

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.

It is interesting how undergraduate students goals change through-out their studies. It is often assumed that during students' junior years they primary focus is on getting good grades and then it shifts towards a deeper-subject-understanding at their more senior years. It is also not obvious if whether students demonstrate greater intrinsic motivation

It is not obvious that the student's sex, age and subject would not affect their goals and this paper will also investigate if it true or not.

Recent evidence has shown as undergraduate students progress through their studies their reasons for learning change; their primary focus shifts from deep understanding of the subject towards achieving good grades.

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.

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 - Student's fear of not mastering the course.
 - Questions number: 10, 11, 12
- Interest - Student's expectations whether the course will be interesting.
 - Question number: 13
- Enjoyment - Student's expectations whether the course will be enjoyable.
 - Question number: 14
- Student's relative importance between Understanding and Grades
 - Question number: 15

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. To conceal the existence of the 7 categories from students, they were presented with the questions in random order.

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.

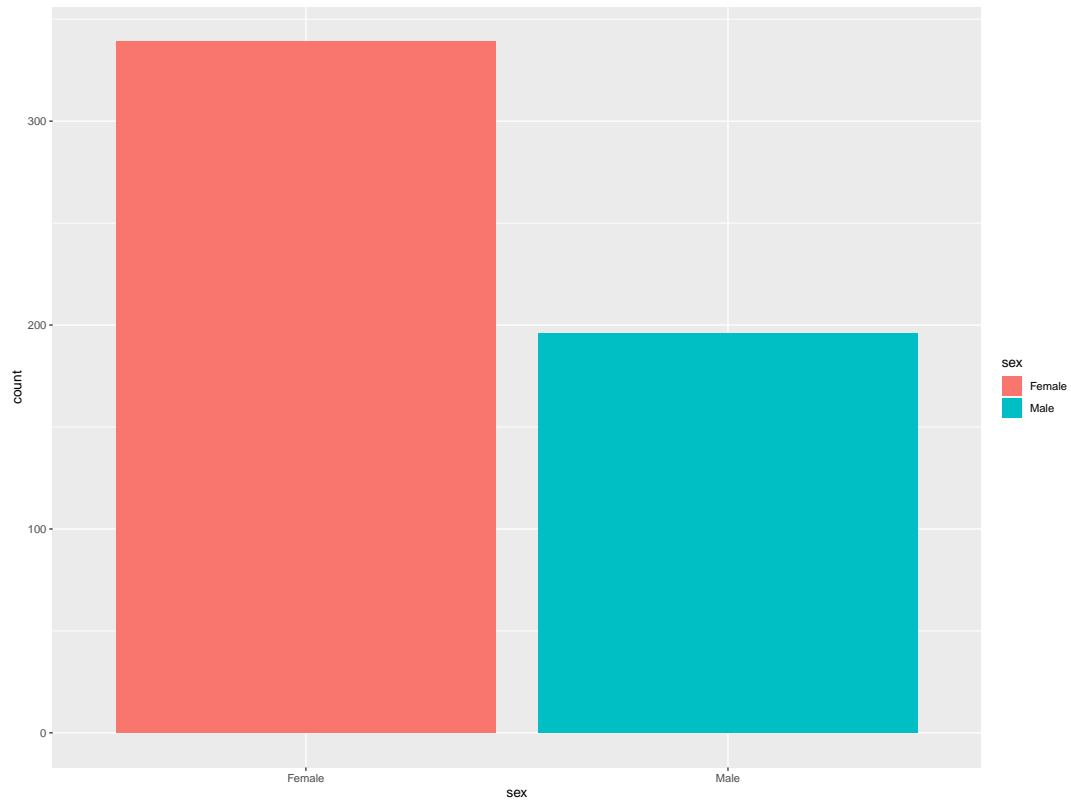
<https://ggplot2.tidyverse.org>

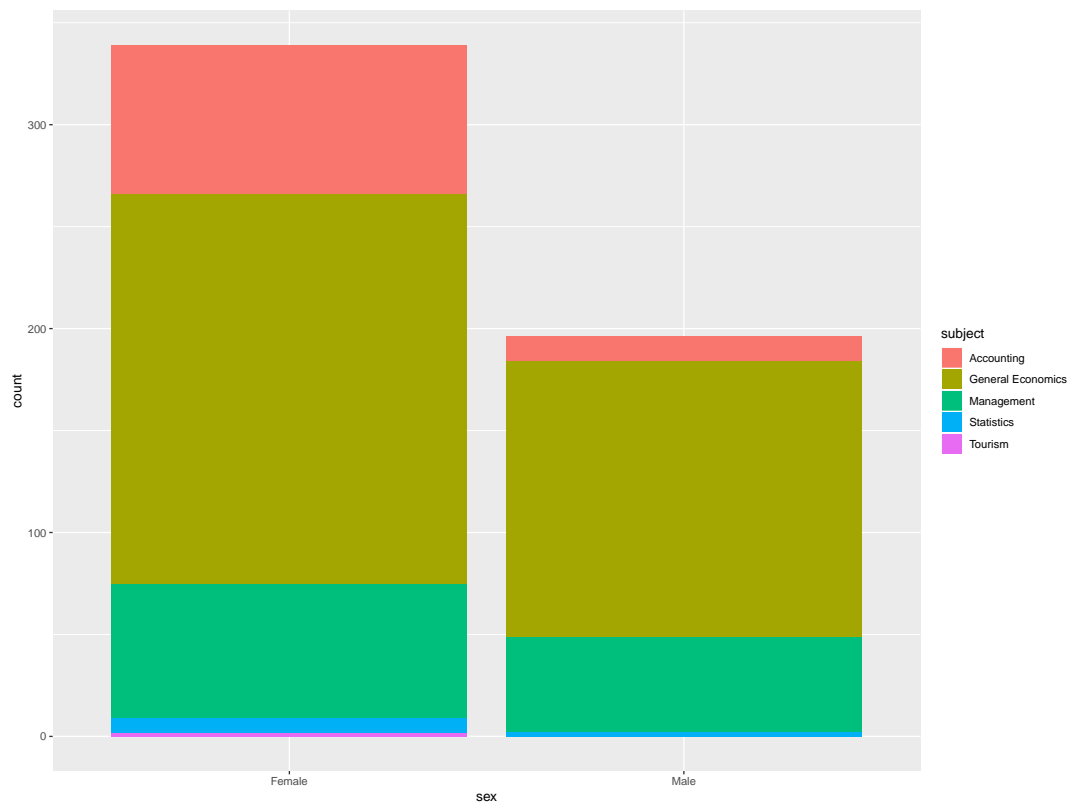
5 Results

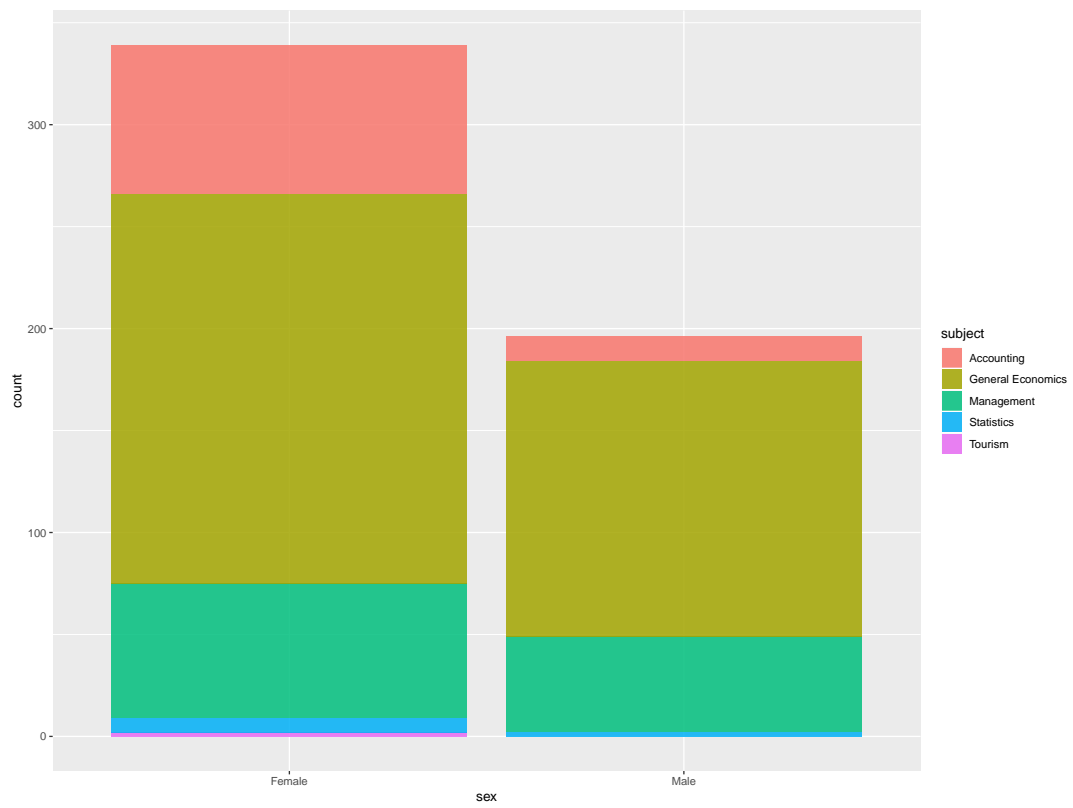
Present both your informal and formal analyses.

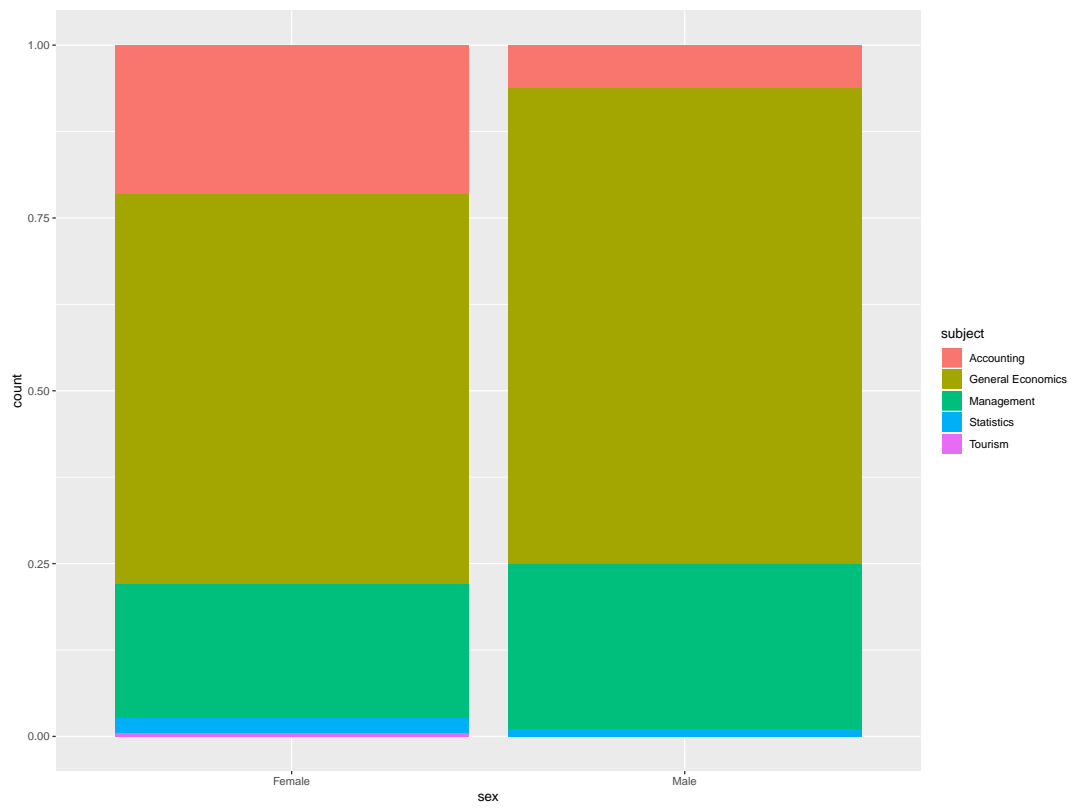
6 Conclusion / Discussion

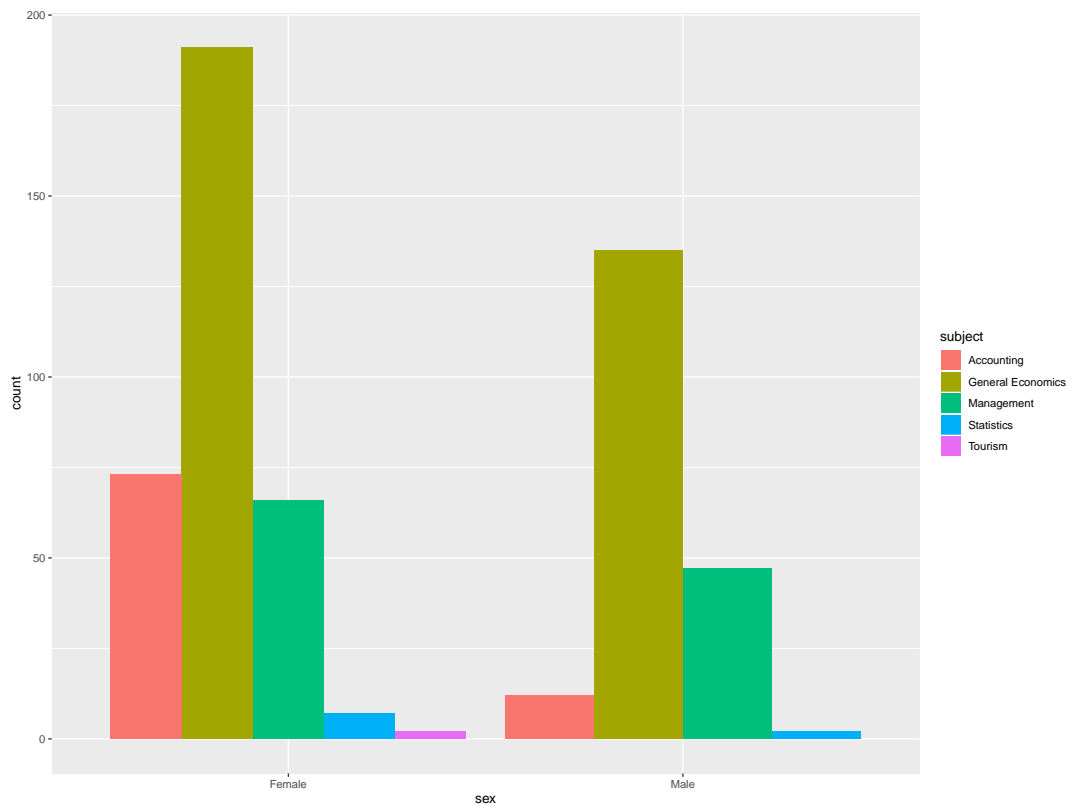
You need to conclude your project, discuss the results, discuss any reservations that you have about the study and list any future work.

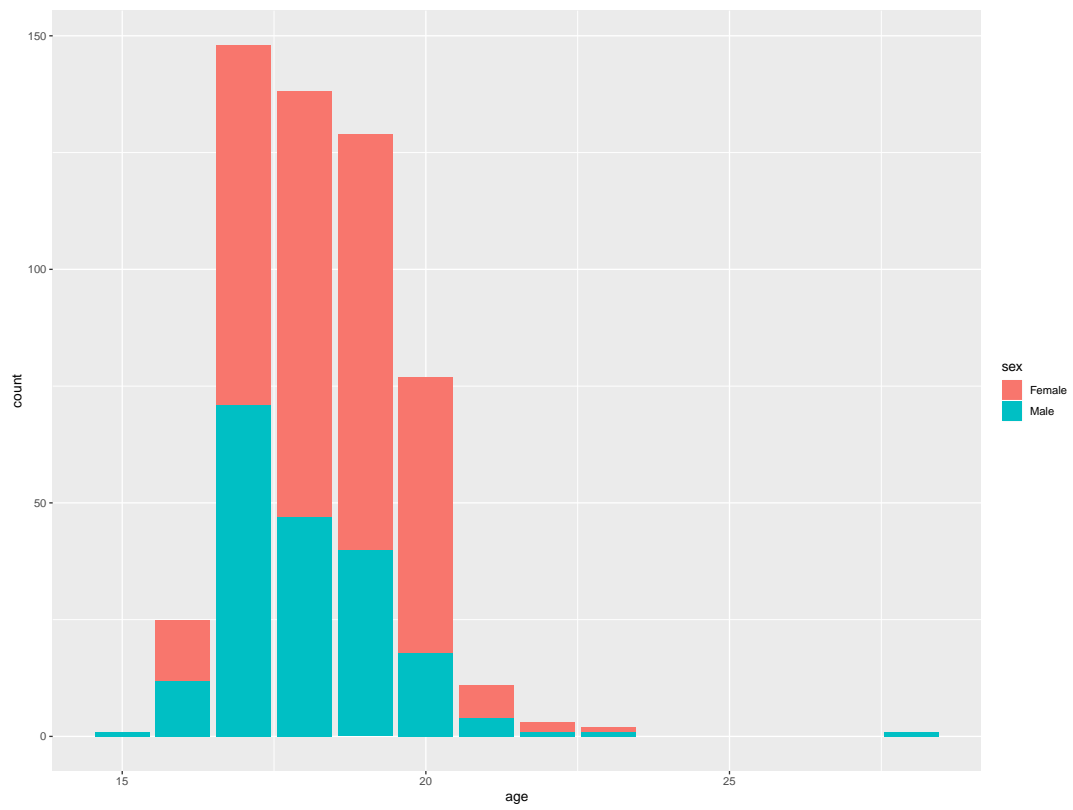


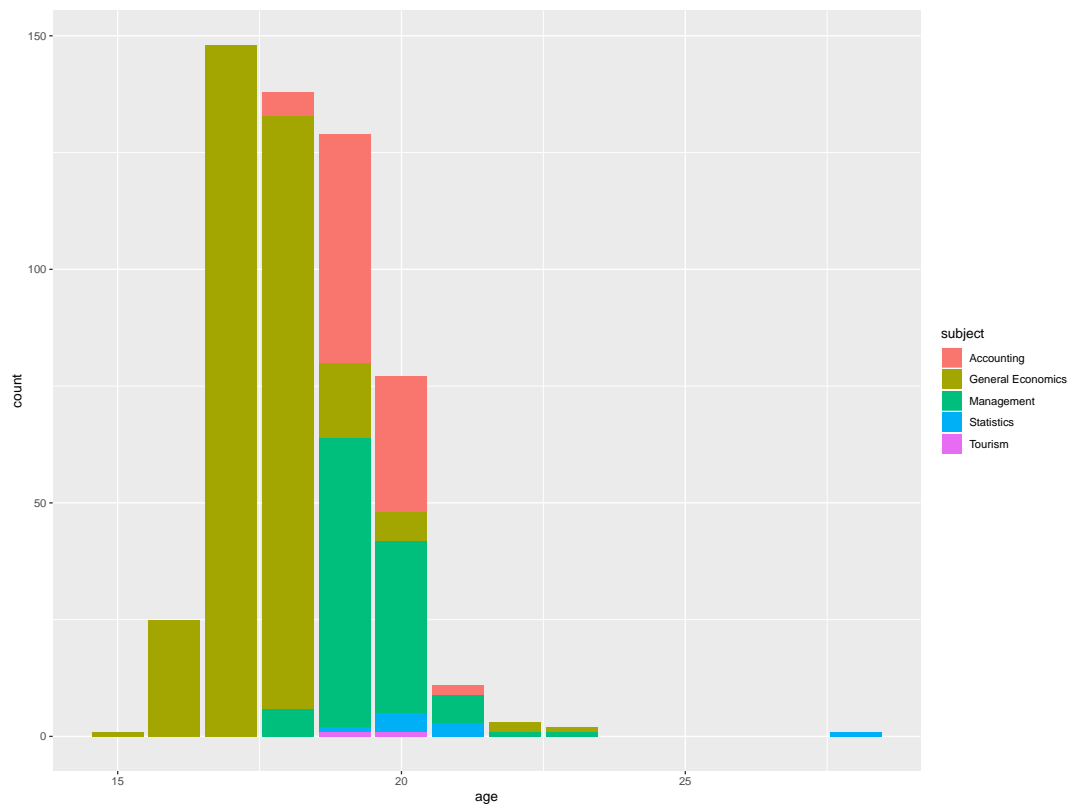


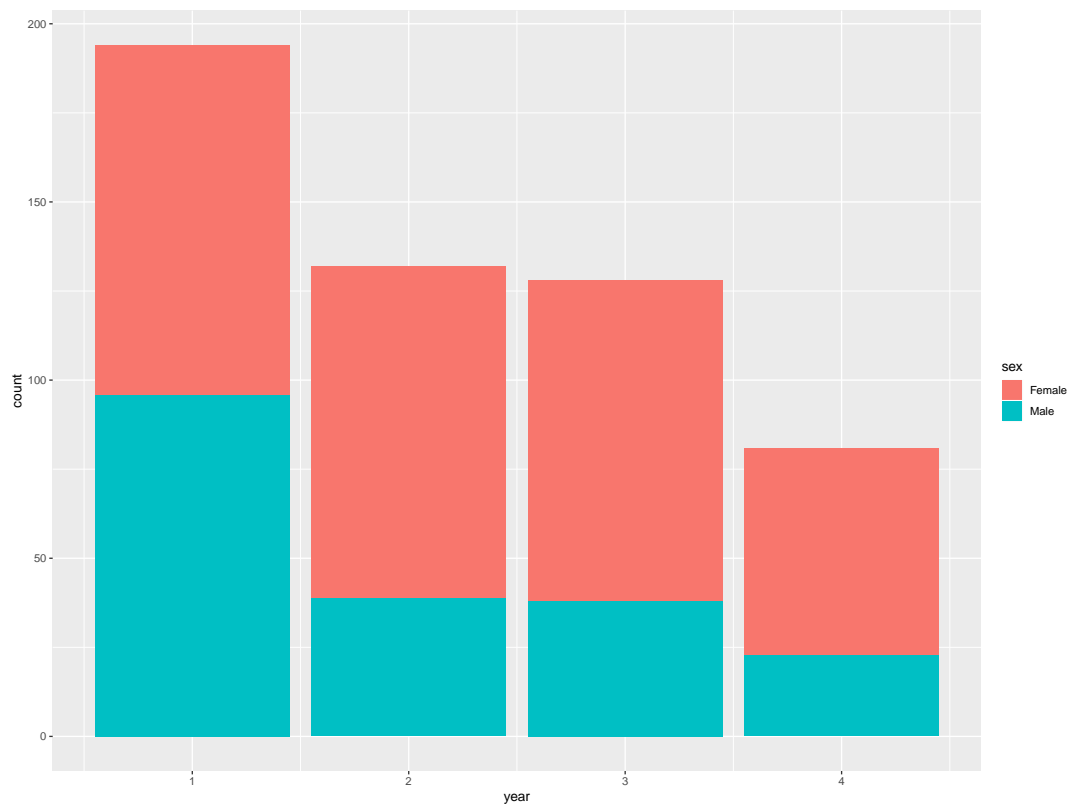


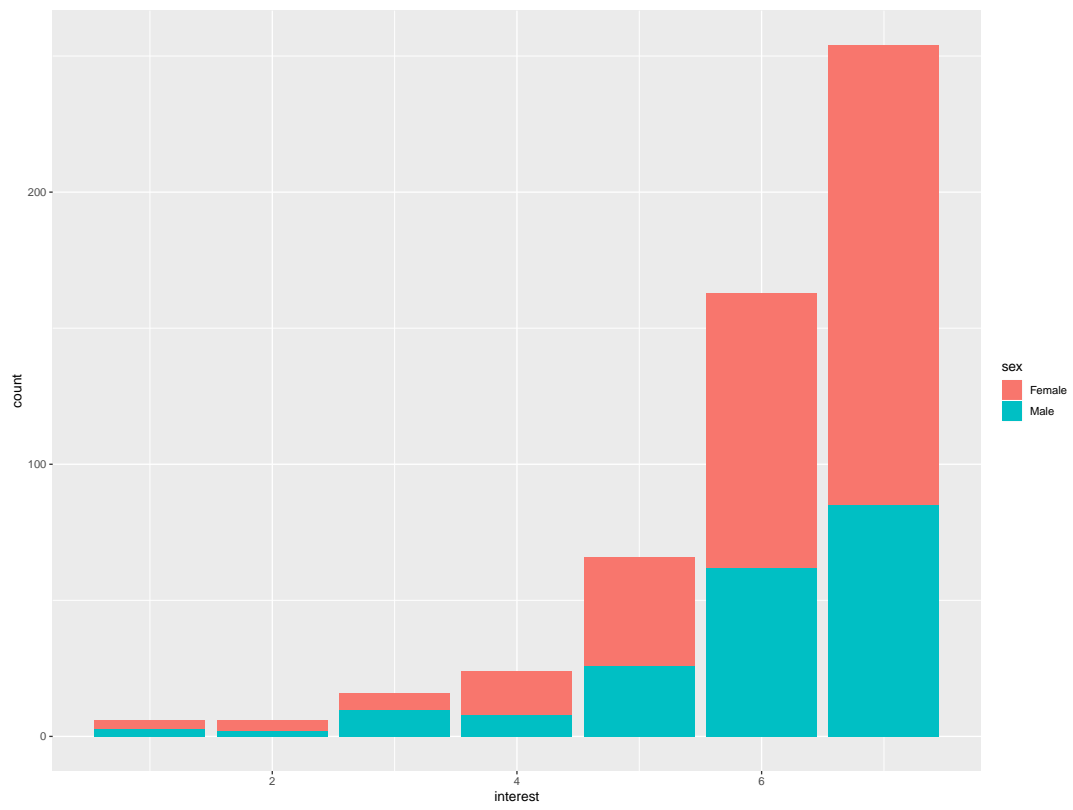


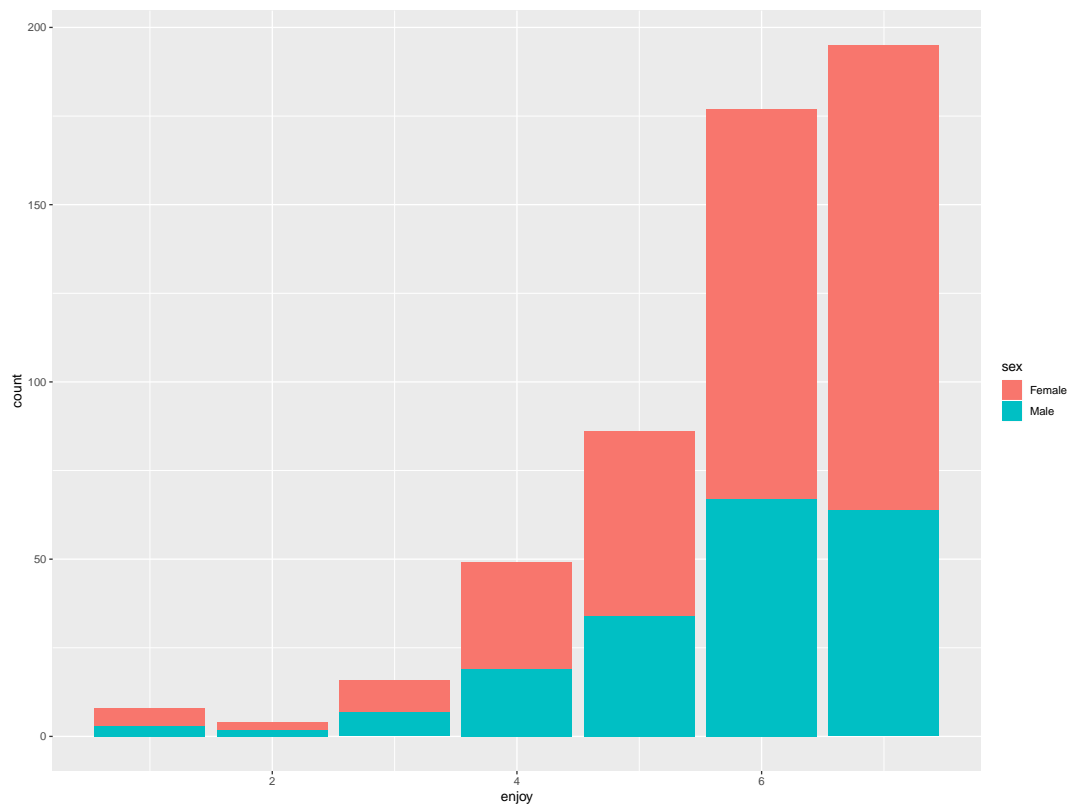


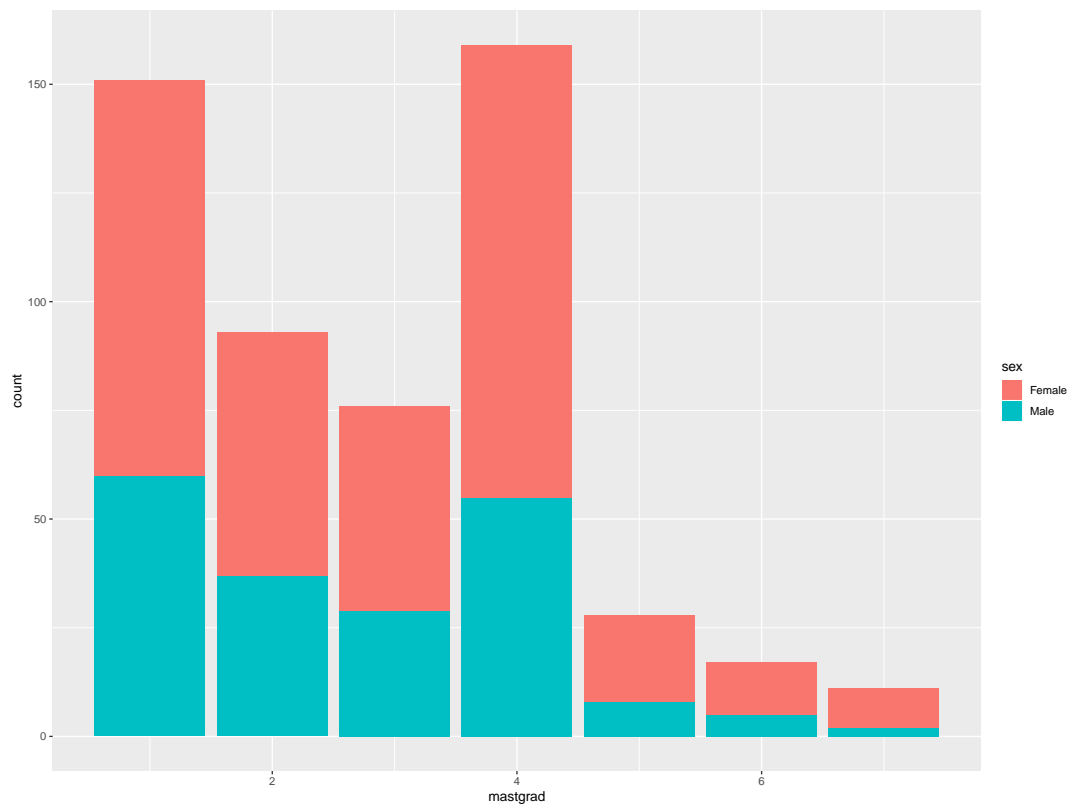


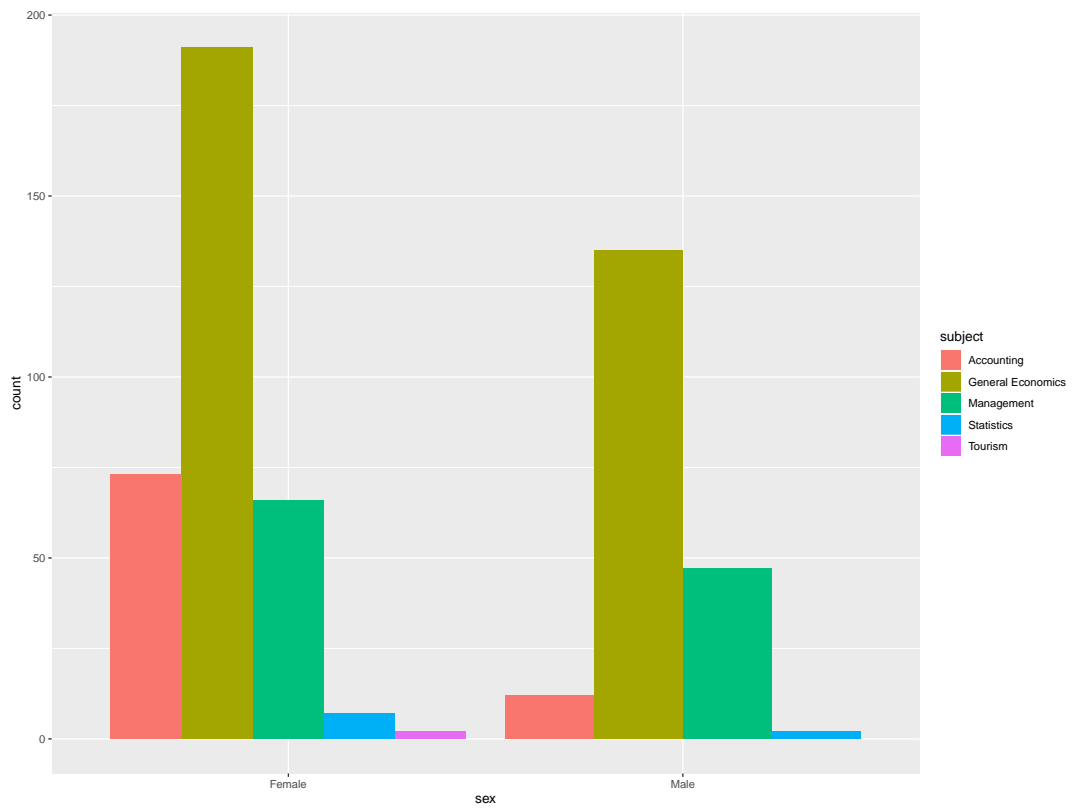


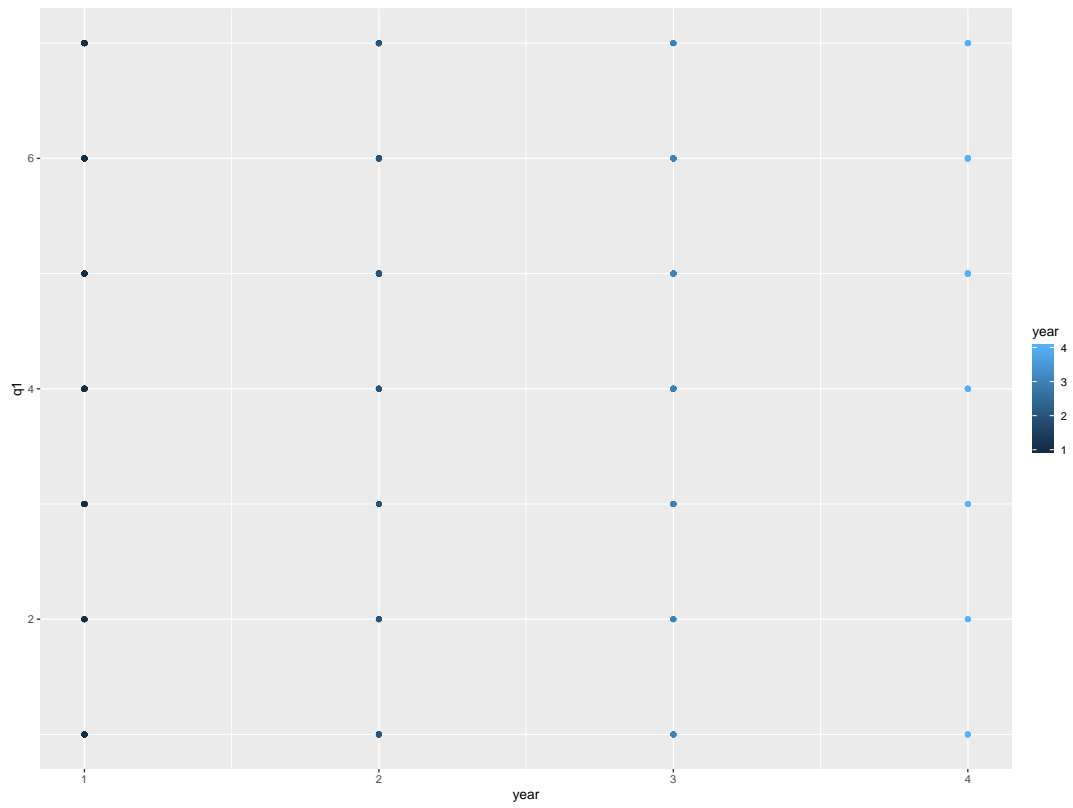




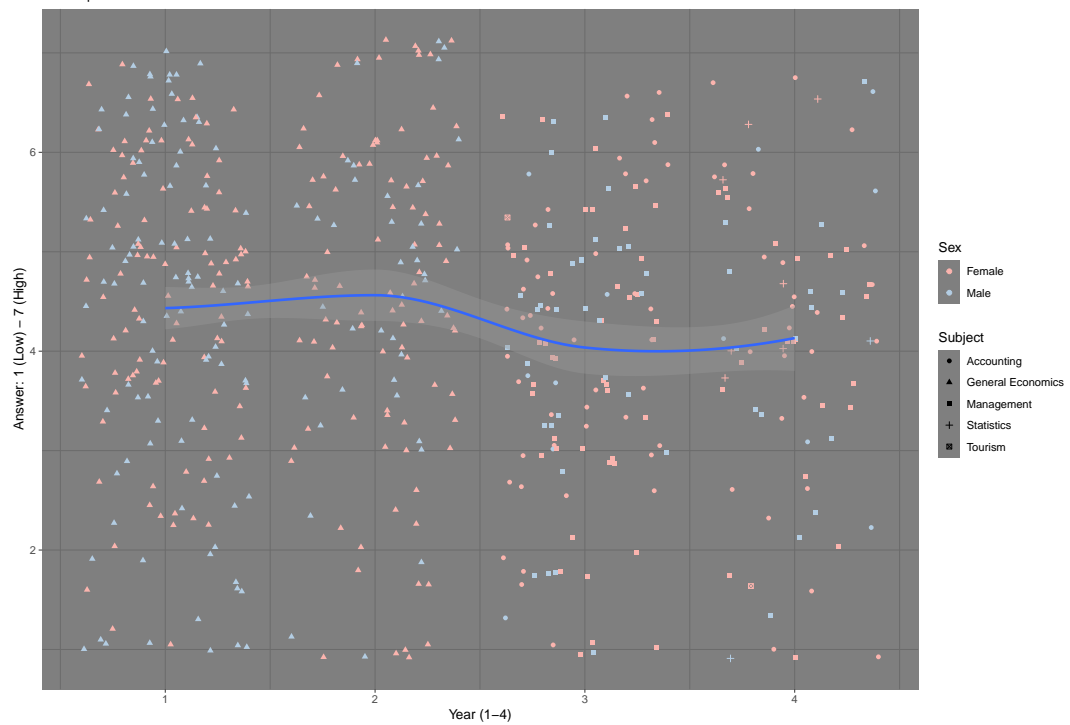








Student's grade-orientation focus set on basis of:
different years of study, sexes and subjects.
How important it is to students to do better than others?



Data source: Elliot, A. J. and McGregor, H. A. (2001)

Figure 1: ...

Student's grade-orientation focus set on basis of:
different years of study, sexes and subjects.
How motivated are students by fear of performing poorly?

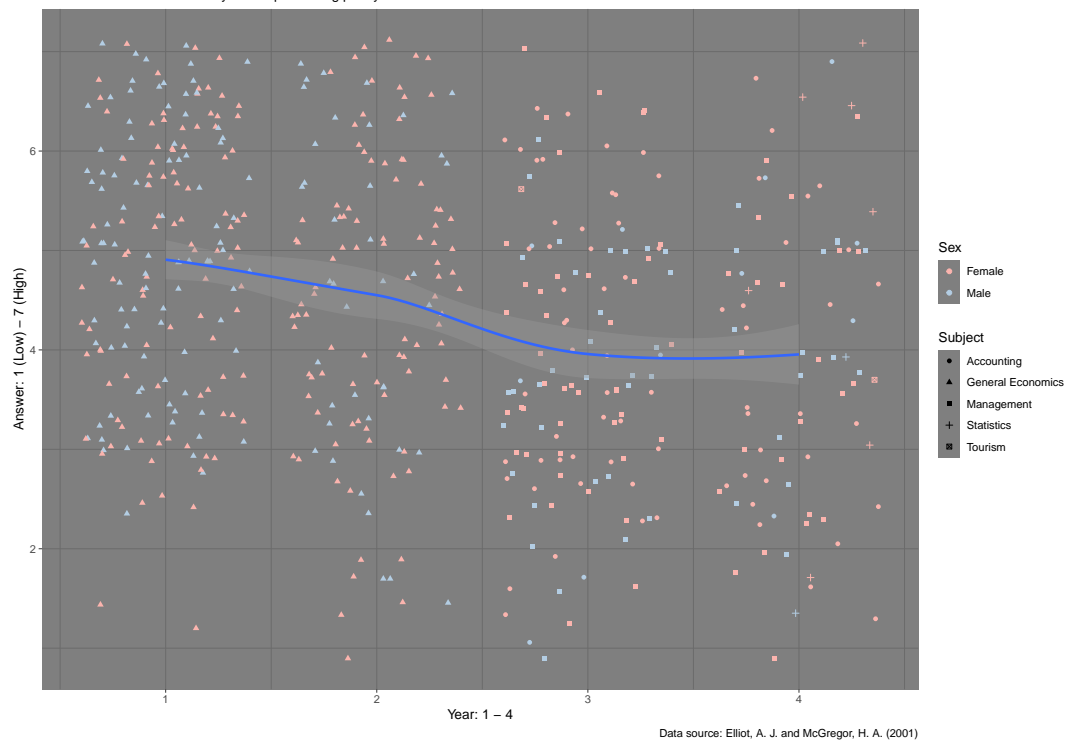


Figure 2: ...

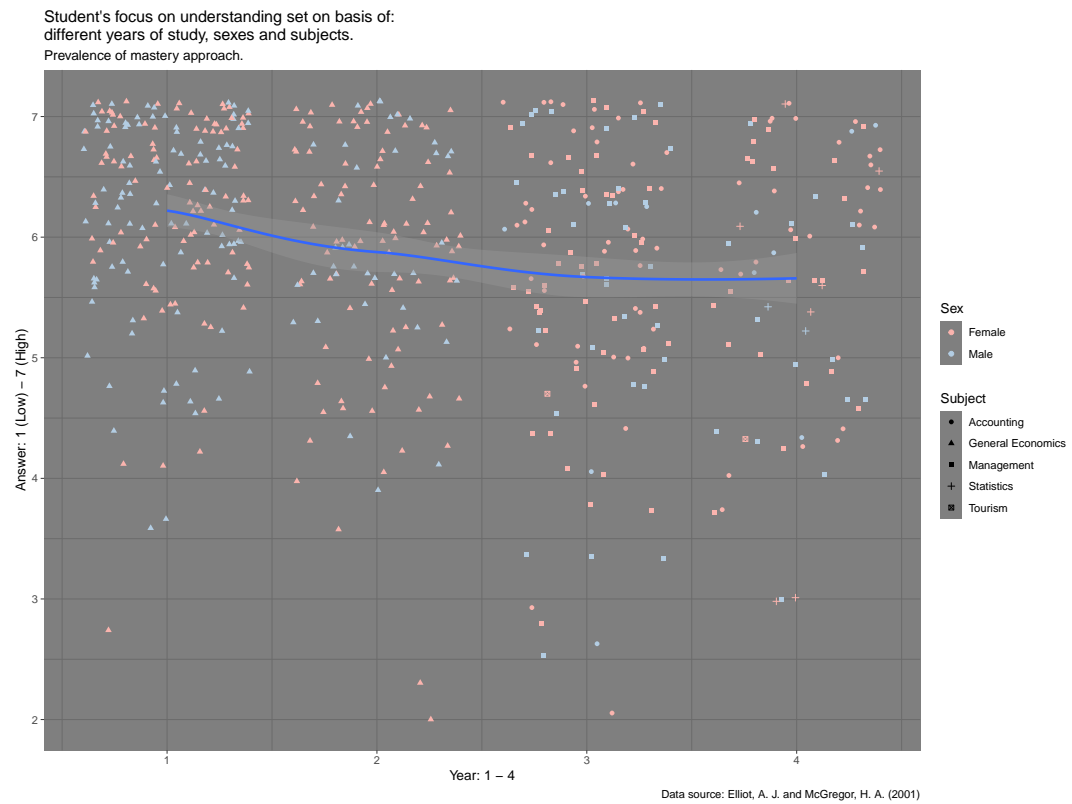


Figure 3: ...

Student's focus on understanding set on basis of:
different years of study, sexes and subjects.
Student's fear of not mastering the course.

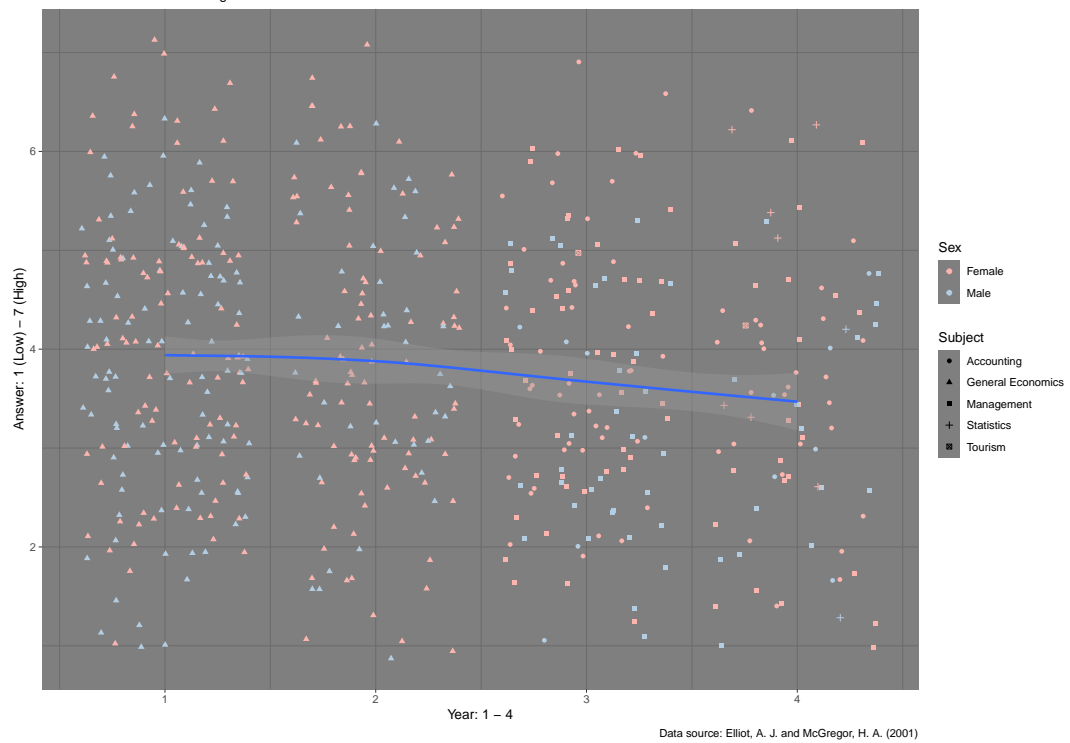
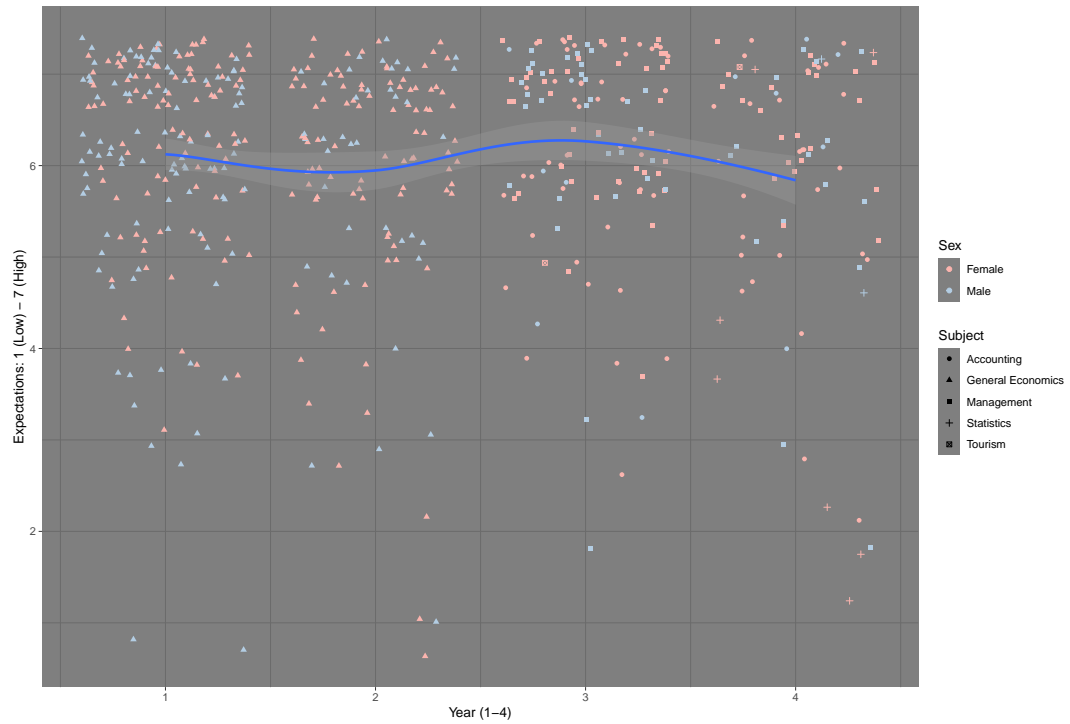


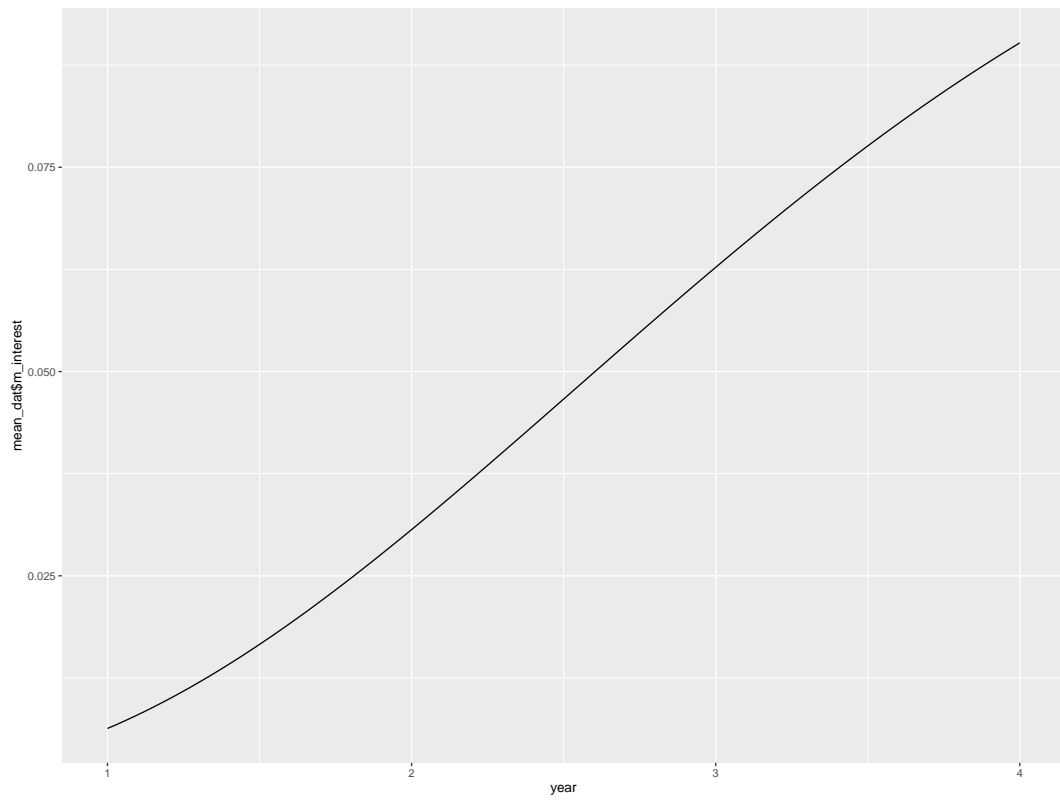
Figure 4: ...

Student's course interestedness expectations set on basis of:
different years of study, sexes and subjects.

'I expect my courses this semester to be very interesting'



Data source: Elliot, A. J. and McGregor, H. A. (2001)



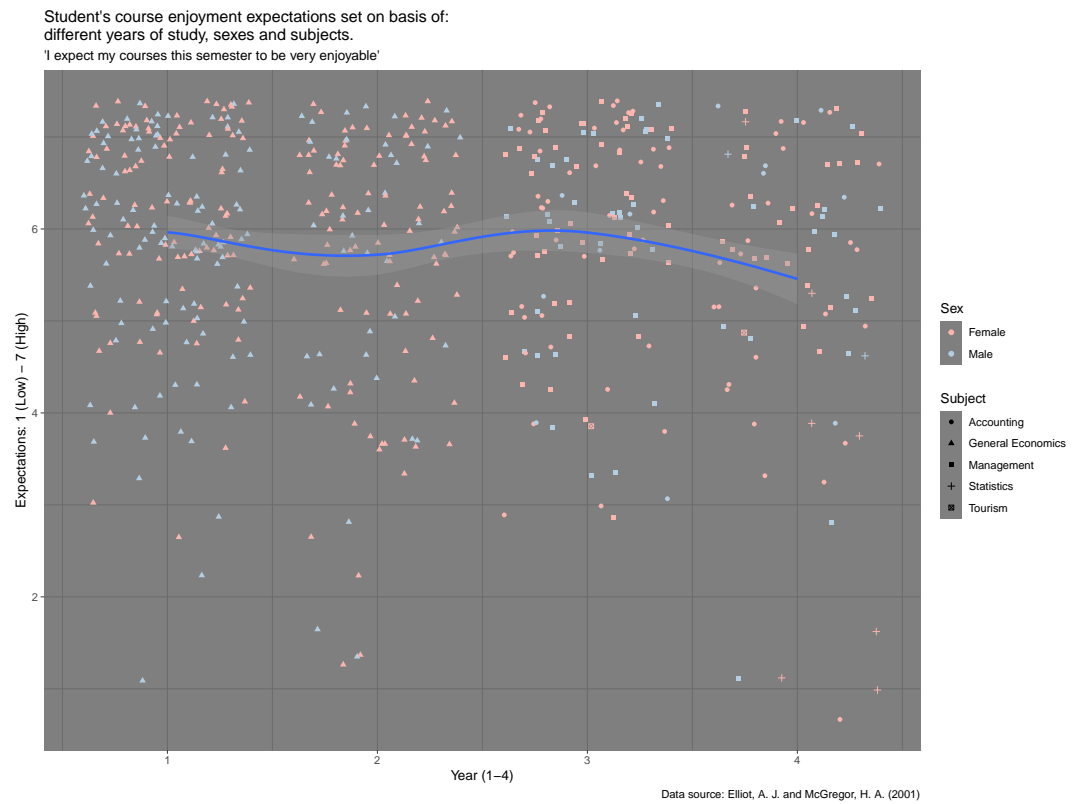
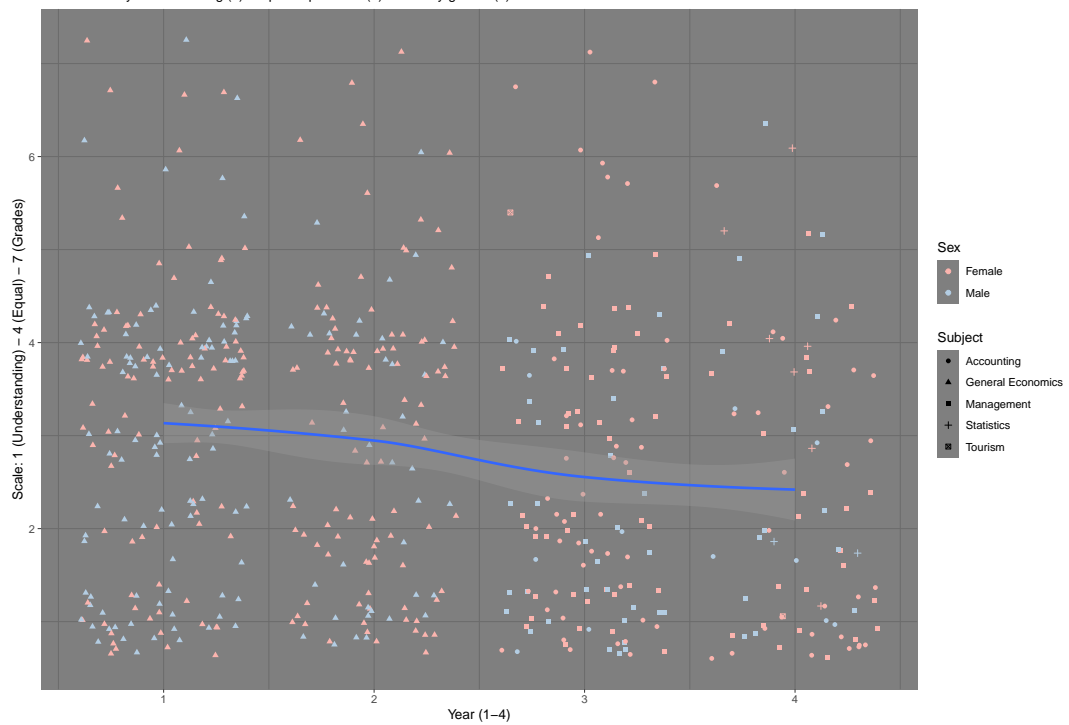


Figure 5: ...

Student's importance scale between understanding and grades set on basis of:
different years of study, sexes and subjects.

Scale: Primarily understanding (1) / Equal Importance (4) / Primarily grades (7)



Data source: Elliot, A. J. and McGregor, H. A. (2001)

Figure 6: ...