## **Student Alcohol Consumption**

### Factors contributing to student alcohol comsumption

Sayantan Mondal

Roll no: MDS202231 DG1107: Visualisation

Email: sayantanm@cmi.ac.in

CHENNAI MATHEMATICAL INSTITUTE

November 2, 2022

#### **Abstract**

In this project we try to understand the various factors contributing to the alcohol consumption among students. We would look into the social, family and educational factors in great detail. Finally we aim to build a dashboard to explore the above queries.

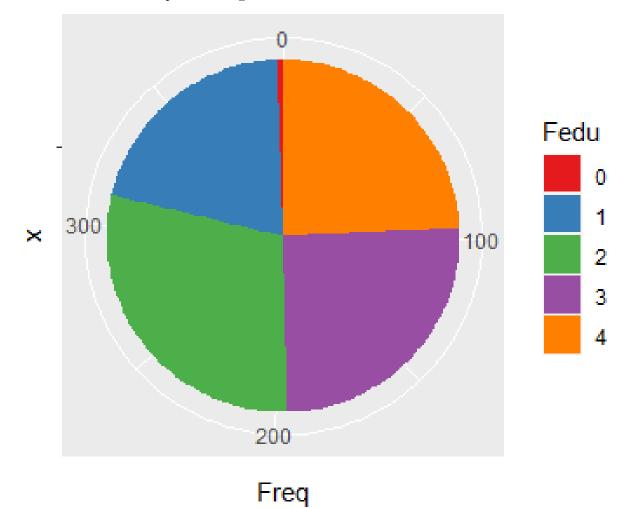
#### 1 Alcohol as a socially acceptable drug:

Alcohol, sometimes referred to by the chemical name ethanol, is a depressant drug that is the active ingredient in drinks such as beer, wine, and distilled spirits (hard liquor). Alcohol was brewed as early as 7,000 to 6,650 BCE in northern China.

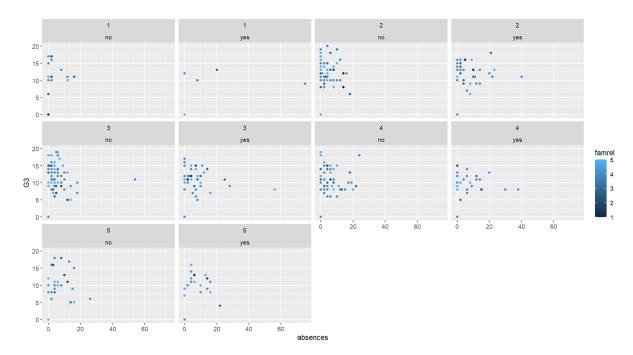
Though alcohol consumption is completely legal in available readily in most of the countries, there are strict laws and prohibitions about drinking in the public and minimum age requirement to buy and consume. Over the years alcohol has been thought of as an acceptable drug to be consumed and belittle it's effects on humans.

# 2 Analysis from the Alcohol consumption among secondary students:

We use a publicly available dataset and try to understand the key relations/factors responsible for the alcohol consumption among students.

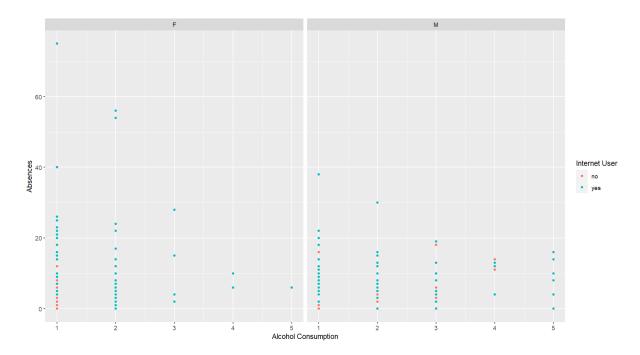


In the above pie chart, we can clearly see that the distributions of the father's education of the students. There is a very low population of father's having no education, and rest are very evenly distributed.

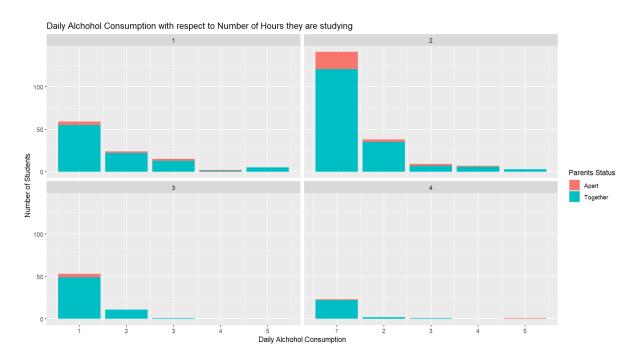


The above scatter plot has student absences, the final grade(G3) and the colour symbolises the quality of family relations they have (1 for very low and 5 being very high), going out with friends and the romantic relationship they might have.

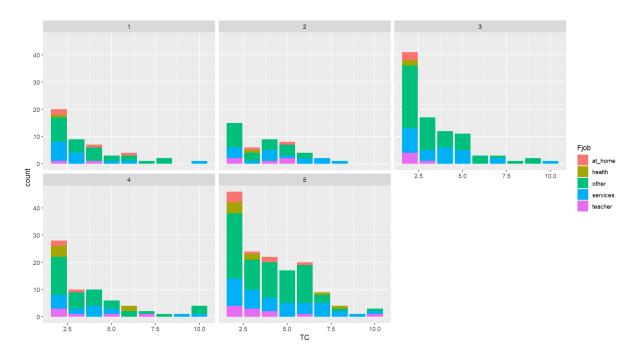
A possible deduction one might make is that students who are absent in the class frequently score poor in the final exam and is clearly reflected in the grade. Also to note are the students dont have a great relationship with the family members tend to score poorly in exams and are often present more in the class.



The above scatter plot shows the relations between absences and if they are an internet user. We can deduce that for female students all of non-internet users have very low alcohol consumption. Though for being absent in the class, alcohol consumption seems to have very low/negligible effect.



The above plot shows the relation between daily alcohol consumption, parents status and the hours of studying of each student. Clearly the parent's status of being together or separated has a direct relation with the student being studying as a major chunk of students are falling in category 2 which is studying very few hours. As the daily alcohol consumption increases so is the time they can give towards their studies.



The above plot shows the relation between the father's job, the health(1 - 5) and the

total alcohol consumption. Clearly at a glance, the students whose father's are staying at home/working from home, have a low alcohol consumption. And the health of the students are clearly better who cho choose to drink very less or avoid drinking.

#### 3 Conclusion:

From the analysis of the data we can conclude certain points:-

- Even if we have accepted alcohol as a societal drug enjoyed and seem to have to effects, that's not true for students/developing children
- From the analysis done above, students seem to focus less on their studies and bunk classes if they are too deep into the rabbit hole of alcohol.
- The parents being separated/together also has an impact on the student scoring in the exams.
- Parents being in the house all the time/working from home seem to reduce the alcohol consumption of the students.