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Background

Alcohol is one of the leading contributors to the burden of disease in young people internationally and is associated with a range of short and long term harms¹⁻⁴

Early adolescent alcohol initiation is common; the average age of alcohol initiation in 2013 in Australia was 15.5 years and over 50% of 14-19 year olds reported current alcohol use²

Risky alcohol use in adolescence and young adulthood is also common; one third of 14-19 year olds report binge drinking in the past year, increasing to 61% of 18-24 year olds²

Early age of alcohol initiation is thought to be associated with an increased risk of alcohol problems in adolescence and adulthood. However, evidence for this relationship is mixed⁵

A recent systematic review questioned the quality of the research in this area, concluding that there was no strong evidence that early age of initiation leads to later alcohol problems⁵



Aims

Using data from the Australian Parental Supply of Alcohol Longitudinal Study (APSALS) cohort, the current study aims to:

- Explore the age of initiation amongst drinkers in the APSALS cohort
- Examine the rates of drinking and bingeing during school years 7 to 11
- Investigate whether early initiation of alcohol leads to later alcohol problems, specifically binge drinking in year 11.

The APSALS cohort

- Recruited in 2010-2011 through 49 schools in NSW, TAS and WA.
- 1,927 eligible parent-adolescent dyads in the cohort
- Grade 7 adolescents and their parent/guardian completed separate annual surveys over 5 years
- Survey response rates have remained above 85%
- Measures demographics, alcohol use, alcohol related harms, parental, child, family and peer factors
- The cohort closely matches the Australian population in sex, age, household composition, socioeconomic status and alcohol use

The Difference is Research

Discussion & Implications

- The unadjusted results suggested a link between early initiation and binge drinking in high school, but control of important confounders eliminated this apparent relationship.
- These findings highlight the importance of conducting rigorous epidemiological research. The results are consistent with previous well-controlled prospective studies, finding no evidence for the relationship between age of initiation and later binge drinking.⁵
- The findings are limited to drinking between early and mid-teens. Follow-up of this cohort into adulthood will help clarify impacts of early drinking on more mature consumption patterns.
- Other possible risk factors for binge drinking that came up in this analyses were:
 - Supply of alcohol to minors (by parents and other sources)
 - Peer substance use
 - Adolescent externalising behaviours (rule breaking, aggression).
- Early drunkenness (rather than just early use) has been suggested as another potential risk factor. Early experiences of being drunk may set up a heavier drinking trajectory, or perhaps reflects some underlying risk factor. These are questions that we will be pursuing with this cohort.
- Regardless of the age of initiation, there are well demonstrated acute risks associated with adolescent binge drinking.
- Alcohol attributable harms in Australia increased between 2001-2010, and recent evidence suggests that alcohol use and related harms are increasing amongst the heaviest drinkers.⁶ Understanding the progression to heavy alcohol use is vital to reducing alcohol related harms.



- Advice to delay initiation remains appropriate to ensure that early drinking does not compromise adolescent well-being.

Results

In year 11, 1673 participants provided data:

- 53% were male
- Mean age was 16.9 years
- 56% had initiated alcohol

Rates of alcohol use and binge drinking increased at each wave (Figure 1). Among those who had initiated alcohol (at <18 years of age), the mean age of initiation was 15 years, and 30% had started drinking by age 14 (Figure 2).

Figure 1: Rates of drinking and bingeing (n=1673)

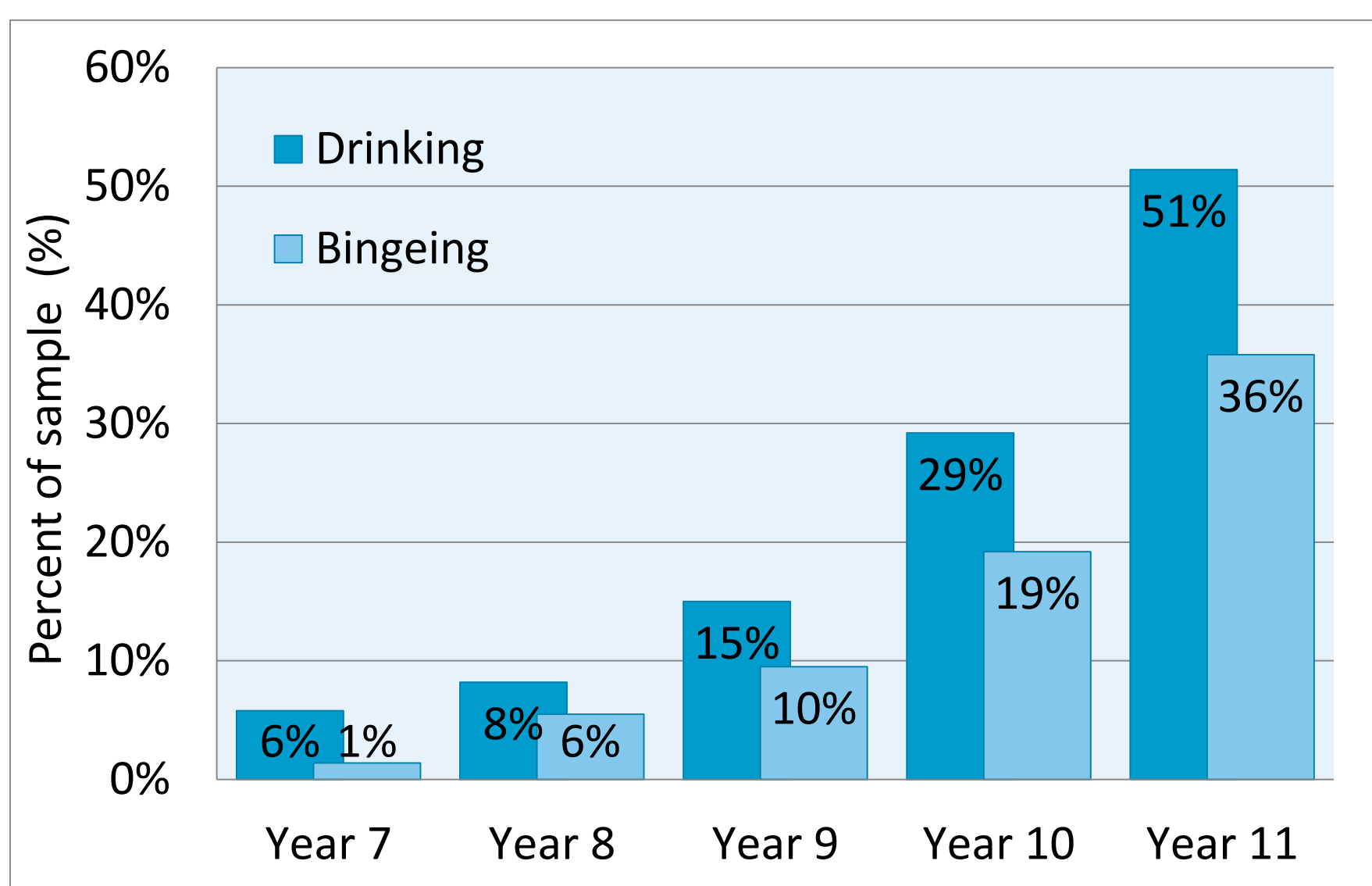
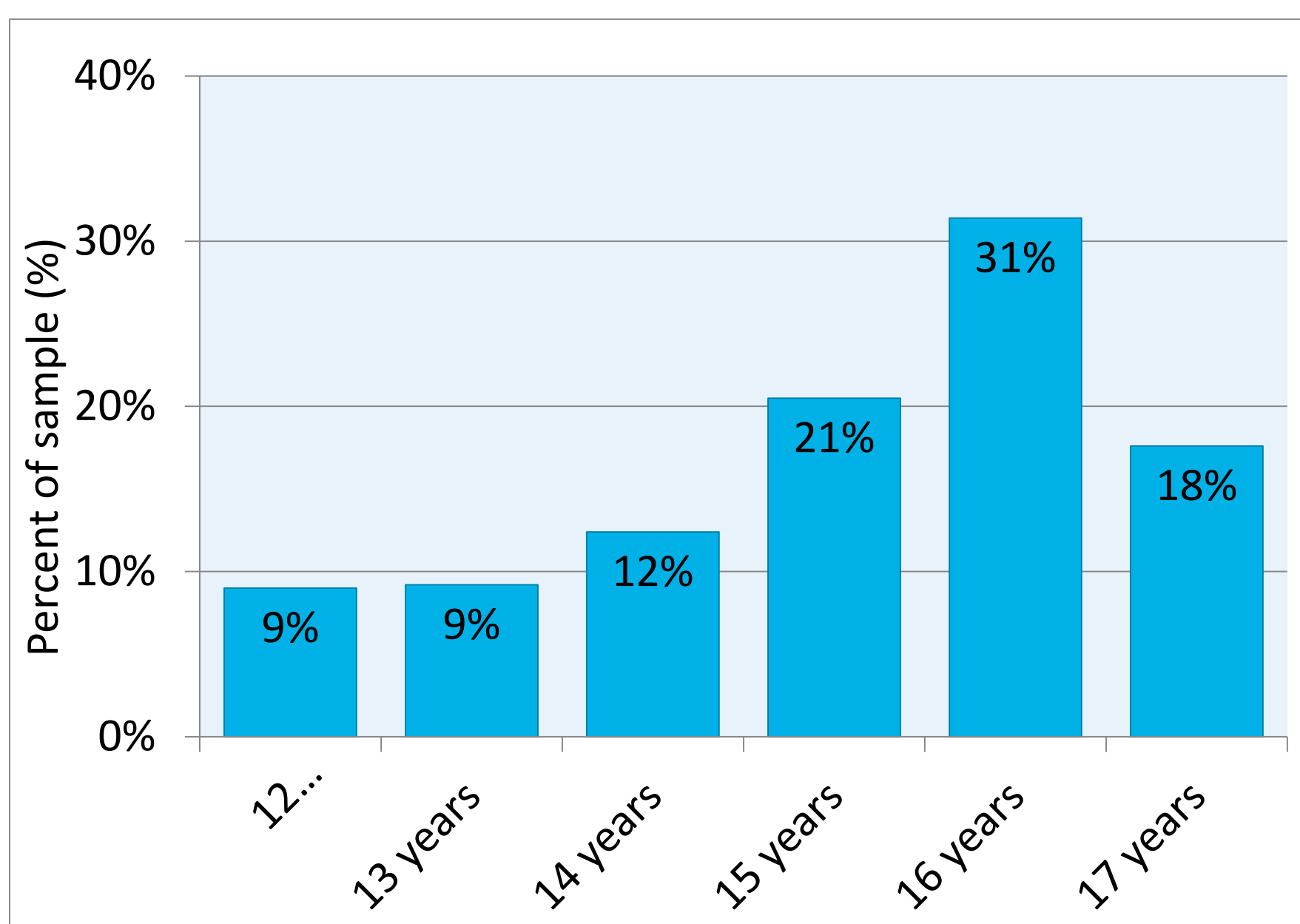


Figure 2: Percent of drinkers initiating at each age (n=929)



Does earlier alcohol initiation increase the risk of binge drinking in late high school?

Age of initiation	Odds and 95% CI of binge drinking in Wave 5 (n=839)	
	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
12	1.00	1.00
13	1.10 (0.43-2.78)	1.37 (0.44-4.26)
14	0.56 (0.26-1.24)	0.59 (0.23-1.53)
15	0.78 (0.37-1.67)	1.13 (0.45-2.85)
16	0.27 (0.14-0.53)*	0.63 (0.27-1.47)
17	0.24 (0.12-0.49)*	0.47 (0.19-1.13)

* p<0.001

- A logistic regression analysis was conducted using 5 years of APSALS data to examine the impact of age of initiation on the risk of binge drinking in year 11 of school, controlling for a range of child, parent, family and peer factors
- **Unadjusted results:** later age of initiation appeared to be protective of binge drinking
- **Adjusted results:** After controlling for important covariates, this relationship was no longer significant
- There was no increased risk of binge drinking for those who initiated alcohol use earlier in adolescence, compared to those initiating later in adolescence



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