

**Research question:** What factors affect the decision when Chinese international students choose a major?

**Questionnaire:**

1. Your gender (select one)
  - ☐ Male
  - ☐ Female
2. Your age: \_\_\_\_\_
3. Your current statue:
  - ☐ enrolled
  - ☐ not enrolled
  - ☐ graduated
4. Your target degree:
  - ☐ bachelor
  - ☐ master
  - ☐ PHD
5. Who is your sponsor? (multiple choice)
  - ☐ Parents
  - ☐ Government or corporation
  - ☐ Personal
6. Have you ever studied abroad?
  - ☐ Yes
  - ☐ No
7. Marital status:
  - ☐ Married
  - ☐ Unmarried
  - ☐ Divorced
8. Do you plan to find a job in the United States after graduation?
  - ☐ Yes
  - ☐ No
9. What major do you want to study: \_\_\_\_\_
10. Which of the following factors do you think influenced your choice ? Grade your choice. (0 means no impact, 10 means very important)

<input type="checkbox"/> salary	0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/> employment rate	0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/> self-interest	0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/> composition of students' nationality	0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/> expectation of parents	0	1	2	3	4	5	6	7	8	9	10
<input type="checkbox"/> the advice from friends	0	1	2	3	4	5	6	7	8	9	10

**Selection of sample:** Chinese international students. (Including the student who are prepare to come to American, the students who are studying in American and the student who are already graduated.)

Mode: Questionnaire survey.

**Results of pilot study:**

Intended methods: At first, this study planned to adopt the analysis method of KNN. However, the goal of this research is to find out the relationships between each factor and the independent variables. Regression will be easier to tell the relationship and easier to explain. We tried to use linear regression on our 40 samples but there is no significant variable in our independent variables.

We publish our questionnaire on some social media and ask more Chinese international student to do it and we collect 200 samples totally

**The results of the analysis:** We collected a total of 200 questionnaires, including 40 pilot study. Then we use the regression model to analyze the data. Firstly, we used multiple linear regression analysis, and the results indicated that each factor could not significantly affect the choice of majors of Chinese international students. Next, we take each factor as dependent variable and analyze the influence of other factors on this variable.

*Salary*

The results indicated that if others conditions are fixed, compare to female, male pay more attention to salary when choosing a major. Compare to undergraduate students, graduate students pay more attention to salary when choosing a major.

Compare to art students, engineering students pay more attention to salary when choosing a major.

#### *Employment rate*

Compare to undergraduate students, graduate and PhD students pay more attention to employment rate when choosing a major. Compare to unmarried students, married students pay more attention to employment rate when choosing a major.

#### *Self-interest*

Compared with the arts students, business and engineering students were negatively correlated with self-interests. This means that Chinese international students in business and engineering are less likely to consider personal interests when choosing their major.

#### *Number of Chinese students*

Compare to art students, international students majoring in education are more likely to choose majors with a large number of Chinese students. On the contrary, students majoring in medical health tend to choose majors with a small number of Chinese international students.

#### *Advice from parents*

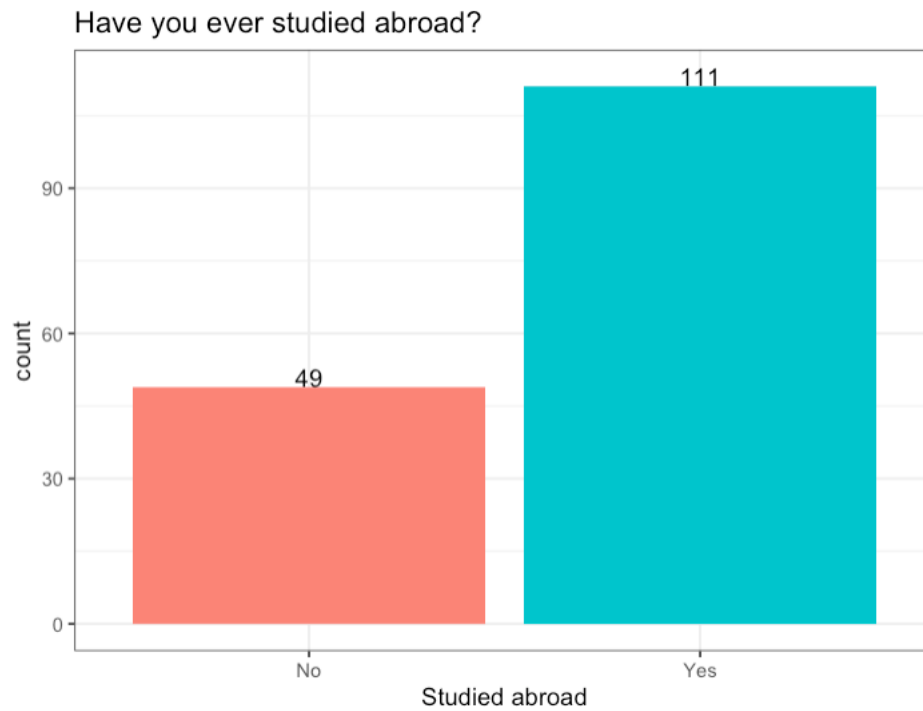
Compare to the students who want to stay in the United States after graduation, the students who don't want to find a job in the United States pay less attention to advice of parents when choosing a major.

#### *Advice from friends*

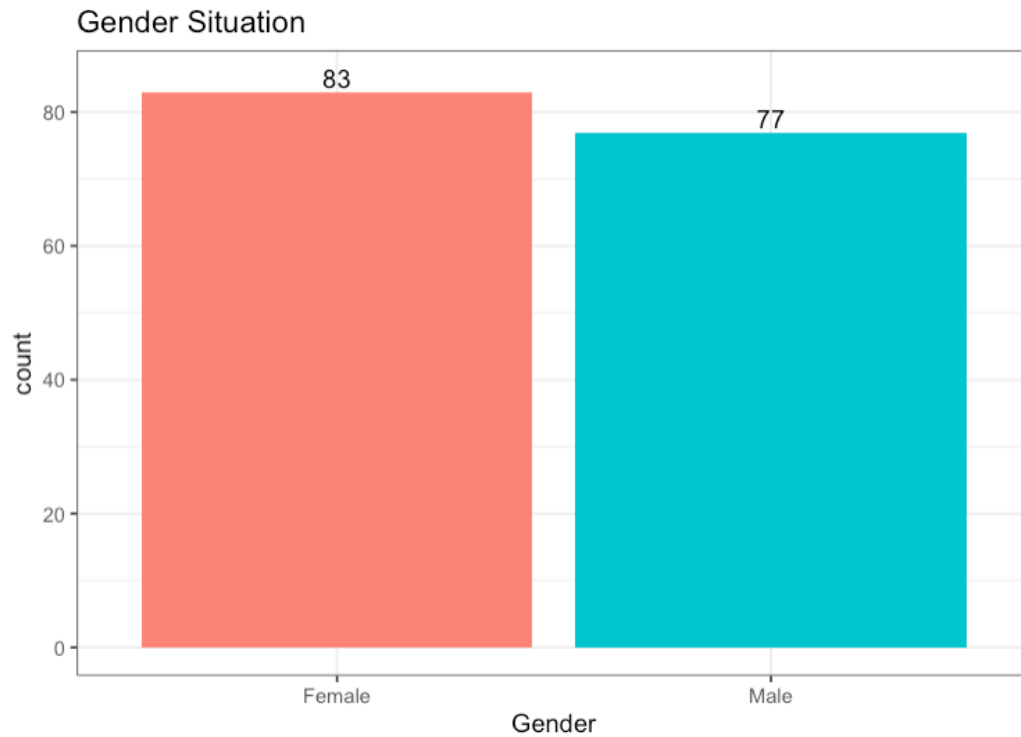
Compared with art students, the students majoring in medical health are less

likely to be influenced by their friends when choosing their major.

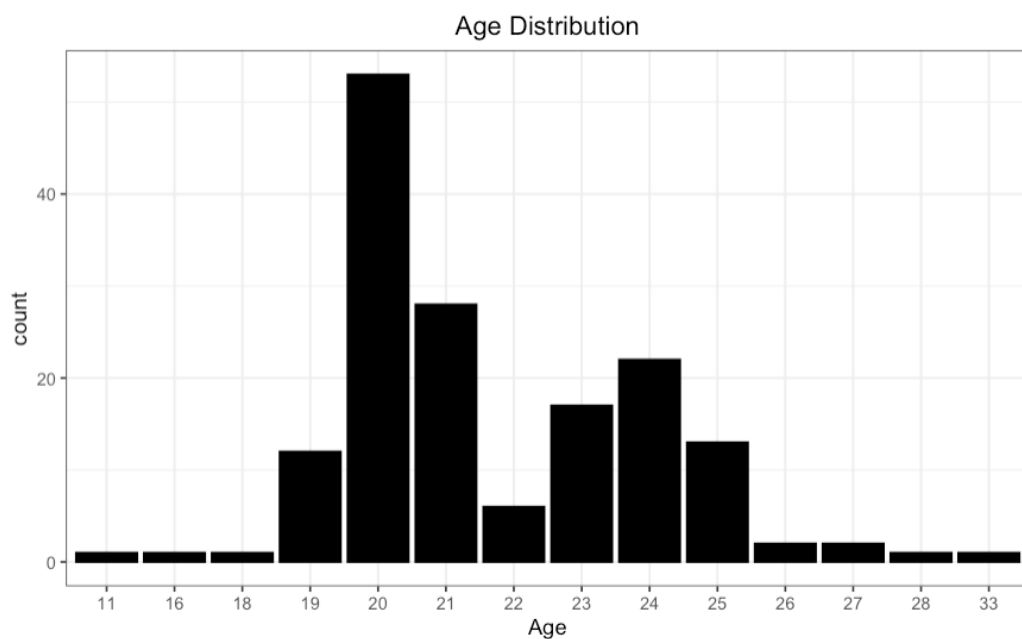
### Some Basic Analysis



From the plot, we can see that most of our sample used to study abroad, so there might be a “trend” to let them continue their studying oversea.

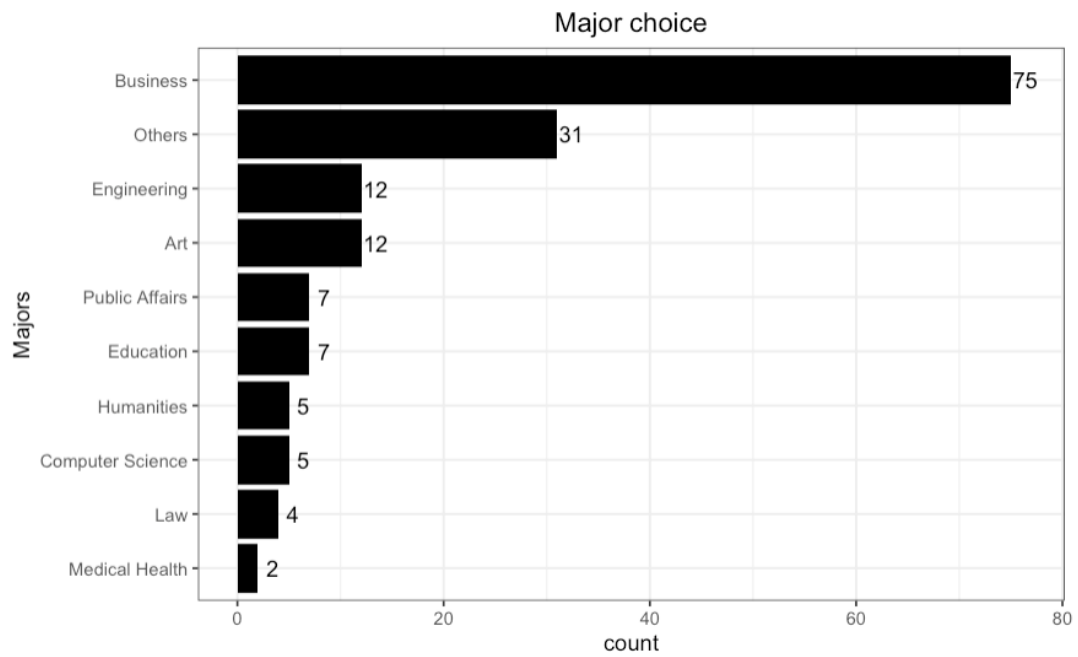


From our sample, there is no big difference in gender, and the number of female is even larger than the number of male, the gender inequality is not significant in our sample.



From the plot of the age distribution, we can see that most of our sample is in the

range of 19-25 years old, which is also the time period of bachelor and master's degree for most people, only a few of people are below or over the 19-25 age period.



Most of international students that from China are interested in the Business major.