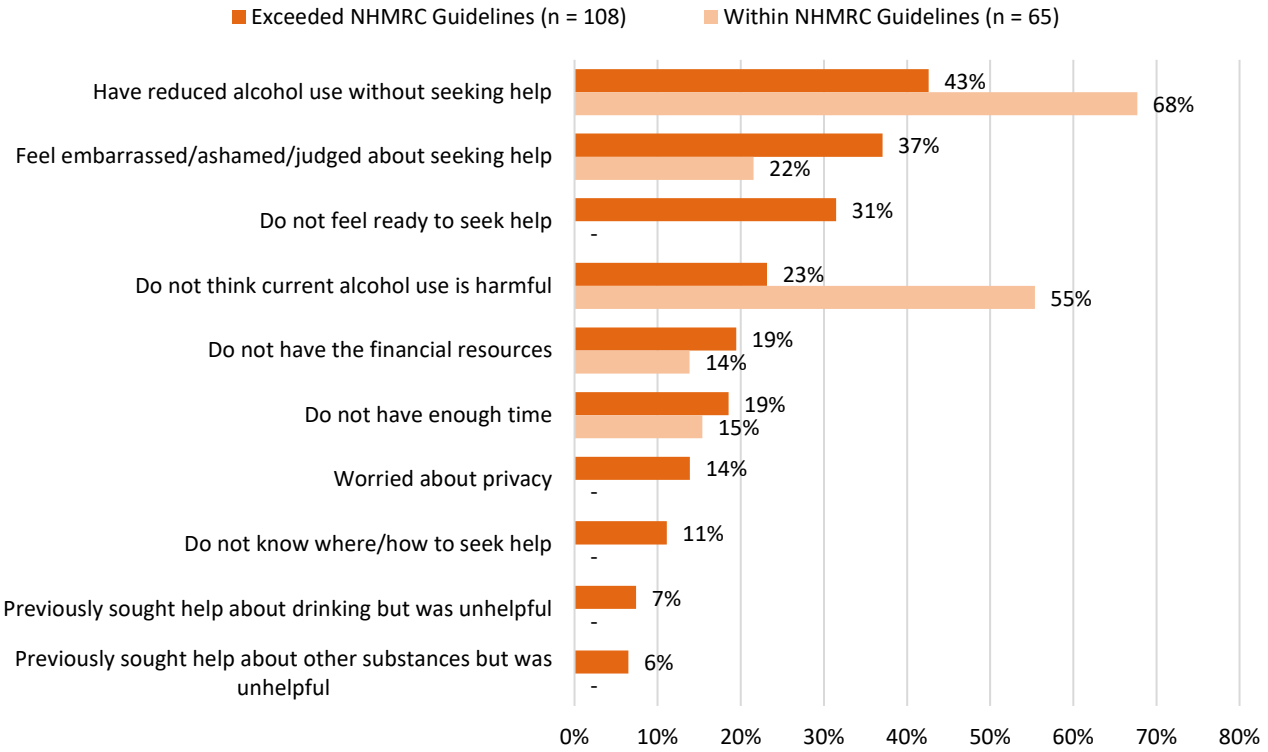
Note. Single-day guideline = No more than 4 standard drinks on a single day. Weekly guideline = No more than 10 standard drinks in a week. - = Number suppressed due to small cell size (n ≤ 10 but not 0). Rounded to whole percentages. Missing responses and 'Don't know' and 'Prefer not to say' responses were excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.2. Barriers to seeking help to reduce alcohol consumption

2.7.2.1. Common barriers to help seeking

Among participants who had thought about seeking help to reduce their alcohol consumption but did not actually seek help in the past 12 months, the most common reason for not seeking help was that they thought they had reduced their alcohol consumption without seeking help (43% among those who exceeded NHMRC guidelines; 68% among those who consumed alcohol within NHMRC guidelines; Figure 29). Among those who exceeded NHMRC guidelines, the next most common reasons were that of feeling embarrassed, ashamed, or being judged about seeking help (36%) and not feeling ready to seek help (31%). Among those who consumed alcohol within NHMRC guidelines, the next most common reasons were that they did not think their current level of alcohol consumption was harmful (55%) and feeling embarrassed, ashamed, or being judged about seeking help (22%).

Figure 29. Barriers to seeking help to reduce alcohol consumption among participants who consumed alcohol and thought about seeking help but did not seek help to reduce alcohol consumption in the past 12 months.

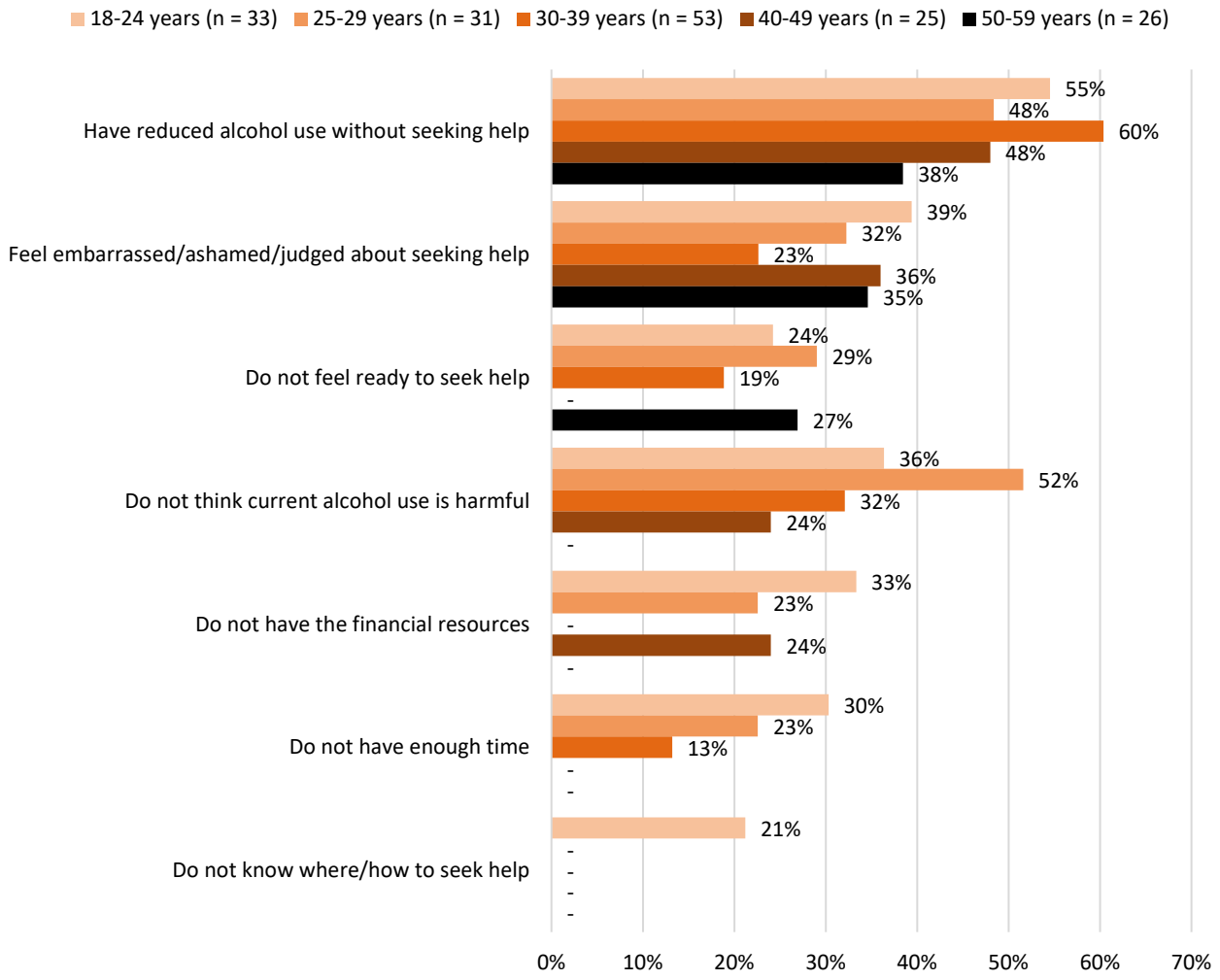


Note. - = Percent suppressed due to small cell size (n≤5 but not 0). 'Exceeded guidelines' includes participants who exceeded one or both NHMRC guidelines (no more than 4 drinks on a single day; no more than 10 drinks in a week). Barriers with small cell size (n≤5 but not 0) among participants who exceeded NHMRC guidelines and among participants who consumed alcohol within guidelines have been excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.7.2.2. Common barriers to help seeking by age group

Among participants who had thought about seeking help to reduce their alcohol consumption but did not actually seek help in the past 12 months, the most common reasons for not seeking help across all age groups reported were that their current alcohol consumption was not harmful or they reported they had reduced their alcohol consumption without seeking help (38-60%; Figure 30). Some barriers unique to younger age groups include not having enough time, not having enough financial resources, and not knowing where or how to seek help.

Figure 30. Most common barriers to help seeking by age group among participants who consumed alcohol and thought about seeking help but did not seek help to reduce alcohol consumption in the past 12 months.

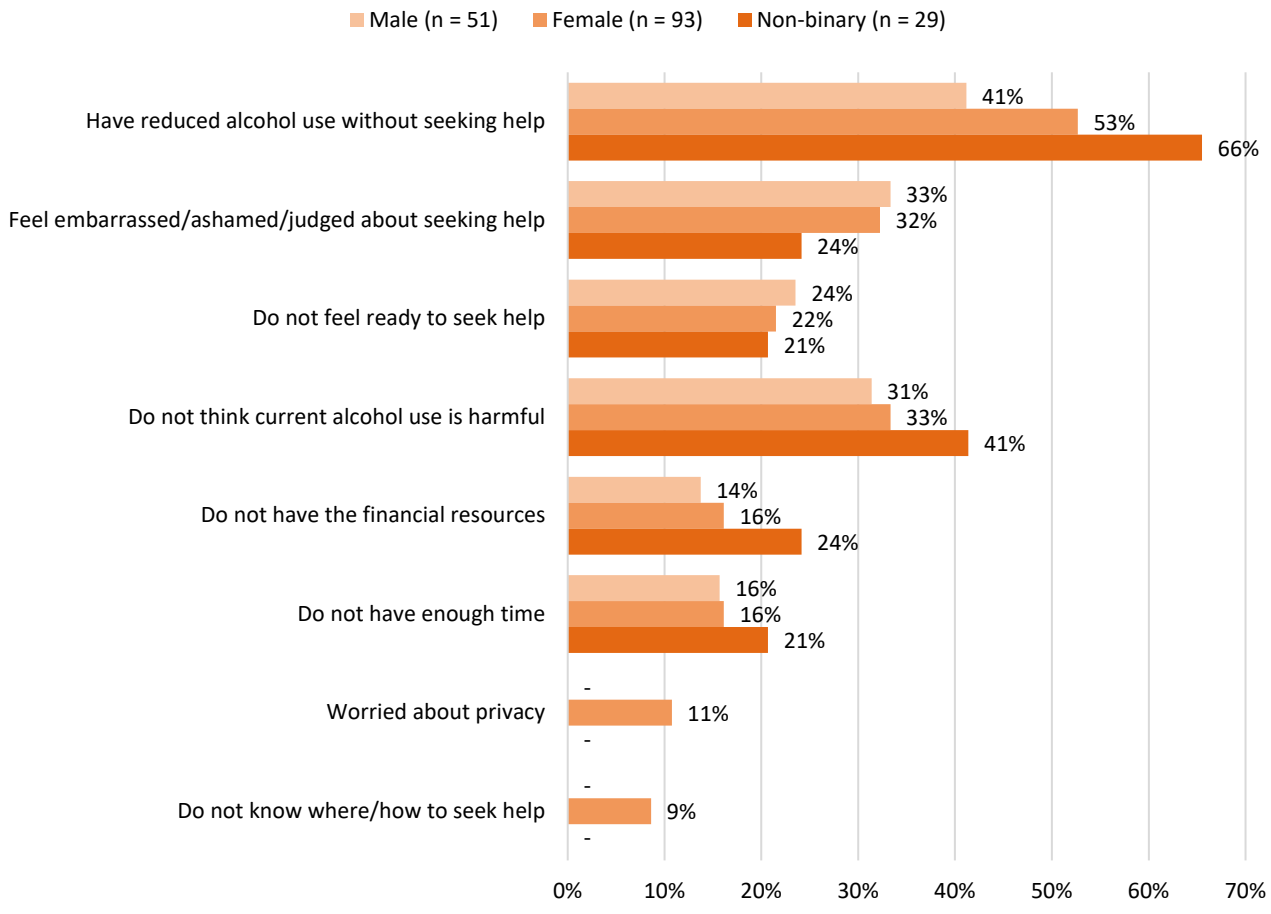


Note. - = Percent suppressed due to small cell size (n≤5 but not 0). Barriers with small cell size (n≤5 but not 0) across all age groups have been excluded. The 60-69 years and 70+ years age groups have been excluded due to small cell size (n≤5 but not 0). Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.2.3. Common barriers to help seeking by gender

Among participants who had thought about seeking help to reduce their alcohol consumption but did not actually seek help in the past 12 months, the most common reason for not seeking help across all gender identities was that they thought they had reduced their alcohol consumption without seeking help (41-66%; Figure 33). For male participants, the second most common reason for not seeking help was that they felt embarrassed, ashamed, or judged about seeking help (33%). For female and non-binary participants, the second most common reason for not seeking help was that they thought their current alcohol consumption was not harmful (33%-41%).

Figure 31. Most common barriers to help seeking by gender among participants who consumed alcohol and thought about seeking help but did not seek help to reduce alcohol consumption in the past 12 months.

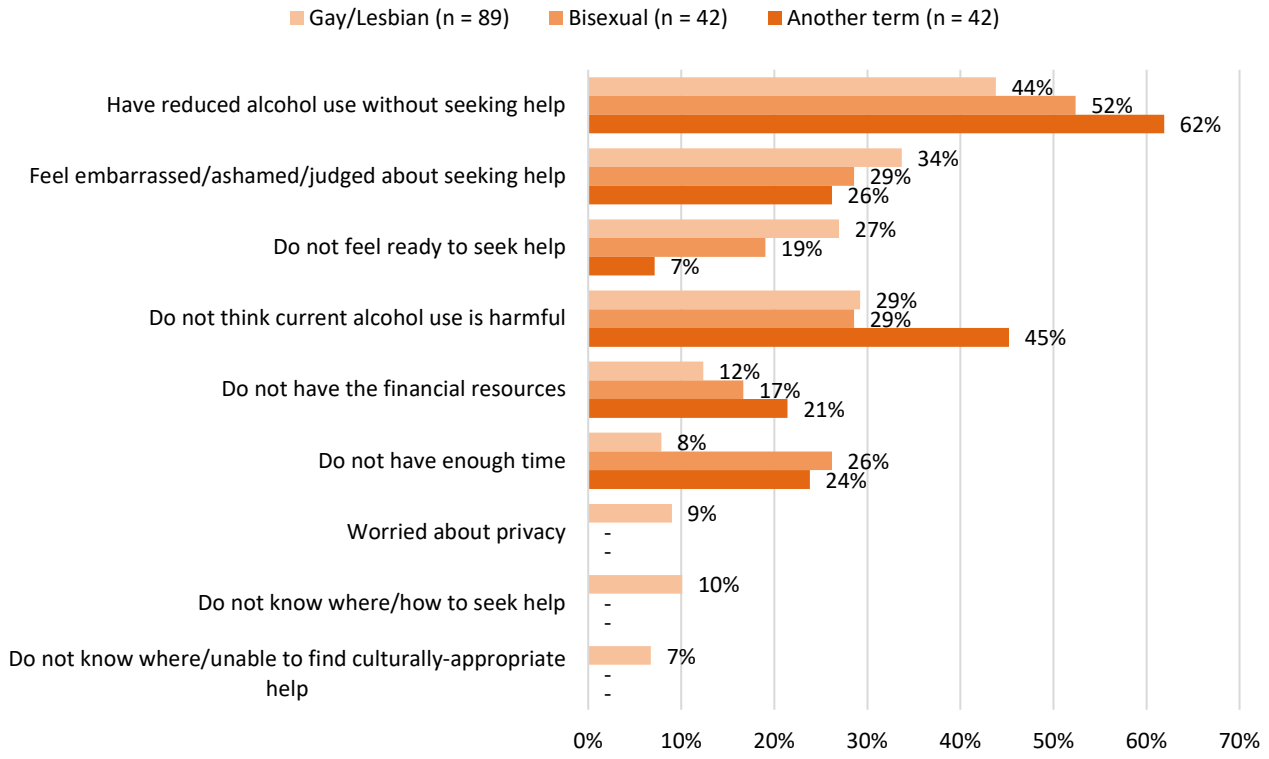


Note. - = Percent suppressed due to small cell size (n≤5 but not 0). Includes only participants who consumed alcohol and thought about seeking help to reduce alcohol but did not seek help. As there were very few participants in this subsample who identified as transgender (n≤10 but not 0), we did not distinguish between cisgender and transgender in the 'Male' and 'Female' groups. Barriers with small cell size (n≤5 but not 0) across all genders have been excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.2.4. Common barriers to help seeking by sexual identity

Among participants who had thought about seeking help to reduce their alcohol consumption but did not actually seek help in the past 12 months, the most common reason for not seeking help across all sexual identities was that they thought they had reduced their alcohol consumption without seeking help (44-62%; Figure 37). For gay/lesbian participants, the second most common reason for not seeking help was that they felt embarrassed, ashamed, or judged about seeking help (34%). For bisexual participants, feeling embarrassed, ashamed, or judged about seeking help (29%) and feeling that their current alcohol consumption was not harmful (29%) were the second most common reasons for not seeking help. For participants who identified as another sexual identity, the second most common reason for not seeking help was that they thought their current alcohol consumption was not harmful (45%).

Figure 32. Most common barriers to help seeking by sexual identity among participants who consumed alcohol and thought about seeking help but did not seek help to reduce alcohol consumption in the past 12 months.



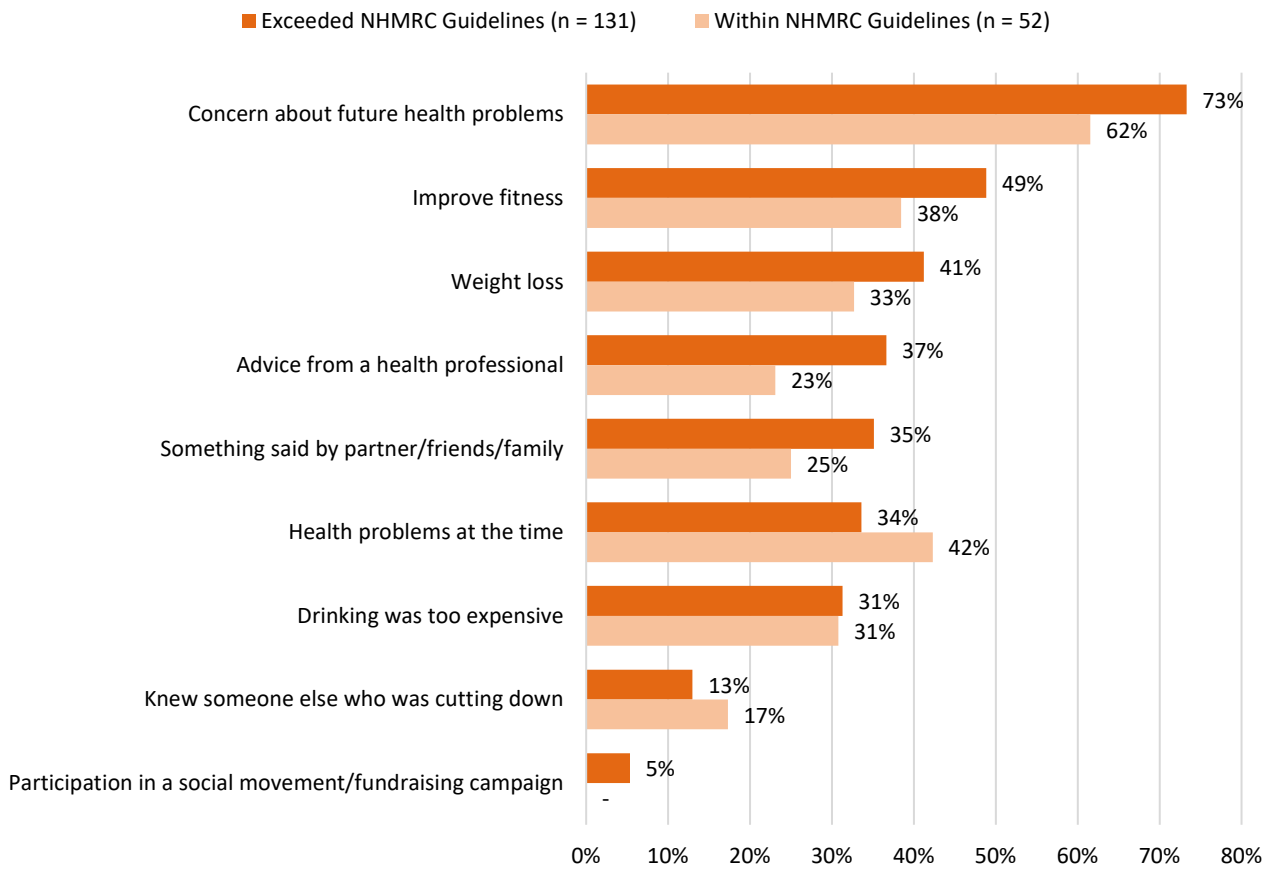
Note. - = Percent suppressed due to small cell size (n≤5 but not 0). As there were very few participants in this subsample who identified as straight/heterosexual, asexual, pansexual, or another term (n≤10 but not 0), the 'Another term' group includes participants who identified as straight/heterosexual, asexual, pansexual, queer, or another term. Barriers with small cell size (n≤5 but not 0) across all sexual identities have been excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.3. Facilitators of seeking help to reduce alcohol consumption

2.7.3.1. Common facilitators of seeking help to reduce alcohol consumption

Among participants who had ever sought help to reduce their alcohol consumption, the most common reason for seeking help was that they were concerned about future health problems (73% among those who exceeded NHMRC guidelines; 62% among those who consumed alcohol within NHMRC guidelines; Figure 33). Among those who exceeded NHMRC guidelines, the next most common reasons were wanting to improve fitness (49%) and wanting to lose weight (41%). Among those who consumed alcohol within NHMRC guidelines, the next most common reasons were that they had health problems at the time when they sought help to reduce drinking (42%) and wanting to improve fitness (38%).

Figure 33. Facilitators of seeking help among participants who have ever sought help to reduce alcohol consumption.

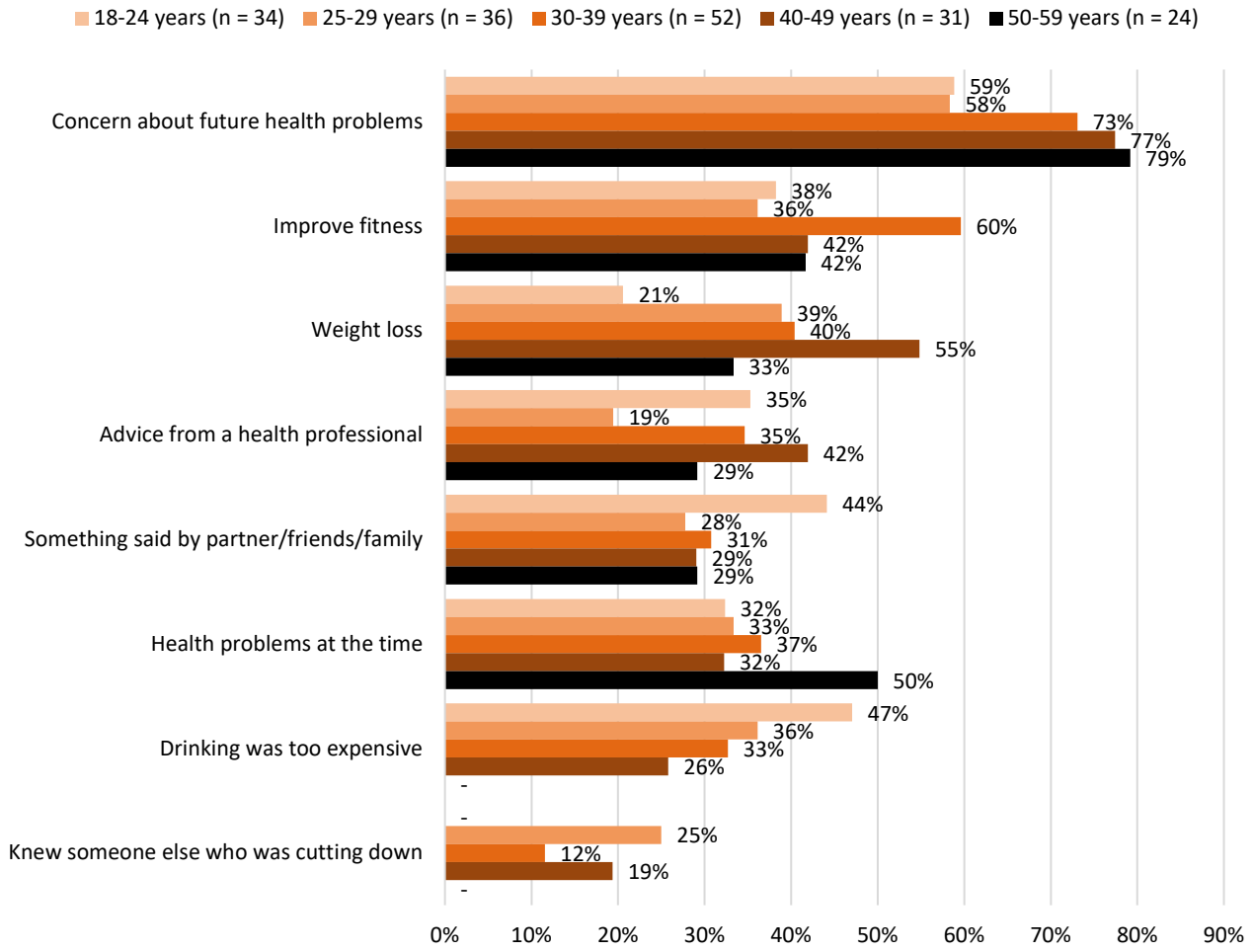


Note. - = Percent suppressed due to small cell size (n≤5 but not 0). 'Exceeded guidelines' includes participants who exceeded one or both NHMRC guidelines (no more than 4 drinks on a single day; no more than 10 drinks in a week). Facilitating factors with small cell size (n≤5 but not 0) among participants who exceeded NHMRC guidelines and among participants who consumed alcohol within guidelines have been excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.7.3.2. Common facilitators of seeking help to reduce alcohol consumption by age group

Among participants who had ever sought help to reduce their alcohol consumption, the most common reason for seeking help across all age groups was that they were concerned about future health problems (58-79%; Figure 34). The second most common reason for seeking help among participants aged 18-24 years was that drinking was too expensive (47%). For participants aged 25-49 years, the second most common reason for seeking help was to lose weight (39-55%). For participants aged 50-59 years, the second most common reason for seeking help was due to having health problems at the time of seeking help (50%).

Figure 34. Most common facilitators of help seeking by age group among participants who had ever sought help to reduce alcohol consumption.

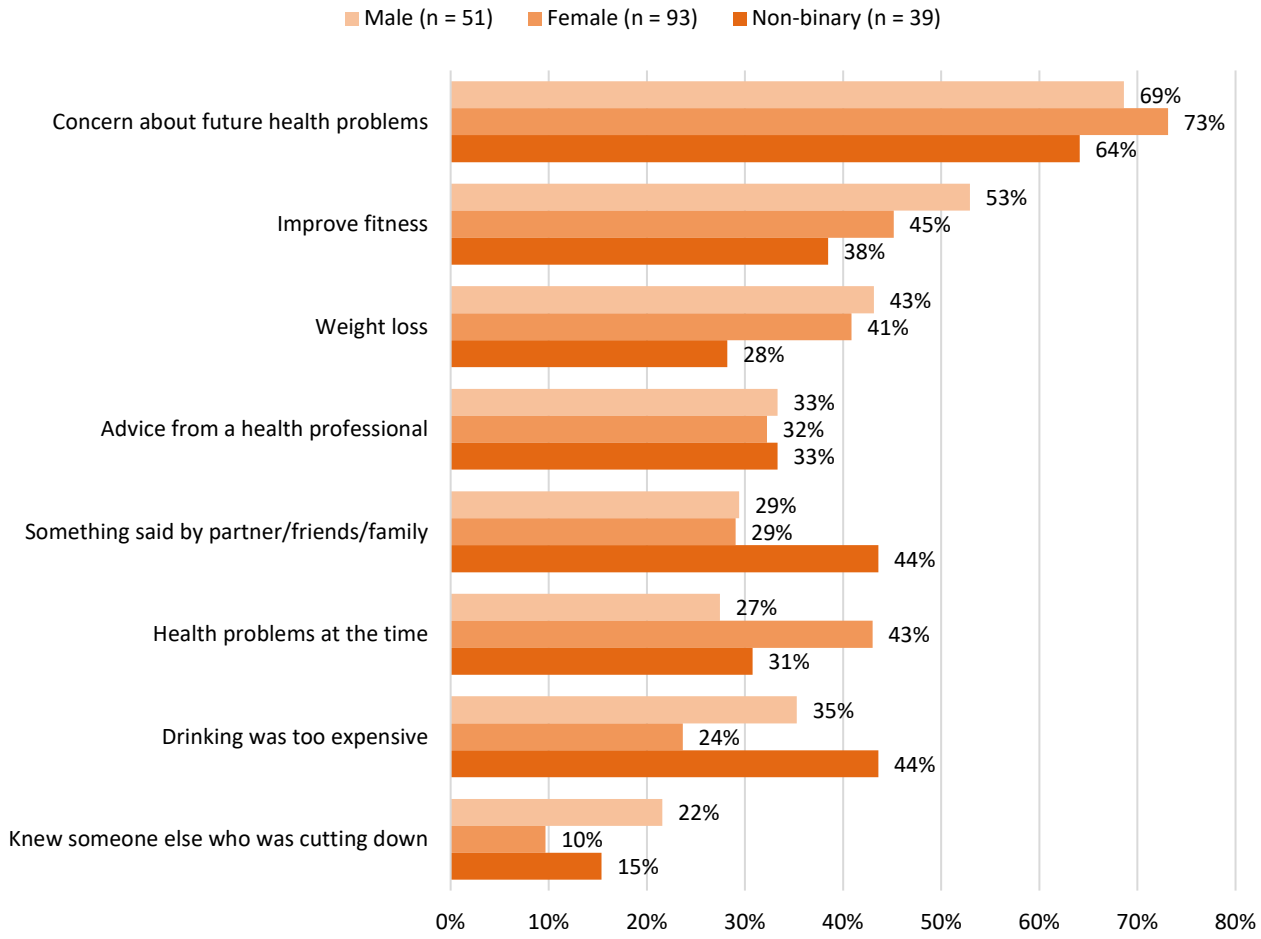


Note. - = Percent suppressed due to small cell size (n≤5 but not 0). Facilitating factors with small cell size (n≤5 but not 0) across all age groups have been excluded. The 60-69 years and 70+ years age groups have been excluded due to small cell size (n≤5 but not 0). Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.3.3. Common facilitators of seeking help to reduce alcohol consumption by gender

Among participants who had ever sought help to reduce their alcohol consumption, the most common reason for seeking help across all gender identities was that they were concerned about future health problems (64-73%; Figure 35). For male and female participants, the second most common reason for seeking help was that they wanted to improve their fitness (45-53%). For non-binary participants, the second most common reasons for seeking help were that their partner/friends/family said something about their drinking (44%) and that drinking was too expensive (44%).

Figure 35. Most common facilitators of help seeking by gender among participants who had ever sought help to reduce alcohol consumption.

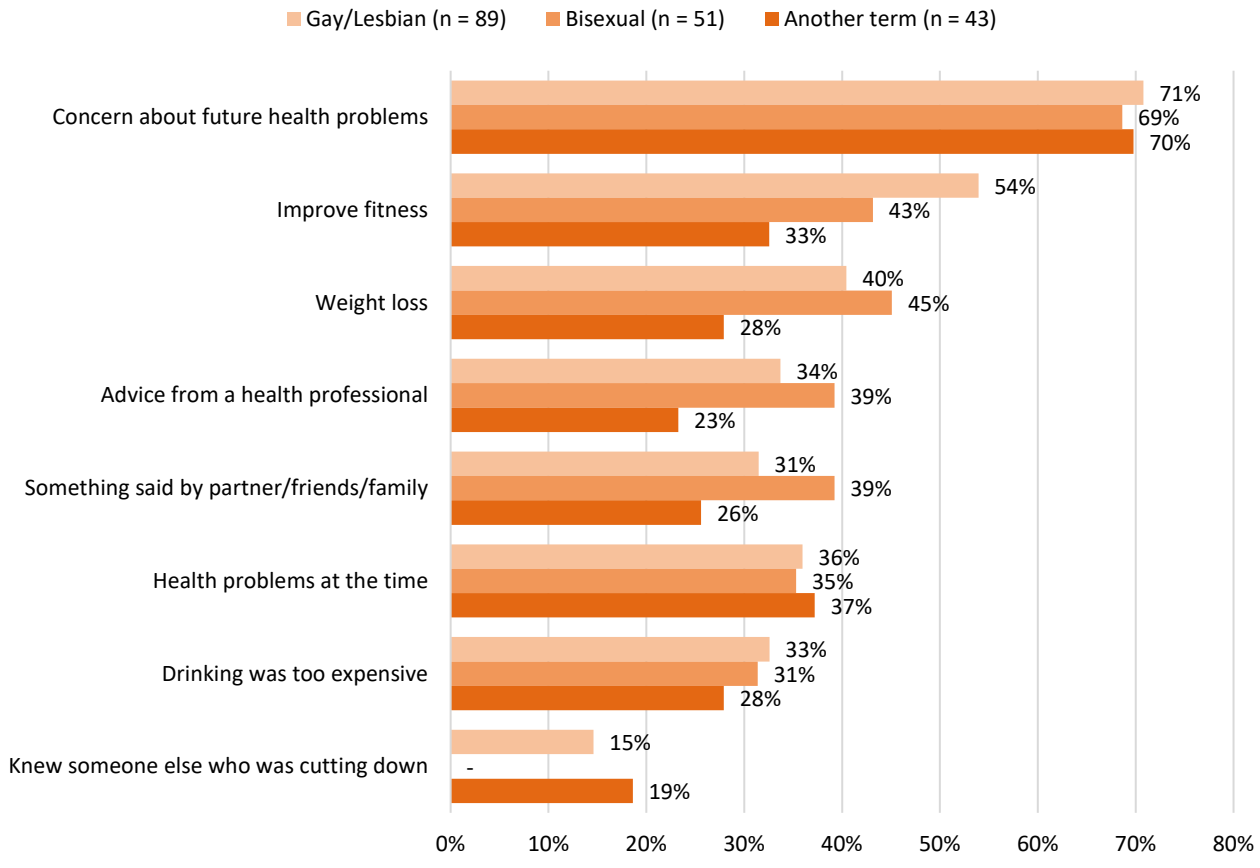


Note. As there were very few participants in this subsample who identified as transgender (n≤10 but not 0), we did not distinguish between cisgender and transgender in the 'Male' and 'Female' groups. Facilitating factors with small cell size (n≤5 but not 0) across all genders have been excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.3.4. Common facilitators of seeking help to reduce alcohol consumption by sexual identity

Among participants had ever sought help to reduce their alcohol consumption, the most common reason for seeking help across all sexual identities was that they were concerned about future health problems (69-71%; Figure 36). For gay/lesbian participants, the second most common reason for seeking help was to improve their fitness (54%). For bisexual participants, losing weight was the second most common reason for seeking help (45%). For participants who identified as another sexual identity, the second most common reason for seeking help was that they had health problems at the time when they sought help (37%).

Figure 36. Most common barriers to help seeking by sexual identity among participants who consumed alcohol and thought about seeking help but did not seek help to reduce alcohol consumption in the past 12 months.



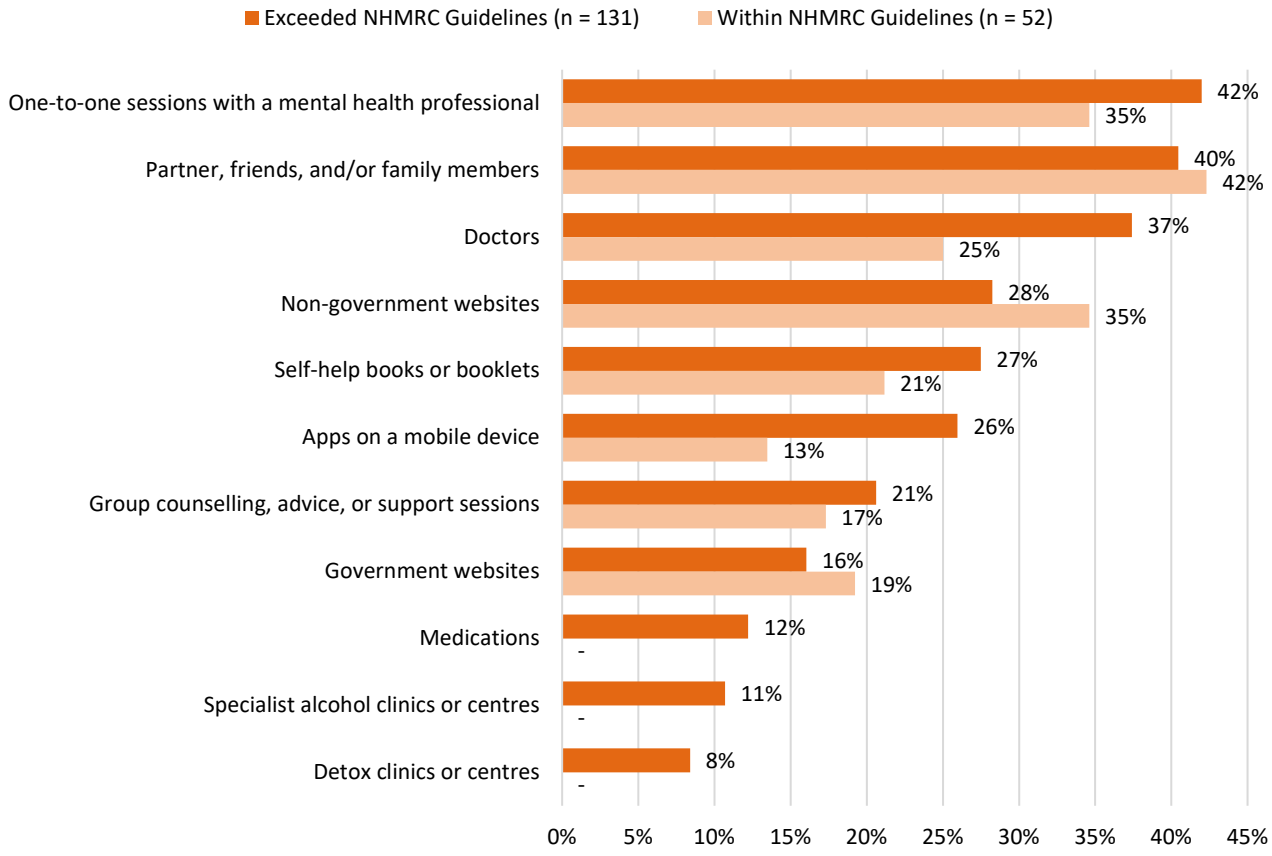
Note. - = Percent suppressed due to small cell size (n≤5 but not 0). As there were very few participants in this subsample who identified as straight/heterosexual, asexual, pansexual, or another term (n≤10 but not 0), the 'Another term' group includes participants who identified as straight/heterosexual, asexual, pansexual, queer, or another term. Facilitating factors with small cell size (n≤5 but not 0) across all sexual identities have been excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population, particularly for percentages where the denominator is small (e.g., n<50).

2.7.4. Methods of help to reduce alcohol consumption

2.7.4.1. Methods of help previously sought

Among participants who had ever sought help for their alcohol consumption and exceeded NHMRC guidelines in the past 12 months, the most common methods of help sought were one-to-one sessions with a mental health professional (42%; Figure 37), followed by partners, friends, and/or family members (40%), and doctors (37%; including psychiatrists). Among participants who had ever sought help for their alcohol consumption and consumed alcohol within guidelines in the past 12 months, the most common methods of help sought were partners, friends, and/or family members (42%), followed by one-to-one sessions with a mental health professional (35%), and non-government websites (35%).

Figure 37. Methods of help sought to reduce alcohol consumption among participants who had ever sought help to reduce alcohol consumption.

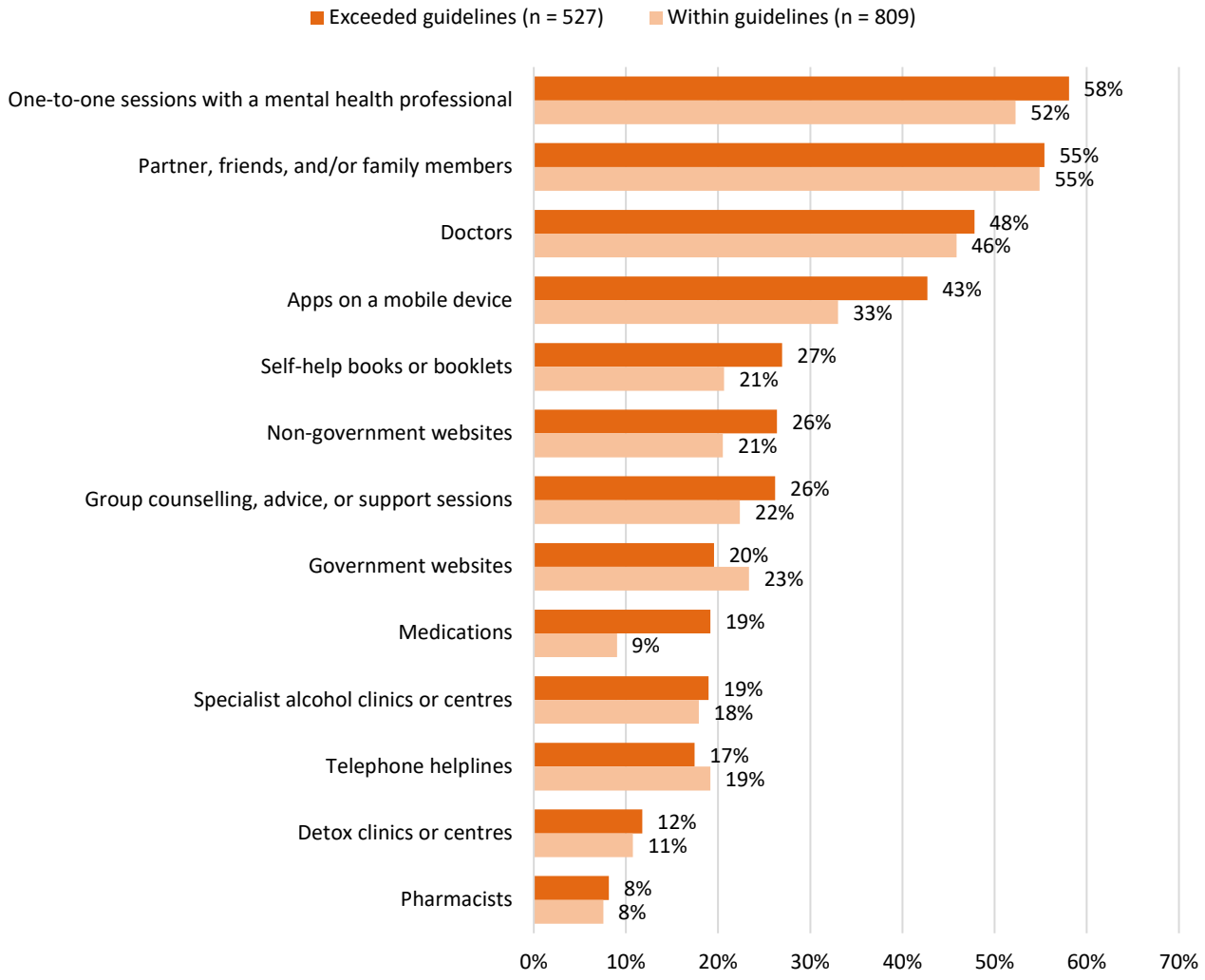


Note. - = Percent suppressed due to small cell size (n≤5 but not 0). 'Exceeded guidelines' includes participants who exceeded one or both NHMRC guidelines (no more than 4 drinks on a single day; no more than 10 drinks in a week). Methods of help with small cell size (n≤5 but not 0) among participants who exceeded NHMRC guidelines and among participants who consumed alcohol within guidelines have been excluded. Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

2.7.4.2. Methods of help likely to use in the future

Among participants who exceeded NHMRC guidelines, the most common methods of help that they were likely to use in the future if they wished to reduce their alcohol consumption were one-to-one sessions with a mental health professional (58%; Figure 38), followed by partners, friends, and/or family members (55%), and doctors (48%; including psychiatrists). Among participants who consumed alcohol within NHMRC guidelines, the most common methods of help that they were likely to use in the future if they wished to reduce their alcohol consumption were partners, friends, and/or family members (55%), followed by one-to-one sessions with a mental health professional (52%), and doctors (46%; including psychiatrists).

Figure 38. Methods of help likely to use in the future to reduce alcohol consumption.



Note. 'Exceeded guidelines' includes participants who exceeded one or both NHMRC guidelines (no more than 4 drinks on a single day; no more than 10 drinks in a week). Caution should be taken in interpreting results as the data are not representative of the NSW LGBTQ+ adult population.

3. Conclusions

As a general note, any interpretation of these results should be considered in context of the short timeframe of recruitment for our study (4 weeks) and skewed demographic distribution (e.g., low proportion of male vs female participants). Our participant sample is not representative of all LGBTQ+ adults in NSW nor Australia.

3.1. Alcohol consumption

Alcohol consumption in our NSW sample of LGBTQ+ adults appears to be slightly higher than that of national estimates from the 2019 Private Lives 3 survey (PL3), which is currently the largest Australian survey of LGBTQ+ adults' health (e.g., 90% of participants consumed alcohol in the past 12 months vs 86% in PL3; 47% of participants who consumed alcohol in the past 12 months drank at least twice a week compared to 37% in PL3)[32]. As a general Australian population reference, we compare our findings with estimates from the 2019 NDSHS. Participants in our study appear to drink more per occasion compared to population estimates, with 31% of our participants who consumed alcohol reporting that they drank five or more drinks on a typical drinking day, compared to 23% of NDSHS adult participants who consumed alcohol[30, 33]. Similarly, our participants reported consuming alcohol more frequently, with 77% of our participants who consumed alcohol reporting that they drank at least twice a month, compared to 70% of NDSHS adult participants who consumed alcohol[30, 34]. However, as noted above, due to the study design these comparisons do not apply to the population of LGBTQ+ adults in NSW and are specific to this study population only.

In our survey, around one-in-eight participants who consumed alcohol in the past 12 months exceeded Guideline 1 of the 2020 NHMRC alcohol consumption guidelines to reduce the risk of harm from alcohol-related disease or injury (i.e., they consumed more than ten standard drinks a week and more than four standard drinks on any one day)[25]. Around one-in-five participants exceeded only one part of Guideline 1 (i.e., more than ten standard drinks in a typical week or more than four standard drinks on a typical drinking day). At the time of this report, this is the only known study measuring alcohol risk against the 2020 NHMRC guidelines among LGBTQ+ adults.

The youngest participants in our study (18-24 years) appeared to consume alcohol less frequently but tended to drink around the same amount as people aged 25-59 years on a typical drinking day. The oldest participants in our study (60+ years) tended to consume the fewest standard drinks on a typical drinking day of any age group. Over half of the participants aged 40+ years consumed

alcohol at least twice a week and over one-in-three exceeded the NHMRC weekly alcohol consumption guideline. Additionally, participants aged 40-59 years were much more likely to be considered 'very high risk' according to the AUDIT compared to people aged 18-24 years. This is consistent with recent changes across the Australian population, where young peoples' alcohol consumption has been declining and alcohol consumption among older adults has been stable or slightly increasing [30]. Additionally, cisgender male participants were much more likely to be considered at risk of alcohol-related harm according to the AUDIT compared to cisgender female, transgender male, and non-binary participants.

There is an opportunity and a need to address harmful levels of alcohol consumption among LGBTQ+ adults to reduce alcohol-related health risks, particularly in cisgender men and those aged 40+ years.

3.2. Perceived health risks of alcohol consumption

There was general awareness among participants that consuming alcohol causes health risks, with most participants who exceeded NHMRC guidelines perceiving their own alcohol consumption as harmful to their health. Almost all participants indicated that they thought alcohol consumption was associated with various health conditions such as liver disease, depression, anxiety, obesity, and heart disease.

Cancer was not top of mind compared to other health conditions; whereas nearly all participants were aware of liver disease risk associated with alcohol, two thirds of participants were aware of cancer risk. One third were aware without any prompting and further one third were aware after being prompted with a list of potential health conditions. Awareness of cancer risk associated with alcohol consumption was higher among people aged 25-59 years compared to people aged 18-24 years and among those who exceeded only the NHMRC weekly guideline or both guidelines compared to those who consumed alcohol within guidelines. While cancer risk awareness appears to be higher in our sample compared to the general NSW population (66% awareness vs 56% in 2019 Cancer Council NSW survey)[35], there remains a third of our sample who were completely unaware.

Knowledge around alcohol-related cancer risk in the LGBTQ+ community needs improvement, particularly among young adults.

In terms of cancer types, nearly all participants who were aware of alcohol-related cancer risk were also aware of alcohol as a risk factor for liver cancer and stomach cancer. Just over half of participants who were aware of alcohol-related cancer risk were aware of alcohol as a risk factor for colon and rectal cancers and mouth and throat cancers. Although breast/chest cancer is one of the most common cancers attributable to alcohol consumption [5], less than one-in-five participants were aware of this association. More participants cited cancers that have less established evidence regarding connection to alcohol consumption (pancreas[36-38], bladder[39, 40], and brain[41]) than breast/chest cancer.

There is a need to increase awareness in the LGBTQ+ community regarding the types of cancer that are associated with alcohol consumption, particularly those that are common yet less known such as breast/chest cancer.

3.3. Alcohol-related negative consequences

Almost all participants who consumed alcohol in the past 12 months had experienced alcohol-related negative consequences that generally have minimal long-term impacts, such as feeling drunk, having a headache, or feeling nauseous. Around half of participants who consumed alcohol in the past 12 months had experienced negative consequences that could impact their long-term health and psychosocial wellbeing, for example, getting into a verbal argument, regretting having sex with someone, or physically injuring themselves. Experience of any alcohol-related negative consequence was much more common among participants who had exceeded NHMRC guidelines.

Our findings support the use of the national guidelines for alcohol consumption to reduce health risks among LGBTQ+ people.

3.4. Help seeking to reduce alcohol consumption

Nearly two-in-three participants who exceeded NHMRC alcohol consumption guidelines in the past 12 months had not thought about seeking help to reduce their alcohol consumption. Most participants who thought about seeking help did seek help and promisingly, the majority who sought help also received help. Among those whose alcohol consumption exceeded NHMRC guidelines who thought about seeking help, common reasons for not following through to seek help included:

- Feeling that they have reduced their alcohol use without seeking help.

- Feeling embarrassed, ashamed, or judged about seeking help.
- Not feeling ready to seek help.
- Not perceiving their current alcohol consumption as being harmful.

Notably, there were additional barriers to help-seeking that were unique to younger people:

- Not having the financial resources to seek help.
- Not having enough time to seek help.
- Not knowing where or how to seek help.

These findings suggest that more needs to be done to motivate LGBTQ+ people who currently drink at risky levels to think about seeking help to reduce their alcohol consumption.

Raising awareness about what constitutes harmful levels of alcohol consumption, encouraging immediate action, and doing so in an empowering and non-judgemental manner may facilitate help-seeking behaviours to reduce alcohol consumption among LGBTQ+ people who drink at risky levels.

Among participants who had ever sought help to reduce their alcohol consumption, health considerations were the most cited reasons for seeking help. These include distal concerns such as wanting to avoid future health problems, and more immediate concerns like improving fitness and losing weight. Advice from a health professional and comments by partners, family, or friends were also common reasons for seeking help.

As for sources of help that participants have used in the past and would use in the future, help from trusted sources were most cited including mental health professionals, doctors, and partners, friends and/or family members. Digital support such as from non-government websites and mobile phone apps were also cited.

Raising awareness of risky alcohol consumption levels among the broader community, including health professionals, can encourage and support help seeking behaviours among LGBTQ+ people who drink at risky levels.

3.5. Strengths and limitations

This is one of the first studies to examine knowledge regarding the health risks of alcohol consumption among LGBTQ+ people in Australia. There are some strengths and limitations to consider when interpreting the results. While our sample was large (n=1,499) and relatively diverse, we note that our study and similar studies of LGBTQ+ people had large proportions of cisgender women, people who identify as gay or lesbian, and people who are younger (particularly among gender-diverse participants)[32]. As population-level surveys such as the Australian Census do not adequately capture gender and sexual identity, we were unable to conduct weighted analyses and it is difficult to determine whether our data is representative of the NSW LGBTQ+ community. However, we had a similar distribution of age, gender identity, and sexual identity compared to the only recent national survey of LGBTQ+ adults, PL3[32].

To facilitate comparison with existing and future studies, we used validated measures (AUDIT, DMQ-R) and assessed alcohol consumption against the current national guidelines. However, our survey did not include questions that could be used to assess alcohol consumption against the 2009 iteration of the national guidelines[42], which has to date been more commonly used in national reporting[30, 32]. Additionally, the item measuring frequency of heavy single-day alcohol consumption was mistyped as “4 or more drinks” rather than “5 or more drinks”, meaning that we were not able to assess participants’ frequency of exceeding the single-day guideline. To maximise accuracy when assessing knowledge of alcohol-related health risks, we avoided specific mentions of cancer and other health risks in the study information, instead framing as a general survey about alcohol behaviours and beliefs. We also took care to avoid leading/loaded questions when assessing knowledge (e.g., first asking participants to name health conditions they perceive to be associated with alcohol consumption without further prompting and subsequently asking participants to select from a list of potential health conditions).

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Appendices

Appendix A. SODA+ Questionnaire

1. Screening

First off, we'd just like to confirm that you're eligible for this study. This background information about you will also help us analyse the results of this survey. **It is our greatest priority to protect your confidentiality – we do not collect any information such as your name or contact information that can identify you.**
1.1. What is your age? _____ years **[Those < 18 years of age are ineligible and will be redirected to an end of survey ineligibility message]**
1.2. [ACON] How do you describe your gender? 1. Man or male 2. Woman or female 3. Non-binary 4. I use a different term (please specify)
1.3. [ACON] At birth, you were recorded as: 1. Male 2. Female 3. Another term (please specify)
1.4. [ACON] Were you born with a variation of sex characteristics (sometimes called 'intersex')? 1. Yes 2. No 98. Don't know
1.5. [ACON] How do you describe your sexual orientation? 1. Straight or heterosexual 2. Gay or lesbian 3. Bisexual 4. I use a different term (please specify) 98. Don't know

* = modified from original scale

1.6. Do you currently live in New South Wales, Australia?

1. Yes
2. No **[Ineligible, will be redirected to an end of survey ineligibility message]**

If ALL of the following criteria are met, respondent is ineligible and will be redirected to an end of survey ineligibility message:

- **[Selected 'Man or male' in 1.2. AND 'Male' in 1.3.] OR [Selected 'Woman or female' in 1.2. AND 'Female' in 1.3.]**
- **Selected 'No' OR 'Don't know' in 1.4.**
- **Selected 'Straight or heterosexual' in 1.5.**

* = modified from original scale

2. About you

Some more background information about you will help us analyse the results of this survey.

It is our greatest priority to protect your confidentiality – we do not collect any information that can identify you.

If you do not feel comfortable answering any of these questions, please feel free to select 'Prefer not to say'.

2.1 Are you of Aboriginal or Torres Strait Islander origin?

1. Yes, Aboriginal
2. Yes, Torres Strait Islander
3. Yes, both Aboriginal and Torres Strait Islander
0. No
98. Don't know
99. Prefer not to say

2.2 In which country were you born?

[Dropdown menu with list of countries including 'Don't know' and 'Prefer not to say' options]

2.3 Do you speak a language other than English at home?

1. Yes (please specify)
0. No
98. Don't know
99. Prefer not to say

* = modified from original scale

3. Your alcohol use

The following questions ask about your use of alcohol. We understand that some of these questions may be confronting.

Please remember, it is our greatest priority to protect your confidentiality – we do not collect any information that can identify you.

If you do not feel comfortable answering any of these questions, please feel free to select 'Prefer not to say'. If you wish to stop participating, you can exit the survey at any time.

If you do experience distress or would like to seek assistance, please click here for a list of places you can contact.

[Popup box with resources if clicked]

- **QLife (3pm-midnight): 1800 184 527**
- **Lifeline (24 hours): 13 11 14**
- **Suicide Call Back Service (24 hours): 1300 659 467**
- **National Alcohol & Other Drug Hotline (24 hours): 1800 250 015**
- **Family Drug Support (24 hours): 1300 368 186**
- **1800RESPECT (sexual assault and domestic/family violence helpline; 24 hours): 1800 737 732**

3.1 Have you ever used alcohol?

1. Yes, in the last 12 months
2. Yes, but more than 12 months ago **[SKIP to 3.12]**
0. No, never **[SKIP to 4.4]**
98. Don't know
99. Prefer not to say

3.2 [NDSHS] Before today, have you ever heard of a "standard drink" of alcohol?

1. Yes
0. No
98. Don't know
99. Prefer not to say

* = modified from original scale

3.3 **[AUDIT] In the last 12 months, how often did you have a drink containing alcohol?**

0. Never
1. Monthly or less
2. 2 to 4 times a month
3. 2 to 3 times a week
4. 4 to 5 times a week
5. 6 or more times a week

98. Don't know
99. Prefer not to say

* = modified from original scale

3.4 **[AUDIT*] In the last 12 months, how many standard drinks containing alcohol did you have on a typical day when you are drinking?**

Please refer to the standard drinks guide above or use this calculator.

[Dropdown menu]

1. 1 or fewer
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12
13. 13
14. 14
15. 15
16. 16
17. 17
18. 18
19. 19
20. 20 or more
98. Don't know
99. Prefer not to say

* = modified from original scale

3.5 **[AUDIT*] In the last 12 months, how many standard drinks containing alcohol did you have in a typical week?**

Please refer to the standard drinks guide above or use this calculator.

[Dropdown menu]

1. 1 or fewer
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12
13. 13
14. 14
15. 15
16. 16
17. 17
18. 18
19. 19
20. 20 or more
98. Don't know
99. Prefer not to say

3.6 **[AUDIT] In the last 12 months, how often did you have 4 or more standard drinks on one occasion?**

Please refer to the standard drinks guide above or use this calculator.

0. Never
1. Less than monthly
2. Monthly
3. Weekly
4. Daily or almost daily
98. Don't know
99. Prefer not to say

* = modified from original scale

3.7 **[AUDIT] How often during the last 12 months have you found that you were not able to stop drinking once you had started?**

0. Never
1. Less than monthly
2. Monthly
3. Weekly
4. Daily or almost daily

98. Don't know
99. Prefer not to say

3.8 **[AUDIT] How often during the last 12 months have you failed to do what was normally expected from you because of drinking?**

0. Never
1. Less than monthly
2. Monthly
3. Weekly
4. Daily or almost daily

98. Don't know
99. Prefer not to say

3.9 **[AUDIT] How often during the last 12 months have you needed a first drink in the morning to get yourself going after a heavy drinking session?**

0. Never
1. Less than monthly
2. Monthly
3. Weekly
4. Daily or almost daily

98. Don't know
99. Prefer not to say

3.10 **[AUDIT] How often during the last 12 months have you had a feeling of guilt or remorse after drinking?**

0. Never
1. Less than monthly
2. Monthly
3. Weekly
4. Daily or almost daily

98. Don't know
99. Prefer not to say

* = modified from original scale

3.11 **[AUDIT] How often during the last 12 months have you been unable to remember what happened the night before because you had been drinking?**

0. Never
1. Less than monthly
2. Monthly
3. Weekly
4. Daily or almost daily

98. Don't know
99. Prefer not to say

3.12 **[AUDIT] Have you or someone else ever been injured as a result of your drinking?**

0. No
1. Yes, but not in the last 12 months
2. Yes, during the last 12 months

98. Don't know
99. Prefer not to say

3.13 **[AUDIT] Has a relative or friend or a doctor or another health worker ever been concerned about your drinking or suggested you cut down?**

0. No
1. Yes, but not in the last 12 months
2. Yes, during the last 12 months

98. Don't know
99. Prefer not to say

[DMQ-R*] Listed below are some reasons people might be inclined to drink alcoholic beverages. Using the five-point scale, decide how frequently your own drinking is motivated by each of the reasons listed.

Some of these reasons might sound very similar, but there are subtle differences that are important to our research. Please answer them all to the best of your ability.

[Only show if respondent has ever consumed alcohol]

* = modified from original scale

	1. Almost Never / Never	2. Some of the time	3. Half of the time	4. Most of the time	5. Almost Always / Always	98. Don't know	99. Prefer not to say
3.14 To forget your worries.							
3.15 Because your friends drink.							
3.16 Because your partner(s) drink.							
3.17 Because your friends pressure you to drink.							
3.18 Because your partner(s) pressure me to drink.							
3.19 Because it is expected of you by others in the LGBTQ+ community.							
3.20 Because it helps you enjoy a party.							
3.21 Because it helps you when you feel depressed or nervous.							
3.22 To be sociable.							

* = modified from original scale

3.23 To cheer up when you are in a bad mood.							
3.24 Because you like the feeling.							
3.25 So that others won't tease or make fun of you about not drinking							
3.26 Because it's exciting.							
3.27 To get high.							
3.28 Because it makes social gatherings more fun.							
3.29 To fit in with a group you like.							
3.30 Because it gives you a pleasant feeling.							
3.31 Because it improves parties and celebrations.							
3.32 Because you feel more self-confident and sure of yourself.							

* = modified from original scale

3.33 To celebrate a special occasion with friends.							
3.34 To forget about your problems.							
3.35 Because it's fun.							
3.36 To be liked.							
3.37 So you won't feel left out.							
3.38 To express your gender and/or sexual orientation (e.g., consumed alcohol beers to feel more masculine).							
3.39 To help you deal with stress or anxiety.							
3.40 Because you like to drink when you're using tobacco.							
3.41 Because you like to drink when using drugs (excluding tobacco).							

* = modified from original scale

4. Your beliefs about alcohol

The following questions ask about your beliefs regarding alcohol. We understand that some of these questions may be confronting.

Please remember, it is our greatest priority to protect your confidentiality – we do not collect any information that can identify you.

If you do not feel comfortable answering any of these questions, please feel free to select 'Prefer not to say'. If you wish to stop participating, you can exit the survey at any time.

If you do experience distress or would like to seek assistance, please click here for a list of places you can contact.

[Popup box with resources if clicked]

- **QLife (3pm-midnight): 1800 184 527**
- **Lifeline (24 hours): 13 11 14**
- **Suicide Call Back Service (24 hours): 1300 659 467**
- **National Alcohol & Other Drug Hotline (24 hours): 1800 250 015**
- **Family Drug Support (24 hours): 1300 368 186**
- **1800RESPECT (sexual assault and domestic/family violence helpline; 24 hours): 1800 737 732**

4.1 Do you think most <u>adults in NSW</u>...

[Only show if respondent has ever consumed alcohol]

1. Consumed alcohol more than you in the last 12 months
2. Consumed alcohol about the same as you in the last 12 months
3. Consumed alcohol less than you in the last 12 months

98. Don't know

99. Prefer not to say

4.2 Do you think most <u>adults in the NSW LGBTQ+ community</u>...

[Only show if respondent has ever consumed alcohol]

1. Consumed alcohol more than you in the last 12 months
2. Consumed alcohol about the same as you in the last 12 months
3. Consumed alcohol less than you in the last 12 months

98. Don't know

99. Prefer not to say

* = modified from original scale

4.3 Do you think most <u>adults around your age in the NSW LGBTQ+ community</u>...

[Only show if respondent has ever consumed alcohol]

1. Consumed alcohol more than you in the last 12 months
2. Consumed alcohol about the same as you in the last 12 months
3. Consumed alcohol less than you in the last 12 months

98. Don't know
99. Prefer not to say

4.4 Do you think most <u>adults in NSW</u> consumed alcohol alcohol in the last 12 months?

[Only show if respondent has NEVER consumed alcohol]

1. Yes
0. No

98. Don't know
99. Prefer not to say

4.5 Do you think most <u>adults in the NSW LGBTQ+ community</u> consumed alcohol alcohol in the last 12 months?

[Only show if respondent has NEVER consumed alcohol]

1. Yes
0. No

98. Don't know
99. Prefer not to say

4.6 Do you think most <u>adults around your age in the NSW LGBTQ+ community</u> consumed alcohol alcohol in the last 12 months?

[Only show if respondent has NEVER consumed alcohol]

1. Yes
0. No

98. Don't know
99. Prefer not to say

* = modified from original scale

4.7 **[NDSHS*] How harmful or beneficial do you think <u>your alcohol consumption</u> in the past 12 months has been to your health?**

[Only show if respondent has consumed alcohol in the past 12 months]

1. Very harmful
2. Somewhat harmful
3. Neither harmful nor beneficial
4. Somewhat beneficial
5. Very beneficial

98. Don't know
99. Prefer not to say

4.8 **[NDSHS*] You mentioned that you haven't consumed any alcohol in the past 12 months.**

How harmful or beneficial do you think <u>no alcohol consumption</u> in the past 12 months has been to your health?

[Only show if respondent has not consumed alcohol in the past 12 months]

1. Very harmful
2. Somewhat harmful
3. Neither harmful nor beneficial
4. Somewhat beneficial
5. Very beneficial

98. Don't know
99. Prefer not to say

* = modified from original scale

* = modified from original scale

4.9 **[NDSHS*] How many "standard drinks" do you believe an adult could drink <u>every week for many years</u> without adversely affecting or harming their health?**
Please refer to the standard drinks guide above or use this calculator.
[Dropdown menu]

0. None
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12
13. 13
14. 14
15. 15
16. 16
17. 17
18. 18
19. 19
20. 20 or more
98. Don't know
99. Prefer not to say

* = modified from original scale

4.10 **[NDSHS*] How many "standard drinks" do you believe an adult could drink on a single day without adversely affecting their health?**

Please refer to the standard drinks guide above or use this calculator.

[Dropdown menu]

0. None
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12
13. 13
14. 14
15. 15
16. 16
17. 17
18. 18
19. 19
20. 20 or more
98. Don't know
99. Prefer not to say

4.11 **[NDSHS] Before today, did you know that Australia has alcohol guidelines that provide advice on how to reduce your health risks from drinking alcohol?**

1. Yes
0. No
98. Prefer not to say

* = modified from original scale

4.12 How many "standard drinks" does the national guideline state that an adult could drink <u>every week for many years</u> without adversely affecting their health?

Please answer this from memory, i.e., without looking up the guideline.

Please refer to the standard drinks guide above or use this calculator.

[Only show if selected 'Yes' in 4.11]

[Dropdown menu]

0. None
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12
13. 13
14. 14
15. 15
16. 16
17. 17
18. 18
19. 19
20. 20 or more
98. Don't know
99. Prefer not to say

* = modified from original scale

4.13 How many "standard drinks" does the national guideline state that an adult could on a single day without adversely affecting their health?

Please answer this from memory, i.e., without looking up the guideline.

Please refer to the standard drinks guide above or use this calculator.

[Only show if selected 'Yes' in 4.11]

[Dropdown menu]

0. None
1. 1
2. 2
3. 3
4. 4
5. 5
6. 6
7. 7
8. 8
9. 9
10. 10
11. 11
12. 12
13. 13
14. 14
15. 15
16. 16
17. 17
18. 18
19. 19
20. 20 or more
98. Don't know
99. Prefer not to say

4.14 What health conditions do you think can result from drinking too much alcohol?

[Free text response]

* = modified from original scale

4.15 Which of these health conditions, if any, do you think can result from drinking too much alcohol?

Please select as many as you think apply.

[Multiple response]

1. Arthritis
2. Cancer
3. Depression or anxiety
4. Diabetes
5. Digestive problems
6. Heart disease
7. High blood pressure
8. High cholesterol
9. Liver disease
10. Memory loss or dementia
11. Being overweight or obese
12. Respiratory problems
13. Stroke

97. None of the above
98. Don't know
99. Prefer not to say

4.16 Please rank these health conditions in order of which you think are most likely to result from drinking too much alcohol.

Please drag each option to rearrange them. The ones at the top are those that you think are more likely to result from drinking too much alcohol than ones at the bottom.

[Only show if more than one option is selected in 4.15, excluding 'None of the above', 'Don't know', and 'Prefer not to say']

[Ranking, piped options from those selected in 4.15]

* = modified from original scale

4.17 Which of the following cancers do you think people are at increased risk of from drinking too much alcohol?

Please select as many as you think apply.

[Only show if 'Cancer' is selected in 4.15]

[Multiple response]

1. Bladder
2. Brain
3. Breast or chest
4. Colon & rectal
5. Liver
6. Lung
7. Lymphoma
8. Mouth & throat
9. Ovarian & uterine
10. Pancreas
11. Prostate
12. Skin
13. Stomach
14. Thyroid

97. None of the above
98. Don't know
99. Prefer not to say

4.18 Please rank these types of cancer in order of which you think are most likely to result from drinking too much alcohol.

Please drag each option to rearrange them. The ones at the top are those that you think are more likely to result from drinking too much alcohol than ones at the bottom.

[Only show if more than one option is selected in 4.17, excluding 'None of the above', 'Don't know', and 'Prefer not to say']

[Ranking, piped options from those selected in 4.17]

* = modified from original scale

5. Your experiences when drinking alcohol

The following questions ask about your experiences when drinking alcohol. We understand that some of these questions may be confronting.

Please remember, it is our greatest priority to protect your confidentiality – we do not collect any information that can identify you.

If you do not feel comfortable answering any of these questions, please feel free to select 'Prefer not to say'. If you wish to stop participating, you can exit the survey at any time.

If you do experience distress or would like to seek assistance, please click here for a list of places you can contact.

[Popup box with resources if clicked]

- **QLife (3pm-midnight): 1800 184 527**
- **Lifeline (24 hours): 13 11 14**
- **Suicide Call Back Service (24 hours): 1300 659 467**
- **National Alcohol & Other Drug Hotline (24 hours): 1800 250 015**
- **Family Drug Support (24 hours): 1300 368 186**
- **1800RESPECT (sexual assault and domestic/family violence helpline; 24 hours): 1800 737 732**

Please indicate whether you have ever experienced each of the following.

Some of these experiences might sound very similar, but there are subtle differences that are important to our research. Please answer them all to the best of your ability.

[Only show if respondent has ever consumed alcohol]

	1. Yes, in the last 12 months	2. Yes, but not in the last 12 months	0. No, never	98. Don't know	99. Prefer not to say
5.1 Had a headache and/or felt nauseated as a result of your drinking					

* = modified from original scale

5.2	**Been drunk enough to feel the effects of the alcohol - for example, your speech was slurred and/or you had trouble walking steadily**					
5.3	**Taken a drink to get over any of the bad after-effects of drinking**					
5.4	**Felt sick or found yourself shaking when you cut down or stopped drinking**					
5.5	**Gotten into a physical fight while drinking**					
5.6	**Gotten into a verbal argument while drinking**					
5.7	**Physically injured yourself while drinking**					
5.8	**Physically injured someone else while drinking**					
5.9	**Had trouble with your finances due to your drinking**					
5.10	**Had trouble doing housework or chores due to your drinking**					

* = modified from original scale

5.11 Had trouble with your work, studies, or finding employment opportunities due to your drinking					
5.12 Had trouble with your marriage and/or intimate relationships due to your drinking					
5.13 Had trouble with your friendships and/or social life due to your drinking					
5.14 Had trouble with your family due to your drinking					
5.15 Had sex that you regret due to your drinking					

5.16 Did the above experience(s) make you think about reducing your alcohol use?
[Only show if answered 'Yes' to any of 5.1 to 5.15]

1. Yes, in the last 12 months
2. Yes, more than 12 months ago
0. No, never
98. Don't know
99. Prefer not to say

* = modified from original scale

6. Reducing your alcohol use

The following questions ask about your experiences with reducing your alcohol use. We understand that some of these questions may be confronting.

Please remember, it is our greatest priority to protect your confidentiality – we do not collect any information that can identify you.

If you do not feel comfortable answering any of these questions, please feel free to select 'Prefer not to say'. If you wish to stop participating, you can exit the survey at any time.

If you do experience distress or would like to seek assistance, please click here for a list of places you can contact.

[Popup box with resources if clicked]

- **QLife (3pm-midnight): 1800 184 527**
- **Lifeline (24 hours): 13 11 14**
- **Suicide Call Back Service (24 hours): 1300 659 467**
- **National Alcohol & Other Drug Hotline (24 hours): 1800 250 015**
- **Family Drug Support (24 hours): 1300 368 186**
- **1800RESPECT (sexual assault and domestic/family violence helpline; 24 hours): 1800 737 732**

6.1 [NDSHS*] In the last 12 months have you...?

[Only show if respondent has consumed alcohol in the past 12 months]

[Multiple response]

1. Reduced the amount of alcohol you drink at any one time
2. Reduced the number of times you drink
3. Switched to drinking more low-alcoholic drinks than you used to
4. Stopped drinking alcohol

97. None of the above
98. Don't know
99. Prefer not to say

* = modified from original scale

6.2 [NDSHS*] What were the reason(s) for doing that?

Please select all that apply to you.

[Only show if 'None of the above', 'Don't know', and 'Prefer not to say' are NOT selected in 6.1]

[Multiple response]

1. To avoid hangovers
2. To avoid getting drunk
3. Health reasons (e.g. weight, diabetes)
4. Life style reasons (e.g. work/study commitments, less opportunity, family with children)
5. Social reasons (e.g. believe in moderation, concerned about violence)
6. Pregnant, planning a pregnancy, or breastfeeding
7. Taste/enjoyment (e.g. prefer low alcohol beer)
8. Drink driving regulations
9. Financial reasons
10. Pressure from partner
11. Pressure from family
12. Pressure from friends/peers
13. Other (please specify)
98. Don't know
99. Prefer not to say

6.3 Have you <u>thought about</u> seeking help to reduce your alcohol consumption?

Help can be from health professionals, support groups, friends, books, websites, etc.

[Only show if respondent has ever consumed alcohol]

1. Yes, in the last 12 months
2. Yes, more than 12 months ago
0. No, never
98. Don't know
99. Prefer not to say

* = modified from original scale

6.4 You mentioned thinking about seeking help to reduce your alcohol consumption. Have you <u>sought</u> any help to reduce your alcohol consumption?

Help can be from health professionals, support groups, friends, books, websites, etc.

[Only show if answered 'Yes' to 6.3]

1. Yes, in the last 12 months
2. Yes, but not in the last 12 months
0. No, never
98. Don't know
99. Prefer not to say

6.5 You mentioned seeking help to reduce your alcohol consumption. Have you <u>received</u> any help to reduce your alcohol consumption?

Help can be from health professionals, support groups, friends, books, websites, etc.

[Only show if answered 'Yes' to 6.4]

1. Yes, in the last 12 months
2. Yes, but not in the last 12 months
0. No, never
98. Don't know
99. Prefer not to say

* = modified from original scale

6.6 What are your reason(s) for not seeking any help in the past 12 months to reduce your alcohol consumption?

Please select all that apply to you.

[Only show if consumed alcohol in the past 12 months AND answered 'Yes, more than 12 months ago' OR 'No, never' OR 'Don't know' to 6.4]

[Multiple response]

1. I do not think that my current alcohol use is harming my health
2. I have reduced my alcohol use without seeking help
3. I do not feel ready to seek help
4. I feel embarrassed, ashamed, or worry about being judged if I seek help
5. I do not have enough time
6. I do not have any way of travelling to get help or it would be too far to travel
7. I do not have the financial resources to afford help
8. I do not know where or how to seek help
9. I do not know where to find or are unable to find culturally-appropriate help
10. I am worried about my privacy
11. I worry that I will be discriminated against based on my sexual orientation
12. I worry that I will be discriminated against based on my gender identity
13. I have previously sought help but experienced discrimination based on my sexual orientation and/or gender identity
14. I have previously sought help about my drinking but it was not helpful
15. I have previously sought help about other substance use but it was not helpful
16. Other (please specify)

98. Don't know
99. Prefer not to say

* = modified from original scale

6.7 Which of the following, if any, do you think contributed to you making your <u>most recent</u> attempt to reduce your alcohol consumption?

Please select all that apply to you.

[Only show if answered 'Yes' to 6.4]

[Multiple response]

1. Advice from a health professional (e.g., doctor)
2. Public health advertisement on TV/radio/social media/online
3. Drinking was too expensive
4. I knew someone else who was cutting down
5. Health problems I had at the time
6. A concern about future health problems
7. Something said by my partner/friends/family
8. A significant birthday or event
9. Improve my fitness
10. Help with weight loss
11. Participation in a social movement/fundraising campaign (e.g., Dry July)
12. I had a positive experience after seeking help for my other substance use
13. Other (please specify)
98. Don't know
99. Prefer not to say

Listed below are some ways people can seek help to reduce their alcohol use.

Which of the following, if any, have you used to help reduce your alcohol consumption?

[Only show if answered 'Yes' to 6.5]

	1. Yes, in the last 12 months	**2. Yes, but not in the last 12 months**	**0. No, never**	**98. Don't know**	**99. Prefer not to say**
6.8 Doctors, including general practitioners (GPs) and psychiatrists					

* = modified from original scale

6.9 Medications (e.g., acamprosate (Campral), disulfiram (Antabuse), nalmefene (Selincro))					
6.10 One-to-one sessions with a psychologist, counsellor, or other mental health professional					
6.11 Group counselling, advice, or support sessions					
6.12 Specialist alcohol clinics or centres					
6.13 Detox clinics or centres					
6.14 Pharmacists					
6.15 Telephone helplines (e.g. National Alcohol and other Drug Hotline)					
6.16 Self-help books or booklets					
6.17 Government websites					
6.18 Non-government websites					
6.19 Apps on a mobile device (e.g., smartphone, tablet)					

* = modified from original scale

6.20 My partner, friends, and/or family members					
6.21 Other (please specify)					

6.22 Which of these, if any, would you use <u>in the future</u> if you wanted to reduce your alcohol consumption?

Please select all that apply to you.

[Only show if respondent has ever consumed alcohol]

[Multiple response]

1. Doctors, including general practitioners (GPs) and psychiatrists
2. Medications (e.g., acamprosate (Campral), disulfiram (Antabuse), nalmefene (Selincro))
3. One-to-one sessions with a psychologist, counsellor, or other mental health professional
4. Group counselling, advice, or support sessions
5. Specialist alcohol clinics or centres
6. Detox clinics or centres
7. Pharmacists
8. Telephone helplines (e.g. National Alcohol and other Drug Hotline)
9. Self-help books or booklets
10. Government websites
11. Non-government websites
12. Apps on a mobile device (e.g., smartphone, tablet)
13. My partner, friends, and/or family members
14. Other (please specify)
15. None of the above
98. Don't know
99. Prefer not to say

* = modified from original scale

7. More about you

Almost done - these are just a few more questions about you that will help us analyse the results of this survey. If you do not feel comfortable answering any of these questions, please feel free to select 'Prefer not to say'.

7.1 What is the highest qualification you have obtained?

1. Never attended school
2. Year 8 or below
3. Year 9 or equivalent
4. Year 10 or equivalent
5. Year 11 or equivalent
6. Year 12 or equivalent
7. Certificate not further defined
8. Certificate I/II
9. Certificate III/IV
10. Advanced Diploma / Diploma
11. Bachelor Degree
12. Graduate Diploma / Graduate Certificate
13. Postgraduate Degree

98. Don't know
99. Prefer not to say

* = modified from original scale

7.2 Which of the following groups would represent your personal annual income, before tax, from all sources?

1. Negative Income
2. Nil Income
3. $1 – $7,799 ($1 – $149/week)
4. $7,800 – $15,599 ($150 – $299/week)
5. $15,600 – $20,799 ($300 – $399/week)
6. $20,800 – $25,999 ($400 – $499/week)
7. $26,000 – $33,799 ($500 – $649/week)
8. $33,800 – $41,599 ($650 – $799/week)
9. $41,600 – $51,999 ($800 – $999/week)
10. $52,000 – $64,999 ($1,000 – $1,249/week)
11. $65,000 – $77,999 ($1,250 – $1,499/week)
12. $78,000 – $90,999 ($1,500 – $1,749/week)
13. $91,000 – $103,999 ($1,750 – $1,999/week)
14. $104,000 – $155,999 ($2,000 – $2,999/week)
15. $156,000 or more ($3,000 or more/week)
98. Don't know
99. Prefer not to say

7.3 Who do you currently live with?

Please select all that apply to you.

[Multiple response]

1. My partner(s)
2. Friends who identify as LGBTQ+
3. Friends who do not identify as LGBTQ+
4. Family members, including children
5. Housemates
6. No one, I live alone
7. Other (please specify)
98. Don't know
99. Prefer not to say

* = modified from original scale

7.4 What is your current relationship status?

1. Single, never married
2. Single, previously married
3. In relationship(s), but not married or living together
4. Married, de facto, or living with partner(s)

98. Don't know
99. Prefer not to say

7.5 Which of the following best describes the general area where you currently live?

1. Metropolitan (Greater Sydney)
2. Regional
3. Rural or remote

98. Don't know
99. Prefer not to say

8. Feedback

8.1. Do you have any feedback for us?

[Free text response]

* = modified from original scale