



Test Your Knowledge!

Australian Prime Ministers

VS

Beer Brands



1. Introduction:

Have you ever wondered how much year 7s know that they should know and how much they know that they shouldn't know? One of our friends read an article about a survey (a survey sponsored by the Centre for Science in the Public Interest, found in Jehovah's Witness's March 1989 Awake magazine) that was carried out in the United States that was about boys and girls up to the age of 12 being asked to name as many American presidents as they could and then then to name many beer brands as they could. On average, students could name more beer brands than presidents which indicates that alcohol is a big part of everyday lives of underage children. We were curious about how Australian students would do with this survey compared to American students, so we decided to conduct this experiment on a few people. We assume that all students have had an equal amount of education provided in the subject of civics and that they have similar socioeconomic backgrounds.

2. Hypothesis:

Respondents are more likely to know more beer brands than Australian prime ministers due to alcohol being a big part of their everyday lives. The older and the closer the respondent gets to the legal drinking age, the more beer brands and prime ministers they will be able to name.

3. Data Collection Method:

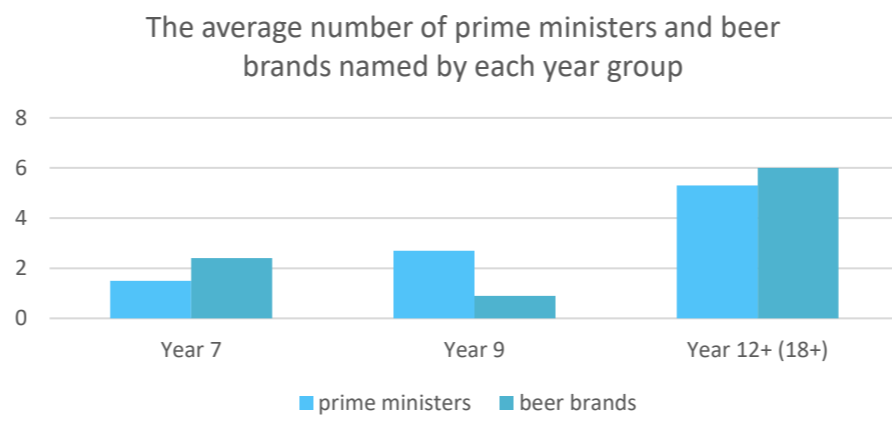
We have a good sample size because we surveyed 40 year 7s and 40 year 9s, asking them to name as many Australian prime ministers and as many beer brands as they could. We also surveyed 40 people of the ages of 18 and over as a control for our probability experiment – 18 being the legal drinking age in Australia, so people the ages of 18 and over would be expected to know lots of brands of beer, unlike underage students. We sampled a variety of abilities (general, extension, Gifted and Talented & ATAR classes) and a variety of genders to make it fair. We also surveyed about 40 people for every year group to ensure it is a fair test. And we refined the data by checking for mistakes -some people listed premiers like Mark McGowen- so we didn't count such mistakes as Australian Prime Ministers in our data.

4. Raw Results:

Year group	Number of prime ministers known (mean)	Number of beer brands known (mean)
7	1.5	2.0
9	2.7	0.9
12+ (18 years and over)	5.3	6.0
Overall average	3.2	3
Overall average excluding year 12+	2.1	1.5

5. Graphing Data:

The double bar graph bellow shows the average amount of beer brands and prime ministers each year group could name. We have decided to get the mean (the average) of the beer brands and prime ministers known because we don't have any outliers. And we've also decided to include an average where we don't count the year 12+ in our overall average because the year 12+ was like a 'control' for our experiment, a standard or a reference of what an average adult should know for our experiment so that we can compare them to the underage children surveyed.



6. Data Analysis:

In our data, we found that the average number of prime ministers that could be named overall (excluding year 12+) were 3.2 including year 12+ and 1.5 excluding year 12+. The average number of beer brands named was 3 including year 12+ and 2.1 excluding year 12+. The year group that could name the most beer brands was year 12+ which shows that our hypothesis is correct about being able to name more beer brands and prime ministers as you get older but not entirely as year 9s named less beer brands and prime ministers than year 7s which was a very surprising find. So as expected, all the other year groups named a lot less beer brands and prime ministers compared to the year 12+. Another surprising find was that on average, the respondents named more prime ministers than beer brands which shows that our hypothesis wasn't entirely true.

7. Evaluation

We had a few flaws in our method – for an example, some participants in the survey could have used search engines to look up prime ministers and beer brands, so not all of their answers were from their own knowledge. Some participants also asked their friends or the people around them for help which could have affected their answers. Our findings were different to America's survey results so our findings cannot be applied to a different country.

8. Conclusion:

To conclude this investigation, we discovered that our hypothesis was not entirely correct. We thought that as year 9s are closer to the legal drinking age than year 7s, they would be able to name more beer brands than year 7s, but on average year 7s named 2 beer brands while year 9s named an average of 0.9 beer brands. Perhaps some year 7s were exposed to more alcohol than some year 9s as family members around them could drink more, or other factors could have something to do with how much they are exposed to alcohol. But it is not entirely wrong either as year 12+ named the most beer brands and prime ministers than the other year groups which proves that you can name more beer brands and prime ministers as you get older. So, our experiment can prove that alcohol is a part of some underage children's lives, but not everyone.