Motivated students tend to learn more and are better adjusted. While selecting a major in college is an important decision, little is known about how that decision predicts students' motivation. The current study tried to find out how motivation was predicted based on how students choose an undergraduate major and their expectation of employment opportunities. We also compared Asian and non-Asian students to understand if those links differ across cultures. The study surveyed 220 undergraduate students in the U.S. (64 Asians and 156 non-Asians) and found the followings:

- As expected, choosing a major based strongly on interest predicted higher intrinsic motivation, higher perceived employment opportunities predicted higher extrinsic motivation and the link was stronger for Asians.
- Most students selected their majors based highly on interest regardless of culture.
- However, interest did not predict students against increased amotivation when expected employment opportunities lowered.
- While Asians had significantly higher intrinsic motivation and higher amotivation than non-Asians, they did not have lower GPA.
- Higher parental influence in selecting a major predicted lower enjoyment and higher amotivation regardless of culture.

Asian students who chose their majors because of job prospects and non-Asian students who were influenced by their parents may be more vulnerable to having higher amotivations. University advisors may want to explore with students the reasons for their choice of majors and discuss the potential risks. Future studies that explore how students' identity formation is related to students' major selection and their motivation levels may help universities develop better counseling services.

Undergraduate students who are highly motivated tend to perceive less stress during their university years and have less psychological distress (Baker, 2004). About one-fifth of the undergraduate students do not complete their degrees (Bradburn & Carroll, 2002). Therefore, understanding which factors impact students' academic motivation may help students sustain through the challenges of being in college. Students across different cultures are motivated differently. For example, students in Asian cultures are more academically motivated by the fear of failure than non-Asian cultures (Eaton & Carroll, 1997) while the ability to make personal decision motivates Anglo-American students more than Asian American students (Iyengar & Lepper, 1999). The current study offers predictors of academic motivation within Asian and non-Asian cultures in the U.S.

### Abstract

Motivated students tend to learn more and are better adjusted. While selecting a major in college is an important decision, little is known about how that decision predicts students' motivation. The current study tried to find out how motivation was predicted based on how students choose an undergraduate major and their expectation of employment opportunities. We also compared Asian and non-Asian students to understand if those links differ across cultures. The study surveyed 220 undergraduate students in the U.S. (64 Asians and 156 non-Asians) and found the followings:

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### Tables and Figures

#### Factors Influencing Choice of Major

![Figure 1. Percentage of students rated the factors important/very important.](image)

- **Interest**
  - 100%
  - 80%
  - 60%
  - 40%
  - 20%
  - 0%
- **Job**
  - 100%
  - 80%
  - 60%
  - 40%
  - 20%
  - 0%
- **Ease**
  - 100%
  - 80%
  - 60%
  - 40%
  - 20%
  - 0%
- **Parents**
  - 100%
  - 80%
  - 60%
  - 40%
  - 20%
  - 0%

#### Predicting motivation for non-Asian students

![Figure 2. Predicting motivation for non-Asian students.](image)

- **Parents**
  - 24**
  - 23
  - 22
  - 21
  - 20
  - 19
- **Enjoyment**
  - 23
  - 22
  - 21
  - 20
  - 19
  - 18
- **Intrinsic**
  - 24
  - 23
  - 22
  - 21
  - 20
  - 19
- **Extrinsics**
  - 25
  - 24
  - 23
  - 22
  - 21
  - 20
- **Amotivation**
  - 26
  - 25
  - 24
  - 23
  - 22
  - 21
- **GPA**
  - 27
  - 26
  - 25
  - 24
  - 23
  - 22

#### Predicting motivation for Asian students

![Figure 3. Predicting motivation for Asian students.](image)

- **Parents**
  - 32**
  - 31
  - 30
  - 29
  - 28
  - 27
- **Enjoyment**
  - 32
  - 31
  - 30
  - 29
  - 28
  - 27
- **Intrinsic**
  - 33
  - 32
  - 31
  - 30
  - 29
  - 28

### Results

#### Hypothesis 1
Choosing a major based strongly on interest will predict higher intrinsic motivation was supported but the relation was not stronger for non-Asian students.

#### Hypothesis 2
Higher perceived employment opportunities will predict higher extrinsic motivation and that the relation will be stronger for Asian students was supported.

#### Hypothesis 3
Interest will be a stronger factor for non-Asians while job prospects will be a stronger factor for Asians was not supported. The order of importance was the same for both groups. Higher percentage of non-Asians rated interest as important, \( X^2(1, N=219) = 4.32, p = .038 \). Higher percentage of Asians rated parental influence as important, \( X^2(1, N=220) = 8.81, p = .003 \) (see Figure 1).

#### Hypothesis 4
Asian students will have higher intrinsic motivation and lower amotivation was not supported. Non-Asian students had higher intrinsic motivation, \( X^2(1, N=361) = 2.32, p = .022 \), and lower amotivation, \( f(185) = -2.24, p = .028 \). However, there was no difference in GPA between the two groups, \( f(185) = -0.30, p = .767 \).

#### Hypothesis 5
Choosing majors based on interest will interact with perceived employment opportunities to predict amotivation was not supported.

#### Post hoc analysis
Structural equation modeling showed that different models fit the non-Asian, \( X^2(9, N=136) = 10.90, p = .282 \) (see Figure 2), and Asian data, \( X^2(6, N=57) = 4.98, p = .547 \) (see Figure 3).

### Discussion

Selecting a major in college is an important decision, the current study found that academic motivation can be predicted by how students choose their majors and their perceived employment opportunities. Furthermore, the links differ culturally. Enjoyment may be more important for non-Asians because interest did not predict better motivation directly. Employment opportunities. Asians may be at a higher risk of increased amotivation when external factors change the job market because fewer opportunities predicted higher amotivation for Asians. Parental influence. Non-Asians may be at a higher risk when influenced by parents because they will less likely follow interest. Following parental advice may indicate a lack of identity maturity that links to negative academic experiences. Future research to explore students' identity formation with students' major selection and motivation levels may help universities develop better counseling services. As universities are able to provide better guidance, students may better understand themselves and be able to choose a major that they will enjoy, especially if it becomes their lifelong career.

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