

Sociological Factors Determining Students' Undergraduate Majors

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Abstract

This research project examines the sociological factors that contribute to how Boston College undergraduate students choose their majors. Based on previous research, parental influence has typically been a major factor when students choose their majors. Using rational choice theory. I expand on previous research by examining how parental influence and other sociological factors, such as perceptions of the job market and high school education socialization, impact the selection of college majors. In order to conduct this study, I interviewed twenty three Boston College undergraduate students (freshman, sophomores, juniors, seniors). All participants were from four Boston College undergraduate schools: Morrissey College of Arts & Sciences, Carroll School of Management, Lynch School of Education and Human Development, and Connell School of Nursing. Results show that parental influence is the primary factor in the selection of majors by students. However, within parental influence, the influence that parents have is not so much about whether students are enjoying their subject and finding passion, but the influence of the job market has been still a huge factor in the way students feel about their education. As we live in a more volatile economy and live in a competitive world where individuals strive to be the best, this study provides important insight into how college students choose their majors and how external factors outside of the college environment affect students' decisions regarding careers.

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Introduction

In 2023, Boston College (BC) released its annual report that provides statistical information on the most popular majors among BC undergraduates. For the first time in fifteen years, finance was the most popular major, with 1,360 students enrolled in it. The second most popular major was economics, with 1,260 students. When BC's Vice Provost for Undergraduate Academic Affairs Akua Sarr was asked about the surge of interest in finance, she replied how students "consider majors that most likely lead to a job" (Boston College Magazine, 2023). This response demonstrates how education is not just about learning, but it is about students positioning themselves for the future and preparing for the professional occupation that they will inhabit one day.

College education is considered a milestone for many students in America and worldwide because it is the time period where students transition to adulthood, and it requires them to be both responsible and think about their future. Moreover, the college transition also involves students making their own life decisions without their parents' input. Choosing a college major is important, as it allows students to specialize in a specific field and use the skills that they learn in the classroom to apply them to real life applications in their respective professions. Although receiving a college degree is a huge step toward getting a job or receiving further education in graduate school, there is also the stress that often comes with selecting a major. Some students entering college may not know what their passions are and can struggle to know what subjects they like and dislike. Moreover, they also begin to find out more about the subjects in which they excel and those they may find difficult. There are also cases where students are introduced to new scholarly subjects as well. However, the process of choosing a major is not so simple for many college students. Some students mention that they feel pressured in choosing between a

major that they excel in or a major that they know can lead to a high paying job (Monaghan et al., 2017). Meanwhile, other students have mentioned the pressure they felt from their parents. They share how their parents force them to choose majors that lead to high paying jobs instead of choosing majors that they are interested in (Porter et al., 2006).

In 2014, the *New York Times* released an article that discussed how former college students regretted choosing their major for various reasons. Some students regretted choosing a major in the humanities because they realized that being a "business major is where the money is" (*New York Times, 2014*). Moreover, some students have felt pressured by their parents during college to choose their major based on their parents' preference. Even more alarmingly, in 2022, *The Washington Post* reported that "nearly 2 in 5 American college graduates have regretted choosing their majors" (*Washington Post, 2022*). According to the article, approximately 37% of students regret choosing their major, citing the volatile job economy, the need for high salaries, and the increasing need to know technical subjects such as STEM. When asked who were the biggest influencers in choosing their majors in college, around 74% of the participants noted that their parents had the biggest influence on them, and 22% noted that their passion for their major grew from high school interest. In addition to the job market, parental involvement and high school education experience has some effect on how college students choose their majors.

As the data from the New York Times, Washington Post, and various academic studies suggests, students are rationalizing their decisions through the different sociological factors (economic, family, self-interest, students' education history) that they encounter. Therefore, this study examines how Boston College students determine their school major through rational choice theory and the sociological factors that come into account. I examine how students come to understand how their majors are chosen and the process behind their decisions of choosing

their majors. In addition, this research could also help examine how BC students select their majors and how universities can assist their students in choosing their majors.

Theoretical Framework

Rational Choice Theory:

The central core of rational choice theory is that individuals are in control of their decision and make their decisions based on cost and benefits. Typically, these decisions are eventually made by maximizing an individual's self-interest. This theory believes that individuals will only perform the action if the benefit of the action is greater than the cost. Individuals will no longer pursue their goals once the cost outweighs the benefit. However, every individual has their own rationality when they make their decisions. What may be irrational to one person can make sense to another person based on their own individual desire. This is because each individual has their own preferences.

First, rational choice is commonly applied to when individuals are focused on choosing between success and failure. Tverky and Kahneman (1986) examine rational choice theory in the context of when individuals are debating between success and failure. The authors explain that individuals think about cost and benefits especially when they are fearful of reaching their goals and achieving success. If they feel like they will not achieve success despite the work that they put into a goal, they will most likely not pursue their goal. This is because the individual is aware that if they keep pursuing a path where they know there will be failure, they are also wasting their time. Instead of wasting their time, they would prefer to work or pursue things that they can find success in. Furthermore, Tverky and Kahneman also argue that competition is another factor

that helps individuals optimize their decisions. Competition can motivate individuals to pursue their goals even further and use the comparison to outdo their competition (Tversky and Kahneman, 1998). Consequently, when individuals make their own choices, they think about how they can reach their goals and compare their goals to other individuals' goals.

Rational choice theory has also been used to rationalize job market decisions. Based on Zafirovski's research, he found that some college students choose their options based on salary, working hours, and the geographical location of the job (Zafirovski, 2014). This suggests that students are not just solely thinking about salaries when applying for jobs, but they are also considering how the job will be able to provide them other comforts in life such as optimal working hours and ideal geographical locations. All of these factors are related to rational choice theory because individuals are thinking about the costs and benefits that come with their jobs.

Students also utilize core aspects of rational choice theory when navigating their college education. Beekhoven (2002) explains in his article that class differences in educational attainment exist and could have a possible effect on whether a student chooses to pursue or drop a course. He found in his study that students who come from wealthy backgrounds and have access to private tutors are more likely to not drop out of a difficult course because they have the resources that enable them to succeed (Beekhoven, 2002). Wealthy students do not need to worry about financial costs such as buying a textbook or paying their private tutors because their parents can cover it. By having access to such materials, the benefits of pursuing the course outweighs that of dropping out or not taking it. In contrast, students from working class backgrounds may be more likely to drop a course, as they may not have the outside resources that they need in order to help them succeed in a course or improve their academic performance (Beekhoven, 2002). Beekhoven's research demonstrates that each individual does not have the

same resources and options when making their decisions. Furthermore, it shows that socioeconomic factors could play a role in how students can think about their benefits and costs. His research demonstrates that some students from privileged backgrounds have more options to think about when deciding the costs and benefits.

Other research has shown that students rationalize their major choice based on their parental educational trajectory. Hatcher (1998), argues children's education choice and usage of rational choice theory can sometimes be influenced by how long their parents have been educated (Hatcher, 1998). The author found that students would make their education decision based on the education that their parents received. Around 75% of the participants in Hatcher's study have responded that parental education was an important factor to them (Hatcher, 1998, pg. 11). If a parent did not have a college education, the children may not have a positive impression of college because they may believe that education is not valued in their family. This suggests that parents' collegiate experiences have a significant influence on their children's perception of education as well as their risks/benefits assessment of their educational choices. Furthermore, students also place value on their perceptions of the non-financial aspects of parents' college majors. For example, research shows that if a student heard from their own parents that they did not enjoy their college major, some students begin to have a negative perception towards their parent's major (Bosetti, 2004). Additionally, if they also hear that their parents did not have passion in their current job that is correlated with their major, they will use that to see the cost/benefits of choosing their parents' major.

Rational choice theory does not always imply that individuals are solely interested in their goals and choosing decisions based on their own rationale. In some cases, individuals could be influenced by other outside factors such as the culture and societal pressure that is inflicted

upon them. Chong (1996) believes that humans choose within the limits of their knowledge and make rapid decisions when they are under pressure. Chong lists the environments that allow individuals to make quick decisions can be found in places such as the workforce, sports, and higher education. Chong claims that culture, norms, and institutions are what improve the way humans think and what people begin to value and not value. Chong implies that this rational choice theory is used by students in this context because students are influenced by each other. They take classes because they see that their friends or classmates are taking courses that may be popular with others (Chong, 1996). One of the reasons is that they read about the positive reviews that a professor has or they hear that it is easy to receive a good grade. As a result, the costs and benefits are not so much of their own thinking but are influenced by others. In other words, students are using other's experiences as a way to make their decision rather than their own personal experience. The more they interact with other students, the more others may influence their decisions regarding majors or coursework.

Limitations of rational choice theory can include an overemphasis on individual action. This is because individuals may have limited information available to them and make choices based on the information that they have (Blau, 1998). As a result, they may not have enough time to think about the potential costs and benefits thoroughly. However, for this research line of inquiry, rational choice theory is appropriate because it explains how participants in this study will come from a variety of different backgrounds and grew up in different areas of the world. Furthermore, the strength of rational choice theory is that it explains individual behavior. Becker (1976) argued in his work that the theory is a "unified framework for understanding all human behavior" (Becker, 1976, pg. 14). The theory gives insight to what is behind human behavior and their decision making. Furthermore, the theory can also explain social group behaviors and how

like-minded individuals may make certain decisions within a group. People who have similar values are more likely to behave similarly because they all have a common interest. In the context of this research, students from various different backgrounds such as their college grade year could play a factor into how they behave. A college freshman student will most likely think differently about their major and their future compared to a college senior who is about to graduate.

Overall, using rational choice theory, I hypothesize that parental involvement, unequal labor markets, and high school curriculum will be important factors in determining college majors. I argue that parental involvement is the most important sociological factor in determining the major because of the care that parents have for their children and their desire for them to succeed once they graduate from college. These reasons are based on previous literature that will be outlined in detail within the next section.

Literature Review

Parental Involvement:

Previous research on parental involvement focused on activities that parents expose children to prior to college. For example, Ma (2009) showed that parents sending children to discipline-specific after-school learning programs influenced their children's educational trajectories (Ma, 2009). Through interviews with college students, Ma found that a large percentage (70%) of students indicated that attending after school programs in elementary school influenced their higher education (Ma, 2009). Moreover, 95% of the students who went to STEM-related after-school programs ended up being STEM majors in college, and 93% of those that went to learn the arts and sciences became humanities majors (Ma, 2009). This data

underscores the influence that parents have on their children; parents can guide children in different directions that can be discipline specific.

In addition, parents have an influence over their children via their perceptions of the job market. For some parents, the major that their child has is an important factor in what job offers they may receive (Kocak, 2021). College majors, at times, can be a predicament to employers. An investment bank may be looking to hire students who majored in finance instead of those who may have majored in history. Similarly, a research center may be looking for students who have history research experience as opposed to skills indicative of a business major. Since many professions have ideal qualifications that reflect specific academic backgrounds, parents may pressure their children into deciding a major that bolsters their child's chances of landing a desired job. Kocak found that around 65% of his participants reported to have chosen what their parents wanted instead of their own desire because they felt the pressure of needing to choose a major that is able to provide them a solid foundation that consists of: income, livelihood, and wellbeing (Kocak, 2021). Of the students that felt pressure, 71% of them chose majors that correlated with well-paying jobs such as economics, finance, and computer science because the jobs produce students who receive high paying employment. Although the participants' parents had a significant impact, the students ultimately were the ones that chose their majors. The parents still respected their children's decision of ultimately choosing their major, even if they disagreed with it (Kocak, 2021).

Interestingly, there is also a correlation with socioeconomic status when parents have an influence on the major. College students' selection of academic majors and subsequent job selections are influenced by a variety of factors. Previous research illustrates the interplay between socioeconomic status and parental influence and students' academic and career

decisions. For example, research by Karen Leppel shows that students who came from a wealthier background were more likely to major in the humanities, whereas students from poorer backgrounds were more likely to major in business (Leppel, 2001). Some of the students from wealthier backgrounds responded that they felt no urge to work at a 9-5 job because they had financial backing from their parents (Leppel, 2001). As a result of this, they were unafraid of choosing majors that did not lead to well-paying jobs and were more focused on choosing a major that they enjoyed and excelled at. Meanwhile, for students who came from poor backgrounds, they responded that they had no choice but to pursue majors that led them to having stable jobs and paying off college debt and loans. This demonstrates the potential experiences that college students can have and how family's socioeconomic status can potentially influence the way students feel about education and how students see education as a means to gain social mobility.

Job Market:

Other than parental involvement, some authors have found how the job market can affect a student's decision in the way they choose their majors regardless of the way their parents think about their major.

Catherine Crumb, who is a professor of Education at the University of Austin Texas, introduces the concept of how job stability is an important decision for college graduates and how it can affect their decisions to choose and even in some cases change their majors (Crumb, 2010). She found that some of her participants stated in their personal interviews that their majors were heavily influenced by the relationship between the job market pay and major (Crumb, 2010,). Some of the participants stated that they actively researched the success of the

alumni that came out of their institution and what their majors were. For the remaining students in her interviews, they stated that they either did not care for the job market and the others accepted the potential correlation between major and job market pay. Baker (2020) also reinforced the concept of students changing majors or being unable to choose the major that they want because they knew in advance of how the job market would look if they had chosen a major that did not have high salary wages. He used former history majors as a sample size for this research and his study showed that 79% of his participants had switched from being a history major to being a business or engineering major. The reason is because they cited high salary and seeking stability as reasons for them changing. Furthermore, Baker noted that history majors "earn one quarter to one third less than comparable graduates" who may have studied engineering, economics, computer science, and health sciences (Baker, 2020, pg. 122). The remaining participants changed to other social science majors because they lacked the passion for learning history but did not mind their job post college. Baker's data suggests that the job market salary is a huge factor even when students have already declared their major.

Other studies have shown how the relationship between college majors and occupations of college graduates change over time. Josipa Roska and Tania Levey, who are professors at the University of Virginia and York College, CUNY, used previous data that was published in 1979 by National Longitudinal Survey of Youth. The sample that the authors used for their experiment was for individuals who have obtained their undergraduate prior to the experiment. For their results, the authors found that there was a relationship between popular majors in college and the most well-paid jobs in the industry. The most popular majors, such as engineering, were found to have students who were among the highest paid post college graduates. They found that some of their participants had changed their job occupation that differed from their college major (Roska

and Levey, 2010). They changed their occupation from humanities such as being a historian/academic to STEM related occupations. This demonstrates how job markets have a major effect on the way students think about jobs after college, and how college is not just a place to learn but a stepping stone for people to pursue their professional careers

Furthermore, the difference in wage gap between majors could be affected in the way students view their majors and majors in general. Kinsler (2015) notes that "college graduates majoring in science or business earn significantly higher wages than other college graduates, often 25% more" (Kinsler, 2015, pg. 933). As a result of this, some students, according to Kinsler, began to switch their majors by their sophomore or junior years because they realize that their business major peers are making more money than them during their summer internships. For some students, they not only think about their immediate future after college, but they also think about how their majors and jobs can affect how they raise their family. In Johnson's (2005) research, she discusses how some of the college students she interviewed have mentioned about the stress that they had in choosing a major that can potentially affect the amount of job opportunities they have immediately after graduation and in the long term when they are beginning to raise their family. Majority of the students were overwhelmingly from a humanities background such as history, English, and political science (Johnson, 2005). The humanities students have cited that they enjoy the learning aspect of their major, but were regretting if their major was going to give them a long term prospective job that will pay them well. Furthermore, only 10% of those students had found employment after college and the remaining humanities students were still looking for job opportunities (Johnson, 2005).

High School Education Curriculum:

Another important life stage for students when they choose their majors is their high school curriculum. Certain students begin to derive their passion for learning especially in high school as they take advanced courses such as Advanced Placements (APs) or honors related courses. Venezia (2013) discusses the importance that high school curriculum and instructors have on students before they go to college. Her research study shows that some students were able to pursue their majors once they were in freshman year in college because they felt that they had a personal connection with their high school instructor that enabled them to further pursue the subject in college. By personal connections, the students meant how their instructors were personally reaching out to them by encouraging them to come to their office hours for one on one material reviewing sessions. In a public high school, Grasha (2002) found that his respondents have stated that they enjoyed going to their teacher's office hours because they feel like they are being cared for (Grasha, 2002). Grasha defines being cared for as when students feel like they are receiving the support from their teachers. This could mean that the teacher is willing to explain concepts to students even beyond the standard class time such as office hours. In addition, it also involves the teacher showing that they care about students' performances in class such as reaching out to them if they see that their recent exam scores were low or congratulating them when they perform well on assignments. Because they feel the support from their teachers, they begin to feel comfortable in reaching out to them and coming to their office hours. This demonstrates the importance that teachers have on students and how teachers can affect the way students may feel about their performance. Ehrenberg (2012) emphasizes the teacher's role in students when he discusses how some students in his study have demonstrated how their choice of major in college was related to their high school academic experience with their teachers.

Various students discussed how they would be more interested in learning certain subjects based on how well their teachers were teaching the subject, the help that they received from them, and if they enjoyed studying the course (Ehrenberg, 2012). Ehrenberg's article is important for this study in that it lays out the potential reasons why certain college students at Boston College may share why their high school learning experience was very important in their undergraduate major decision.

Importantly, there are some students who may not have interest in the academic courses that are provided in their high school. Within the high school education curriculum, there were also students who began to form passion in an area of study through either high school club activities or doing a side hobby after school such as having their own mini- business (Cardon, 2009). A common side-business that students did when they were young was being a salesman. For example, they would go to their neighborhood and convince their neighbors to buy their materials. For some students that have engaged in these types of activities, it eventually "inspired" them to take courses that are related to business during their college years. For some, it gives them motivation to apply to business school either for undergrad or for their graduate school (von der Heidt, 2014). Importantly, Norwood (2006) found that people who eventually major in business related fields were associated with finding their passion in running or doing their own business and found it outside of the high school curriculum/environment. This is because high schools generally do not offer management or finance in their core curriculum. As a result, some business school majors have voiced that their interest in business typically starts from doing a side business rather than learning the theoretical concepts of it during class (Asoni, 2016). It is when they finally get to college and enroll in business courses that they begin to have interests in the theoretical aspects of finance that enable them to eventually work in the finance/business industry.

Methods

Data:

I determined that a qualitative method, namely semi-structured interviews, would be the most suitable for this study in order to hear and listen to participants instead of doing a quantitative study through surveys. As a result of this, it allows for themes to emerge based on participants' interviews. Participants in the study consisted of students from four of Boston College's four schools: Morrissey College of Arts and Sciences (MCAS), Carroll School of Management (CSOM), Lynch School of Education (Lynch), and Connell School of Nursing (CSON). The exclusion criteria in this method was students under the age of eighteen and students from the Engineering School because the school was created last year in 2021. So far, there have only been two freshman graduating classes that have been involved in this program and it is still too early to see how much the engineering school will grow in the foreseeable future.

The recruitment process of this study was established through sending out emails through listservs to various clubs and organizations on campus. Additionally, fliers were posted in various locations across campus, ranging from the library to the cafeteria to classrooms to the residence hallways. In this study, I utilized snowball sampling in order to attain additional participants. Between January and early March, 2023, I conducted a total of twenty-three interviews via Zoom. There were fourteen students from MCAS, three students from CSOM,

three students from CSON, and three students from Lynch. Additionally, I interviewed fourteen male participants and nine female participants. All the interviews were private and confidential with the participants' permission. In addition, I asked participants to read and sign consent forms and the overview of the research. The actual interviews lasted around an average of sixteen minutes each, with the longest being thirty three minutes and the shortest being ten minutes.

Once the interviews were completed, I uploaded them to a secured server and transcribed them via Otter.ai. Finally, I coded and then de-identified responses to protect participants' identities.

All of the names that have been used in this study are all pseudonyms.

Table 1. Participants' Demographic Characteristics

Name	Gender	Classification	Major	Boston College Undergrad School
Karver	Male	Junior	English	MCAS
Nick	Male	Junior	Political Science	MCAS
Helen	Female	Junior	Philosophy	MCAS
David	Male	Sophomore	Neuroscience	MCAS
Janelle	Female	Freshman	Neuroscience	MCAS
Mark	Male	Junior	Marketing and Finance	CSOM
Joon	Male	Sophomore	Geological Sciences	MCAS
Erik	Male	Junior	Economics	MCAS
Trae	Male	Freshman	History and Economics	MCAS
Al	Male	Junior	Economics	MCAS
Sammy	Male	Freshman	Biology	MCAS
Victor	Male	Freshman	Finance	CSOM

Damion	Male	Senior	Finance	CSOM
Megan	Female	Sophomore	Secondary Education	Lynch
Alexander	Male	Senior	Neuroscience	MCAS
Andy	Male	Senior	Economics and Math	MCAS
Terrance	Male	Senior	Neuroscience and Economics	MCAS
Regina	Female	Junior	History	MCAS
Olive	Female	Junior	Nursing	CSON
Issac	Male	Sophomore	Secondary Education	Lynch
Elisa	Female	Freshman	Secondary education + Math	Lynch
Roger	Male	Sophomore	Nursing	CSON
Mia	Female	Senior	Nursing	CSON

Measures:

The interviews were centered on each individual's journey path towards selecting their major. The participants were asked about their childhood upbringing along with the education and occupation of their parents. They were also asked if there were any individuals or classes they took that inspired them to select their current area of study. Finally, they were all asked whether parental influence, job market, or high school education/interest inspired them to choose their college major. For this study, I used a semi-structured interview where I asked them the sets of questions that I had previously prepared. Afterwards, I also asked any follow-up questions

based on the response that they had given. Utilizing a semi-structured interview allowed me to be flexible with my participants and ask more specific questions for each participant.

Analytical Strategy:

Since I utilized qualitative data and semi-structured interviews in this research, I created a codebook in order to identify similar and divergent key quotes or phrases provided by the twenty participants. In particular, I paid attention to keywords used by the participants in order to find relevant themes across all interviews.

Results

Based on the interviews, three key themes were identified: influence from high school education/environment, parental involvement, and the prospects of looking for a job in a volatile economy.

The overall observations that I had was that of the twenty three students that participated, twelve students have cited that parental involvement was the biggest factor in choosing their major, eight students choose the job market, and the remaining four students chose their high school education as the largest influence. The results reinforced my idea that parental involvement was the biggest factor in students choosing their major, suggesting that parents have a big impact on the direction of the students' major decision. When looking at the different class years, the motivations of the freshmen and seniors were different in that more seniors were focused on the job market and their professional future careers. Meanwhile, the freshman participants discussed the excitement they had in taking a variety of different courses and were more interested in finding subjects that they enjoyed taking. Even for freshmen who had an idea

of choosing their major or had already declared their major, they did not cite the job market as reasons why they chose their major, but shared that they had innate passion about their subject and took courses because they were curious about the subject. Meanwhile the juniors and seniors had the most similar experience as both grades are in the phase where they are trying to either receive internships or job offers. Thus, for them, their major selection was more focused on getting a good job placement rather than having a pure passion for the subject.

High School Education/environment:

The importance of impactful high school curriculum and teachers in students' selection of majors is one theme found across the data.

High School Curriculum:

Some participants have mentioned the importance of their high school curriculum and how their school's courses helped them gain interest in the current major of their choice at Boston College. Participants cited that their respective high schools provided them a strong educational foundation, but also offered a variety of courses for them to take and gain interest in. For these students, high school was an important part of their education because it enabled them to take courses from a variety of different choices: English, math, biology, history, statistics, and computer science. Furthermore, the courses they took and liked allowed some of them to pursue high school internships during the summer that corresponded with the school subjects that they enjoyed. Moreover, it enabled them to join their school clubs. Erik, a junior economics major from MCAS, cited:

"My exposure to taking an AP Economics class enabled me to join my economics club in high school. I am really glad that my school was able to afford AP Economics for us because I

was able to do a one month economic research near my home during the summer of my post junior year of high school.".

However, for some participants, they cited some of their high schools were different from others in the sense that their school either focused more on STEM than the humanities or vice versa. One participant, Andy, cited that his high school was primarily a STEM oriented school, which enabled him to foster an early interest in math. He talks about his high school experience:

"For the second reason, especially going to McCarthy High School, it's an unofficial STEM focus school. Just having that STEM focus also gave me another influence for me to study something STEM oriented. Also a majority of students from McCarthy High School are now majoring in STEM, specifically computer science. So, it really made sense to stay on that STEM path"

Andy's response demonstrates how the high school education curriculum is an important factor to consider because his exposure to STEM was not a result of him attending math camps, but the courses that his school wanted him and his classmates to focus on. For Andy, there was a heavy emphasis on taking STEM related courses in their curriculum.

Another participant, Karver, who is an English major, told a similar story where his school not only provided a great education, but was opposite of Adam's in that his high school was more humanities focused. Luke said:

"My interest in English began because we had a strong humanities program at our high school. The grading was hard where it was hard to earn an A. But the school did a good job of making us read really advanced books that made me really enjoy the process of annotating and analyzing passages. So, coming to BC, I knew that the humanities was strong and my high school background made it easier for me to choose English."

Both Andy and Karver's experiences show another aspect of the high school education curriculum in that what subjects the school prioritizes can influence students to favor one field of study over others. Moreover, the high school educational system in general can serve as a stepping stone for students to gain an early exposure and interest in their potential majors in college.

Teachers:

Another sub-theme that was found in this study was the influence that teachers had and the positive impact in the way they served as role models for some participants. The majority of the participants in the study cited how their high school teachers have had a positive influence on them and enabled them to have at least some sort of interest as they enter college.

For some students, their teachers inspired them to not only pursue the subject that they taught, but also inspired them to become teachers themselves. One student, Megan, who is a sophomore student at Lynch, recalled her experience:

"I think the first time I really wanted to be an English teacher was when I was in ninth grade. I had this English teacher who took the time to talk to me outside of class. She was able to give me one on one writing lessons outside of class time and gave me literature books that can enhance my English writing skills. Through her, I realized that I wanted to be like her. I want to be that kind of teacher for my students after college."

Another student, Isaac, who is a Lynch Education major, noted:

"I think that I have had a lot of really good solid math teachers over the years that have really helped cultivate my passion for math. And I definitely recognize their role in that. I looked at them as inspirations, and drew inferences from my own lesson plans."

Both Megan and Isaac's experiences demonstrate the importance that teacher influence has on students. Furthermore, it conveys how teacher and student interaction can contribute to students having an initial interest in their teacher's teaching subject and potentially, their occupation.

Parental/Family Involvement:

The discussion of parent/family involvement centers around two main key sub-themes. The first theme is job market influence and pressure that parents give to their children. The second is how natural conversations with parents in a day to day life can lead some students to major in their studies.

Parental Influence in Job Market:

Some individuals pointed out that they had to choose their major or give up one through discussions with their parents about job stability. Some of the participants understood that their parents cared for them because they wanted them to succeed economically, but they felt the disappointment of needing to drop a major they were passionate about. One student, David, a neuroscience major, echoed this sentiment when he stated:

"Yes, definitely, I feel a lot of pressure in terms of the job market from my parents. So yeah, that would be my, like, honest answer. Yeah. If I had my way, I'd probably study history"

David was disappointed that he could no longer pursue history as a major because he knew that his parents, who came from a STEM oriented background, would not approve of him majoring in the humanities. When asked if his parents did not come from a STEM background, he replied:

"They still probably would have wanted me to pursue something that could give me a good job. Neuroscience would have still been the choice because I could either be a doctor or a researcher. Both jobs you get paid pretty well."

David's response shows how some parents place a larger emphasis on wanting their child to have a stable job after college rather than choosing a major that their child has passion in.

Furthermore, other participants, such as Janelle, who is a freshman biology major, have commented how they chose what their parents wanted because they also wanted a stable career. Janelle commented:

"I chose biology, specifically the pre-med track, because I know that being a doctor gives me stability. I may not be extremely wealthy, but I can be stable enough to support my family. If there was a major I wanted to choose, it would be somewhere in the arts, but my parents were not supportive of that."

Janelle's response conveys how some students are forced to agree with their parents on why certain subjects may not be well highly regarded because of the potential concern of job stability. Janelle's experience also demonstrates how she has acquiesced to her parent's reasoning even though she had a passion and interest in a different academic sphere and not biology.

Familial Influence through Conversations:

An emerging sub-theme in the study is the influence of parents' conversations regarding academics. This influence from parents is less pressure for the students and more conversation-based discussion that they had with their parents naturally in a day to day life. Some students decided on their major based on conversations that they had with their parents or their siblings that inspired them to choose their major because they enjoyed talking about it with their parents or family members. One participant, Regina, who is a junior history major,

explained how her conversations with her parents about growing up in China's Cultural Revolution inspired her to learn about Chinese history and East Asian history. Regina noted:

"I heard my parents talk about it. And then we briefly touched it in class. And like, I think it's just like, pure curiosity of like, oh, like, what is this? Because this is tied to my parents homeland (China), like this is like where I'm from. So, I wanted to study more when I did a research paper about the Cultural Revolution in high school. I did it out of curiosity. It is more interesting because my parents lived through that experience when they were growing up in China. I think when I was younger, I never really understood, and now I want to know."

Regina's experience in talking with her parents about their own personal life inspired her to pursue history as her major and also pursue East Asian Studies as a minor. It was through her discussion with their parents that enabled her to combine her parents' background and her interest in history to further pursue history. Another participant, Trae, who is a freshman that is a history and economics (ECON) major, also had a similar experience with Regina in that one of his family members, his uncle, fostered his interest in history by sharing Korean history with him at a young age. He recalls:

"But I would say the person who sort of sparked my interest in history was definitely my uncle. Because he, when I was younger, used to tell me about how Korea was treated during the Japanese occupation and how he grew up in the 80s. I guess that planted the seed in me to care more about history."

Both Regina and Traes' experiences demonstrate the importance that parents or family members can have because they can influence the way young students think about certain subjects. The interesting note about Regina's and Trae's experience is that they are both history majors, and they were the only participants in the study where they have shared how their

parent's storytelling conversations have inspired them to choose a history major. Although there may be no clear explanation on the relationship between history majors and parents sharing historical events with their children, history can be an easier way for parents to connect with their children. This is because history can also be used as a form of storytelling, unlike subjects such as math, finance, and economics.

Job Market:

Discussions involving the job market were important factors in participants' selection of majors. Specifically, students expressed the desire to have both job stability and the rationality of determining that major can affect their job market.

Job Stability:

Regardless of if parents forced them to find a stable job, some students were already concerned about the job market itself and chose their major based on how much their major can generate money. One participant, Damion, who is a finance major at CSOM, did not want to miss the experience of being able to study finance at a top undergraduate program and wanted to equip himself with skills that can help him in the job market. He notes:

"But I didn't want to really miss out on anything in terms of learning new business skills. So, when I looked at job applications, I saw that there were a lot of financial skills needed. As a marketing major initially, I thought I should obtain a finance degree. CSOM has a top ten undergraduate business program. Where else can I learn these skills? I wanted to make money, too. So, being at a school with a top 10 finance program and being in a well-paid major industry was a major decision for me to choose here."

Damion's response demonstrates academic rankings and prestige can affect how students feel about certain academic disciplines. Furthermore, Damion also chose finance because he saw that some jobs required knowing financial skills such as "Excel, PowerPoint, and financial modeling." This demonstrates how certain students also check to see if they have the necessary required skills for certain jobs and will take courses that can help them obtain those skills and be a qualified candidate for employers. Even though Damion eventually wants to have his own coffee shop, he intends to be in finance for the "foreseeable future" because he wants to earn a stable career first and finance is the quickest route to make money at a young age.

For other students such as Vector, he knew from the beginning that Finance was the only option for him. For Vector, he replied to my questions:

"Finance is the most stable career path in my own opinion. If you look at the data, finance majors get extremely paid well. It is a competitive industry to enter but at least I know I will get paid well."

Interestingly, both Damion and Vector's responses provide evidence of finance being a profitable path for students after college. Furthermore, people want to gain financial skills in order to be well-equipped for the job industry. They were not the only ones that have reported these types of responses. A potential reason why the responses may be similar is because of the culture of CSOM and an undergraduate business school. Many of the students that enroll in CSOM have some business background and have career aspirations revolving around money and are taking courses that involve the day to day of what they will face in the finance industry.

Rationality of Major Affecting Job:

Some students had innate interest in other subjects such as history or English, but could not pursue them because they were thinking rationally of how they need to find a job over

studying a passion that may lead to uncertainty. This decision-making process was completely innate because the students were not influenced by their parents or peers directly. Instead, they just followed their natural thinking process. One participant, Mark, decided to choose pursuing a business major over film studies because he knew that he would have to work part-time in other areas in order to make up for the lack of compensation he will have if he enters the film industry at a young age. According to Mark:

"Like for film school, most graduates for like, two years at a college were like, working retail and freelancing. And I'm like, alright, well, I already freelance now. So if I really want to do film, why not just go and freelance when I'm at school and in with a business major. And then I have like a, I guess a, like a, a backup plan"

For Mark, getting a CSOM degree was also providing him a backup plan in case he ever wanted to pursue the film industry because he knew if he did not succeed, he could at least have a CSOM degree that would enable him to stay competitive in business oriented job applications and interviews. This proved beneficial when he was able to secure a consulting internship over the summer. He plans to use the money that he earns from his internships to help pay his camera and film equipment expenses. This is so that he would not need to rely on his parents for buying his equipment, and he could self-rely on his own wealth.

Meanwhile, Al shared how he wanted to pursue an English major, but knew that economics is a more prosperous major in terms of wealth than English is.

"I was just like, I think I want to do econ. I know I can make good money. But I mean, if thinking about like, rationality, obviously, I didn't have full information or any of those like other assumptions, you need to assume rationality, but it was just like, I know, I know, this is something I'd like to do. I would have preferred to major in English, but economics is something that will give me reasonable security in the future."

For Al, he did not want to write a book or novel because he knew that would be taking a risk, too. He does not view an economics degree as a backup plan but more of an immediate degree that will help him find his first job in the business area.

Discussion

This research was designed to assess the different ways in which college students choose their major. In order to conduct this study, I interviewed twenty three students from Boston College from different schools: MCAS, CSOM, Lynch, and CSON. I found that the three key factors that determine their major was their education in high school and the curriculum provided, their families' involvement in the process of choosing their major, and the volatile job economy that has students thinking about job security and wealth.

Overwhelmingly, I found that while factors such as the job market and high school education were important in students choosing their majors, parental influence was still the biggest factor in Boston College students choosing their major. Specifically, the findings show that parents desired job security for their children. Extensive parental influence could raise a concern, where one could argue that parents may have too much control over their childrens' college education. College is designed for students to be independent from their parents. They may consult with their parents about their life choices. For some, college is often seen as a transition to adulthood, where it is expected that these young adults make decisions for themselves.

The findings in my research reflect previous theories and literature that discuss the factors that make students choose their majors. First, all participants' responses demonstrated notions of rational choice theory. All students stated that they made their decisions rationally and not impulsively. Even though they may have outside pressure from people such as family and classmates, and time-related constraints in choosing a major, they all noted that they ultimately made their decisions. However, they used pressure from external sources to inform them about the costs and benefits of their potential majors. For some of my participants, they raised concerns about how they chose their majors by defining what "success" and "failure" meant. My participants defined success as finding a stable job after one to two years graduating from college. They defined failure as either not finding a stable job after college or needing to go to graduate school for additional training.

Their responses on success and failure supports Tverky and Kahneman's idea (1986) that individuals think about the success and failure that comes along with their decisions. Parental influence can have a big impact when students think about success and failure. This is because some students do not want to disappoint their parents. My participants have shared that they felt pressure to select a certain major. These respondents felt like they were indebted to their parents, as they have worked so hard to pay tuition so that they can attend Boston College. Out of gratitude, some students wanted to give thanks to their parents and felt like getting a good job with a stable salary is a way to "repay" their parents. However, for some students who choose their majors to get a good job, they felt disappointed that their college experience was not what they wanted academically.

A potential reason why students may feel like this is because they could be focused on maximizing their performance in their classes and turning those performances into receiving job

offers. This raises the question of how participants may feel about their education. In addition, whether parents are blocking their children from being able to fully enjoy their college education experience without feeling pressured by them.

Another key finding that was reinforced in my results is parents prioritizing certain fields of academics, such as humanities and STEM, to their children. Ma (2009) explains in her writing that parents who tend to send their children to after school programs that lean heavily towards either humanities or STEM related courses will have an effect on how their children view both academic disciplines.

Similar to the aforementioned article, some of the participants stated that their parents sent them to after school programs or summer camps where they either just did writing/reading or went to math/science camps. Going to these programs outside of their school helped them to develop passion in those respective fields. One of my participants who was a math major felt that going to math camps enabled him to gain an early interest in the field and his passion for math was a continuation from the time he went to math programs starting from elementary school. There was another participant who went to an art and English camp. The experience that they had in those camps gave them an early interest in the arts and sciences (humanities). Additionally, the study shows that some of the participants had a negative viewpoint on majors that were of no interest to them. The math and economic majors had a less positive viewpoint of subjects such as history and English and vice versa. They pointed out how they struggled in those areas of subjects and as a result of those struggles, they decided to not pursue the subjects further in college. The math and economic majors took less writing classes, and the humanities majors shied away from taking physics labs. These responses suggest that a combination of

academic performance and early first impressions of certain subjects could impact the way college students may feel about different majors and areas of studies.

Also, it is interesting to see the differences in attitudes between each grade classification (freshman, sophomore, juniors, seniors) on the job market. 75% of the students that replied that the job market was a concern for them were upperclassmen (juniors and seniors). A potential reason that the majority of them are upperclassmen is because upperclassmen are the ones that are currently searching for jobs and internships. Therefore, there is more pressure for them to think about their future after college compared to a freshman or a sophomore. These findings in my study support Crumb's notion of how upperclassmen were more likely to have concerns over the job market than underclassmen because they were dealing with expectations of securing well-paid jobs (Crumb, 2010). Her studies were relevant to this research in that my study demonstrated that there were more upperclassmen concerned about the job market. Interestingly, Crumb's study consisted of students from humanities background. Meanwhile, 83% of upperclassmen in my research that chose the job market as the number one reason for choosing their major were business or economics majors. The remaining majors were all pre-med students who aspired to attend medical school and be medical physicians. This response demonstrates an interesting relationship between the business majors and the job market. Historically, business majors tend to find jobs that are best paid because the industry is about generating revenue and money.

Finally, another result that was found was that some participants in my study mentioned how their high school education experience had a huge impact on the way they thought about their majors. Venezia (2013) mentions the importance of high school education curriculum and how teachers have a huge impact on the way students feel about a course based on the way they

teach it and how they develop relationships with the student. Some of the participants have cited how their high school teachers were a key factor in them eventually pursuing their major because they had such a wonderful experience earning from their teacher. In particular, these students enjoyed one-on-one interactions within instructors as well as the time teachers set aside outside of class to provide additional instructional support. For some of the participants, they themselves ended up wanting to become a teacher, thus enrolling in the Lynch School of Education.

An intriguing statistic that I was found was that three out of four students that shared this experience were Lynch enrollees. Despite the limited amount of Lynch participants in this study, all three have shared how their high school teachers were instrumental in the way they viewed education. Interestingly, when I asked students from CSOM, the business school of Boston College, they also enjoyed their high school education curriculum and enjoyed taking economics, but they did not choose finance or other business related courses because of their high school experience. They were able to pursue finance/business through two ways: doing business related activities on the side as a high school scholar and taking college business courses.

This notion supports Cardon's (2009) discussion of how entrepreneurial/business passion is typically developed at a young age, when kids or young adults create a business as side hustle. Through this, they learn about entrepreneurship and how to make money and strategize. All of my CSOM participants have shared in their interviews that they created their own small business in high school, and they began to have interest in business through this experience. A potential reason why CSOM students may enjoy business learning as an academic discipline in college is because most high school programs do not offer finance as a course. These courses are found typically in undergrad or graduate school. Interestingly, the dichotomy of a Lynch and CSOM students' experiences demonstrate their divergent academic experiences. Lynch students'

experiences consisted of the traditional learning classroom where there is an instructor.

Meanwhile, CSOM students gained their experience without a teacher and found their business experience at first outside of the classroom environment.

Overall, there should be more research done about the sociological factors that contribute to college students choosing their majors. Clearly, there are socioeconomic factors that do contribute to students choosing their major. More research should focus on the socioeconomic status of families and explore a diverse range of backgrounds.

Limitations:

There were a few limitations that I encountered while I was doing this research. First, I did not have a diverse background of students from different social classes, race, gender, and majors. All of my participants were from middle class backgrounds ranging from lower middle to upper middle class. Therefore, I did not have any students that were able to discuss how their socioeconomic status was impacting their education and the potential struggles that may have come along with it when choosing their education. Furthermore, it would be interesting to expand this study by seeing the difference between various high school educational backgrounds that people received such as whether they went to a private day school, private boarding school, or a public school. Private schools typically have a better teacher to student ratio and have more academic resources than public schools. Finally, I did not have the variety of socioeconomic background I hoped to have as I was only able to choose participants that wanted to participate in my study and those that replied to the email surveys or through snowball sampling. Additionally, the MCAS students were not as diverse as I intended as the majority of the students were economics, computer science, or history majors. These three majors are typically the most

popular majors at Boston College. A final factor that limited this study was the difference in gender participation: there were more males than females. Despite these limitations, this study will still prove a crucial aspect of how college students at BC determine their major and the social factors that contribute to their decisions and provide further research.

Conclusion:

Choosing a college major will still be an important step for all future graduates as it will provide them the academic platform in order to be eventually prepared for post-graduation. However, it is also important to understand how students choose their majors. This research is able to provide people with the sociological factors that can affect the way college students determine their majors and the process that is involved with it. It has shown that students do not just choose their majors out of pure passion only. There are factors such as the volatile job market economy and pressure from their parents that contribute to their decision making process. Universities should also understand and know how their students make their decision when they declare a major and the sociological factors that are involved in it.

Appendix 1

- 1. Talk to me about your family background a bit and where you grew up?
 - a. What is your parents' occupation?
- 2. What is your major and when did you declare?
- 3. What was the process like for selecting your major?
- 4. Why did you choose your major?
- 5. Who motivated or helped guide you in selecting your major?
- 6. Did you ever feel pressure in choosing your major?
- 7. What are your plans after graduation?
- 8. Considering your major, did you also consider the job market?
- 9. What does your family think about your major
- 10. Do you have any concerns about job prospects?
- 11. Rational Choice theory or passion
- 12. Which was the biggest influence in your college major decision: parental involvement, job market, or high school education/environment

References

- Asoni, Andrea, and Tino Sanandaji. 2016. "Identifying the Effect of College Education on Business and Employment Survival." *Small Business Economics* 46(2):311–24.
- Baker, H. Robert, and Gregory B. Lewis. 2020. "How Do History Majors Fare in the Job Market?" *The History Teacher* 54(1):107–28.
- Beekhoven, S., U. De Jong, and H. Van Hout. 2002a. "Explaining Academic Progress via Combining Concepts of Integration Theory and Rational Choice Theory." *Research in Higher Education* 43(5):577–600.
- Beekhoven, S., U. De Jong, and H. Van Hout. 2002b. "Explaining Academic Progress via Combining Concepts of Integration Theory and Rational Choice Theory." *Research in Higher Education* 43(5):577–600.
- Beekhoven, S., U. De Jong, and H. Van Hout. n.d. "Explaining Academic Progress via Combining Concepts of Integration Theory and Rational Choice Theory."
- Bosetti *, Lynn. 2004. "Determinants of School Choice: Understanding How Parents Choose Elementary Schools in Alberta." *Journal of Education Policy* 19(4):387–405. doi: 10.1080/0268093042000227465.
- Boudon, Raymond. 1998. "Limitations of Rational Choice Theory." *American Journal of Sociology* 104(3):817–28. doi: 10.1086/210087.
- Cardon, Melissa S., Joakim Wincent, Jagdip Singh, and Mateja Drnovsek. 2009. "The Nature and Experience of Entrepreneurial Passion." *The Academy of Management Review* 34(3):511–32.
- Crosnoe, Robert, and Chandra Muller. 2014. "Family Socioeconomic Status, Peers, and the Path to College." *Social Problems* 61(4):602–24. doi: 10.1525/sp.2014.12255.
- Ehrenberg, Ronald G. 2012. "American Higher Education in Transition." *The Journal of Economic Perspectives* 26(1):193–216.
- Gabay-Egozi, Limor, Yossi Shavit, and Meir Yaish. 2010. "Curricular Choice: A Test of a Rational Choice Model of Education." *European Sociological Review* 26(4):447–63.

- Grasha, Anthony F. 2002. "The Dynamics of One-on-One Teaching." *College Teaching* 50(4):139–46.
- Grodsky, Eric, and Catherine Rieglecrumb. 2010. "Those Who Choose and Those Who Don't: Social Background and College Orientation." *The Annals of the American Academy of Political and Social Science* 627:14–35.
- Hatcher, Richard. 1998. "Class Differentiation in Education: Rational Choices?" *British Journal of Sociology of Education* 19(1):5–24.
- von der Heidt, Tania, and Geoffrey Lamberton. 2014. "How Academics in Undergraduate Business Programs at an Australian University View Sustainability." *Australian Journal of Environmental Education* 30(2):215–38.
- Johnson, Monica Kirkpatrick. 2005. "Family Roles and Work Values: Processes of Selection and Change." *Journal of Marriage and Family* 67(2):352–69.
- Kinsler, Josh, and Ronni Pavan. 2015. "The Specificity of General Human Capital: Evidence from College Major Choice." *Journal of Labor Economics* 33(4):933–72. doi: 10.1086/681206.
- Koçak, Orhan, Namık Ak, Sezer Seçkin Erdem, Mehmet Sinan, Mustafa Z. Younis, and Abdullah Erdoğan. 2021. "The Role of Family Influence and Academic Satisfaction on Career Decision-Making Self-Efficacy and Happiness." *International Journal of Environmental Research and Public Health* 18(11):5919. doi: 10.3390/ijerph18115919.
- Ma, Yingyi. 2009. "Family Socioeconomic Status, Parental Involvement, and College Major Choices—Gender, Race/Ethnic, and Nativity Patterns." Sociological Perspectives 52(2):211–34. doi: 10.1525/sop.2009.52.2.211.
- Monaghan, David, and Sou Hyun Jang. 2017. "Major Payoffs: Postcollege Income, Graduate School, and the Choice of 'Risky' Undergraduate Majors." *Sociological Perspectives* 60(4):722–46.
- Norwood, F. Bailey, and Shida Rastegari Henneberry. 2006. "Show Me the Money! The Value of College Graduate Attributes as Expressed by Employers and Perceived by Students." *American Journal of Agricultural Economics* 88(2):484–98.

- Porter, Stephen R., and Paul D. Umbach. 2006. "College Major Choice: An Analysis of Person-Environment Fit." *Research in Higher Education* 47(4):429–49.
- Roksa, Josipa, and Tania Levey. 2010. "What Can You Do with That Degree? College Major and Occupational Status of College Graduates over Time." *Social Forces* 89(2):389–415.
- Tversky, Amos, and Daniel Kahneman. 1986. "Rational Choice and the Framing of Decisions." *The Journal of Business* 59(4):S251–78.
- Venezia, Andrea, and Laura Jaeger. 2013. "Transitions from High School to College." *The Future of Children* 23(1):117–36.