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Do schools and alcohol mix? Australian parents' perspectives.

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Conflicts of interest

The authors have no conflicts of interest to declare.

Abstract

Purpose

Alcohol use by adults at school events, and alcohol promotion through school fundraising activities is common, but little is known about secondary school parents' attitudes toward these practices. Parental attitudes may influence principals' decision-making on this topic, particularly in jurisdictions where education department guidance is limited. This study explored parents' attitudes towards the consumption or promotion of alcohol in schools or at school events.

Methodology

Parents (n=298) from five non-government secondary schools in Western Australia completed an online survey and provided responses relating to the promotion and availability of alcohol through their child's school.

Findings

This sample of parents were evenly divided in support of alcohol consumption or support of schools as alcohol-free zones. Parents reporting higher alcohol consumption were more supportive of alcohol promotion and use through schools, and those with higher education supported use of alcohol for school fundraising. Almost 20% of parents were neutral on several measures indicating they could be swayed by social pressure.

Engaging parents is an ongoing challenge for school principals and alcohol may play a part in engagement activities. The results from this small, exploratory study suggest even engaged parents may have very differing views on alcohol use in schools.

Implications

Education Departments are encouraged to explore these issues carefully and introduce changes incrementally to assist decision-making and minimise potential parent disengagement.

Originality

This paper addresses a knowledge gap about parents' attitudes towards alcohol in secondary schools. These findings can support those involved in the development of school alcohol policies.

Keywords: alcohol, parents, schools, adolescents, school environment, policy

Article Classification: Research Paper

Background

Despite a recent decline in alcohol consumption among adolescents internationally, a significant number of those who do drink continue to do so at levels considered likely to increase risk of harms even among adults (NHMRC, 2009). In a 2017 survey of Australian adolescents aged 12-17 years, 23% indicated they had drunk at risky levels (five or more standard drinks on one occasion) in the last month (Guerin and White, 2018). Thirty-five percent of European 15-16 year olds report heavy episodic drinking in the past month (ESPAD, 2015). Thus, alcohol-related harm continues to be a major public health concern in Australia and internationally. Efforts to delay young people's alcohol initiation, and to identify and harness the factors associated with recent declines are at the forefront of prevention efforts (Aiken et al., 2018, Barry et al., 2016, Pennay et al., 2018). Increasing awareness among parents of alcohol-related risks, and stricter alcohol-related parenting behaviours have been postulated as possible explanations for the decline (Pennay et al., 2018). Studies in Denmark (de Looze et al., 2014) and Finland (Raitasalo et al., 2018) support the role of parents in the decline through monitoring and parenting style, but this has not been found consistently in Australian studies (Hodder et al., 2018).

The influence of the social norms and role modelling to which young people are exposed is difficult to quantify but is widely accepted, and can be attributed to home, school, and social environmental norms, and the relationships between each of these environments (Ennett et al., 2008). While evidence for health-promoting schools-based interventions in reducing alcohol use is limited (Langford et al., 2015, Shackleton et al., 2016), investigation of potential negative influences that can occur within schools could identify targets for future intervention efforts. Alcohol use, or exposure to alcohol at, or through schools is one such influence. Permitting alcohol to be used, distributed or sold by schools is likely to undermine schools' existing health messages and policies, and has implications for staff duty of care. Further, adults' drinking in schools exposes children to role modelling by parents and teachers which can reinforce normative beliefs that alcohol is a necessary part of everyday activities (Munro et al., 2014). Given that parental modelling has been associated with adolescent initiation of drinking and levels of alcohol use (Ryan et al., 2010) limiting alcohol use in schools may be a community-wide approach to reducing alcohol use by young people.

The context of alcohol use in schools has been framed as either revenue generating (i.e. as part of school fundraising events), for ritual or celebration (i.e. at parent/staff meetings and graduation celebrations), or recreational (i.e. for parent/staff consumption at school events) (Munro et al., 2014). Thus members of school communities may identify positive benefits of permitting alcohol availability, promotion and consumption under certain conditions (Munro et al., 2014). With most of these alcohol use contexts associated with efforts to engage parents in school activities, it is important that policies designed to allow and/or control alcohol use do not hamper these efforts and alienate groups of parents.

Estimates of alcohol use at school events have been determined by examining data on liquor licences granted to schools across jurisdictions (Ward et al 2018). Results showed large variations, such that rates of granting of occasional liquor licences to schools were 60 times greater in some states than others. Across Australia, the requirements governing the use of alcohol at school events also vary according to policies governing the different school sectors within each of these jurisdictions (Ward et al., 2018). A 2014 review of education department alcohol policies (i.e. affecting public schools) across Australia showed these varied considerably by jurisdiction in terms of clarity and requirements of the policy (Ward et al., 2014). States with more restrictive education department policies tended to have lower rates of liquor licence applications by schools (Ward et al., 2018). Independent and Catholic schools, while not governed by education department policies, showed similar trends in liquor licencing applications to government schools within and between states (Ward et al., 2018).

In most Australian jurisdictions, decision-making about alcohol consumption at school events and the promotion of alcohol in fundraising efforts, is largely the responsibility of school principals and school councils (Ward et al., 2014).

Several Australian studies have reported on the attitudes and experiences of school principals regarding the promotion, and adults' use of, alcohol on school premises and demonstrate that adults' alcohol use at school events is common (Ward et al., 2016a, Ward et al., 2016b). In a survey of 241 secondary school principals in New South Wales and Victoria, 36% reported at least one event where alcohol was consumed in the presence of

students in the previous year, and 17% reported offering alcohol as a prize for a school fundraiser (Ward et al., 2016b). The majority of events cited were Year 12 graduation events (78%) and debutante balls (18%), with no sporting events cited, but a related qualitative study found that alcohol consumption also occurred at sporting, art, music, and other on- and off-site events (Ward et al., 2016a).

Although views differ among school principals, a majority appear to not support the consumption of alcohol at school events and some have taken action by changing policies and holding alcohol-free events. Other principals seemingly feel the pressure of an alcohol-normative school or community 'culture', and have not acted on their own preferences (Ward et al., 2016a). In the qualitative study of principals in Victoria, some principals made comments which were suggestive of the allowance of alcohol as part of facilitating the engagement of parents in school events (Ward et al., 2016a). It is possible that principals fear losing parents from school events if alcohol is not allowed. Justification for this concern is found in comments made by parents, informing the Australian Drug Foundation (ADF) of their concerns about adults' alcohol consumption at school events. One parent explained that she had taken her complaint to the school principal but had been warned "not to make a fuss because fewer parents might attend school functions if they could not drink at them" (Munro et al., 2014). This appears to counter the potential role of parents in the adolescent drinking decline, or at least identifies a group of parents who are not embracing the approaches likely to be effective in facilitating this trend.

Despite the emergence of this issue and recent calls for more consistent legislation and policy (Ward et al., 2018), less is known about Australian parents' attitudes towards alcohol consumption at school events. Given parents' role in school fundraising events and their increasing governance role in Australian schools, it is important for principals and school policy-makers to have an understanding of parental attitudes to alcohol on schools sites and at school events to assist in planning for policy and decision-making (Ward et al., 2015). A survey of parents of primary-school aged children (zero to 12 years) found that 60% disagreed or strongly disagreed with the practice of adults being able to purchase and consume alcohol at school fundraising events when children are present (Ward et al., 2015). This significant support for policies making schools alcohol-free, and enthusiasm for

sustaining or progressing the decline in adolescent alcohol use, is at odds with the current level of alcohol availability and consumption at, and associated with, school-events.

There is an absence of information about parents' attitudes to alcohol use in Australian secondary schools. The present study aimed to address this knowledge gap by exploring the attitudes of parents of secondary-school aged children about the promotion and use of alcohol by adults in secondary schools. We use data from a survey conducted in 2015 as part of a study to establish parents' experiences with parenting strategies effective in delaying or reducing alcohol use by their adolescent child (reference blinded for review).

Methods

Study design and sampling

The larger study and methods are described elsewhere (blinded for review). Parents of students in Years 7 (age 13), 10 (age 15) and 12 (age 17) in five purposively-sampled non-government schools in Western Australia in July/August, 2015 (school response rate 11%) were invited to participate. All parents (or carers, however, for ease of interpretation, only 'parents' are referred to in this manuscript) of students in the three year-levels who could complete a survey in English were eligible for participation. Schools were provided with materials which were sent to parents on the researchers' behalf. The link to the parent survey was emailed and/or sent by text message (depending on the contact details provided to the school) to parents via the school after completion of the student surveys. Parents were asked to complete the survey with reference to their eldest child at the sampled school. A reminder email/text with a link to the survey was sent one week later. Schools were asked to publicise the study in school newsletters and other parent communications. All parents who completed a survey were entered into a prize draw for one of four shopping vouchers (A\$100).

Ethics

Ethics approval for the study was obtained from the Human Research Ethics Committee at (blinded for review) University, and the relevant school authorities. Parents gave implied consent by completing the survey.

Measures

The survey was developed specifically for our larger study (blinded for review) with items based on previously used surveys, expert review, and target group input. Items related to parental expectation about drinking, use of alcohol-related parenting strategies, reports of their child's alcohol use, preferences for alcohol-related intervention delivery, and attitudes to alcohol at school events. Here, we report on data relating to items measuring parents' attitudes to alcohol promotion and availability in schools (see Table 2).

Statistical analysis

Summary statistics were used to describe parent attitudes and sample characteristics. Chi-square tests were applied to test the associations between parent and family characteristics with sufficient variance (i.e. parent gender and education level; the child's gender, birth order and year level; and parent alcohol consumption – frequency of use, number of standard drinks usually consumed when drinks alcohol and frequency of consumption of five or more drinks on one occasion) and the main outcomes of interest, i.e. parental levels of agreement to 7 statements on alcohol in schools. To ensure the assumptions of the chi-square tests were met, the responses to the items were grouped into 3 categories, namely 0 = 'Neither agree nor disagree'; 1 = Strongly/Agree; and 2 = Strongly/Disagree.

Although the three parent consumption variables were highly correlated, each was seen as important to investigate and hence these were analysed separately. Where multiple variables were identified in the chi-square tests as significantly associated ($p < 0.05$) with a parental attitude, a multivariable multinomial logistic regression analysis was conducted (with robust standard error estimation to account for school clustering). Thus, these models were fitted for two of the seven attitudinal statements where each of the parent consumption variables were significant as well as parent education.

Findings

A total of 298 parents of students from the five non-government schools in Perth, Western Australia completed surveys. These data represent 12% of the parents of children in the three year-levels at participating schools. Parent characteristics are summarised in Table 1. The majority of respondents were female, spoke English, were married and were post-

secondary educated. Responses were evenly divided for parents of boys and girls and with children in each of the three age groups. The majority of parents reported some level of alcohol consumption, with almost 70% drinking at least fortnightly.

[insert Table 1]

The percentages of parents who agreed, disagreed and did not have an opinion regarding each of the statements are presented in Table 2 and results from the chi-square tests in Table 3. Agreement with, and details of the associations between the factors (i.e. demographic variables and parent alcohol consumption) and each statement based on the chi-square tests are presented below. Given the mutually exclusive nature of the items, each one is presented separately in the results. The table of results for the multivariable multinomial models conducted for the two attitudinal variables where the parent education and the consumption variables were significant are presented in Tables 4 and 5. In both cases the significant associations found in the chi-square tests were sustained and the conclusions drawn were substantively the same.

In summary, none of the factors were associated with two of the attitudinal statements; only parent and child gender were associated with the statement regarding a parent's decision to provide alcohol for Year 12 students; only the parental alcohol consumption variables were associated with two statements; and parent consumption and parent education were associated with the two items on parental attitudes to the use of alcohol for fundraising. The child's birth order and their year level were not associated with any parental attitudes (Table 3).

Overall, almost half agreed/strongly agreed that schools should be completely alcohol free, but one third disagreed/strongly disagreed with this statement. Parent attitude to schools being completely alcohol free was significantly associated with parent alcohol consumption i.e. parents' drinking frequency, typical number of standard drinks, and frequency of drinking five or more standard drinks on an occasion. Parents who reported consuming alcohol less frequently and at lower levels were more likely to agree with the statement that there should be no alcohol in schools than parents who drank alcohol more often and at

higher levels. For example, 68.9% of those who drank monthly or less often agreed with this statement compared with 34.0% of those who drank twice a week or more often.

Significant associations were found between agreeing with the statement 'parents should be able to drink a glass of wine or beer at social events for families at the school' and each of the parental consumption variables, with parents who drank alcohol, who consumed more standard drinks when they did drink and more often drank at risky levels more likely to be supportive of parents' rights to drink alcohol at family social events at school.

The only significant associations with the statement 'a parent's decision to provide alcohol for Year 12 students at pre- and/or post-ball parties has nothing to do with the school' were both parent and child gender, with fewer female than male parents disagreeing (i.e. being supportive of the school having a say), and no fathers being neutral for this item. Parents responding to the survey in relation to boys (and hence likely thinking of the school's role relative to their son, even if they also had a daughter as some may have) were more likely to disagree.

An association was observed between the variable 'Selling alcohol to adults to drink at school social events as an acceptable way of raising funds for the school' and parent education, whereby more highly educated parents were more likely to agree with this statement. Further, significant associations were found between agreeing with this statement and all three parental alcohol consumption measures. These associations remained significant in the multivariable models including both parent education and parent consumption variables (see Table 4).

An association was observed between the variable "Prizes which include alcohol are fine for school fundraising events" and parent education, whereby more highly educated parents were more likely to agree with this statement. Further, significant associations between agreeing with this statement and each of the consumption measures were observed, with heavier and more frequent drinkers more likely to agree. These associations remained significant in the multivariable models including parent education (See Table 5).

[insert Table 2 & Table 3 & Table 4 & Table 5]

Discussion and Interpretation

On many measures, this sample of parents were fairly evenly divided in support of alcohol consumption or support of schools as alcohol-free zones. For example, apart from issues of alcohol at and after graduation balls, between 30% and 53% of the parents indicated permissive attitudes to alcohol in schools while roughly the same range in percentages indicated restrictive attitudes (i.e. between 30% and 58%). Roughly half of parents agreed/strongly agreed and a third disagreed/strongly disagreed that schools should be alcohol free and that alcohol consumption should only occur at school when children are not present - at the same time about half were supportive of parents being able to drink at school events and that prizes including alcohol are fine for school fundraising events. Parents were less accepting of the consumption of alcohol at Year 12 graduation celebrations or post-ball parties and were supportive of the involvement of schools in these decisions. More frequent and higher volumes of drinking among parents were associated with higher acceptability of both adult drinking at school events and the use of alcohol in fundraising efforts. Higher parental education was associated with greater acceptance of the use of alcohol for fundraising purposes, but not any of the other attitudes.

Patterns of responses between the attitudinal items are indicative of the complex nature of this topic. For example, while roughly half of the respondents agreed that schools should be completely alcohol free, roughly half of those parents also agreed that alcohol should only be consumed on school premises when there are no students present, and a third agreed that parents should be able to drink a glass of wine or beer at social events at the school. It is likely that the first item was viewed as an overarching statement and was answered with the child in mind, while the latter items relate more specifically to parents themselves. It seems that when presented with the more specific scenarios relating to their own freedom to drink alcohol, parents were less inclined to agree that they should not be able to drink.

This study is limited by a small sample size and restriction to non-government schools. Only 11% of invited schools participated and only 12% of eligible parents completed the survey. This recruitment rate is lower than in some previous studies for parents and schools (Aiken

et al., 2017, Gilligan et al., 2013) and may reflect increasing difficulties in recruiting parents into health-related (Hughes et al., 2015) and school-based (Schilpzand et al., 2015) research. The budget in the present study limited our capacity to adopt active follow-up approaches and also meant that limited incentives could be offered to encourage participation. As is often the case in research with parents (Aiken et al., 2017), there was an over-representation of mothers in the sample. It also seems that education level and family structure are not representative of the overall Australian population (Australian Bureau of Statistics, 2018), with a higher representation of educated parents and dual parent families, and an under-representation of cultural minority groups. Hence, the sample represents a homogenous group of parents, who are likely more supportive of research studies. Importantly, however, this group of parents also represent the minority more likely to engage with their child's school, and therefore could be regarded as more inclined to adopt recommended alcohol-related parenting approaches and monitoring. Therefore, while the sample may not be representative, it provides a snapshot of the attitudes of an important target group of parents, particularly given the limited research in this area. Further research with representative samples of parents of high school aged children across several jurisdictions is recommended to build on these exploratory findings.

The nature of this sample of parents, itself represents a challenge for schools and principals. If the response rate of parents to this survey is reflective of parent engagement in schools, the divided nature of the parent group could have substantial impact. With roughly half of the engaged parents likely to be challenged by a school's decision to change policy in either direction, schools risk further distancing parents from involvement in their child's education.

The lack of differences between year levels may be due to the fact that most of the parents cared for multiple children, thus those in each year level have had different experiences with older and younger children. For example, the attitudes of some parents may have been shaped by earlier experiences with older children, and for others, the fear of influence over younger children may have been a factor.

Importantly, a substantial proportion of the parents (11-19%) selected 'neither agree nor disagree' for several measures which suggests that these parents could be swayed by the

social and cultural norms of their school and parent group (Gilligan et al., 2014). At both ends of the spectrum from these 'neutral' parents however, were relatively strongly-opinionated groups advocating either for their right to drink, or for the protection of children. With this discordance in parent attitudes observed in the fairly homogenous group of parents in this study sample, it is reasonable to assume that within the broader parent population parental attitudes would be equally or even more diverse.

Evidence has shown that a vocal minority of parents can initiate action. For example, after media reports highlighting negative issues associated with adult alcohol use in schools, seven parents lodged complaints with the Alcohol and Drug Foundation in 2012/2013 (Munro et al., 2014). Subsequently, the Public Schools Association of Western Australia banned alcohol use at its sporting events. In the case of the group on the other side of the debate however, their opinions, and opposition to any action on adult drinking in schools is likely to be expressed differently; potentially through disengagement with schools or school events. Though it is recognised as a critical element of successful schooling, schools and principals often struggle to engage parents in their children's learning and social development through school activities (Wang and Sheikh-Khalil, 2014, Povey J, 2016). It is possible that current school policies and practices are not in keeping with the desires of most parents, but the findings of this study suggest that such a goal may be unattainable without a shift in social norms to increase parents' support for restrictions to be implemented.

Parent education level was associated with some variables, with more highly-educated parents more accepting of selling alcohol at school events to raise funds for the school, and of the use of alcohol as prizes in fundraising activities. This was not unexpected given consistent evidence that higher socioeconomic status (SES) and education are associated with higher alcohol consumption, but those in lower SES groups bear more of the burden of alcohol-related consequences (Collins, 2016, Huckle et al., 2010). Similarly, both parent and child gender were associated with agreement with the concept that schools have a role to play in decisions about providing alcohol at pre- and/or post-ball parties, with fathers, and parents responding for boys more likely to support a role for the school. It is possible that parents perceive the role of the school differently for boys and girls, but without more

information about the gender of other children in the family and the family structure, any efforts to explain this would be mere speculation. This does, however, warrant further investigation.

There is a discrepancy between the permissive nature of adult drinking at school events and attitudes towards 'serving alcohol to adults that might include students who are over 18 years at school celebrations', with the latter being far less supported by the parents in this study. Given the frequency at which such alcohol consumption occurs however (Ward et al., 2016a, Ward et al., 2016b), it could be that this response is particularly negative due to the stipulation in the question, that over 18-year-old students might also be included. Again, parents appear to be less supportive when faced with the reality of their own child drinking. This finding is somewhat at odds with previous studies in which Year 12 graduation celebrations have emerged as the most common school-related context in which adults do drink alcohol (Ward et al., 2016b). Further, Munro et al have discussed the challenge of managing such celebrations where parents who are present could give permission for students under 18 years to drink, but those students who are not accompanied by parents require adult supervision (Munro et al., 2014).

Conclusions

This study provides an initial exploration of the attitudes of parents to alcohol in secondary schools. While the non-representative sample limits the generalisability of the findings, this research addresses a gap in the literature and a topic on which the level of guidance provided to schools is variable across Australia. Reduction in the availability of alcohol through schools and at school events is a potential target for sustaining the trend of reduced alcohol consumption among adolescents. Schools need to consider their policies regarding adult alcohol use at school events in light of evidence regarding the impact of role-modelling and socially-normative behaviour on children. This issue appears to be one on which parent opinion varies, even within a relatively homogenous sample such as that in this study. Decision-making which attempts to accommodate the desires and beliefs of parents is likely to be problematic for principals and other school-level decision makers, particularly given the limited guidance provided by education authorities in some jurisdictions. Principals and Education Departments are encouraged to explore these issues

carefully to ensure parents with differing points of view remain engaged. If Education Departments take a more active role in directing schools' management of alcohol, pressure could be alleviated from individual principals and parents could potentially receive clear and consistent messages that support the non-use of alcohol by young people.

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Table 1. Parent demographic and alcohol consumption characteristics

Parent demographic variables	n	%
Gender (n=298)		
Female	255	85.6
Male	43	14.4
Relationship to child (n=298)		
Mother	253	84.9
Father	43	14.6
Other female carer	2	0.6
Age (n=294)		
35-44 years	93	31.6
45-54 years	175	59.5
55-64 years	26	8.8
Marital status (n=294)		
Married/de facto	259	88.1
Other	35	11.9
Recipient of Health Care Card (n=294)		
Yes	43	14.6
No	251	85.4
Parent educational level (n=294)		
Bachelors or postgraduate degree	174	59.2
Diploma, Advanced Diploma or Trade Certificate	64	21.8
<= Yr 12	50	17.0
Preferred not to say	6	2.0
Number of children caring for (n=297)		
1	26	8.8
2	145	48.8
3	87	29.3
4+	39	10.8
Language spoken at home (n=292)		
English only	269	92.1
English & other	23	7.9
McMaster Family Functioning (n=295)		
Healthy functioning	281	95.3
Unhealthy functioning	14	4.7
Child gender (n=298)		
Female	155	52.0
Male	143	48.0
Child's Year level (n=298)		
7	103	34.6
10	106	35.6
12	89	29.9
Child's birthorder~ (n=298)		
Eldest	148	49.7
Second eldest	91	30.5
Third eldest or younger	59	19.8
Whom child lives with (n=298)		
Both parents	242	81.2
Time split between homes	18	6.0

Lives with mother only	30	10.1
Parent's alcohol consumption		
How often drinks alcohol (n=293)		
Never	27	9.2
Monthly or less often	64	21.8
Fortnightly or weekly	94	32.1
2 to 3 times a week	73	24.9
4 or more times a week	35	11.9
Usual number of standard drinks (n=291)		
None	27	9.3
1-2	198	68.0
3-4	58	19.9
5 or more	8	2.7
Frequency of consumption of 5 or more drinks on one occasion (n=292)		
Never	157	53.8
Less than monthly	89	30.5
Monthly	24	8.2
Weekly or more often	22	7.5

~ Parents responded for their eldest child at the sampled school

Table 2. Summary of responses to items on attitudes about alcohol and schools

Attitude to alcohol in school	Agree/Strongly agree % (n)	Neutral % (n)	Disagree/Strongly disagree % (n)
Schools should be completely alcohol free/ Alcohol should not be consumed on school premises under any circumstances	49.8% (144)	17.6% (51)	32.5% (94)
Alcohol should only be consumed on school premises when there are no students present e.g. amongst staff on a Friday afternoon; at parent-only evenings	58.2% (167)	11.8 (34)	30.0% (86)
Parents should be able to drink a glass of wine or beer at social events for families at the school	53.2% (148)	18.7% (54)	30.1% (87)
It is appropriate to serve alcohol to adults (including students over 18 years) at school celebrations such as the Year 12 ball or graduation dinners	17.7% (51)	10.8% (31)	71.4% (205)
A parent's decision to provide alcohol for Year 12 students at pre- and/or post-ball parties has nothing to do with the school	26.0% (75)	10.8% (31)	63.2% (182)
Selling alcohol to adults to drink at school social events for families is an acceptable way of raising funds for the school	40.1% (116)	18.7% (54)	41.2% (119)
Prizes which include alcohol are fine for school fund-raising events	51.9% (150)	18.0% (52)	30.1% (87)

Table 3. Results from chi-square tests of association between factors and items on attitudes about alcohol and schools

Attitude to alcohol in school	Child gender		Parent gender		Parent education		Parent consumption Frequency		Parent consumption # std drinks		Parent consumption Frequency of 5+drinks	
	Chi-square (df=2)	p	Chi-square (df=2)	p	Chi-square (df=4)	p	Chi-square (df=4)	p	Chi-square (df=4)	p	Chi-square (df=4)	p
Schools should be completely alcohol free/ Alcohol should not be consumed on school premises under any circumstances	0.5	.782	0.04	.982	3.6	.467	23.9	<.001	15.9	.003	11.0	.027
Alcohol should only be consumed on school premises when there are no students present e.g. amongst staff on a Friday afternoon; at parent-only evenings	3.8	.147	1.3	.518	3.8	.432	7.2	.126	8.9	.064	5.3	.257
Parents should be able to drink a glass of wine or beer at social events for families at the school	1.4	.506	0.2	.908	6.3	.179	36.3	<.001	22.9	<.001	22.0	<.001
It is appropriate to serve alcohol to adults (including students over 18 years) at school celebrations such as the Year 12 ball or graduation dinners	0.5	.772	0.5	.760	6.0	.197	5.7	.219	2.4	.668	5.4	.253
A parent's decision to provide alcohol for Year 12 students at pre- and/or post-ball parties has nothing to do with the school	10.9	.004	6.5	.040	2.6	.626	3.6	.469	1.5	.833	1.1	.896

Prizes which include alcohol are fine for school fund-raising events	0.3	.867	0.6	.731	11.9	.018	26.8	<.001	18.6	.001	14.8	.005
Selling alcohol to adults to drink at school social events for families is an acceptable way of raising funds for the school	3.3	.192	0.7	.703	13.7	.009	31.8	<.001	15.6	.004	22.8	<.001

Table 4. Multinomial regression results for “Prizes which include alcohol are fine for school fund-raising events”

Model 1.1: “Prizes which include alcohol are fine for school fund-raising events” by Frequency of alcohol						
		OR	SE	z	P	95% CI
S/Agree vs Neutral						
Frequency of alcohol use	Monthly or less/Never	1				
	Fortnightly/weekly	.9474111	.2772249	-0.18	0.854	.5339072 1.681168
	2X a week+	1.230465	.3672472	0.69	0.487	.6855164 2.208618
Parent education						
	Year10/12	1				
	Trade/Diploma	1.130106	.3959659	0.35	0.727	.5686902 2.245757
	University degree	2.9059	.4114645	7.53	0.000	2.201678 3.835373
S/Disagree vs Neutral						
Frequency of alcohol use	Monthly or less/Never	1				
	Fortnightly/weekly	.3626706	.2439764	-1.51	0.132	.0970265 1.355608
	2X a week+	.2171345	.1075399	-3.08	0.002	.0822537 .5731946
Parent education						
	Year10/12	1				
	Trade/Diploma	.4774796	.255934	-1.38	0.168	.1669945 1.365236
	University degree	1.490918	.5553695	1.07	0.284	.7184221 3.094053
S/Agree vs S/Disagree						
Frequency of alcohol use	Monthly or less/Never	1				
	Fortnightly/weekly	2.612319	1.198208	2.09	0.036	1.063165 6.418769
	2X a week+	5.666834	1.646526	5.97	0.000	3.206415 10.01524
Parent education						
	Year10/12	1				
	Trade/Diploma	2.366815	.5387269	3.79	0.000	1.515014 3.697534
	University degree	1.949068	.7953614	1.64	0.102	.8759411 4.336897

Model 1.2: "Prizes which include alcohol are fine for school fund-raising events" by Number of standard drinks						
S/Agree vs Neutral		OR	SE	z	P	95% CI
Number standard drinks, when drink	None/Does not drink	1				
	1-2 drinks	.3887389	.5472007	-0.67	0.502	.0246309 6.135291
	3+ drinks	.4145374	.6197358	-0.59	0.556	.0221316 7.764527
Parent education	Year10/12	1				
	Trade/Diploma	1.099183	.3485154	0.30	0.766	.5904476 2.046249
	University degree	2.897081	.3546627	8.69	0.000	2.279061 3.682691
S/Disagree vs Neutral						
Number standard drinks, when drink	None/Does not drink	1				
	1-2 drinks	.0836308	.091801	-2.26	0.024	.0097277 .7189922
	3+ drinks	.0565793	.068291	-2.38	0.017	.005312 .6026354
Parent education	Year10/12	1				
	Trade/Diploma	.545948	.2835193	-1.17	0.244	.1972919 1.510753
	University degree	1.51064	.540403	1.15	0.249	.7493069 3.045526
S/Agree vs S/Disagree						
Number standard drinks, when drink	None/Does not drink	1				
	1-2 drinks	4.648272	2.061698	3.46	0.001	1.948718 11.08751
	3+ drinks	7.326662	4.971722	2.93	0.003	1.937752 27.70219
Parent education	Year10/12	1				

	Trade/Diploma	2.013347	.4523615	3.11	0.002	1.296193 3.127287
	University degree	1.917783	.7675166	1.63	0.104	.8752657 4.20203
Model 1.3: "Prizes which include alcohol are fine for school fund-raising events" by Frequency has 5+drinks						
S/Agree vs Neutral		OR	SE	z	P	95% CI
Frequency of 'binge'	Never	1				
	Less than monthly	1.65619	.4503725	1.86	0.064	.971942 2.822148
	Monthly or more frequently	1.357188	.4503626	0.92	0.357	.7082418 2.60075
Parent education	Year10/12	1				
	Trade/Diploma	1.164427	.2988649	0.59	0.553	.7041099 1.925679
	University degree	3.03412	.3265883	10.31	0.000	2.457031 3.746752
S/Disagree vs Neutral						
Frequency of 'binge'	Never	1				
	Less than monthly	.6626961	.4165525	-0.65	0.513	.1933181 2.271727
	Monthly or more frequently	.3546575	.107968	-3.41	0.001	.1952895 .6440796
Parent education	Year10/12	1				
	Trade/Diploma	.6126348	.2507213	-1.20	0.231	.2746925 1.366333
	University degree	1.553501	.4274441	1.60	0.109	.9059505 2.663905
S/Agree vs S/Disagree						
Frequency of 'binge'	Never	1				
	Less than monthly	2.499169	1.388357	1.65	0.099	.8412594 7.424401
	Monthly or more frequently	3.826757	1.161552	4.42	0.000	2.110872 6.937448

Parent education	Year10/12	1				
	Trade/Diploma	1.900686	.3501875	3.49	0.000	1.324594 2.727332
	University degree	1.953085	.5119203	2.55	0.011	1.16846 3.264588

Neutral: "Neither agree or disagree"

Table 5. Multinomial regression results for “It is appropriate to serve alcohol to adults (including students over 18 years) at school celebrations”

Model 2.1: “It is appropriate to serve alcohol to adults (including students over 18 years) at school celebrations” by Frequency of alcohol use						
		OR	SE	z	P	95% CI
S/Agree vs Neutral						
Frequency of alcohol use	Monthly or less/Never	1				
	Fortnightly/weekly	1.548439	.4980563	1.36	0.174	.8243367 2.908597
	2X a week+	2.353242	.3623622	5.56	0.000	1.740183 3.182279
Parent education	Year10/12	1				
	Trade/Diploma	1.200045	.3383039	0.65	0.518	.6906151 2.085255
	University degree	2.067476	.5302772	2.83	0.005	1.250604 3.417915
S/Disagree vs Neutral						
Frequency of alcohol use	Monthly or less/Never	1				
	Fortnightly/weekly	.3270035	.1656261	-2.21	0.027	.1211774 .8824354
	2X a week+	.3599574	.0967507	-3.80	0.000	.2125504 .6095934
Parent education	Year10/12	1				
	Trade/Diploma	1.023181	.4462707	0.05	0.958	.4352038 2.40554
	University degree	.6480167	.3655942	-0.77	0.442	.2144669 1.957997
S/Agree vs S/Disagree						
Frequency of alcohol use	Monthly or less/Never	1				
	Fortnightly/weekly	4.735237	2.607002	2.82	0.005	1.609569 13.93073
	2X a week+	6.537558	1.023852	11.99	0.000	4.809592 8.886339
Parent education	Year10/12	1				
	Trade/Diploma	1.172857	.2567859	0.73	0.466	.7636291 1.801389
	University degree	3.190468	2.521546	1.47	0.142	.6778257 15.01726
Model 2.2: “It is appropriate to serve alcohol to adults (including students over 18 years) at school celebrations” by Number of standard drinks						

S/Agree vs Neutral		OR	SE	z	P	95% CI
Number standard drinks, when drink	None/Does not drink	1				
	1-2 drinks	3.246525	2.127592	1.80	0.072	.898646 11.72867
	3+ drinks	3.316647	2.419289	1.64	0.100	.7939633 13.85473
Parent education	Year10/12	1				
	Trade/Diploma	1.147605	.3192429	0.49	0.621	.6652787 1.979617
	University degree	2.143046	.5497626	2.97	0.003	1.296194 3.543178
S/Disagree vs Neutral						
Number standard drinks, when drink	None/Does not drink	1				
	1-2 drinks	.4929205	.2443807	-1.43	0.154	.1865379 1.302526
	3+ drinks	.2791153	.0725071	-4.91	0.000	.1677501 .4644129
Parent education	Year10/12	1				
	Trade/Diploma	1.152283	.4766527	0.34	0.732	.5122142 2.592189
	University degree	.7742866	.3650673	-0.54	0.587	.3073052 1.950893
S/Agree vs S/Disagree						
Number standard drinks, when drink	None/Does not drink	1				
	1-2 drinks	6.586306	2.548719	4.87	0.000	3.084966 14.06156
	3+ drinks	11.88272	8.127942	3.62	0.000	3.10944 45.40977
Parent education	Year10/12	1				
	Trade/Diploma	.9959402	.2887958	-0.01	0.989	.5641672 1.758161
	University degree	2.767768	1.996552	1.41	0.158	.6731452 11.38022

Model 2.3: "It is appropriate to serve alcohol to adults (including students over 18 years) at school celebrations" by Frequency has 5+drinks						
S/Agree vs Neutral		OR	SE	z	P	95% CI
Frequency of 'binge'	Never	1				
	Less than monthly	1.811631	.5984173	1.80	0.072	.9482025 3.461293
	Monthly or more frequently	2.5458	.8526191	2.79	0.005	1.320525 4.90797
Parent education	Year10/12	1				
	Trade/Diploma	1.172716	.3494919	0.53	0.593	.6539109 2.103135
	University degree	2.292676	.3316533	5.74	0.000	1.726672 3.044217
S/Disagree vs Neutral						
Frequency of 'binge'	Never	1				
	Less than monthly	.669841	.2553431	-1.05	0.293	.3173175 1.414
	Monthly or more frequently	.434093	.1559752	-2.32	0.020	.2146521 .8778703
Parent education	Year10/12	1				
	Trade/Diploma	1.184526	.4504752	0.45	0.656	.5621244 2.496069
	University degree	.7649363	.3410843	-0.60	0.548	.3192093 1.833053
S/Agree vs S/Disagree						
Frequency of 'binge'	Never	1				
	Less than monthly	2.704568	1.22577	2.20	0.028	1.112537 6.574781
	Monthly or more frequently	5.864642	1.057441	9.81	0.000	4.118729 8.35064
Parent education	Year10/12	1				

	Trade/Diploma	.9900302	.2667397	-0.04	0.970	.5838655 1.678743
	University degree	2.997212	1.764102	1.86	0.062	.9456192 9.499889

Neutral: "Neither agree or disagree"