

Comparison of adolescent alcohol use at baseline and first follow-up: Results from the Drinking and Teens Project

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Introduction

- Harmful alcohol use is a leading cause of disease burden for young Australians (1).
- There is concern over the significant rates of early alcohol initiation and the often rapid progression to risky drinking.
- Australian data show that the proportion of young people consuming alcohol in the past year increases from 28% of 12-year-olds to 74% of 15-year-olds and 85% of 17-yearolds (2).
- Close to 40% of young Australians binge drink each year, with 30% doing so at least monthly. Additionally, 10% put themselves at risk of long term harms from alcohol⁽³⁾.
- It has been estimated that 80% of all alcohol consumed by 14-17-year-olds is drunk at risky levels for acute harm (4).
- Factors such as parental alcohol use^(5,6), family relationships and peer influence^(7,8) have been associated with adolescent alcohol initiation. Perceived availability, acceptability and normality of drug use have also been shown to increase early alcohol use (9).
- Most of the research in this area to date has been crosssectional, conducted overseas and/or in small samples. There is a strong need for prospective Australian data exploring the context of alcohol initiation and how harmful patterns of consumption develop.

The Current Study

The current study reports results from a national cohort study, the drinking and teens project. This ongoing project is investigating parental supply of alcohol, adolescent alcohol initiation and the development of drinking trajectories.

This study:

- Compares adolescent alcohol use at baseline (year 7) and first follow up (year 8);
- Investigates the context and predictors of initiating alcohol use by the first follow-up.
- Young people are defined as initiating alcohol use for this study if they have tried alcohol for the first time in the past year or if they have initiated drinking of full serves of alcohol where previously only sips had been consumed.

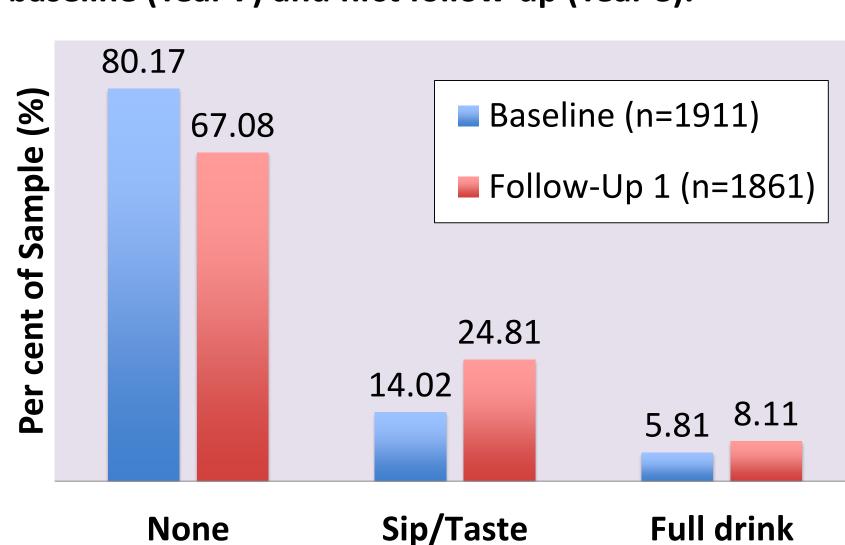
Method

- Parent-child dyads (N=1977) were recruited from secondary school schools across NSW, TAS, and WA in 2010/11. Of these, 97% provided active informed consent and completed baseline surveys; 1911 parents and 1909 adolescents. In 2011/12 1848 parents and 1861 children completed follow-up surveys.
- Parent-child dyads complete online or paper surveys every 12 months for 5 years.
- Measures include demographics, alcohol use, harms, alcohol specific rules, parental alcohol supply, home access to alcohol, parental style and relationships, parental monitoring, peer substance use and adolescent behaviour.

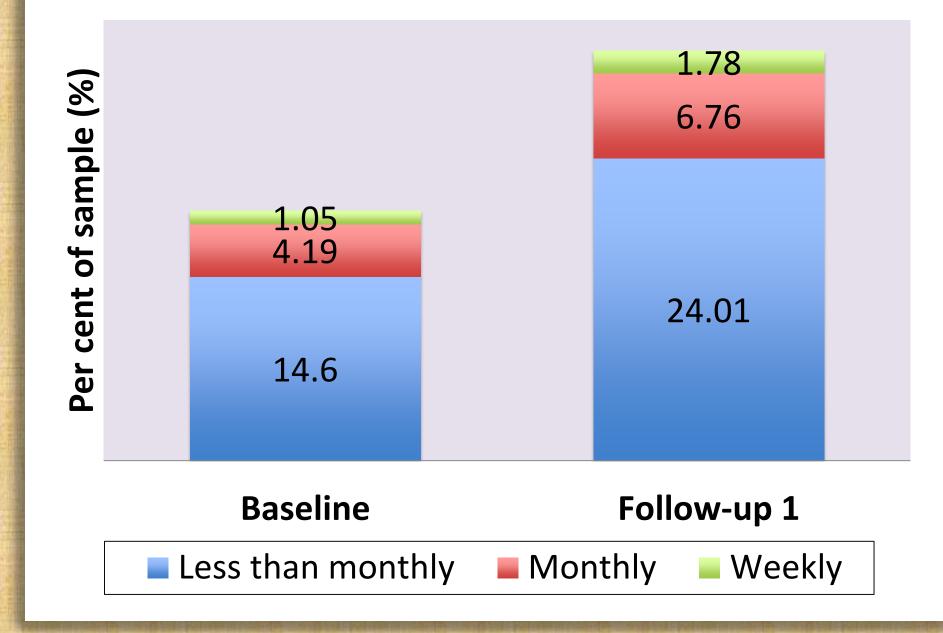
	Table 1. Baseline sample demographics Parents (N=1911)						
	Mean parent age (range)	43.9 years (22-70)					
	Which parent?	Mother Father Other	86.3% 12.6% 1.1%				
	Born in Australia	73.1%					
	Household Income	Up to \$34,999 \$35,000-\$80,000 \$80,001-\$180,000 \$180,001+	8.6% 24.6% 48.8% 18.0%				
Western March	Parent Employed	81.2%					
	Parent Education	Less than Year 10 School Certificate Diploma/Trade University	3.0% 28.7% 32.2% 36.1%				
	Ever tried alcohol?		99.27%				
	Adolescents (N=1909)						
	Mean age (range)	12.5 years (10-14)					
	Gender	54.5% male					
	Lives in 2 parent household	79.5%					
	Has older siblings	51.89%					



Graph 1. Comparison of adolescent alcohol use at baseline (Year 7) and first follow-up (Year 8).



Graph 2. Frequency of alcohol consumption at baseline (Year 7) and first follow-up (Year 8).



Discussion

- Consistent with previous research^(2, 3), alcohol use increased with age; with 33% of young people reporting recent consumption of alcohol at follow-up (13.9 years) compared to 20% at baseline (12.9 years).
- Of young people who had not consumed or only sipped alcohol at baseline (94% of sample), 25% had initiated or increased their alcohol use at follow-up.
- Initiation or increase in alcohol use was associated with a range of variables including the child's current age, living with both parents, parent education, parent's age of initiation to alcohol, alcohol specific rules, peer use and approval of alcohol and delinquent child behaviour. However many of these became non-significant when entered into the multivariable model.
- The multivariable model showed that the odds of a young person initiating alcohol use increased with their age, and with peer alcohol use. The odds decreased if their parents were university educated and if parents had initiated alcohol use at a later age.
- Peers have a strong impact on alcohol initiation at this age. Having friends who had tried alcohol and having friends who had ever been drunk by increased the odds of initiating alcohol use by 1.7 and 1.9, respectively.
- Unexpectedly, parents' baseline alcohol use was not significantly related to child alcohol initiation. It is possible that parents' current alcohol use would have more influence on child drinking behaviours.

Table 3. Selected bivariate and multivariable analyses of past-12-month alcohol initiators, N=1787.

		Bivariate (n=1708-1787)		Multivariable (n=1597)				
	% (n) / M (SD)	OR	95% Cl	OR	95% Cl			
Demographics								
Female	45.4%	0.94	0.75-1.16	1.04	0.81-1.32			
Current Age	13.9 (0.54)	1.54**	1.25-1.89	1.25*	1.00-1.57			
Parent is university educated	36.3%	0.67**	0.53-0.84	0.75*	0.58-0.98			
Parent and famil	Parent and family factors							
Parent recent alcohol use	94.0%	1.42	0.87-2.31	1.49	0.71-3.14			
Parent age of first alcohol	16.5 (2.70)	0.93**	0.89-0.97	0.95*	0.90-0.99			
Home access to alcohol	17.0 (3.64)	1.00	0.98-1.03	1.01	0.98-1.05			
Alcohol rules	49.6 (1.17)	0.86**	0.79-0.94	0.96	0.87-1.05			
Monitoring	28.9 (1.70)	0.91**	0.86-0.97	0.97	0.90-1.04			
Peer factors	Peer factors							
Friends have tried alcohol	70.2%	2.09**	1.61-2.70	1.70**	1.24-2.31			
Friends ever been drunk	15.6%	2.62**	2.00-3.42	1.91**	1.40-2.62			
Peers approve of drinking	8.6%	1.68*	1.12-2.52	1.14	0.76-1.71			
Child behaviour	Child behaviour factors							
Rule-breaking behaviour	1.9 (2.46)	1.10**	1.06-1.15	1.07	0.99-1.14			
Aggressive behaviour	4.0 (4.14)	1.04**	1.02-1.07	0.96	0.87-1.05			
* p<0.05 **p<0	* p<0.05 **p<0.005							

Conclusions

- Peers appear to have the strongest influence on alcohol initiation at this age. This is consistent with other research showing that peers play an important role in shaping adolescent behaviours (8).
- As most of the 'drinkers' in this study are only consuming sips of alcohol, it will be valuable to repeat these analyses in future waves of data from this cohort, when there is a broader range of experience with alcohol within the sample.
- Future analyses of this cohort will investigate the influence that peers have on the development of harmful or responsible drinking trajectories.

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