SUBSTANCE USE AND HARMS IN YOUNG AUSTRALIANS

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Introduction

Alcohol consumption among young people is a leading cause of morbidity and mortality worldwide and contributes to the three leading causes of death: unintentional injuries, homicide and suicide. Alcohol use before the age of 15 is associated with more regular and higher levels of alcohol use and dependence at later ages[1], and with more negative mental health conditions and social harms[2]. For example, anxiety, depressive and substance use disorders account for 75% of the disability attributed to mental disorders[3]. These disorders peak in adolescence and often co-occur[4].

Methods

Baseline data were obtained from a large cohort of Australian Year 8 students participating in the Climate Schools Combined (CSC) Study. This study is the first randomised controlled trial internationally to use a combined approach aiming to prevent substance use and mental health problems in adolescents, and is being conducted in 71 schools across Australia (New South Wales, Queensland and Western Australia). A total of 6409 students completed the baseline survey at the beginning of 2014 and will be assessed via 6 follow-up self-report questionnaires until the end of 2016. Measures included alcohol use and alcohol related harm using the 23-item Rutgers Alcohol Problem Index (RAPI). Students were asked to rate how many times in the past six months they have experienced harms as a consequence of drinking alcohol, on a Likert scale ranging from 0 = 'never' to 5 = 'more than 6 times'.
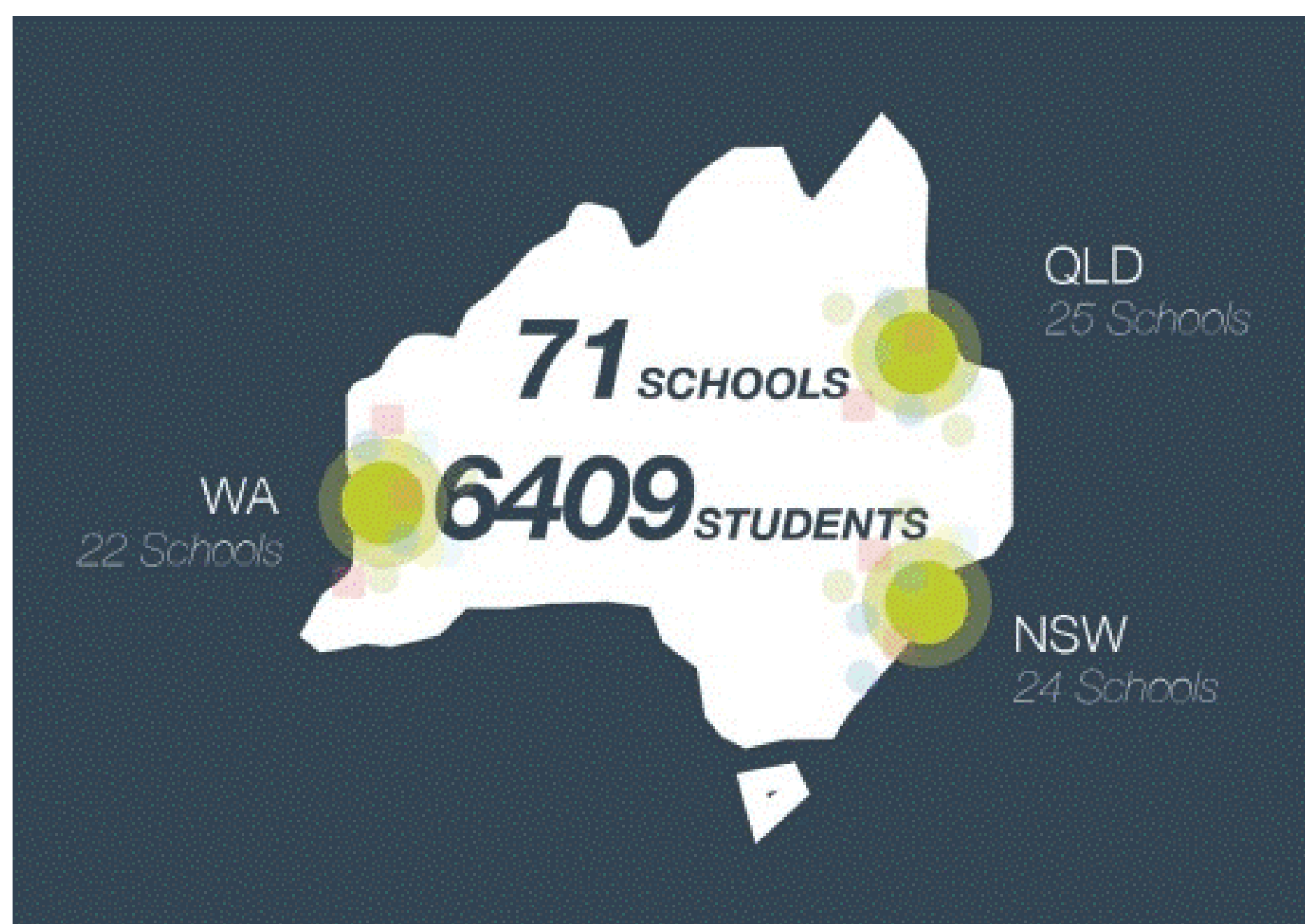
Results

Chi-square tests were performed to examine the relationship between gender and if the student ever had a sip and ever had a full standard alcoholic drink. The relation between these variables was significant, X2 (n = 6338) = 20.59, p < .01 respectively, X2 (n = 3950) = 17.10, p < .01. A slightly larger proportion of males ever had a sip or a full standard alcoholic drink than females (respectively 65% compared to 60%, and 11% compared to 7%).

The overall RAPI score showed that most of these students (n = 3723, 94.7%) never experienced any alcohol-related harm, 3.1% experienced harm 1-2 times, and 2.1% experienced harm 3 or more times. Males experienced alcohol-related harms more often than females, with a mean RAPI score of 0.82 (SD = 5.38, n = 2840) for males compared to a mean score of 0.44 (SD = 3.39, n = 3476) for females. An independent samples t-test showed that this difference is significant (t(4585.3)=3.3, p <.01, 95% CI [0.15, 0.60]).

Some students also experienced mental health problems. On average, one in five students experienced mild anxiety, with females reporting higher levels of anxiety than males for all categories (See Table 1). Furthermore, more than one third (36.8%) of the students reported depressive symptoms. The level of moderate, moderately severe and severe depression was twice as high for females as for males (See Table 2).

Table 1: Generalised Anxiety Disorder (GAD-7)			
	Male (N=2702)	Female (N=3348)	Total (N=6050)
None	76.7%	65.6%	70.6%
Mild Anxiety	17.0%	21.3%	19.3%
Moderate Anxiety	4.2%	7.6%	6.1%
Severe Anxiety	2.1%	5.5%	4.0%

Table 2: Patient Health Questionnaire (PHQ-8)			
	Male (N=2723)	Female (N=3367)	Total (N=6090)
None	70.2%	57.6%	63.2%
Mild Depression	20.8%	24.4%	22.8%
Moderate Depression	5.9%	10.7%	8.6%
Moderately Severe Depression	2.1%	4.8%	3.6%
Severe Depression	1.0%	2.6%	1.9%
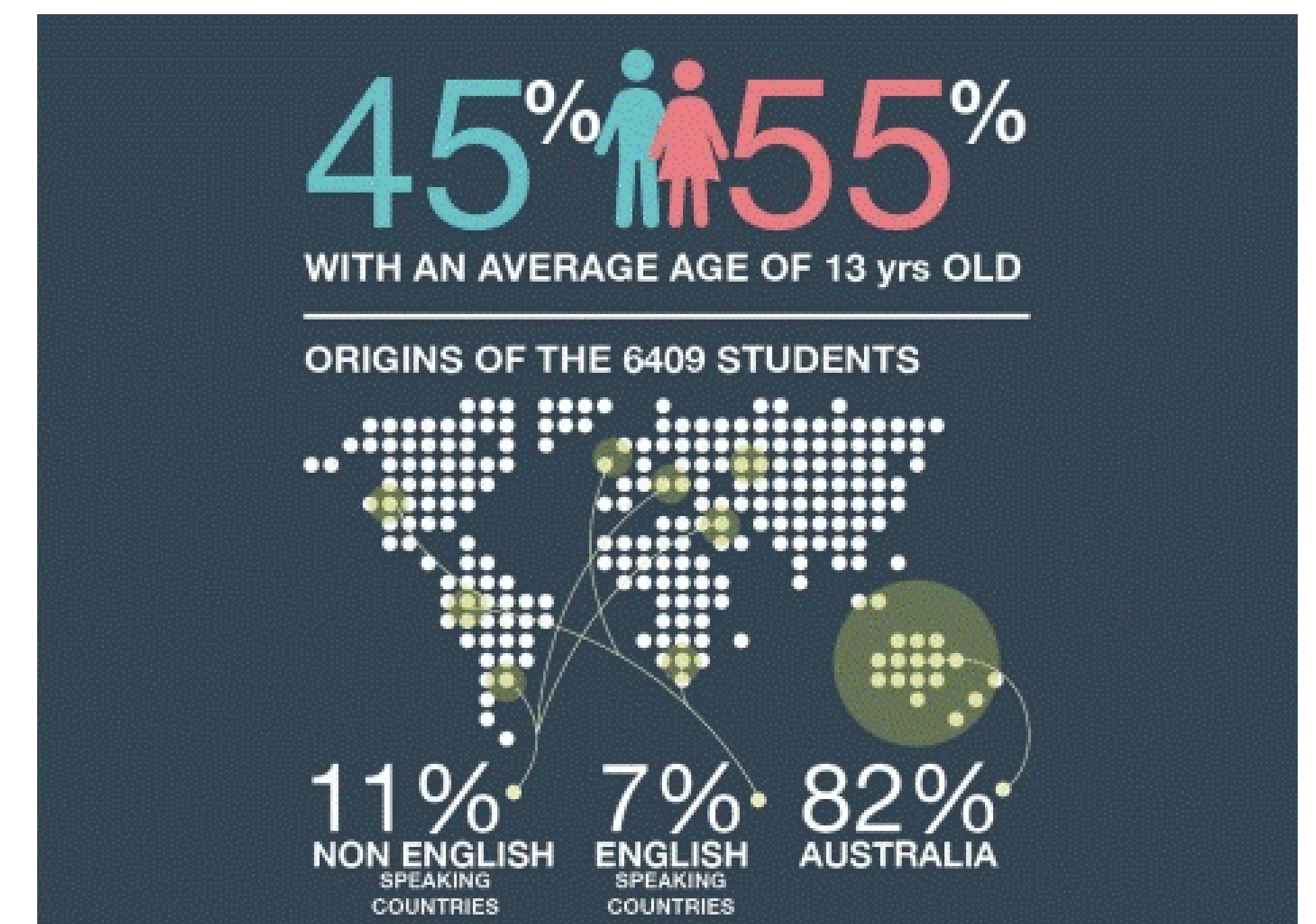
Discussion

Australian students in this sample report alcohol consumption at levels similar to other research. Males are more likely to have consumed alcohol at 13 years of age than females[5]. Possibly linked to other research, that indicates increasing abstention rates of Australian students'[6], only a small proportion of students in this age group drink at risky levels. However, the potential current and downstream harms for young people who do engage in risky drinking are significant. Males are more likely to engage in potentially harmful activities while under the influence of alcohol and females are at greater risk of mental health problems such as anxiety and depression. As the nature of the relationship between alcohol consumption and mental health in young people is reciprocal[7], at least to some extent, it is important to design and deliver effective interventions.

References

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