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An Examination of the College Major Decisions of Students at the University of Mississippi

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by
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This thesis is dedicated to the memory of Mr. and Mrs. Tom and Doris Kelly.

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Abstract

Factors such as socio-economic status affect students' level of educational aspiration. Furthermore, major (and thus career choice) may be influenced by race or gender. This study demonstrates the effects of academic aptitude, race, gender, first generation status, and importance of expected future earnings on undergraduate students' college major decision. More specifically, this study examines if these factors lead to an increase or decrease in the probability of students choosing a major in a specific field. The likelihood of choosing a major in a specific field is relative a baseline category, which can be changed.

1.1 Introduction

According to the College Board, a college major is "a specific area that students specialize in."[1] College majors are frequently associated with career choices and eventual earnings, both of which influence students' future socio-economic status. The purpose of this study is to investigate the factors that affect a student's choice of major. This analysis will consider variables such as ACT score, ethnicity, race, first generation status, expectations of and self-reported importance of future earnings.

Between the years 2009-2014, total enrollment at the Oxford campus of the University of Mississippi increased from 11,948 to 16,517, or 38.24%. Despite this increase, the number of students enrolled in the College of Liberal Arts decreased from 5,043 in 2009 to 4,601 in 2014, a decrease of 8.76%.[2] This indicates that newer students are choosing different majors than their predecessors.

Researchers from multiple disciplines have analyzed the college major decisions of undergraduate students as it relates to economic mobility and/or integration of first generation students. An example of economic mobility is Davies et al. (2012), who model how college students' major choice changes with the "labour market." Specifically, they analyze variables such as salary, job status, and creativity requirements of the job. A second example is a study performed by Arcidiacono et al. (2011). They model college students' major decision as a function of expectations of future income and perceived competency in a specific major. Another aspect of their study is the

[1] https://bigfuture.collegeboard.org/explore-careers/college-majors/the-college-major-what-it-is-and-how-to-choose-one
[2] http://irep.olemiss.edu/institutional-research/enrollment-data/

solicitation of information measuring how much compensation one would have to receive in order to change majors.

Soria et al. (2012) define a first generation student as a student who is enrolled in a college or university and does not have a parent or guardian with a baccalaureate degree. They find that first generation students are less likely to be academically engaged and more likely to drop out than non-first generation students. Eshelman and Rottinghaus (2014) discover that first generation students are often of a lower socio-economic class than non-first generation students. They also find that educational and vocational aspirations are correlated with socio-economic status, so first generation students may often have lower aspirations than non-first generation students.

This study builds upon previous studies by addressing how students' background information, such as race, gender, parents' level of education, expected future income, and financial aid status influence their college major decision. This thesis uses a sample from a midsized Southern public university (University of Mississippi). The sample is composed of male and female respondents. Respondents are also all enrolled in the EDHE (Leadership and Counseling) program. EDHE is a program designed to help freshman and transfer students learn academic and career skills that will assist them in their undergraduate studies at the University of Mississippi. The next section contains a literature review that further contextualizes the issue of college major. The third section contains discussion about the design, methodology, descriptive statistics, and summary statistics. The fourth section contains the regression results and explains areas for future research. The fifth section offers some concluding remarks.

2.1 Literature Review

This section provides a context for this thesis and discusses other investigators' findings about students' major choices. Existing research models how undergraduates decide on their majors. However, modeling students' major decisions become more complicated when accounting for issues unique to first generation students. More specifically, first generation students tend to have lower aspirations than their peers. This results in first generation students and non-first generation students making different choices about their college destination and their major, which ultimately has implications for their financial success. This section also addresses the methodology of related studies and explain why the research provided is necessary.

2.2 Determinants of College Major

In their research, Wiswall and Zafar (2014) study the variables that influence undergraduates' major selections.[3] They primarily focus on differences between students' preferences for coursework in a specific field, expected future incomes, perceived abilities to succeed in a certain major, and societal expectations. They also investigate how students' majors change as a result of changes in the students' subjective beliefs.

Wiswall and Zafar determine that students have a strong tendency to major in fields where they perceive they have greater ability to succeed and where they expect higher incomes. Additionally, students' demographic and academic backgrounds can result in different major decisions. Wiswall and Zafar find that men are less likely to

[3] Wiswall and Zafar (2014) survey 501 students at New York University. The final sample contained responses from 488 students. Students were recruited via email and were awarded $30 for completion of the questionnaire.

declare a major in the Humanities. Differences in race, SAT scores, and academic classification also contribute to major choice variation. Wiswall and Zafar's research also includes an intense focus on subjective beliefs and preference elasticities, which is beyond the scope of the thesis.

A similar study by Arcidiacono et al. (2011) at Duke University examines college major decisions based on students' perceptions of future earnings and subjective ability. [4] Arcidiacono et al. ask respondents to provide their self-rated odds of entering various career fields, their perceived future annual income, and what they believe other students at Duke majoring in various fields will earn. They find that choice of major is a strong predictor of future career choice. For example, students majoring in Science fields have a 67.1% of beginning a career in the Science or Health field. Furthermore, Arcidiacono et al. also asks respondents how much their income would have to change in order to facilitate a change in major. Like Wiswall and Zafar (2014), Arcidiacono et al. find that expected earnings and perceived abilities are important factors in students' major decision.

Eshelman and Rottinghaus (2014) find that the educational and career aspirations of high school students are positively correlated with the socio-economic status of their parents. [5] In their study, socio-economic status is defined as level of income and educational attainment. Simply put, high school students without college educated parents tend to have to have lower aspirations than students with college educated parents. Therefore, first generation college students likely choose their major differently

[4] Arcidiacono et al. (2011) survey 173 students at Duke University. Only male students were recruited to participate. Participants were awarded $20 for completion of the questionnaire.
[5] Eshelman and Rottinghaus (2014) survey 100 high school students from two Midwestern high schools. These schools were selected because of their demographic makeup.

than their peers. This study seeks to determine if there is a substantial difference between the major selection of first generation and non-first generation students in a sample of University of Mississippi students.

2.3 Issues Affecting First Generation Students

In contrast to students who have a parent or guardian with a college degree, first generation students often have a lower GPA, ACT score, and perceptions of campus climate. Controlling for race, gender, cumulative GPA, ACT scores, and perception of campus climate, Soria et al. (2012) find that first generation students are less likely to engage with faculty, contribute to a class discussion, bring up concepts from another class, or ask insightful questions during class.[6] First generation students also have a lower second year retention ratio than their peers, i.e., they have a higher dropout rate than do non-first generation students. Because first generation students tend to be less engaged academically, this thesis seeks to address other factors unique to them.

Other variables that affect a student's choice of major include race, sex, and nationality. Sociology research has pointed out that students' academic and career decisions are often affected by sex-typing and racial-typing (Ma, 2010)[7]. Ma contends that a major (particularly business and engineering) strongly influences a student's future career, so sex-typing and racial-typing in college leads to segregation between career fields. Thus it is important to control for variables such as ethnicity/race and gender when examining college major choices.

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[6] Soria et al. (2012) use a sample of 1864 students from a large Midwestern university. A link to the survey was sent to all students at the university, but the sample was restricted to first year students.

[7] Ma (2010) uses data from the National Educational Longitudinal Study (1988-1994) and Public Use Micro census data (1990). Data were cross-referenced between the two sources, which resulted in a final sample size of 8,743.

The effects of race, gender, and first generation status on major choice is brought to the foreground by Davies et al. (2012). In their study, Davies et al. model undergraduates' major decisions based on market outcomes.[8] They find that male students and non-white students have a propensity to choose majors with a higher expected income. On the other hand, they find that students from lower income families are more likely to choose majors with lower expected incomes. This fact is concerning because this likely inhibits socio-economic mobility of these students. Therefore, assuming that US and UK students are socio-economically comparable, additional focus should be given to first generation students because they often have a lower socio-economic status than their peers.

Although their study does not deal directly with the college major decision of students, Cho et al. (2008) examine whether or not there is a difference in the type of college first generation students attend in contrast to non-first generation students.[9] They find that first generation African American and Asian students value parental input more than their non-first generation peers. Furthermore, first generation females, in particular African American, place a greater emphasis on the academic quality of the institution than do non-first generation students. These findings reveal the importance of dissecting the effects of college major choice by each ethnic group and gender as well as first and non-first generation status.

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[8] Davies et al. (2012) collect data from prospective university students in the UK during their final year of high school. Questionnaires were distributed via contacts at various universities. The total sample size is 1,384.

[9] Cho et al. (2008) target incoming freshman entering public and private universities. They select four universities based on geographic setting; two were in urban areas and two were rural. Their study contained a sample of 1,539 respondents.

Research shows that undergraduate college students are influenced by their abilities and expectations of future income when determining a major. Other factors, such as gender, race, and socioeconomic status also play a role in this decision. An important variable that this study emphasizes is first generation status. Compared to their peers who come from a household with a college educated parent, students without a college educated parent tend to have lower aspirations. They also tend to pick majors associated with lower salaries, likely inhibiting their socio-economic mobility. Under some circumstances, first generation students even choose to attend different types of universities than other students, revealing that their academic preferences differ from other students.

3.1 Methodology

This study targets an original sample of undergraduate students enrolled in the University of Mississippi's EDHE program. EDHE is an instructional program offered to recently enrolled students. It is designed to assist their transition to the University and to teach academic and professional skills. The EDHE program was targeted in the hope that incoming freshman and transfer students would generate a sample with similar demographics as the University of Mississippi student body. The survey was distributed to students during class with the agreement of EDHE instructors. One benefit of this method is that it ensures a high response rate. Two versions of the survey, which are included in the Appendix, were drafted and distributed. The purpose of using two versions is to control for differences in academic classification. The two versions are described below.

The first version of the survey was designed for EDHE 105, which is the course for first semester freshmen. This version of the survey provided answer choices relevant to freshmen, e.g., a question asking for a student's expected amount of time to finish a degree. In total, 250 copies of the survey were distributed to the Center for Student Success and First Year Experience. The Center then distributed the surveys to 9-10 of their EDHE 105 instructors who in turn issued the surveys to their students. Of the 250 copies provided, 108 were completed by students and returned.

The second version of the survey was designed for EDHE 305 students, which is the course for junior level transfers into the University of Mississippi. The number of students enrolled in EDHE 305 is much smaller than students enrolled in EDHE 105. This version of the survey was administered during class time to three different sections of EDHE 305. In total, 75 copies of the survey were prepared for EDHE 305 students and 66 were completed and returned.

3.2 Design

The survey questions and design were influenced by the study "Modeling College Major Choices Using Elicited Measures of Expectations and Counterfactuals" by Arcidiacono et al. (2011). Surveys were distributed to entire classes, and no identifiable information was recorded, ensuring anonymity.[10] In order to minimize the loss of class time, the director of EDHE requested that the survey be no longer than two pages. (Specifically, one page printed front and back.) There were a total of 17 questions in the EDHE 105 version and 18 in the EDHE 305 version. Most of the questions provided

[10] The survey was approved under UM IRB Protocol 16x-098

response options, including options like “does not apply” or “other, please specify” where appropriate. The remaining 3 questions were free response questions.

The sampling techniques used in this study were also designed to provide a sample approximately representative of the student body. Previous studies have used various sampling techniques, ones that may not have been representative of their respective populations. Wiswall and Zafar sampled 488 students from New York University (NYU). Sixty-four percent of their respondents were female, 38% were white, and 45% were Asian. The respondents’ self-reported SAT scores represented the 93rd percentile of test takers. Altogether, this sample may not have reflected the major choices of typical NYU students. In order to control the levels of variation (and thus utilize a smaller sample), Arcidiacono et al. recruited only male students as respondents. As shown by Ma (2010) and Davies et al. (2012), gender is a variable that exerts force on a student’s choice of major. Therefore, gender needs to be considered when examining major choice. This study seeks to contribute to the literature by targeting a sample that may likely be representative of the underlying population.

3.3 Design Limitations

The original survey based on Arcidiacono et al. had 31 questions and was approximately seven pages long. To satisfy the instructions by the EDHE director regarding length, the final versions of the survey omitted several questions. For example, questions addressing grade point average and expectations of earnings in various time intervals (e.g., expected income 5 years from now, 10 years from now) were removed. Other omitted questions included ones concerning changes in major since enrolling as well as in-depth questions about counterfactuals and expectations of other students’

future earnings. A copy of the original survey is included in the Appendix. A comparison of that questionnaire to the survey instrument used by Arcidiacono et al. reveals a great deal of similarity.

The original survey was to be distributed online to the university email addresses of students via Qualtrics survey software. The sample was a stratified random group of 3,750 full-time undergraduates organized by academic classification at the Oxford campus of the University of Mississippi, provided by the Office of Institutional Research, Effectiveness, and Planning. Participation was to be incentivized in the form of a drawing for one of nineteen $20 Amazon gift cards was to be made available to students taking this study. Funding was approved and was to be provided by the Sally McDonnell Barksdale Honors College. At the conclusion of the online survey, the webpage was designed to redirect participants to a separate one question survey designed to collect only contact information. This separate survey was detached from the data survey in a manner to ensure anonymity.

Because of the deadline, this more thorough survey was not distributed. However, the data from this survey would have been useful for modeling college major decisions, especially taking expectations of earnings and other students' earnings into account. This could provide noteworthy information, especially if the sample size was sufficiently large in order to contain male and female respondents. This provides an area for future research.

3.4 Comparison of Sample and EDHE Population

Table 3.1 provides descriptive statistics and selected demographic variables from both the sample and the EDHE population. The values in the sample are comparable to

the values of the population from Fall 2015. An exception is the percentage of white and black students enrolled in EDHE 105. The sample contains a considerably smaller percentage of white students than the population (71.3% vs. 81.5%) and a larger percentage of black students than the population (21.3% vs. 10.9%)[11]. According to the University's enrollment data, during the 2014-2015 school year 77.42% of all full-time students enrolled at the Oxford campus were white while 13.67% of full-time students enrolled at the Oxford campus were black.[12]

Table 3.1. Descriptive Statistics on Selected Variables in the Sample and Population

	Sample		**EDHE Population**	
	EDHE 105	EDHE 305	EDHE 105	EDHE 305
Total	108	66	2,649	358
Male	40.74%	45.45%	41.20%	48.90%
Female	59.26%	54.55%	58.80%	51.10%
White	71.30%	69.70%	81.50%	68.70%
Black	21.30%	22.73%	10.90%	24.60%
Asian/Pacific Islander	2.78%	3.03%	1.40%	1.40%
Latino	0%	1.85%	4.00%	2.80%
Native American	0%	0%	0.30%	0.30%
Two or more/other	4.55%	1.85%	1.90%	2.20%

3.5 Comparison of EDHE Sample and University Enrollment Data

Table 3.2 breaks down the count and percentage of EDHE students enrolled in each major classification. Majors were classified into the following six classifications: Humanities, Physical Sciences, Social Sciences, Applied Sciences, Business and

[11] Population data were provided by the Office of Institutional Research, Effectiveness, and Planning via email correspondence.
[12] These calculations were made using the Office of Institutional Research, Effectiveness, and Planning's Fall 2014 enrollment data.

Accountancy, and Journalism. A list of majors included in each category is included in the Appendix. However, respondents who are enrolled in the School of Education are classified under Humanities. This was done to ensure each category had a minimum of 10 respondents. Although some classifications are larger than others, the sample data tends to match enrollment data. Table 3.2 also provides the breakdown of all full-time students enrolled in the Oxford campus during the Fall of 2014. The comparison of the information provided by these tables reveals that, like the population data, the EDHE sample favors certain major classifications.

Table 3.2. Major Classification of Respondents and Breakdown of UM Enrollment Data (2014-2015)

	Major						
	Human.	Phys. Sci.	Soc. Sci.	App. Sci.	Bus. + Accy.	Journal.	Total
EDHE 105	6	20	8	24	37	12	107
EDHE 305	7	16	5	13	17	7	65
Total EDHE	13 (7.56%)	36 (20.93%)	13 (7.56%)	37 (21.51%)	54 (31.40%)	19 (11.05%)	172 (100%)
University Population (Fall 2014)	3174 (20.82%)	3310 (21.72%)	1381 (9.06%)	2629 (17.25%)	3740 (24.54%)	1008 (6.61%)	15242 (100%)

Applied Sciences, Business and Accountancy, and Journalism are overrepresented while Humanities and Social Sciences are underrepresented by the sample. However, the sample captures the basic pattern of major choice in the Fall 2014 enrollment data. This also does not take into account the fact that the population data is from Fall 2014 and the EDHE data was collected in Fall 2015.

Table 3.3 reveals the average of students' self-reported probabilities of entering each of the seven given career fields given their current area of major. A positive

relationship exists between majoring in a subject and an intention to enter a related career field upon graduation. For instance, roughly 59% of the students majoring in the physical sciences intend on working in a health profession after graduating; likewise, 58% of business and accountancy students plan to begin a career in business.

Table 3.3. Students' Self-Reported Likelihood of Entering Specific Career Fields

Career Field	**Major**					
	Human.	Phys. Sci.	Soc. Sci	App. Sci.	Bus. + Accy.	Journal.
STEM	5.42%	21.08%	2.11%	12.78%	5.91%	6.25%
Health	9.58%	58.72%	13.32%	38.42%	4.78%	6.00%
Business	6.69%	5.84%	9.28%	6.03%	58.01%	36.11%
Government/ Non-Profit	7.08%	1.87%	11.26%	7.52%	6.54%	8.99%
Education	53.31%	5.60%	9.25%	8.81%	5.22%	9.69%
Law	5.42%	5.21%	41.99%	17.40%	13.52%	10.83%
Other	12.50%	1.74%	12.79%	9.04%	6.39%	20.82%
Total	100%	100%	100%	100%	100%	100%

Table 3.4 shows the self-reported expected income of all students enrolled in EDHE 105 and 305 for each major classification. A difference exists between students' expectations of future annual income and classification of major. For example, over 42% of Business and Accountancy students believe they will earn an income for over $100,000 whereas nearly 39% of Humanities majors expect to earn between $25,001-40,000.

Table 3.5 below shows the EDHE students' subjective importance of future income. With the exception of majors within the Humanities, most students claim that major is either "somewhat important" or "very important" in their career choice. In

section 3.5, these findings will be used as a benchmark against responses from first generation students in order to compare outcomes.

Table 3.4. Expected Future Income by Major Classification

Expected Annual Income	**Major**					
	Human.	Phys. Sci.	Soc. Sci.	App. Sci.	Bus. + Accy.	Journal.
$14,500-25,000	7.7%	2.9%	7.7%	0.0%	0.0%	0.0%
$25,001-40,000	38.5%	2.9%	0.0%	8.1%	0.0%	15.8%
$40,001-60,000	30.8%	17.1%	7.7%	10.8%	15.4%	26.3%
$60,001-80,000	7.7%	25.7%	15.4%	40.5%	25.0%	21.1%
$80,001-100,000	15.4%	25.7%	38.5%	24.3%	17.3%	21.1%
More than $100,000	0.0%	25.7%	30.8%	16.2%	42.3%	15.8%

Table 3.5. Importance of Future Expected Incomes by Major Classification

Importance of Expected Income	**Major**					
	Human.	Phys. Sci.	Soc. Sci.	App. Sci.	Bus + Accy.	Journal.
Not at all important	38.5%	0.0%	0.0%	5.4%	1.9%	8.0%
Somewhat Unimportant	7.7%	11.1%	0.0%	2.7%	3.7%	16.0%
Somewhat Important	38.5%	44.4%	46.2%	40.5%	40.7%	36.0%
Very Important	15.4%	44.4%	53.8%	51.4%	53.7%	40.0%
Somewhat + Very Important	53.9%	88.8%	100%	91.9%	94.4%	76%

3.6 Differences between the Sample and First Generation Students

First generation students are defined as students who do not have a parent who has earned a baccalaureate degree.[13] In this paper, students who report that one parent or guardian has at least a Bachelor's degree are not classified as first generation college students. This section compares the expectations of future incomes and importance of future expected incomes from the entire sample to those of first generation students. First, the demography of first generation students is provided to help determine any differences in the background of first generation students.

Table 3.6 shows that female students make up a much larger percentage of first generation students than do male students. Although the majority of first generation students are white, the percentage of black first generation students is substantially higher than the percentage of black students in the sample. This reveals that there is a propensity for black students to be first generation students. The percentage of first generation Asian/Pacific Islander students is nearly identical to the percentage of Asian/Pacific Islander students enrolled at the University. The same applies for Latino students; however, both of these latter two categories have only a few respondents.

Table 3.6. Demographic Breakdown of First Generation Students	
Male	23.33%
Female	76.67%
White	63.33%
Black	31.67%
Asian/Pacific Islander	3.33%
Latino	1.67%
Native American	0.00%
Two or more/other	0.00%

[13] Soria et al. (2012)

Table 3.7 breaks down the expected future annual income by major classification of first generation students. Compared with the expected future annual income of students reported in Table 3.4, in most major categories first generation students are less likely to expect a future income greater than $100,000. With the exception of the social sciences, the responses of first generation students tend to gravitate toward the middle and higher end income answer choices compared to their non-first generation peers. The largest difference between groups is within the Business and Accounting category, where 42.3% of all students expect to earn over $100,000 annually, whereas only 14.3% of first generation business and accountancy majors expect to earn as much annually.

Table 3.7. Expected Future Income of First Generation Students by Major Classification

	Major					
Expected Income	Human.	Phys. Sci.	Soc. Sci.	App. Sci.	Bus. + Accy.	Journal.
$14,500-25,000	14.3%	0.0%	20.0%	0.0%	0.0%	0.0%
$25,001-40,000	42.9%	5.9%	0.0%	5.9%	0.0%	25.0%
$40,001-60,000	42.9%	23.5%	0.0%	11.8%	21.4%	0.0%
$60,001-80,000	0.0%	35.3%	0.0%	35.3%	35.7%	25.0%
$80,001-100,000	0.0%	17.6%	60.0%	35.3%	28.6%	50.0%
More than $100,000	0.0%	17.6%	20.0%	11.8%	14.3%	0.0%

Despite the differences in expectations of future income, the importance of future expected income between the sample and first generation students is relatively constant. Comparing Tables 3.5 and 3.8, students typically identify the importance of future

expected income as either “somewhat important” or “very important.” (See the bottom rows of Tables 3.5 and 3.8.)

Table 3.8. Importance of Future Expected Income of First Generation Students by Major Classification

Importance of Expected Income	**Major**					
	Human.	Phys. Sci.	Soc. Sci.	App. Sci.	Bus. + Accy.	Journal.
Not at all important	42.9%	0.0%	0.0%	0.0%	0.0%	0.0%
Somewhat Unimportant	0.0%	5.9%	0.0%	5.9%	0.0%	0.0%
Somewhat Important	57.1%	47.1%	60.0%	41.2%	50.0%	75.0%
Very Important	0.0%	47.1%	40.0%	52.9%	50.0%	25.0%
Somewhat + Very Important	57.1%	94.2%	100%	94.1%	100%	100%

3.7 Summary of Descriptive Statistics

As shown in Table 3.1, the percentages of male and female respondents is nearly identical between the sample and the population. However, as mentioned earlier, the percentage of white respondents from EDHE 105 sample is approximately 10 points lower than the population and the percentage of black respondents is approximately 10 points higher. Asian/Pacific Islander students are overrepresented in both the sample and the population, and Latino students are underrepresented.

First generation students tend to view the importance of future expected earnings similarly to their peers. Tables 3.6 and 3.9 reveal that most students weight income as being either “somewhat important” or “very important” to their future career objectives. However, the results shown in Tables 3.5 and Table 3.8 reveal that first generation

students assume they will likely have a different income level than non-first generation students. In particular, first generation students, especially those in the social sciences and business and accountancy categories seem less likely to believe they will earn an income of over $100,000 than do their non-first generation peers. Therefore, a more rigorous analysis is needed before making further assumptions about first generation students' college major decision.

3.8 Comments on Procedure and Data Irregularities

This section discusses any inconsistencies or errors that may be present in the data and explains how these were corrected in the analysis. Common mistakes included the probabilities of entering various career fields not adding up to 100%, checking two answer choices for a question with mutually exclusive answers, or claiming to be enrolled in a major that does not exist.

Question 14 asked respondents to indicate their odds of going into various career fields. They were instructed that the sum of all answer choices should equal 100%. However, the sum of these percentages were often larger or smaller than 100%. In these cases, the probabilities were weighted so that the sum would equal 100%. For example, if the sum of all probabilities was smaller than 100%, each response was multiplied by 100/x, where x is the sum of all probabilities. When the sum of all probabilities was larger than 100%, each responses was multiplied by x/100. Therefore, the responses used in the descriptive statistics include responses with weighted values as well as raw percentages.

Questions 4, 5, 7, 9, 10, 11, 15, and 16 from the EDHE 105 survey provide answer choices that are mutually exclusive. (Numbers 15 and 16 are respectively

numbered 16 and 17 in the EDHE 305 survey.) For example, a student cannot report expectations to earn $25,000-40,000 and $40,001-60,000 annually. However, there were a few instances where this occurred. When this occurred, the answer choice containing the higher of the two incomes was chosen. This was done because the midpoint of both answer choices is the base income of the higher option. Thus, it is likely that the respondent expects to earn at least that amount.

The protocol of selecting the higher of two mutually exclusive options was also used when respondents selected more than one level of education for their parents. For example, if a respondent claimed that his/her father's highest level of education was a Bachelor's degree and a Master's degree, only the Master's degree response was considered in the analysis. This was done because the question wording specifically requested the highest level of educational attainment. A specified level of educational attainment typically implies that lower levels have already been attained.

Another problem is the classification of majors that are present in multiple schools and/or colleges. An example is the Economics major. Because there are two degrees (Bachelor of Arts and Bachelor of Business Administration) that offer the Economics major, there is ambiguity as to whether the student should be classified under Social Sciences or Business and Accountancy (unless he/she specifies which school he/she is enrolled in). However, in this study, all but one Economics major specified that they were enrolled in the Business school. The student who did not specify his or her degree program provided Marketing and Integrated Marketing Communications as other possible majors, therefore he or she was also classified under Business.

A common mistake made by respondents was claiming majors that do not exist. Typically this error was made by underspecifying a major, e.g., a student may claim to be majoring in non-existent "Finance" rather than Managerial Finance or Banking and Finance. Likewise, a student may report majoring in "Business" rather than General Business. However, this is not a concern because of the dependent variable of major choice being broken down into six categories. As a result, an underspecified major like "Business" falls under the Business + Accountancy category. Another example is the reported major "Speech Pathology." In this case, speech pathology is not a major, but is included in the Applied Science category by way of Communication Sciences and Disorders.

Some respondents identified a non-existent major, i.e., one that is not offered by the University. For example, one student reported a major in "Graphic design." Graphic design is not a major offered by the University, but rather is a series of coursework within the Department of Art and Art History. In this case, the second major in the student's list was used to determine his or her major. (This student also specified a third major, but it was not considered because it too was nonexistent.)

A final point of consideration is a classification anomaly. When compiling data for Table 3 in the Methodology section, there was one student who was classified under the School of Liberal Arts in the Fall 2014 enrollment data although he or she is a Criminal Justice major. Criminal Justice is a major offered only through the School of Applied Sciences, and this student was the only Criminal Justice major enrolled in a school other than Applied Sciences. Therefore, for the purposes of this study, that student was categorized under Applied Sciences.

4.1 Model Specification

This study attempts to model major choice using variables found to be significant in other studies. Using multinomial logistic regression, the effects of academic aptitude, ethnicity, gender, first generation status, and expectations of future earnings are measured against a student's choice of major classification. ACT scores were used as a measure of academic aptitude. SAT scores were also collected, but relatively few students reported SAT scores, so ACT scores were used to minimize the amount of missing data. Ethnicity was included as the dummy variable White where students were either classified as white (= 1) or nonwhite (= 0). The survey instrument allowed respondents to select one of 6 ethnic classifications, but a binary classification is used because of the relatively small number of minority respondents.[14] Gender was included as the dummy variable Female where students were either classified as female (= 1) or male (= 0). First generation status was identified with the dummy variable FirstGen where students were classified as first generation (= 1) or not first generation (= 0). Finally, importance of future earnings was with the variable ExpEarn, which had a value from 1 to 4. On the survey, respondents answered a 4-point Likert scale question asking them how important they believed their future income was when deciding their major (1 = Not at all important, 4 = Very important).

4.2 Multinomial Regression

Multinomial logistic regression was used to determine the effects these five variables had on students' chosen major classification. Logistic regression (logit) is

[14] Out of the 174 students sampled, 123 are white, 38 are black, 2 are Latino, 5 are Asian/Pacific Islander, 2 classify as Other, and 3 classify as Two or More. Out of the 126 observations in the Table 4.3 regression below, 91 are white, 28 are black, 2 are Latino, 3 are Asian/Pacific Islander, and 2 classify as Other.

defined as a mathematical equation that relates the probability of the dependent variable to the values of the independent variables.[15] However, the standard logit model can only be used when the dependent variable is binary (e.g., a response of "yes" or "no" coded with the values "1" or "0" respectively). Multinomial logit is a variation of the standard logit model where the dependent variable can assume multiple values, where each value represents a categorical response. In this study, the values range from 1 to 6, where 1 represents Humanities, 2 represents Physical Sciences, 3 represents Social Sciences, 4 represents Applied Sciences, 5 represents Business and Accountancy, and 6 represents Journalism.

Multinomial logit requires omission of one independent variable category when the regression is performed. This omitted category serves as a baseline against which the other categories are compared. In this study, category 6, or Journalism, served as the baseline group. As a result, the regression's estimated beta coefficients reveal whether there is an increase or decrease in the relative log odds ratio between each independent variable relative to the baseline. For the purpose of this study, the coefficient shows whether or not the independent variable is positively or negatively associated with the dependent variable (major category) relative to the baseline category. More specifically, a positive coefficient means that when the independent variable increases in value, there is (on average) an increase in the probability that the student would choose the given major category (relative to the baseline category). A negative value would indicate a decrease in the corresponding probability.

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[15] Anderson, Sweeny, Williams, *Statistics for Business and Economics* (South-western, Cengage Learning, 2011), 696.

4.3 Regression Results

The level of significance for each independent variable (and the entire model) is another important criterion to consider. If the p-value of a variable is .10 or smaller, that variable is considered marginally statistically significant while a p-value of .05 or smaller is considered statistically significant. Table 4.1 shows a summary of each independent variable's fit within the model and the overall fit of the model. Here, gender and expected earnings are the two statistically significant variables (p = .000, .002, respectively)[16]. The entire model is statistically significant with a chi-square of 57.928 (p = .000).

Table 4.1. Model Fit Statistics

Variable Name	**Chi-Square**	**p-value**
Model	57.928	.000**
ACT	19.055	.338
White	5.688	.189
Male	7.451	.000**
FirstGen.	22.983	.758
ExpEarn	2.622	.002**

Note: n = 126 (48 missing values), pseudo R^2 = .369
* = significant at the .10 level, ** = significant at the .05 level

Table 4.2 provides a summary of the number of respondents that were included in analysis from each major category. The number of respondents is smaller than the sample because of missing data. This is primarily the result of over 40 students in the sample not providing their ACT score.

[16] The p-value .000 simply means that the value is rounded at the third decimal place; it does not have a value of 0.

Table 4.2 Response Number and Percentage per Major Category		
Major Category	**Number of Respondents (N)**	**% of Respondents**
Human.	9	7.1%
App. Sci.	28	22.2%
Soc. Sci.	12	9.5%
App. Sci.	26	20.6%
Bus. + Accy.	41	32.5%
Journal.	10	7.9%
TOTAL	126	100%

Interpretation of multinomial logistic regression results is crucial to understanding the results of the model. Table 4.3 provides the regression output for this model. The important takeaways from this regression are the signs of the estimated beta coefficients and the levels of significance of the coefficients. The sign (+/-) of the estimated beta coefficient of an independent variable reveals whether this variable is positively or negatively associated with the dependent variable relative to the baseline group. For example, in Table 4.3 the ACT beta coefficient for physical science (Phys. Sci., .202) is positive, meaning that students who majored in physical science have higher ACT scores on average than journalism students. This implies that the probability of a student majoring in the physical sciences over journalism (the baseline) increases with ACT score.

Table 4.3. Regression Output

Independent Variable	Major					
	Human.	Phys. Sci.	Soc. Sci.	App. Sci.	Bus. + Accy.	Journal.
ACT	.070 (.149)	.202* (.117)	.245* (.138)	.092 (.116)	.167 (.111)	- -
White	.045 (1.282)	–1.647* (.963)	–1.195 (1.103)	–.101 (.995)	–.773 (.958)	- -
Female	.310 (1.133)	.186 (.834)	2.070 (1.282)	3.75 (.820)	–1.405* (.792)	- -
FirstGen	.970 (1.151)	1.060 (.872)	.457 (.988)	.409 (.867)	.381 (.870)	- -
ExpEarn	–1.118** (.549)	.556 (.490)	.641 (.609)	.286 (.474)	.659 (.467)	- -
Intercept	.618 (4.015)	-4.939 (3.276)	-8.631** (3.979)	-2.391 (3.196)	-3.595 (3.130)	- -

Note: * = significant at the .10 level, ** = significant at the .05 level

ACT is significant and positive for the Physical Sciences and Social Sciences. White is negative and significant for the Physical Sciences. Female is negative and significant for Business and Accountancy. ExpEarn is significant and negative for the Humanities. Notably, FirstGen is not significant in any of the major classifications.

4.4 Interpretation of Findings

The note to Table 4.1 indicates that the regression summarized in Tables 4.2 and 4.3 contains 48 missing values from the 174 completed surveys. Forty-seven of these are due to missing ACT scores, which means roughly 27% of respondents failed to provide an ACT score. These missing observations could affect the results of the regression. If ACT is removed from the model, these observations can be included. After omitting ACT, there are only two missing observations. Table 4.4 provides a summary of the regression with both ACT included (as seen in Table 4.3 above) and with ACT omitted.

Entries for the statistically significant variables are included, and indicate whether the sign is positive (+) or negative (-) within each major category.

Table 4.4. Comparison of Regression Results With and Without ACT

	Original Regression incl. ACT (n = 126)					Regression with ACT removed (n = 172)				
Major	ACT	White	Male	First Gen	Exp Earn	ACT	White	Male	First Gen	Exp Earn
Human.					(-)	-			(+)	(-)
Phys. Sci.	(+)	(-)				-	(-)			
Soc. Sci.	(+)					-				
App. Sci.						-			(+)	
Bus. + Accy.			(+)			-		(+)		
Journal.	-	-	-	-	-	-	-	-	-	-

Table 4.4 shows that the omission of ACT changes the significance of FirstGen compared to the original regression. Unlike the results from the first regression, FirstGen is now significant for two major categories, Humanities and Applied Sciences. This may be due to correlation between ACT and FirstGen, which is known as multicollinearity. Multicollinearity is defined as "high (but not perfect) correlation between two or more independent variables."[17] In the first regression, multicollinearity is what likely rendered ethnicity statistically insignificant, and it also had an adverse effect on first generation status (although first generation status remained insignificant after removing ACT from the model).

[17] Wooldridge, *Introductory Econometrics A Modern Approach*, (Cengage Learning, 2012), 91.

4.5 Limitations and Areas for Future Research

This study provides basic insight on which factors influence the major decisions of undergraduate students at the University of Mississippi. However, missing data or multicollinearity led to inconsistences in the regression output. Once ACT scores were removed from the model, the other independent variables become more significant (or less insignificant). This study also collected SAT scores, but these were not used due to the low number of respondents who had reported taking the SAT. In future research, SAT scores could be converted to equivalent ACT scores. It is important to include a model measuring academic aptitude in the model as this is a core component of Wiswall and Zafar (2014).

Additionally, variables such as financial aid amount, amount of student loan debt held at graduation, or employment status could be included in analysis. These data were collected as part of the survey, but were omitted from the primary model due to differences between EDHE 105 (freshman) and EDHE 305 (junior) students. Analyzing financial aid received, amount of loan debt, and employment status should be compared within the two individual groups before being regressed in the model containing both groups of students.

An area of future research is performing the study with the original, comprehensive questionnaire, which was designed for a more inclusive sample. As a result of the time constraint, the original survey was not distributed to the stratified random sample of students at the Oxford campus. This survey instrument was designed for students of all classifications (i.e., freshmen, sophomores, juniors, and seniors), rather than just freshmen and juniors. Unlike Arcidiacono et al., the design of this study

included both male and female respondents. The additional questions about counterfactual majors and major changes were intended to illicit more information about students' major decisions, how these decisions change, and how often they change.

5.1 Conclusion

Wiswall and Zafar (2014) and Arcidiacono et al. (2011) both model how college students decide on their major. Eshelman and Rottinghaus (2014) find that high school students' level of career and academic aspirations are positively correlated with their parents' level of education. Soria et al. (2012) confirms this, explaining that students without a college educated parent perform worse than their peers in the classroom. Ma (2010) and Davies et al. (2012) further examine college choice, and determine that gender and ethnicity are also important factors that influence major decision.

This study attempts to provide insight as to how students at the University of Mississippi choose their majors and which variables have the largest effect. A total of 9-10 sections of EDHE 105 and 3 sections of EDHE 305 classes were sampled which provided a total sample size of 174. (The number of sections is uncertain because the EDHE program directors distributed the surveys to EDHE 105 instructors.) This sample is thought to be representative of the University of Mississippi population because it contains a large number of entering freshmen and juniors. The analysis is section 3 largely confirms this.

The descriptive and summary statistics reveal that there are differences between first generation and non-first generation students. First generation students are less likely to expect a very high income career (over $100,000 annually), but typically claim that future earnings are either "somewhat important" or "very important", which is similar to

their non-first generation peers. However, regression analysis is needed before determining which variables significantly affect major choice.

Multinomial logistic regression was used to analyze whether or not ACT score, ethnicity, gender, first generation status, and importance of expected earnings affect major choice. When the original regression was run, first generation status was found to be insignificant for each variable. However, this may be the result of 47 observations missing from the model. When ACT was removed from the model (all but 2 missing observations were the result of missing ACT scores), first generation status became significant for the Humanities and Applied Sciences categories.

This study provides some insight on how undergraduates at the University of Mississippi choose their major. However, the original, comprehensive survey was not distributed due to time. An area of future research includes distributing this to an inclusive sample of students.

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Appendix

Freshman Major Questionnaire

1. Did you take the ACT, SAT, or other as your college admission test? If applicable, please specify your highest composite score.

   _____ACT _____SAT _____Other

2. Which of the following ethnicities do you most identify yourself with?

   _____White _____Latino _____Black _____Asian/Pacific Islander
   _____Native American _____Other

3. What is your gender?

   _____Male _____Female

4. What is your primary male guardian's highest level of educational attainment?

   _____Some high school _____High school diploma or GED equivalent

   _____Some college

   _____Associate's degree _____Bachelor's degree _____Some graduate work

   _____Master's degree _____Doctorate or any other specialized degree (JD, Medical, etc.) _____Does not apply

5. What is your primary female guardian's highest level of educational attainment?

   _____Some high school _____High school diploma or GED equivalent

   _____Some college

   _____Associate's degree _____Bachelor's degree _____Some graduate work

   _____Master's degree _____Doctorate or any other specialized degree (JD, Medical, etc.) _____Does not apply

6. What is/are your declared major(s)? If you are undecided, please rank your top 3 majors in order of preference.

   _____
   _____
   _____

7. How long do you think it will take you to finish your degree at The University of Mississippi?

   _____Less than 3 years _____4 years _____5 years _____6 years _____Greater than 6 years

8. Do you receive financial aid? If so, which kind? (select all that apply)

_____Scholarships _____Grants _____Loans _____Other

9. What portion of your college expenses are covered by financial aid?

_____0% _____1-25% _____26-50% _____51-75% _____76-100% _____I do not know

10. Do you have a job?

_____No _____Yes, full-time _____Yes, part-time

11. How much student loan debt do you anticipate to have outstanding at graduation?

_____$0-5000 _____$5001-10,000 _____$10,001-15,000 _____$15,001-20,000 ____More than $20,000

12. What was your favorite subject in high school?

_____Mathematics	_____Physical Science (e.g. Chemistry, Biology, Physics)	_____Social Science (e.g. Economics, Government, Psychology, Sociology)	_____Humanities (e.g. English, History, Foreign Languages)	_____Business (e.g. Entrepreneurship, Book Keeping, etc.)
_____Vocational class (e.g. Allied Health, Automotive Mechanics, etc.)	_____Other (Please specify below) _____			

13. Did any favorite class in high school influence your decision for your current college major? Select all that apply.

_____Mathematics	_____Physical Science (e.g. Chemistry, Biology, Physics)	_____Social Science (e.g. Economics, Government, Psychology, Sociology)	_____Humanities (e.g. English, History, Foreign Languages)	_____Business (e.g. Entrepreneurship, Book Keeping, etc.)
_____Vocational class (e.g. Allied Health, Automotive Mechanics, etc.)	_____Other (Please specify below) _____			

14. What is the probability of you entering each of the following fields? Please indicate the probability for each field in the corresponding row under the "Probability" heading. Note that the sum of all rows must equal 100%.

	Probability
STEM (Science, Technology, Engineering, Math)	
Health (Doctor, Nurse, Dentist, etc.)	
Business (Banking, Accounting, Insurance, etc.)	
Government/Non-Profit	
Education	
Law	
Other (Anything not listed above)	

15. How much do you expect to earn annually?

_____$14,500-25,000 ($7.25-$12.50/hour)
_____$25,001-40,000 ($7.26-$20/hour)
_____$40,001-60,000 ($20.01-$30/hour)
_____$60,001-80,000 ($30.01-$40/hour)
_____$80,001-100,000 ($40.01-$50/hour)
_____ More than $100,000 (more than $50/hour)

16. How important would you say your expected future earnings are to your career choice?

_____Very important _____Somewhat important _____Somewhat unimportant _____Not at all important

17. Short answer: What would you say are the primary influences for your chosen college major(s), and ultimately, future career plans?

EDHE 305 Major Questionnaire

1. Did you take the ACT, SAT, or other as your college admission test? If applicable, please specify your highest composite score.

   _____ACT _____SAT _____Other

2. Which of the following ethnicities do you most identify yourself with?
   _____White _____Latino _____Black _____Asian/Pacific Islander
   _____Native American _____Other

3. What is your gender?
   _____Male _____Female

4. What is your primary male guardian's highest level of educational attainment?

   _____Some high school _____High school diploma or GED equivalent

   _____Some college

   _____Associate's degree _____Bachelor's degree _____Some graduate work

   _____Master's degree _____Doctorate or any other specialized degree (JD, Medical, etc.)

   _____Does not apply

5. What is your primary female guardian's highest level of educational attainment?

   _____Some high school _____High school diploma or GED equivalent

   _____Some college

   _____Associate's degree _____Bachelor's degree _____Some graduate work

   _____Master's degree _____Doctorate or any other specialized degree (JD, Medical, etc.)

   _____Does not apply

6. What is/are your declared major(s)? If you are undecided, please rank your top 3 majors in order of preference. Please use the list of majors on the back of the information sheet for reference.

   _____
   _____
   _____

7. How long do you think it will take you to finish your degree at The University of Mississippi?

   _____Less than 1 year _____1 year _____2 years _____3 years _____Greater than 3 years

8. Do you receive financial aid? If so, which kind? (select all that apply)

   _____Scholarships _____Grants _____Loans _____Other

9. What portion of your college expenses are covered by financial aid?

   _____0% _____1-25% _____26-50% _____51-75% _____76-100% _____I do not know

10. Do you have a job?

_____No _____Yes, full-time _____Yes, part-time

11. How much student loan debt do you anticipate to have outstanding at graduation?

_____$0-5000 _____$5001-10,000 _____$10,001-15,000 _____$15,001-20,000 ____More than $20,000

12. What was your favorite subject in high school? (Note: more choices on back of sheet.)

_____Mathematics	_____Physical Science (e.g. Chemistry, Biology, Physics)	_____Social Science (e.g. Economics, Government, Psychology, Sociology)	_____Humanities (e.g. English, History, Foreign Languages)	_____Business (e.g. Entrepreneurship, Book Keeping, etc.)
_____Vocational class (e.g. Allied Health, Automotive Mechanics, Information Technology, etc.)	_____Other (Please specify below) _____			

13. Did any favorite class in high school influence your decision for your current college major? Select all that apply.

_____Mathematics	_____Physical Science (e.g. Chemistry, Biology, Physics)	_____Social Science (e.g. Economics, Government, Psychology, Sociology)	_____Humanities (e.g. English, History, Foreign Languages)	_____Business (e.g. Entrepreneurship, Book Keeping, etc.)
_____Vocational class (e.g. Allied Health, Automotive Mechanics, Information Technology, etc.)	_____Other (Please specify below) _____			

14. Did any favorite class in community college influence your decision for your current college major? Select all that apply.

_____Mathematics	_____Physical Science (e.g. Chemistry, Biology, Physics)	_____Social Science (e.g. Economics, Government, Psychology, Sociology)	_____Humanities (e.g. English, History, Foreign Languages)	_____Business (e.g. Entrepreneurship, Book Keeping, etc.)
_____Vocational class (e.g. Allied	_____Other (Please specify			

Health, Automotive Mechanics, Information Technology, etc.)

below) _____

15. What is the probability of entering each of the following fields? Please indicate this probability in the field below. Note that the sum of all fields must equal 100%.

	Probability
STEM (Science, Technology, Engineering, Math)	
Health (Doctor, Nurse, Dentist, etc.)	
Business (Banking, Accounting, Insurance, etc.)	
Government/Non-Profit	
Education	
Law	
Other	

16. How much do you expect to earn annually?

_____$14,500-25,000 ($7.25-$12.50/hour)

_____$25,001-40,000 ($7.26-$20/hour)

_____$40,001-60,000 ($20.01-$30/hour)

_____$60,001-80,000 ($30.01-$40/hour)

_____$80,001-100,000 ($40.01-$50/hour)

_____ More than $100,000 (more than $50/hour)

17. How important would you say your expected future earnings are to your career choice?

_____Very important _____Somewhat important _____Somewhat unimportant _____Not at all important

18. Free response: What would you say are the primary influences on your college major(s), and ultimately, future career plans?

COLLEGE OF LIBERAL ARTS

HUMANITIES = 1

- B.A. in Liberal Studies
- B.A. in African American Studies
- B.A. in History
- B.A. in Art
- B.A. in Art History
- B.F.A. in Art
- B.A. in Southern Studies
- B.A. in Classics
- B.A. in English
- B.A. in Arabic
- B.A. in Chinese
- B.A. in French
- B.A. in German
- B.A. in Linguistics
- B.A. in Spanish
- B.A. in Music
- B.M. in Music
- B.A. in Philosophy
- B.A. in Religious Studies
- B.A. in Theatre Arts
- B.F.A. in Theatre Arts

PHYSICAL SCIENCES = 2

- B.A. in Biology
- B.S. in Biology
- B.A. in Biochemistry
- B.A. in Chemistry
- B.S. in Chemistry
- B.S. in Forensic Chemistry
- B.A. in Computer Science
- B.A. in Mathematics
- B.S. in Mathematics
- B.A. in Physics
- B.S. in Physics
- B.S. in Dental Hygiene (2 +2)
- B.S. in Health Info & Info Mgmt (2 +2)
- B.S. in Medical Laboratory Science (2+2)
- B.S. in Medical Technology (3+1)
- B.S. in Occupational Therapy (2 +3)
- B.S.N. in Nursing (2 +2)
- BS in Radiologic Sciences (2+2)

SOCIAL SCIENCES = 3

- B.A. in Anthropology
- B.A. in Economics
- B.A. in International Studies
- B.A. in Political Science
- B.A. in Psychology
- B.A. in Public Policy Leadership
- B.A. in Sociology

MEEK SCHOOL OF JOURNALISM & NEW MEDIA = 6

- B.A.J. in Journalism
- B.S. in Integrated Marketing Communication

SCHOOL OF ACCOUNTANCY = 5

- B.Accy. in Accountancy

SCHOOL OF APPLIED SCIENCES = 4

- BS in Communication Sciences & Disorders
- B.A.R.A. in Recreation Administration
- B.S.E.S. in Exercise Science
- B.P.S. in Paralegal Studies
- B.S.C.J in Criminal Justice
- B.S. in Dietetics and Nutrition
- B.S. in Hospitality Management
- B.S.W. in Social Work

SCHOOL OF BUSINESS ADMINISTRATION = 5

- B.B.A. in Economics
- B.B.A. in General Business
- B.B.A. in Banking and Finance
- B.B.A. in Managerial Finance
- B.B.A. in Real Estate
- B.B.A. in Risk Management and Insurance
- B.B.A. in Management
- B.B.A. in Management Information Systems
- B.B.A. in Marketing
- BBA in Marketing and Corporate Relations

SCHOOL OF EDUCATION = 1

- B.A.Ed. in Elementary Education
- B.A.Ed. in English Education
- B.A.Ed. in Mathematics Education
- B.A.Ed. in Science Education
- B.A.Ed. in Social Studies Education
- B.A.Ed. in Special Education

SCHOOL OF ENGINEERING = 2

- B.E. in Engineering
- B.S.Ch.E. in Chemical Engineering
- B.S.C.E. in Civil Engineering
- B.S.C.S. in Computer Science
- B.S.E.E. in Electrical Engineering
- B.S. in Geology
- B.S.G.E. in Geological Engineering
- B.S.M.E. in Mechanical Engineering

SCHOOL OF PHARMACY = 4

- B.S. in Pharmaceutical Sciences

UNIVERSITY PROGRAMS = 1
GENERAL STUDIES

- B.G.S. in General Studies

Q1 Did you take the ACT, SAT, or other as your college admission test?

- ACT (1)
- SAT (2)
- Other (3)

Answer If Did you take the ACT, SAT, or other as your college admission test? ACT Is Selected

Q2 Please specify your highest ACT composite score.

Answer If Did you take the ACT, SAT, or other as your college admission test? SAT Is Selected

Q3 Please specify your highest SAT composite score.

Q4 What is your gender?

- Male (1)
- Female (2)

Q5 What is your primary male guardian's highest level of educational attainment?

- Some High School (1)
- High School Diploma or GED Equivalent (2)
- Some College (3)
- Associate's Degree (4)
- Bachelor's Degree (5)
- Some Graduate Work (6)
- Master's Degree (7)
- Doctorate or any other specialized degree (JD, Medical, etc.) (8)
- Does Not Apply (9)

Q6 What is your primary male guardian's highest level of educational attainment?

- Some High School (1)
- High School Diploma or GED Equivalent (2)
- Some College (3)
- Associate's Degree (4)
- Bachelor's Degree (5)
- Some Graduate Work (6)
- Master's Degree (7)
- Doctorate or any other specialized degree (JD, Medical, etc.) (8)
- Does Not Apply (9)

Q7 What is your declared major(s)? If you are undecided, please rank your top 3 majors from most preferred to least preferred. Be sure to specify between closely related majors (e.g., Managerial Finance is not the same as Banking and Finance)

Q8 What is the number of academic years you expect to spend in college before earning your Bachelor's degree? In other words, please select the number of years you think you will be in college before earning your Bachelor's degree.

- ❍ Less than 3 years (1)
- ❍ 3 years (2)
- ❍ 4 years (3)
- ❍ 5 years (4)
- ❍ 6 years (5)
- ❍ More than 6 years (6)
- ❍ Does not apply - not seeking Bachelor's degree (7)

Q9 Do you receive financial aid?

- ❍ Yes (1)
- ❍ No (2)
- ❍ I'm not sure (3)

Answer If Do you receive financial aid? Yes Is Selected

Q10 Select all forms of financial aid that you receive.

- ❑ Scholarships (1)
- ❑ Grants (2)
- ❑ Loans (3)
- ❑ Other (4)

Q11 Are you a resident of Mississippi?

- ❍ Yes (1)
- ❍ No, I am from out-of-state (2)
- ❍ No, I am from out of the country (3)

Q12 What portion of your college expenses are covered by financial aid?

- ❍ 0% (1)
- ❍ 1-25% (2)
- ❍ 26-50% (3)
- ❍ 51-75% (4)
- ❍ 76-100% (5)
- ❍ I do not know (6)

Q13 Do you have a job?

- ❍ No (1)
- ❍ Yes, full-time (2)
- ❍ Yes, part-time (3)

Q14 How much student loan debt do you anticipate to have outstanding at graduation?

- ❍ $0-5000 (1)
- ❍ $5001-10,000 (2)
- ❍ $10,001-15,000 (3)
- ❍ $15,001-20,000 (4)
- ❍ More than $20,000 (5)

Q15 What was your favorite subject in high school?

- ❍ Mathematics (1)
- ❍ Physical Science (e.g., Chemistry, Biology, Physics) (2)
- ❍ Social Science (e.g., Economics, Government, Psychology, Sociology) (3)
- ❍ Humanities (e.g., English, History, Foreign Languages) (4)
- ❍ Business (e.g., Entrepreneurship, Book Keeping, etc.) (5)
- ❍ Vocation Class (e.g., Allied Health, Automotive Mechanics, etc.) (6)
- ❍ Other (7)
- ❍ None (8)

Q16 Did any favorite class in high school influence your decision for your current college major? Select all that apply.

- ❑ Mathematics (1)
- ❑ Physical Science (e.g., Chemistry, Biology, Physics) (2)
- ❑ Social Science (e.g., Economics, Government, Psychology, Sociology) (3)
- ❑ Humanities (e.g., English, History, Foreign Languages) (4)
- ❑ Business (e.g., Entrepreneurship, Book Keeping, etc.) (5)
- ❑ Vocation Class (e.g., Allied Health, Automotive Mechanics, etc.) (6)
- ❑ Other (7)
- ❑ None (8)

Q17 Did any favorite class in your FIRST two years of college influence your decision for your current college major? Select all that apply.

- ❑ Mathematics (1)
- ❑ Physical Science (e.g., Chemistry, Biology, Physics) (2)
- ❑ Social Science (e.g., Economics, Government, Psychology, Sociology) (3)
- ❑ Humanities (e.g., English, History, Foreign Languages) (4)
- ❑ Business (e.g., Entrepreneurship, Book Keeping, etc.) (5)
- ❑ Vocation Class (e.g., Allied Health, Automotive Mechanics, etc.) (6)
- ❑ Other (7)
- ❑ None (8)

Q18 Did any favorite class in your most recent two years of college influence your decision for your current college major? Select all that apply.

- ❑ Mathematics (1)
- ❑ Physical Science (e.g., Chemistry, Biology, Physics) (2)
- ❑ Social Science (e.g., Economics, Government, Psychology, Sociology) (3)
- ❑ Humanities (e.g., English, History, Foreign Languages) (4)
- ❑ Business (e.g., Entrepreneurship, Book Keeping, etc.) (5)
- ❑ Vocation Class (e.g., Allied Health, Automotive Mechanics, etc.) (6)
- ❑ Other (7)
- ❑ None (8)

Q19 What is the probability of you entering each of the following fields? Please indicate the probability for each field in the corresponding row under the "Probability" heading. Note that the sum of all fields should equal 100%.

	Probability (in %) (1)
STEM (Science, Technology, Engineering, Math) (1)	
Health (Doctor, Nurse, Dentist, etc.) (2)	
Business (Banking, Accounting, Insurance, etc.) (3)	
Government/Non-Profit (4)	
Education (5)	
Law (6)	
Other (Anything not listed above) (7)	

Q20 How much do you expect to earn annually immediately after beginning your career?

- ❍ $14,500-25,000 ($7.25-12.50/hour) (1)
- ❍ $25,001-40,000 ($12.50-20.00/hour) (2)
- ❍ $40,001-60,000 ($20.01-30.00/hour) (3)
- ❍ $60,001-80,000 ($30.01-40.00/hour) (4)
- ❍ $80,001-100,000 ($40.01-50.00/hour) (5)
- ❍ More than $100,000 (more than $50/hour) (6)

Q21 How much do you expect to earn annually 5 years into your career?

- ❍ $14,500-25,000 ($7.25-12.50/hour) (1)
- ❍ $25,001-40,000 ($12.50-20.00/hour) (2)
- ❍ $40,001-60,000 ($20.01-30.00/hour) (3)
- ❍ $60,001-80,000 ($30.01-40.00/hour) (4)
- ❍ $80,001-100,000 ($40.01-50.00/hour) (5)
- ❍ More than $100,000 (more than $50/hour) (6)

Q22 How much do you expect to earn annually 10 years into your career?

- ❍ $14,500-25,000 ($7.25-12.50/hour) (1)
- ❍ $25,001-40,000 ($12.50-20.00/hour) (2)
- ❍ $40,001-60,000 ($20.01-30.00/hour) (3)
- ❍ $60,001-80,000 ($30.01-40.00/hour) (4)
- ❍ $80,001-100,000 ($40.01-50.00/hour) (5)
- ❍ More than $100,000 (more than $50/hour) (6)

Q23 How important would you say your expected future earnings are to your career choice?

- ❍ Very Important (1)
- ❍ Somewhat Important (2)
- ❍ Somewhat Unimportant (3)
- ❍ Not at all Important (4)

Q24 Have you ever changed your major?

- ❍ Yes (1)
- ❍ No (2)

Answer If Have you ever changed your major? Yes Is Selected

Q25 How many times have you changed your major?

- ❍ Once (1)
- ❍ Twice (2)
- ❍ Three times or more (3)

Answer If Have you ever changed your major? Yes Is Selected

Q26 What was your primary motive for changing your major?

- ❍ More interested in the material presented in the new major (1)
- ❍ Skills and abilities better suited for new major (2)
- ❍ Expectations of earning more money post-graduation with the new major (3)
- ❍ Belief that new major would help you benefit others (4)
- ❍ None of the reasons listed above (5)

Q27 Do you expect to change your major at any point in the next year?

- ❍ Yes (1)
- ❍ No (2)

Answer If Do you expect to change your major at any point in the next year? Yes Is Selected

Q28 What was your primary motive for planning to change your major?

- ❍ More interested in the material presented in the new major (1)
- ❍ Skills and abilities better suited for new major (2)
- ❍ Expectations of earning more money post-graduation with the new major (3)
- ❍ Belief that new major would help you benefit others (4)
- ❍ None of the reasons listed above (5)

Q29 When you are mid-career, do you expect to earn more or less than the average Ole Miss student who majors in each of the following? (Assume he/she is also mid-career):For example, for the first row, If I expect my mid-career salary to be $45,000 but I expect the average mathematics major from Ole Miss to earn $65,000, I would select "I expect to earn $1-$30,000 less than him/her annually."

	I expect to earn $30,001 or less than him/her annually (1)	I expect to earn $1-$30,000 less than him/her annually (2)	I expect to earn around the same amount as him/her annually (3)	I expect to earn $1-$30,000 more than him/her annually (4)	I expect to earn $30,001 or more than him/her annually (5)
Mathematics (1)	❍	❍	❍	❍	❍
Physical Science (e.g., Chemistry, Biology, Physics) (2)	❍	❍	❍	❍	❍
Social Science (e.g., Economics, Government, Psychology, Sociology) (3)	❍	❍	❍	❍	❍
Humanities (e.g., English, History, Foreign Languages, etc.) (4)	❍	❍	❍	❍	❍
Business (e.g., Managerial Finance, Accounting, Marketing, Management) (5)	❍	❍	❍	❍	❍
Applied Sciences (e.g., Dietetics and Nutrition, Exercise Science, Criminal Justice, etc. (6)	❍	❍	❍	❍	❍
Other (7)	❍	❍	❍	❍	❍