# Statistical Data Analysis of Student Goals

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#### 1 Abstract

This should be a very brief explanation of your research paper (around 150 words). It normally includes information about the issue, why you are interested in that issue, your method/model, analysis results, discussions and conclusions.

Recent **evidence** has shown that undergraduate students tend to have different reasons for studying as they progress through their course. In this paper, we seek to answer whether this is true while also taking into consideration a student's **subject**, **sex** and a **year** of study.

### 2 Background / Introduction

This section should explain the topic, why it is important, and how you approach the issue

The goal of the survey was to find out if the hypothesis stated in the abstract is true. The authors of the survey stated a hypothesis that - as students progress through their studies their reasons for learning change; their primary focus shifts from achieving good grades towards deep understanding of the subject. The authors wanted to inspect if the student's subject, age and sex would influence, otherwise independent, results.

The survey had 15 questions which were designed to explore 7 main areas of interest, which were student's:

- Performance approach How important it is to students to do better than others?
  - Questions number: 1, 2, 3
- Performance avoidance How motivated are students by fear of performing poorly?
  - Questions number: 4, 5, 6
- Mastery approach Prevalence of mastery approach.
  - Questions number: 7, 8, 9
- Mastery avoidance Students' fear of not mastering the course.
  - Questions number: 10, 11, 12
- Interest Students' expectations whether the course will be interesting.
  - Question number: 13
- Enjoyment Students' expectations whether the course will be enjoyable.
  - Question number: 14
- Students' relative importance between Understanding/Grades with Equal importance being an option as well.
  - Question number: 15

It was noticed that the survey's 12 were randomly ordered with the had 12 randomly ordered questions and that the randomization was stated at the end of it.

#### 3 Data

Explain your dataset and how the was data is collected – e.g. your sampling strategy or information given by the project information.

Around 650 students were surveyed.

### 4 Methodology

This section explains the statistical methods and/or your model. It is also a common practice to present the statistical model structure (i.e. equation) here as well.

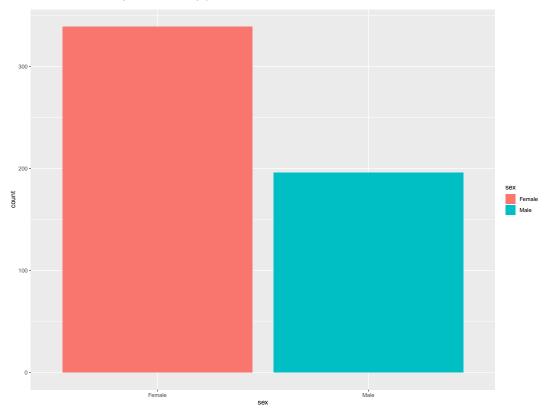
https://ggplot2.tidyverse.org

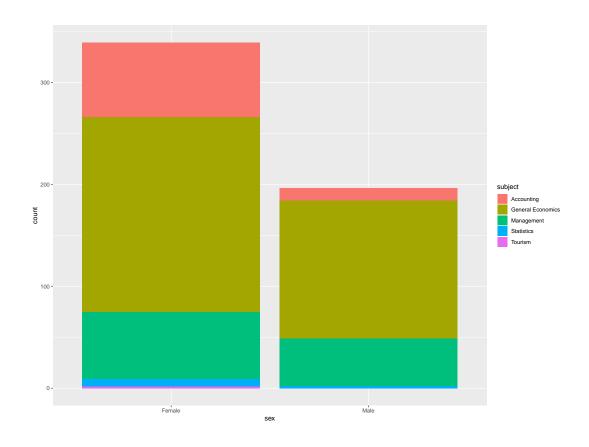
#### 5 Results

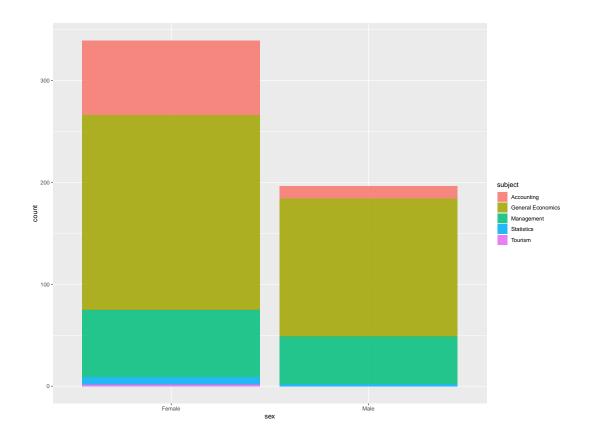
Present both your informal and formal analyses.

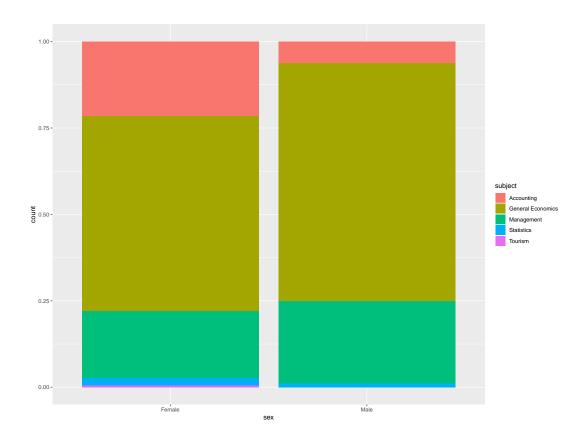
## 6 Conclusion / Discussion

You need to conclude your project, discuss the results, discuss any reservations that you have about the study and list any future work.

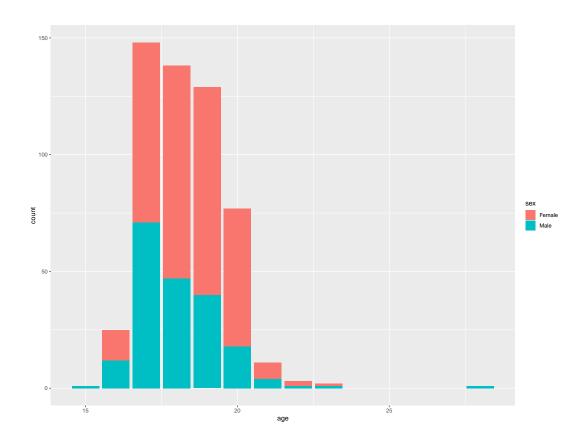




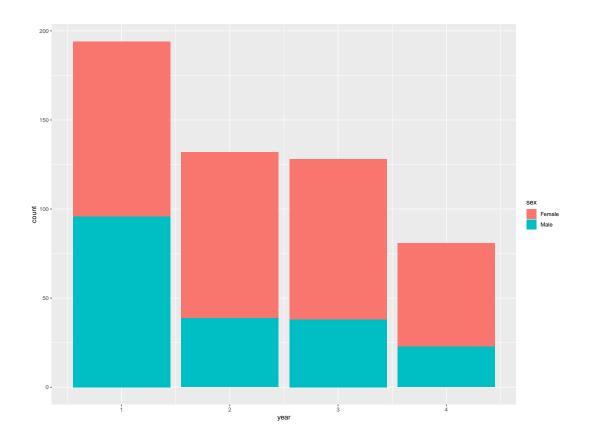


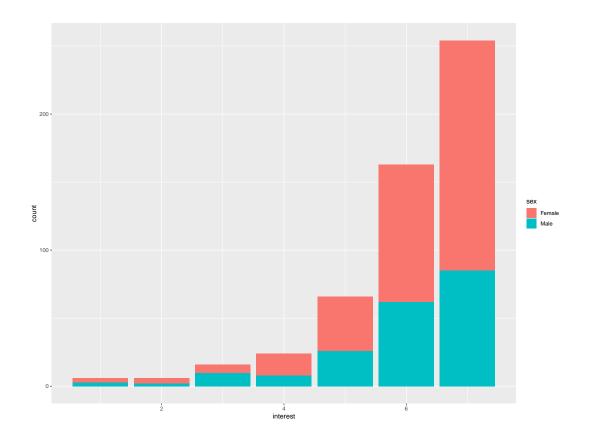


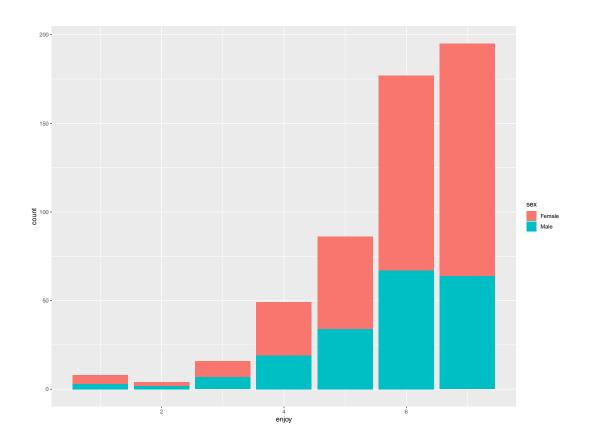


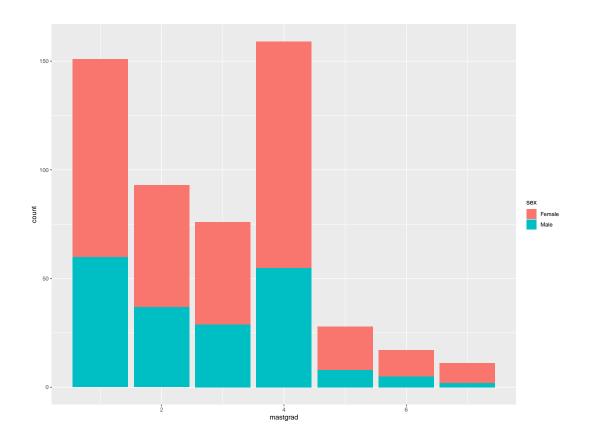




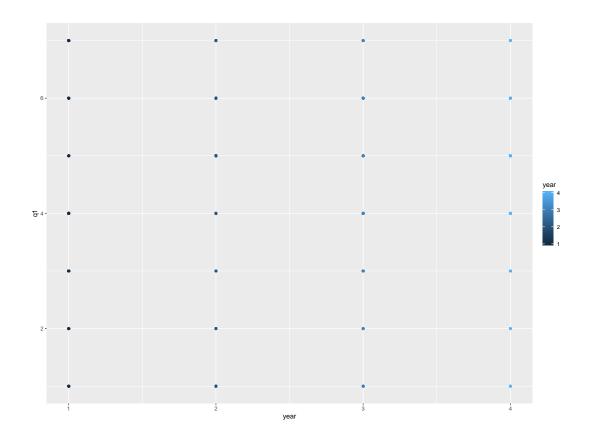












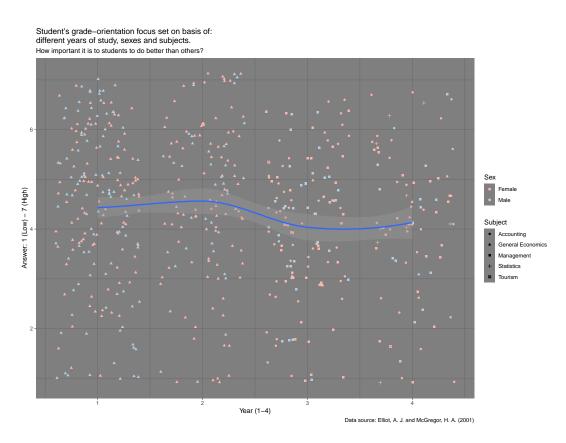


Figure 1:  $\dots$ 

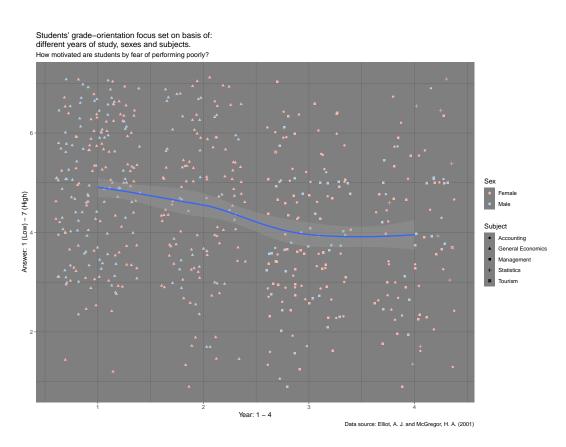


Figure 2:  $\dots$ 

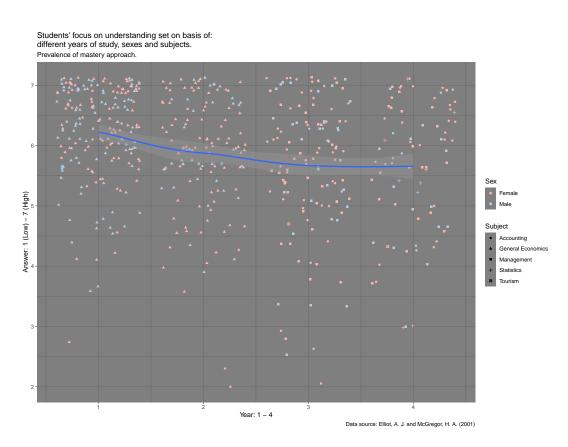


Figure 3:  $\dots$ 

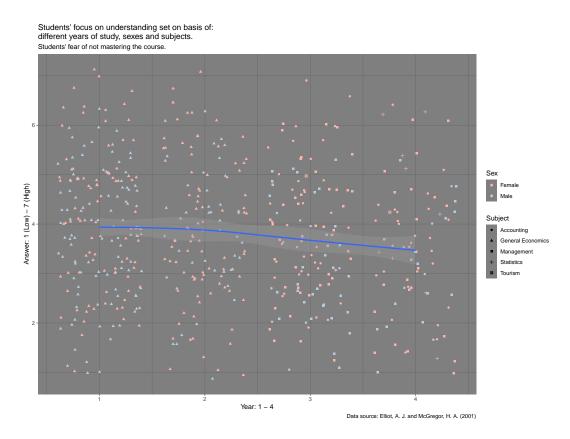
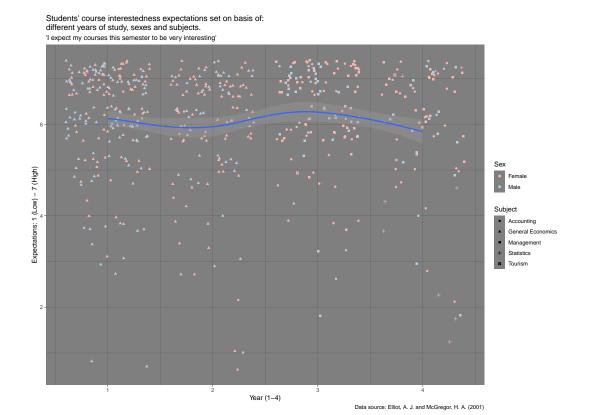
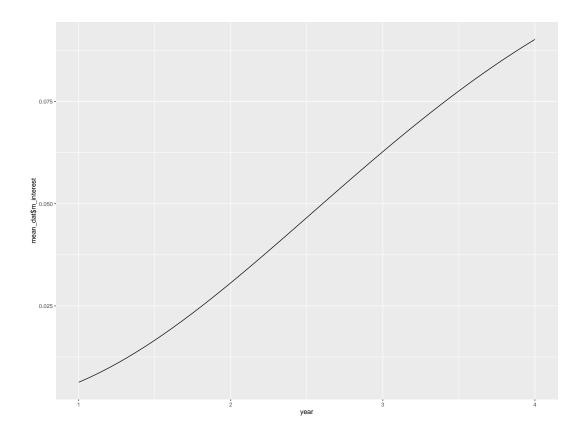


Figure 4:  $\dots$ 





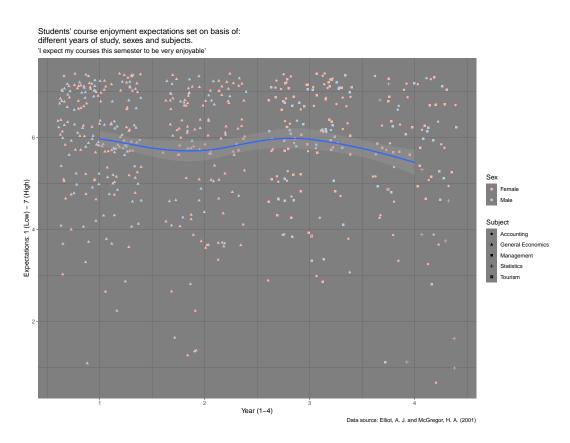


Figure 5: ...

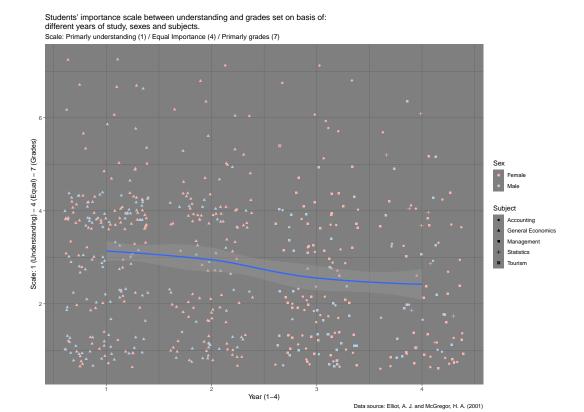


Figure 6:  $\dots$