

# **The Effects of Expectancy and Heuristics on the Major Selection Process**

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*The current research investigates the applicability of the expectancy theory and heuristics to university business students' major selection decision. Results from a sample of 180 college of business students confirm a positive relationship between major selection and expectancy. Availability and anchoring heuristics also affected the selection process separated by major. Valuable insights are provided as to what else, other than strictly materialistic factors, affects the major selection decision and determines perceived success in the long run. Although the research findings are based on a college of business context, the findings can be applicable to various academic majors in different settings.*

*Keywords: major selection, heuristics, expectancy*

## **INTRODUCTION**

For quite some time now, academics have been trying to investigate the various factors that affect the way students select their majors. However, the predominant focus has always been the earning potential related to each major as the main motivator (Cebula & Lopes, 1982; Mauldin, Crain, & Mounce, 2000; Boudarbat & Montmarquette, 2009). An ABC news report, for example, details how big the earning's gap can become depending on the selected major (Casselman, 2014). The report illustrates the issue by citing Fed data: the difference in median earnings between a Library Science undergraduate major and a Petroleum Engineering one is substantial with the former at \$22,000 and the latter at \$110,000. However, even this author cautions against taking strictly financial data to illustrate the field of study selection process: "The link between education and earnings is notoriously fraught, with cause and effect often difficult to disentangle." Li, Malvin, and Simonson (2015) add to the concern by introducing the potential of overemphasizing the relationship between the chosen field of study and job compensation. In addition, recent anecdotal evidence of the 1.2 million new collegiate students that offers insight into their decision-making process reveals that 32% had chosen a major that poorly aligns with their interests as influenced by salary expectations (Dame, 2013). This information implies that while students do account for their financial needs, a lot more is involved in the decision-making process, including family, high-school

counselors, teachers, and friends, and the initial and future earning (Lowe & Simmons, 1997; Kumar & Kumar, 2013), and personal expectations and related traits.

The current study addresses the need by introducing a unifying theoretical model based on the expectancy theory and the related heuristics of determining these expectations. To the best of the authors' knowledge and with the notable exception of (Kumar & Kumar, 2013), who use the Theory of Reasoned Action (TRA) to investigate the effect external influencers, no study has adopted the expectancy theory-heuristics perspective in an investigation of major choice. Bridging the gap between external student influencers and internal processing models of such influencers becomes the major contribution. Only a deeper understanding of the mental models involved in the major choice decision will help academic institutions to provide better, more personalized advisement to individual students. The remainder of the study is organized as follows: first, a literature review, leading to research formulation and methodological execution is offered, next, the empirical findings and some limitations of the study are discussed. Future research directions and a conclusion complete the paper.

## **THEORETICAL FRAMEWORK AND HYPOTHESES**

“The choice of a college major can be one of the most important decisions a student can make” (Porter & Umbach, 2006, p. 429) as it not only affects the students' actual and perceived success in their future, but also plays an important role in maintaining the student's self-regulative goal pursuit and in maintaining psychological health and well-being (Uthayakumar et al., 2010). Galotti (1999) contends that students see the choice of major as reflecting core characteristics of themselves with significant implications for their futures (Jia et al., 2020). Academic inquiry around major choice among students has been vigorous, with studies on business majors being found to mirror other majors across universities as a whole (Roach, McGaughey, & Downey, 2012).

Financial rewards and job security from a specific major have been a predominant focus in extant literature and have been found to be a significant determinant of major choice (Cebula & Lopes, 1982; Coperthwaite & Knight 1995; Mauldin, Crain, & Mounce, 2000; Boudarbat & Montmarquette, 2009; Montmarquette, Cannings, and Mahseredjian 2002). Others (e.g. Adams et al., 1994; Cohen & Hanno, 1993; Malgwi et al., 2005; Strasser et al., 2002; Zhang, 2007) report interest in the field to be among the most important factors influencing major choice. Hansen and Neuman (1999) found that students' interests were more important than skill in establishing college major choice. Other Studies in a college of business setting (e.g. Kim et al., 2002; Strasser et al., 2002) support these findings, concluding that interest in the field is more important than money and career opportunities in major choice. Self-efficacy or ability has also been proposed as an important predictor (Lapan, 1996; Coperthwaite & Knight, 1995; Hansen & Neuman, 1999). Jia et al (2020) also explore this topic around beliefs and expectations toward the future that the students harbor, finding that that these affect the choices students make in their college career. Closely aligned with the expectations are career opportunities (Kirk, 1990; Pappu, 2004) and job availability (Kaynama & Smith, 1996).

Studies have also explored the impact of family, instructors, career counselors, high school teachers and friends in determining major choice (e.g. Bartol, 1976; Calkins & Welki, 2006; Farley & Staniec, 2004; Mauldin et al., 2000; Saemann & Crooker, 1999; Strasser et al., 2002). These individuals are important in the major choice decision because they provide information and guidance and may also serve as role models to be emulated. In addition, expectations from these referent groups can form the basis of positive academic and life satisfaction (Vautero et al., 2020).

Gender is another factor found to influence major choice. Studies have reported that fewer female students choose Finance as a major compared to their male counterparts (e.g. Hawash, & Stephen, 2019; Hawash, Stephen, & McCormick, 2020). Turner and Bowen (1999) contend that choice of major among men and women could be reflective of their preparation before their college career. Dawson-Threat and Huba (1996) find that men and women tend to gravitate toward majors dominated by more of their own gender, and their gender roles (Lackland, 2001). Other notable determinants of major choice among students include the image, reputation, and prestige of a major (Gabrielsen, 1992), and Family educational

and occupational backgrounds, and socioeconomic status, were also found by researchers to affect choice of major (Leppel, Williams, & Waldauer, 2001). In this study, we adopt an expectancy theory – heuristics perspective in the study of major choice.

### **Expectancy Theory**

The Expectancy Theory of Motivation (Vroom, 1964) is used to explain factors influencing individual behavior. Expectancy theory is comprised of two related models—the valence model and the force model. Geiger & Cooper (1996) contend that the valence model attempts to capture the perceived attractiveness, or valence, of an outcome by aggregating the attractiveness of all associated resultant outcomes. Thus, according to this model, “the valence of a first-level outcome is equal to the summation of the products from all associated second-level outcome valences with the perceived belief (or instrumentality) the first-level outcome will result in the second level outcome” (Geiger & Cooper, 1996:114).

$$V_j = \sum_{k=1}^n (V_k I_{jk}) \quad (1)$$

where:  $V_j$  = Valence of the first level outcome.

$V_k$  = Valence of the second level outcome.

$I_{jk}$  = Perceived instrumentality or belief that  $V_j$  will lead to  $V_k$ .

$n$  = Number of potential second level outcomes.

The force model on the other hand suggests that “the motivational force influencing a person to perform an act is equal to the sum of the products of the valences of first-level outcomes multiplied by the expectancy that the act will result in these outcomes (Geiger & Cooper, 1996, p. 115). This is more formally conceptualized as follows:

$$F_i = (E_{ij} V_j) \quad (2)$$

where:  $F_i$  = the motivational force to perform an act  $i$ .

$E_{ij}$  = the expectancy that act  $i$  will result in outcome  $j$ .

$V_j$  = the valence of outcome  $j$ .

The use of expectancy theory in studying students’ behavior and aspirations is not new. Chen and Hou (2002), for example, use the common characteristics of the valence and force models in explaining their propensity to select and adopt new groupware applications. We suggest that the eventual choice of major is a function of: (a) expectancy that they are capable of being successful in the chosen major and (b) that desirable career rewards will follow after graduating with the said major. All in all, whether depicted as a composite or unified single construct (Lawler & Suttle, 1973), the consensus is present that expectancy theory can provide a causal relationship between expectancy attitudes of students and their major selection decision.

***Hypothesis 1: Expectancy is likely to influence students in their choice of a business major.***

Next, we examine the influence of valence on major choice. While expectancy tends to be more objectively defined and based on particular success factors related to career choices, the decision-making process is not going to be complete if personal emotions are not accounted for as well. Following, the current study investigates valence as “an attribute of emotions” (Chong & Ahmed, 2017) where the positive and negative feelings of individual students toward a particular goal will define their evaluation of the expected outcomes. As much as expected earning potential may seem difficult to overcome as a decisive factor in the major selection process, for example, overlooking the personal positive or negative emotional component related to the decision is not warranted. Not surprisingly, the expectancy theory research has

always been linked with valence or positive or negative evaluation of outcomes. Gray and Wert-Gray (1999) best illustrate the relationship: “Expectancies ... are measures of outcome probabilities, while valences are evaluations of attractiveness of outcomes. p. 54”. Following the development of hypothesis 1 and the relationship between expectancy and valence depicted above, the current research suggests the following hypothesis:

***Hypothesis 2: Valence is likely to influence students in their choice of a business major.***

### **Applicable Heuristics**

There is a presumption that individuals are rational in their decision making, but because of bounded rationality, all relevant information is usually not considered and applied in reaching given outcomes in various decision-making scenarios (Knechel, 2000). Instead, people use simplified approaches – heuristics, in solving problems. Heuristics are therefore the “mental” shortcuts that individuals use to make judgments and solve problems quickly and efficiently (Canziani & Tullar, 2017; Gigerenzer, 2015; Gigerenzer & Gaissmaier, 2011). “Heuristic assertions usually represent a complex of inferences based on observation and experience; condensed over time; and filtered through logic, intuition, and prejudice” (Wilson, 1995, p. 12). This study primarily investigates two heuristics - availability and anchoring (Tversky & Kahneman, 1974, 2000) and their influence on major selection.

Availability refers to an individual’s estimation of the frequency or probability of an outcome, by the ease with which instances or associations with events can be brought to mind (Tversky & Kahneman, 1973). Students may ascribe more importance to a specific choice of major based on the information that is readily available to them about the major’s career paths from family, schools, friends and peers, part-time jobs, and the internet and media (Levine, & Aley, 2020). For example, a young adult may observe a parent’s work schedule, the parent’s interaction with coworkers, and the nature of work performed (Levine & Hoffner, 2006) and create a mental picture of the attractiveness of a major leading up to a similar career. If a student has a role model that is in a specific profession (for example a marketing executive), the said student may naturally gravitate toward a marketing major. Similarly, if the student’s relatives or guardians are constantly available to provide counsel on career and major choice, it may follow that the student may regard such readily available information as sufficiently conclusive in their choice of major. They may overlook further information seeking steps that may provide additional information in their choice of major.

***Hypothesis 3: Availability is likely to influence students in their choice of a business major.***

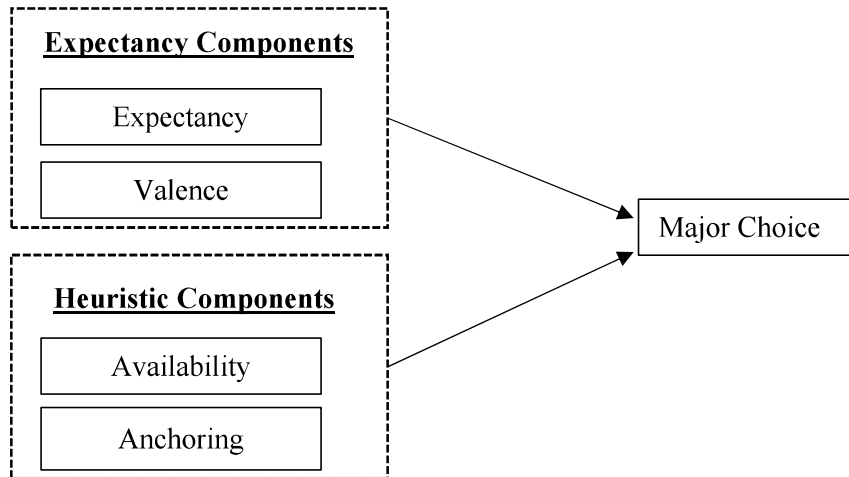
Anchoring refers to the heavy reliance on a piece of information (the anchor) that appears before decision makers make a judgment (Tversky & Kahneman, 1974). Individuals will tend to give priority to information that is consistent with an anchor (Chapman & Johnson, 1994; Strack & Mussweiler, 1997) and subsequently bias decisions toward the anchor. Indeed, Barberis and Thaler (2002) find that an anchoring heuristic has two features. First, individuals are not likely to engage in a search process for alternatives. Second, individuals are likely to distrust alternatives that conflict with pre-existing beliefs. Two significant anchors that have been explored in literature are ‘interest’ and self-efficacy (or ability for purposes of this study). Studies have found that interest and self-efficacy (Coperthwaite & Knight, 1995; Hansen & Neuman, 1999; Kaynama & Smith, 1996; Kim, Markham, & Cangelosi, 2002; Lapan, 1996). Perceived skills, broadly defined as “qualitative or quantitative” may prove to be as equally important in shaping the selection decision as the external influences and tangible expected outcomes (Pritchard, Potter, & Saccucci, 2004). And while the expected difficulty or the amount of studying related to different majors has been mentioned as a differentiating factor in the selection process before, research has not yet distinguished the very process of shaping up those expectations according to individual study habits and characteristics (Faranda, 2015). Cobb-Walgren et al (2016) warn that misperceptions regarding the degree of difficulty of different majors may result in a misalignment of expectations and reality upon graduation. Although in the context of the marketing major, these authors consider such attitudes stereotypical, exemplifying further the need to include individual characteristics in the major-selection process. Prior enrollment in a class or

classes related to a specific major (Mauldin, Crain, & Mounce, 2000) may evoke certain affinities toward a certain subject and can also serve as an anchor to enrollment in a major.

**Hypothesis 4:** *Anchoring is likely to influence students in their choice of a business major.*

Figure 1 summarizes the literature review and presents our conceptual framework.

**FIGURE 1  
RESEARCH MODEL**



## **METHOD**

This study investigates important expectancy and heuristic components that have been hypothesized to determine major choice. Survey factors are based upon Vroom’s (1964) expectancy theory and Kahneman et al.’s (1982) conceptualization heuristics in decision-making. Data was gathered with a survey of recent college of business students. Instrument pretests and protocols satisfying university IRB were conducted prior to the survey administration. We narrowed down major choice to 5 majors – i.e. Accounting, Management (including HR), Finance, Marketing and MIS. Respondents classified as ‘double majors’ and ‘others’ were dropped from consideration to avoid double-counting. After dropping majors with fewer than 10 respondents, our final sample consisted of 180 respondents. The survey instrument is presented in Appendix I.

### **Model Components**

Major choice is our dependent variable. We only consider five majors in this study because there were insufficient numbers of respondents in some majors. *Independent Variables:* It is hypothesized that expectancy and heuristics components are important predictors of major choice. Per our earlier discussion, expectancy, valence, anchoring, and availability considered to be key determinants of major choice. *Control Variables:* We control for GPA, age, gender, family obligation, career orientation and work status - whether a full-time student or working part time or full time.

In our case, majors are unordered categories into which students self-select. The Multinomial Logistic regression model (mlogit) is often used in the literature to handle analyses involving unordered categories. For example, Pinxton et al. (2014) apply the model in their investigation of major selection, and conclude that prior subject uptake in Grade 12 was the main predictor of the type of university major chosen. Starkweather and Moske (2011) note that the mlogit approach is an attractive analysis technique because it does not assume normality, linearity, or homoscedasticity. The mlogit model designates one category as

the reference category and compares the probability of choosing other categories to the probability of choosing the reference category. In its estimation, mlogit estimates beta coefficients for each individual category of the response variable, with estimates in the reference category set to zero (Lopez & Sutter, 2004). We arbitrarily chose the most frequent major (Management) as our reference category. Multinomial logit models are ideal for investigating an individual's choice,  $i$ , from a set of  $j$  alternatives. A student will choose major  $j$  if per the information they have at the time, such a major presents the highest likelihood of success both academically and after graduation.

Independence of irrelevant alternatives (IIA) is an important assumption underlying the Multinomial Logit Model. IIA assumes that error terms are independent across alternatives for an individual. Where independence of alternatives is not apparent, the Nested logit or hierarchical logit models would be more ideal. In this study, we assume that that major choices differ sufficiently enough to deem IIA a reasonable assumption.

While the beta coefficient estimates from mlogit models are not of direct interpretive value (Lopez, & Sutter, 2004), they can be transformed to relative risk ratios (RRR). RRR indicate the relative risk of being in the comparison category versus being in the base category associated with a one-unit increase in the independent variable. The relative risk ratios can vary between zero and positive infinity, meaning that an RRR value over 1 (one) indicates a higher probability of selecting a given major relative to a choice of the management major, while RRR values below 1 indicate lower probabilities of choosing the management major. RRR estimates are presented.

## RESULTS

We report our findings in Table 1. Recall that we chose the management major to be the referent category due to the fact that it had the most respondents. Consider the choice of Accounting major relative to Management. None of our expectancy and heuristic components under consideration are significant. The results may suggest that factors other than the expectancy and heuristic components under consideration affect the major selection decision. Interestingly however, one of the control variables, Age has a statistically significant coefficient that is greater than 1, (RRR=2.887;  $p<0.01$ ). This may suggest that older students have a higher likelihood of choosing Accounting relative to Management. Maybe older students are more mature and are generally more prepared for the rigor of an accounting major.

Considering the Finance major, the coefficient of valence was found to be more than 1 and statistically significant (RRR=1.416,  $p<0.05$ ). This suggests that students with higher valence scores have a higher likelihood of choosing Finance major relative to the Management major. Similarly, Anchoring was found to be statistically significant and greater than 1 (RRR=1.985;  $p<0.01$ ). This may suggest that anchoring elements such as being a high achiever, indeed may play a significant role in the choice of Finance over Management.

Considering the Marketing major, the availability heuristic was found to be more than 1 and highly significant (RRR=1.803,  $p<0.01$ ). This may suggest availability factors such as having family, friends in the marketing profession may play a significant role in the choice of Marketing over Management.

Finally, we consider the MIS major. Interestingly, Expectancy was found to be significant and was less than 1 (RRR=0.597,  $p<0.05$ ), which suggests that students scoring high on expectancy are more likely to choose the Management major as opposed to MIS. Maybe students generally believe that they are more capable of completing the management major as opposed to the MIS. Conversely, students with high valence scores seem to have a higher likelihood of choosing MIS as opposed to Management (RRR=1.399,  $p<0.05$ ).

**TABLE 1**  
**MULTINOMIAL LOGIT ESTIMATION OF MAJOR CHOICE**

Major Choice	RRR	Std. Err.	z	95% Conf. Interval	
<b>Accounting</b>					
Expectancy	0.850	0.187	-0.740	0.553	1.308
Valence	1.223	0.173	1.420	0.926	1.614
Availability	1.273	0.275	1.120	0.834	1.944
Anchoring	0.987	0.199	-0.070	0.665	1.466
Career Orientation	1.181	0.250	0.790	0.780	1.788
Working	0.507	0.300	-1.150	0.159	1.616
Family Obligation	0.704	0.391	-0.630	0.237	2.091
Age	2.887**	1.152	2.660	1.321	6.312
Gender	1.268	0.680	0.440	0.443	3.630
<b>Finance</b>					
Expectancy	1.032	0.226	0.140	0.672	1.584
Valence	1.416*	0.234	2.100	1.024	1.958
Availability	0.970	0.223	-0.130	0.618	1.523
Anchoring	1.985**	0.506	2.690	1.204	3.272
Career Orientation	1.224	0.290	0.860	0.770	1.946
Working	1.913	1.407	0.880	0.452	8.088
Family Obligation	0.721	0.401	-0.590	0.243	2.144
Age	1.645	0.819	1.000	0.620	4.364
Gender	0.256*	0.151	-2.310	0.080	0.814
<b>Marketing</b>					
Expectancy	0.733	0.159	-1.430	0.478	1.123
Valence	1.218	0.176	1.360	0.917	1.618
Availability	1.803**	0.390	2.720	1.179	2.755
Anchoring	0.831	0.168	-0.920	0.560	1.234
Career Orientation	1.184	0.256	0.780	0.775	1.808
Working	1.015	0.632	0.020	0.299	3.441
Family Obligation	0.516	0.266	-1.280	0.188	1.419
Age	0.546	0.334	-0.990	0.165	1.809
Gender	1.043	0.545	0.080	0.374	2.906
Log likelihood	-218.06				
Pseudo R <sup>2</sup>	0.1445				
Chi <sup>2</sup> (36)	73.66				

\* Significant at p<0.05; \*\* Significant at p<0.01.

**TABLE 1 CONTINUED**  
**MULTINOMIAL LOGIT ESTIMATION OF MAJOR CHOICE**

Major Choice	RRR	Std. Err.	z	95% Conf. Interval	
MIS					
Expectancy	0.597*	0.143	-2.150	0.373	0.956
Valence	1.399*	0.237	1.980	1.003	1.950
Availability	0.804	0.207	-0.850	0.485	1.333
Anchoring	0.809	0.175	-0.980	0.529	1.236
Career Orientation	1.007	0.235	0.030	0.637	1.591
Working	0.548	0.341	-0.970	0.162	1.854
Family Obligation	0.513	0.300	-1.140	0.164	1.612
Age	0.655	0.386	-0.720	0.206	2.079
Gender	0.933	0.569	-0.110	0.283	3.083
Log likelihood	-218.06				
Pseudo R <sup>2</sup>	0.1445				
Chi <sup>2</sup> (36)	73.66				

\* Significant at  $p < 0.05$ ; \*\* Significant at  $p < 0.01$ .

## DISCUSSION AND IMPLICATIONS

This research study investigates the association of expectancy, valence, and anchoring and availability heuristics with business college student major selection decision. The statistical analysis supported the notion that these components do indeed influence the selection of major. However, several factors seem to influence the selection of some majors more than others. Undoubtedly, the external influencers like money and people surrounding college students, influence the major selection decision to a substantial degree. However, omitting the personality traits and psychological models of embedded expectations and related motivational heuristics of individual students may prove unwarranted, at best. This is why the current research investigated valence as well, which is related to the emotional component of the decision-making process.

The value-added of such inclusion is further supported by the notion that psychological states of feeling good, or bad, about a career choice translates directly into job commitment and job success (Chavez & Mendez, 2008). Companies should get much more involved into shaping initial expectations of students related to their job choices since those confirming or not meeting those expectations will affect performance and bring costly turnovers in the long run. Research has shown that, among other factors, company culture is becoming one of the top criteria for students when choosing their post-graduation careers (Carroll & Hatch, 2015). These authors re-confirm the concept of match between corporate culture and personality traits, including emotional expectations and valence, when career choices are made. This evidence may help universities and their staff as well to better advise prospective students in terms of future career opportunities. In turn, the university career centers should also be able to better tailor their offerings to their various potential and existing target employers' needs.

### Limitations and Future Research Directions

Related to students-based research, some typical limitations of the study have to be acknowledged. First, a convenience sample was used based on particular classes and students being present. Although a considerable effort was made to represent all business majors, the generalizability of the results should be considered with caution. Second, the participants in the study are traditional undergraduate students from a large, southwest metropolitan university. Additional data should be collected from student populations from



more comprehensive and diverse land-granting colleges and universities. Finally, the study was narrowly focused on students' major selection decision using existing research in confirmatory fashion. An exploratory study may be warranted where other psychological trays, like personal characteristics and goal-setting behaviors can also be considered. In addition, the "financial" expectancy focus, although obvious and understandable, can be considered from behavioral point of view as well.

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**APPENDIX**

**APPENDIX 1  
QUESTIONNAIRE ITEMS**

**1. Expectancy**

Rate on a scale of 1 to 7, with 1 being strongly disagree and 7 being strongly agree.

	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
1) Working hard will lead to good performance in my major?	1	2	3	4	5	6	7
2) Good performance in my major gives me a feeling of accomplishment?	1	2	3	4	5	6	7
3) Working hard in my major gives me a sense of security?	1	2	3	4	5	6	7
4) Working hard in my major leads to greater opportunities?	1	2	3	4	5	6	7
5) Do you believe that good performance in your major will yield fewer chances to make new friends?	1	2	3	4	5	6	7
6) Do you think that working hard in your major will yield respect from your professors or other students?	1	2	3	4	5	6	7
7) Has good performance in your major left you feeling tired or worn out?	1	2	3	4	5	6	7
8) Does good performance in your major entail giving help to others?	1	2	3	4	5	6	7
9) Does personal growth and development arise from hard work in your major?	1	2	3	4	5	6	7
10) Does hard work in your major lead to greater opportunities?	1	2	3	4	5	6	7

*Note:* Responses to question 10 were compared to those of question 4 to see whether the respondent was paying attention.

**2. Valence**

Rate on a scale of 1 to 7, with 1 being extremely undesirable and 7 being extremely desirable.

	Extremely undesirable		Neutral			Extremely desirable	
	1	2	3	4	5	6	7
1) Working hard in my major is	1	2	3	4	5	6	7
2) Feeling of accomplishment that goes along with good performance in my major is	1	2	3	4	5	6	7
3) Is a sense of (financial, other) security derived from hard work	1	2	3	4	5	6	7
4) Is a high-paying career	1	2	3	4	5	6	7
5) Is making new friends at school or in your major	1	2	3	4	5	6	7
6) Is respect from your professors or other students	1	2	3	4	5	6	7
7) How important is to you to get enough sleep and some downtime?	1	2	3	4	5	6	7
8) How important is helping others to you?	1	2	3	4	5	6	7
9) Is personal growth and development an important part of your life?	1	2	3	4	5	6	7
10) Are a vast array of opportunities upon graduation/completion of classes	1	2	3	4	5	6	7

### 3. Availability

Rate whether you agree or disagree with the following.

	Yes	No
1) Do you have a role model for your life decisions?		
2) Did you follow in a role model's footsteps when selecting your major?		
3) Are you the first generation in your family to attend college?		
4) Did you consult with your parents before selecting a major?		
5) Did another close relative influence your choice of major?		
6) Did you have a mentor, other than your parents, who assisted with your major selection?		
7) Did your friends' majors influence your own major decision?		
8) Did friends or family dissuade you from choosing a major?		

### 4. Anchoring

Rate on a scale of 1 to 7, with 1 being strongly disagree and 7 strongly agree.

	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5	6	7
1) I worked hard in high school in order to get into college.	1	2	3	4	5	6	7
2) I developed good study habits in high school.	1	2	3	4	5	6	7
3) My parents always encouraged me to attend college.	1	2	3	4	5	6	7
4) I have remained in the same major since the beginning of college	1	2	3	4	5	6	7
5) Is making new friends at school or in your major:	1	2	3	4	5	6	7