# SHORT RESEARCH ARTICLE



# Alcohol supply as a favour for a friend: Scenarios of alcohol supply to younger friends and siblings

### Correspondence

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### **Abstract**

**Issues addressed:** Adolescents under the legal purchase age primarily source their alcohol through social networks. This study assessed the provision context from the perspective of both underage recipients and their suppliers who were older peers and siblings.

**Methods:** Interviewer-administered surveys were conducted with 590 risky-drinking (50 g alcohol per session, at least monthly) adolescents. Participants of legal purchase age (18- to 19-year-olds; n = 269) reported their provision to 16- to 17-year-olds under eight scenarios. Those aged 14-17 (n = 321) reported receipt of alcohol under the same scenarios plus two parental supply contexts.

**Results:** Purchase-age participants reported supply: to an underage friend (67%), an acquaintance (44%) or a sibling (16%) to drink at the same party; to a friend (43%) or sibling (20%) to take to another party (20%) and to a stranger near a bottle shop (5%). Supply to a friend at the same party was more likely if money was exchanged (60% vs 40%; P < 0.001). Almost all (98%) 14- to 17-year-olds reported receiving alcohol from an adult (including 36% from a parent for consumption away from the parent), with a similar pattern of receipt scenarios as those reported by the 18- to 19-year-olds.

**Conclusions:** Provision of alcohol was more frequent with a friend than a sibling or stranger, in close environmental proximity, and if money was exchanged.

**So what?:** As supply may be sensitive to monetary considerations, the incidence of underage receipt may be affected by community-wide pricing measures. Traditional alcohol availability regulations should be supplemented by strategies relating to the social nature of supply and demand.

### KEYWORDS

accessibility to minors, adolescents, alcohol availability, availability to minors, parental alcohol supply, risky single occasion drinking, secondary supply, social supply

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### INTRODUCTION

Young people born in the 1990s are less likely to drink than previous cohorts. Alcohol use in the past 30 days amongst 16- to 18year old students dropped from 51% in 1999 to 37% in 2014 in the USA, and from 70% in 1999 to 37% in 2017 in Australia. Nevertheless, as the leading risk factor for morbidity and mortality amongst 15- to 49-year-olds, 3-5 harmful alcohol use is a global public health priority.6

The phrase "drinking age" is popularly understood to refer to the minimum age at which alcohol consumption is legal. However, in most Western high-income countries drinking is not legally prohibited by those under a certain age. Rather, legislation refers to a minimum legal purchase age for alcohol.<sup>7</sup> In Australia, where this study is set, the legal purchase age for alcohol is 18, and responsible service of alcohol principles require age identification checks prior to purchase at all venues licensed to sell/serve alcohol, including liquor stores.<sup>8</sup> All Australian states and territories have "secondary supply laws" which prohibit the supply of alcohol to an individual under the legal purchase age within a private premise, without permission from the adolescent's parents.  $^{9-11}$ 

There is strong evidence that a minimum legal purchase age limits the physical availability of alcohol. 12 There is an inverse relationship between minimum purchase age and road traffic accidents, <sup>13</sup> youth hospitalisations and youth suicide. 14 In Australia, official guidelines recommend that, for adults aged 18 and over, the consumption of four Standard Drinks (SD; 40 g of alcohol) or less on a single occasion reduces the risk of alcohol-related injury from that occasion; and for children and young people under 18 years of age, not drinking alcohol is the safest option.<sup>15</sup>

Adolescents who cannot legally purchase their own alcohol typically leverage their social networks. <sup>2,11,16-20</sup> In Australia, 12- to 17-year-olds report their usual supply of alcohol to be a friend or acquaintance (43%), parent (32%), a relative (12%) or though their own purchase (5%).<sup>21</sup>

Some of these suppliers engage in "social supply," the provision of alcohol to known individuals for non-commercial purposes.<sup>22</sup> The context in which alcohol is socially supplied has been associated with consumption patterns. For example, when adolescents are supplied through non-parental sources such as friends or siblings they consume higher quantities of alcohol than when supplied by their parents.<sup>23-25</sup> As social supply can amplify alcohol-related problems within a community by facilitating availability to underage drinkers, this study seeks to investigate the phenomenon further. 12

### 1.1 Rationale

Routinely administered Australian surveys list sources of alcohol where underage drinkers' usually, or most recently, obtained alcohol.<sup>2,21</sup> However, the young people who are overrepresented in alcohol-related harms are underrepresented in these current national health surveys. 16,26-29 By focusing on risky-drinkers, this study selected the underage drinkers most likely to be receiving alcohol that would be consumed in a risky manner, and their older peers and siblings who would be the most likely providers within this shared risky drinking environment. <sup>2,21,24</sup> To provide greater contextual detail on social supply, this study aimed to build upon current understandings in five ways:

- 1. Describing the provision of alcohol to underage individuals from heavy drinking 18- to 19-year-old peers as social network suppliers, 30 as most research has predominantly focused on the demand side of underage availability
- 2. Examining the frequency and context in which alcohol was both requested and eventually received by minors
- 3. Separately asking about acquaintances as some studies do not ask about acquaintances or combine them in the same category with
- 4. Specifically asking about the context of supply (same or different location as drinking), as these are often merged or unknown
- 5. Clarifying whether transaction based on social links was more or less likely when it involved the exchange of money, as in some of the literature it is unclear whether money was exchanged when "friends gave the alcohol to me."

### **METHOD**

### 2.1 | Participants

In 2016 and 2017, computer-tablet assisted surveys were administered by trained interviewers to 590 14- to 19-year-old adolescents (n = 87 14-15 years, 57% female; n = 234 16-17 years, 43% female;n = 269 18-19 years, 48% female). The surveys were conducted in all eight Australian capital cities.

Participants are described as "risky-drinkers" as almost all (98%) were consuming 5 + SD in a single session at least once a month. Half were consuming 11 + SD in a single session at least once a month, and a third at least twice a month. The mean alcohol initiation age in Australia is 16 years, 21 and 14- to 15-year-old drinkers who consumed 1 + SD at least once a month were included in the study under this lower quantity criteria. This study reports on two age groups: young adults (aged 18-19 years) and "underage," or "minors" - participants aged 17 and under who could not legally purchase alcohol for themselves. Participants were a convenience sample recruited primarily through age-targeted social media advertisements (59%) and peer-referral (37%).

## **Procedures**

The confidential interviews were 45 minutes long, and conducted by trained field researchers primarily at cafes. Consent was provided by participants prior to questionnaire administration, no identifying information was collected during the interview, and participants were reimbursed \$AUD40 for their time and travel costs. Participants were assessed as mature minors who did not require parental consent.<sup>31</sup> Institutional ethics approval was granted through all participating universities and Health Departments (Curtin 52/2014; UNSW 52/2014; Monash 1032; UTAS H16018; Flinders OH-00111; ACT Health ETH.9.16.185; CDU H16094; UQ 2016001535). Further questionnaire and operational details are available elsewhere.<sup>32</sup>

### 2.3 | Measures

Participants were asked the frequency (at least monthly, at least twice yearly, once a year or less often, never and not applicable) at which they had asked for, received or supplied alcohol under various scenarios. For ease of interpretation, responses were dichotomised into "no supply" or "lifetime/ever supply." These scenarios varied by:

- 1. Nature of relationship (supplier was: an acquaintance, friend, sibling, parent or stranger);
- Context of supply (supply was provided to the receiver for consumption: at the same party, or at another party the supplier was not attending); and,
- 3. Whether or not money was exchanged as a part of the supply.

The 14- to 17-year-olds were presented with 10 scenarios under which they requested and actually received, alcohol from someone 18 years of age or older. The 18- to 19-year-olds were presented with eight scenarios under which they may have supplied alcohol to someone aged about 16- to 17-years-old. They were instructed to think specifically about 16- to 17-year-old recipients as it was anticipated that compared to much younger adolescents, supply to this group would be more common<sup>18</sup> and less susceptible to social desirability bias. Both underage recipients and adult suppliers responded to eight identical supply scenarios. The two additional "receipt" items which assumed the supplier was a parent were not presented to the 18- to 19-year-olds.

An acquaintance was defined as "someone you know slightly, but who is not a close friend." It was assumed a "party" was understood as a "social gathering" by participants, and the term has also been presented without definition in the two national alcohol and other drug surveys that have been running in Australia since the 1980s. <sup>2,21</sup> Scenarios described where money was exchanged for the alcohol could include both profiteering and the covering of outlay.

### 2.4 | Analyses

The frequency of supply across conditions was compared using a series of Wilcoxon Signed-Rank tests, a non-parametric version of a paired samples t-test given that the responses were not normally distributed. N/A responses were excluded from analyses (10% of 14-to 17-year-olds and 18% of 18- to 19-year-olds selected N/A for the items relating to siblings, and <3% of selected N/A for the other items).

Hypotheses were tested from the 14- to 17-year-old participants' reports ("receipt" hypotheses marked with "a"), as well as from the 18- to 19-year-old supplier's perspective ("provision" hypotheses marked with "b").

Due to the large number of possible comparisons, the main tests covered scenarios paired so that they varied along only one of the three dimensions: (a) nature of relationship; (b) context of supply; or (c) whether money was exchanged.

Supply will vary by relationship:

H1 (ab) Friend vs acquaintance, at the same party
H2 (ab) Acquaintance vs sibling, at the same party
H3 (ab) Friend vs sibling, to take to a party
H4 (a) Sibling vs parent, to take to a party.

Supply will vary by location:

H5 (ab) Friend, at the same party vs to take to another party
H6 (ab) Sibling, at the same vs another party
H7 (a) Parent, at the same vs different party/get-together

There will be a difference depending on the exchange of money:

H8 (ab). When money was exchanged vs not exchanged.

As these paired comparisons within "receipt" and "provision" reports were similar in significance and direction, the discussion of analyses was primarily on the suppliers' experiences.

### 3 | RESULTS

# 3.1 | 14- to 17-year-olds asking for and receiving alcohol

Almost all 14- to 17-year-old participants (98%) reported having received alcohol from an adult under any prompted supply scenario (see Table 1). At the same party alcohol was received from a friend (89%), an acquaintance (69%), a parent (32%) or a sibling (19%), whilst to take to another party alcohol was received from a friend (59%), a parent (35%), a sibling (31%) and a stranger near a bottle shop (21%).

This listing of alcohol receipt scenarios, from the most to least popular, was broadly consistent with the pattern of situations where alcohol was asked for (whether or not it was eventually received; see Supporting Information Table S1). Though, there were three scenarios where participants asked for alcohol significantly more frequently than they received it: (a) asking a sibling for alcohol to take to a different party (38% asked vs 35% received; z = -3.32, P = 0.001, n = 286), (b) parents to take to a party (38% asked vs 36% received; z = -2.76, P = 0.006, n = 312) and, (c) a stranger near a bottle shop (26% asked vs 21% received; z = -3.33, P = 0.001, n = 311).

The 14- to 17-year-olds reported similar rates of receipt from siblings and parents to take to a party (35%; see H4 in Table 3), and lower rates of receipt from parents when the alcohol was to be consumed at a mutual get-together compared to when the alcohol was to be taken to another party the parents were not attending (33% vs 36%; H7).





**TABLE 1** Receipt of alcohol by 14- to 17-year-old participants under 10 scenarios

How often are you GIVEN alcohol by these people who are 18 years of age or older (items only presented to 14- to 17-year-olds)	Ever received	At least once a month	At least twice a year	Once a year or less often	Never	N/A (eg, no siblings)	Total N
An acquaintance to drink at a party you are both going to	68.8%	38.0%	16.5%	14.0%	31.2%	0.3%	321
A friend, to drink at a party you are both going to	89.1%	68.8%	13.7%	6.2%	10.9%	0.3%	321
A friend, to take to a party they won't be going to	59.2%	28.7%	20.6%	9.7%	40.5%	0.6%	321
A brother or sister to drink at a party you are both going to	20.9%	4.4%	7.5%	6.9%	70.9%	10.3%	320
A brother or sister to take to a party they won't be going to	34.8%	15.0%	9.4%	6.9%	58.6%	10.0%	319
Your parent(s) to drink at a party or get- together you are attending with them	33.3%	6.2%	13.4%	12.8%	64.8%	2.8%	321
Your parent(s) to drink at a party that you are attending, but they are not	35.7%	13.4%	13.1%	8.4%	62.9%	2.2%	321
A stranger near a bottle shop	21.4%	4.1%	5.7%	11.4%	77.6%	1.3%	317
A friend to drink at a party you are both going to and money was exchanged (eg, to split the bottle store costs)	88.1%	73.2%	12.1%	2.5%	11.8%	0.3%	321
A friend to drink at a party you are both attending and money was not exchanged (eg, they gave it to you as a favour)	76.6%	40.8%	22.7%	12.8%	23.4%	0.3%	321
Was given alcohol under any of the ten scenarios	98.1%						321

Note: "Ever received" combines response options of "at least once a month," "at least twice a year" and "once a year or less often", and excludes N/A responses. Table items are displayed in the same order as presented in the interview.

### 18- to 19-year-olds' alcohol provision 3.2

Most (80%) of the 18- to 19-year-olds reported supplying alcohol to a 16- to 17-year-old (see Table 2). At the same party, they supplied alcohol to a friend (67%), an acquaintance (44%) and a sibling to (16%), whilst to take to another party alcohol was supplied to a friend (43%) or a sibling (20%), and to a stranger near a bottle shop (5%). The 18to 19-year-olds' supply across scenarios was a similar pattern to the 14- to 17-year-olds' receipt, though endorsed in lower frequencies.

# 3.3 | Relationship

At the same event, 18- to 19-year-olds more frequently provided alcohol to a 16- to 17-year-old who was a friend (68%), compared to an acquaintance (45%) (H1); but more commonly provided alcohol to an acquaintance (45%) than a sibling (H2) (20%; see Table 3). Similarly, alcohol to be taken to another party was more frequently provided to friends (44%) than siblings (24%) (H3).

### 3.4 | Location of supply

Provision of alcohol to a friend was significantly more common when they were both attending the same party (68%), compared to when the supplied alcohol was to be taken by the friend to a party, not attended by the supplier (44%) (H5). However, the opposite was true with supply to 16- to 17-year-old siblings. That is, alcohol was more frequently supplied to siblings to be taken to a party, not attended by the supplier (24%), than provided at a party that both siblings were attending (20%) (H6).

### 3.5 | Exchange of money

Provision of alcohol to friends was significantly more common when money was exchanged for the drinks (60%), compared to when provision was simply a gift or favour as a friend (40%) (H8).

### | DISCUSSION

Adolescents under the legal purchase age are most likely to source alcohol from their peers, and there has been limited investigation of this provision from the peer suppliers' perspective. 18 The current study examined various alcohol supply scenarios with an Australian convenience sample of 590 risky-drinking adolescents. One of the main findings of this study is that 80% of the 269 18- to 19-year-old participants (who were of legal purchase age) reported supplying alcohol to 16- to 17-year-olds.

**TABLE 2** 18- to 19-year-old participant reports of supply of alcohol to 16- to 17-year-olds under eight scenarios

How often do you PROVIDE alcohol to someone aged 16- to 17-years old and is a (items only presented to 18- to 19-year-olds)	Ever provided	At least once a month	At least twice a year	Once a year or less often	Never	N/A (eg, no siblings)	Total N
An acquaintance to drink at a party you are both going to	44.7%	11.9%	16.7%	14.9%	53.9%	2.6%	269
A friend, to drink at a party you are both going to	68.1%	26.4%	22.3%	17.8%	31.2%	2.2%	269
A friend, for them to take the alcohol to a party that you won't be going to	44.4%	10.1%	12.7%	20.5%	54.1%	2.6%	268
A brother or sister to drink at a party you are both going to	19.5%	4.1%	6.3%	5.6%	66.2%	17.8%	269
A brother or sister, for them to take the alcohol to a party that you won't be going to	24.4%	6.3%	9.3%	4.5%	62.1%	17.8%	269
A stranger near a bottle shop	4.6%	0.0%	1.5%	3.0%	92.9%	2.6%	269
A friend to drink at a party you are both going to, and money was exchanged (eg, you split the bottle store costs)	60.1%	24.2%	19.7%	14.9%	39.0%	2.2%	269
A friend to drink at a party you are both attending and money was not exchanged (eg, you gave it as a favour)	39.5%	10.8%	10.4%	17.2%	59.0%	2.6%	268
Provided alcohol under any of the eight scenarios	80.3%						269

Note: "Ever provided" combines response options of "at least once a month," "at least twice a year" and "once a year or less often," and excludes N/A responses. Table items are displayed in the same order as presented in the interview.

There were broad similarities in the popularity of the presented supply scenarios from a supply (18- to 19-year-old provider) and demand (14- to 17-year-old recipient) perspective. Supply occurred most frequently through friends who were at the same party (ever supplied: 68%; ever received: 89%), and least frequently with a stranger near a bottle shop (ever supplied: 5%; ever received: 21%). These patterns are broadly consistent with the patterns of "usual supply" reported in population surveys. 2,21 That there were three scenarios where 14- to 17-year-olds more often asked for, than they actually received alcohol from adults, suggests their requests were sometimes denied.

The frequency of supply varied depending on contextual details such as the relationship between the supplier and recipient, whether the alcohol was provided to be consumed at the same party as the supplier, and whether any money was exchanged for the alcohol. This study found that supply to younger people was more likely the closer the friendship, the more shared the drinking environment and if money was exchanged.

Our results demonstrated that supply to friends was more likely compared to acquaintances, and supply to strangers in front of a bottle shop was rare. The finding that almost half had provided alcohol to 16- to 17-year-old acquaintances suggests supply could be considered a normative casual transaction, rather than a substantial favour.

Provision to friends was more likely when they were at the same party (68%), compared to when the alcohol was to be taken

to another party the supplier was not attending (45%). The temporal and spatial proximity between supplier and recipient at the same party would be conducive to both planned and opportunistic sharing (maximising physical availability). Asking for alcohol that would be consumed elsewhere suggests some pre-planning and perhaps stronger individual intention for eventual behaviour compared to simply opportunistically receiving offered alcohol.<sup>33</sup>

Provision to friends at the same party was more common when money was exchanged for the drinks (60%), compared to when provision was simply a gift or favour as a friend with no exchange of money (40%). Though the survey item described the splitting of bottle store costs, it is unknown whether the financial transactions were generally net positive, neutral or negative; only that the suppliers attempted to cover their outlay. Nevertheless, the decision to provide alcohol appeared to be impacted by the economic considerations of the supplier and/or the capacity of the recipient to meet them.

The scenario of providing alcohol as a favour without the exchange of money could be considered social supply, and conceptualised simply as "sharing" of alcohol between friends. <sup>22</sup> Though there was no immediate financial recouping, it is of note that adolescent providers with access to alcohol may hold a more powerful social network position. <sup>34</sup> We included the phrase "as a favour" in the item description for supply without exchange of money in recognition that supplier is still "putting themselves on the line" to provide alcohol to a minor as most young people believe the "drinking age" is 18. So, older peers' may serve as role models for risky drinking implicitly

TABLE 3 Comparisons of alcohol supply scenarios varying by relationship, proximity and whether money was exchanged

		Ever received or	Wilcoxon signed-rank test <sup>d</sup>	ank test <sup>d</sup>		
		provided <sup>c</sup>	Z	Ь	r	z
Relationship comparisons	omparisons					
H1ª	Acquaintance to drink at a party you are both going to (received)  Friend to drink at a party you are both going to (received)	68.8%	-9.01	<0.001	0.50	320
H1 <sup>b</sup>	Acquaintance to drink at a party you are both going to (supplied)	44.7%	-7.65	<0.001	0.47	262
	Friend, to drink at a party you are both going to (supplied)	68.1%				
H2ª	Acquaintance to drink at a party you are both going to (received)	8.8%	-10.78	<0.001	0.64	287
	Sibling to drink at a party you are both going to (received)	20.9%				
H2 <sup>b</sup>	Acquaintance to drink at a party you are both going to (supplied)	44.7%	-5.03	<0.001	0.34	221
	Sibling to drink at a party you are both going to (supplied)	19.5%				
НЗа	A friend, to take to a party they won't be going to (received)	59.2%	-4.90	<0.001	0.29	286
	A brother or sister to take to a party they won't be going to (received)	34.8%				
H3 <sup>b</sup>	Friend, to take to a party you won't be going to (supplied)	44.4%	-2.82	0.005	0.19	221
	Brother or sister, to take to a party you won't be going to (supplied)	24.4%				
H4ª	Brother or sister to take to a party they will not be going to (received)	34.8%	-0.62	0.533	0.04	287
	Your parent(s) to drink at a party that you are attending, but they are not (received)	35.7%				
Proximity comparisons	parisons					
H5ª	Friend, to drink at a party you are both going to (received)	89.1%	-10.25	<0.001	0.57	319
	Friend to take to a party they will not be going to (received)	59.2%				
H5 <sup>b</sup>	Friend, to drink at a party you are both going to (supplied)	68.1%	8.35	0.001	0.52	260
	Friend, for them to take the alcohol to a party that you won't be going to (supplied)	44.4%				
H6 <sup>a</sup>	Brother or sister to drink at a party you are both going to (received)	20.9%	-5.06	<0.001	0.30	286
	Brother or sister to take to a party they will not be going to (received)	34.8%				
H6 <sup>b</sup>	Brother or sister to drink at a party you are both going to (supplied)	19.5%	-2.75	9000	0.18	221
	Brother or sister, for them to take the alcohol to a party that you won't be going to (supplied)	24.4%				
H7ª	Your parent(s) to drink at a party or get-together you are attending with them (received)	33.3%	-2.62	0.009	0.15	312
	Your parent(s) to drink at a party that you are attending, but they are not (received)	35.7%				
						(Continues)



319 261 z 0.48 0.44 <0.001 < 0.001 Wilcoxon signed-rank test<sup>d</sup> -7.03 Ever received or provided<sup>c</sup> %9.9/ 39.5% 60.1% 88.1% Friend to drink at a party you are both attending and money was not Friend to drink at a party you are both attending and money was not Friend to drink at a party you are both going to, and money was ex-Friend to drink at a party you are both going to and money was exchanged (eg, you split the bottle store costs; supplied) changed (eg, to split the bottle store costs; received) exchanged (eg, you gave it as a favour; supplied) exchanged (eg, Money exchange comparisons  $H8^{a}$ g8H

TABLE 3 (Continued)

<sup>a</sup>Hypotheses marked with "a" refer to the 14-17 year-old participants' receipt of alcohol from those aged 18+.

Phypotheses marked with "b" refer to the 18-19 year-olds' supply of alcohol to individuals aged 16-17 years.

The "ever received/provided" column combines response options of "at least once a month," "at least twice a year" and "once a year or less often", excludes N/A responses, and is presented to aid the

The Wilcoxon Signed-rank tests were run using the four response options of "at least once a month," "at least twice a year," "once a year or less often" and "never" (excluding "N/A" responses).

endorse underage drinking through the social supply of alcohol, and this provision may even improve their own social status.

In contrast to these findings with supply through friends, supply from an older sibling or parent was more likely when the alcohol was taken to a party that the provider was not attending. In recent years, there has been interest in disaggregating parentally supervised provision from provision by a parent for consumption at a peer-based drinking event where the parent is not present. 23-25,35,36 This study found that parental supply occurred in party contexts without direct parental supervision (36%) slightly more frequently than instances where the parent would be present at the party/get-together (33%). It is of note that these parties/get-togethers with parents are logically a subset of the "supervised parental supply" category and do not include more routine contexts such as provision of a smaller quantity of alcohol at the dinner table. So, the results here are likely a conservative estimate of risky-drinkers' parental supply. This parental supply is of consequence as it can influence later drinking patterns. 24,37 Though parental supply likely has greater impact on the initiation of alcohol use,<sup>7</sup> it can still impact on established heavy drinking, for example through enabling immediate availability, and demonstrated willingness to provide alcohol can further signify endorsement of underage drinking and a more permissive familial norm.<sup>18,38</sup>

A quarter reported supplying alcohol to their younger siblings. That second-born children report more frequent intoxication compared to their first-born siblings at the same chronological age may be in part due to the capacity for older siblings to facilitate physical availability, as well as other factors such as relaxation in family drinking norms over time. <sup>39</sup>

Due to the cross-sectional nature of the dataset, we cannot infer causality with this family-based supply – for example, whether parental provision contributed to risky drinking, or parents only started to provide alcohol in an attempt to control established risky patterns. <sup>40</sup> However longitudinal and annual trend studies suggest that lower parental approval for drinking and lower parental supply prospectively reduce risky drinking. <sup>24,41</sup> In the case of friend and acquaintance supply, however, there are likely contemporaneous factors. For example, risky-drinkers are more likely to affiliate with other risky-drinkers – so they may ask or be offered alcohol more often, <sup>42</sup> and have peer networks that include older/purchase age friends or partners. <sup>43</sup>

### 4.1 | Limitations

These results were obtained from a convenience sample of heavy episodic drinkers, so they cannot be considered as representative of the general population. As risky-drinkers' peer groups and families are also more likely to be risky-drinkers, <sup>42</sup> reports of receipt and provision prevalence are likely substantially higher compared to low-risk drinkers. To facilitate interviewer access, the questionnaires were administered in almost exclusively urban settings.

Our methodology relied upon self-report of both alcohol receipt and provision. It was beyond the scope of this study to externally

corroborate the reports of alcohol sources. However, the findings were broadly consistent with other self-report measures with similar populations.<sup>2,21</sup> parental alcohol supply as reported by children is less susceptible to social desirability bias, 44 and lastly, the relative frequency of encountered scenarios appeared to be consistent between the asking for alcohol, receiving alcohol and supplying alcohol.

Although minors asking for alcohol was more common than actual receipt of alcohol, we note that the category of receipt possibly includes scenarios where minors may have received alcohol without explicitly requesting it, for example, by being handed, unasked, a beverage during a party. In future, event-level designs may clarify this detail and include further information such as the quantity of alcohol supplied to the minor, whether consumption was supervised by a responsible adult such as a parent, and the exact location of parties (eg, a supplier's vs recipient's private premise).

At the time of data collection, Australia had secondary supply legislation.8 However, the responses were not sufficiently detailed to confirm whether the social supply was also legally considered secondary supply - for example, if a parent had provided explicit permission to their child's older peer to provide alcohol for consumption, whether the consumption occurred under supervision and whether provision ceased once the child reached intoxication.

### CONCLUSION

As receipt and supply of alcohol through social networks was almost universal, legislation pertaining to the minimum purchase age, as enforced through licensed venues was bypassed.

We were not able to identify many drinking interventions described in the literature that assessed impact on adolescent social supply. However, one study found that teenagers, who have their accessibility to alcohol reduced, were also less likely to provide alcohol to other teenagers. 45 The findings from the present study identify a particular mechanism that is likely to reduce social supply to underage drinkers. Supply was more frequent when money was exchanged, which suggests that the implementation of effective population level pricing measures such as minimum unit pricing may have flow on effects to socially supplied younger drinkers. This study's description of how underage supply most commonly occurs may be useful for the narrative style rationale used to activate community interest about proposed policy changes.

Finally, traditional alcohol availability regulation could be supplemented by strategies relating to the social nature of the supply, such as what the social norms are around peer-supply and demand. This will be explored in future studies.

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### CONFLICT OF INTEREST

The authors declare no conflict of interest.

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### SUPPORTING INFORMATION

Additional supporting information may be found online in the Supporting Information section at the end of the article.

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