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Honors Thesis

TRANSFORMATIONAL EXPERIENCES AND DECISION-MAKING PROCESSES:
FACTORS INFLUENCING THE CHOICE OF COLLEGE MAJOR

by
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Submitted to Brigham Young University in partial fulfillment of graduation requirements
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Experience Design and Management Department
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ABSTRACT

TRANSFORMATIONAL EXPERIENCES AND DECISION-MAKING PROCESSES: FACTORS INFLUENCING THE CHOICE OF COLLEGE MAJOR

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Experience Design and Management

Bachelor of Science

This thesis examines the influence of transformational experiences on decision making when it comes to choosing one's major. Participants attended a one-on-one interview with the primary researcher where questions were asked about how they chose their major and how much they enjoy it. Participants were given the chance to tell stories about how they discovered their major and how they decided to pursue it. Results suggested that transformational experiences, internal and external factors, and mentorship led students to choose and stick with a major where they felt a sense of belonging and "fit." When belonging and perceived fit were not present, students were dissatisfied with their major. Transformational experiences are crucial tools for instigating personal change in individuals and can be used to help in the decision-making processes of individuals seeking to make important decisions in their lives, such as choosing a major.

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I. Introduction

Project Purpose

As individuals in an everchanging world, we are constantly making decisions. In a single day, we choose what to eat, what to wear, what to do with our free time, etc. Our choices range from prosaic everyday decisions to decisions made on what we believe and what we value. Choosing a major is one of those decisions that is heavily weighted. For some students, they have always known what they want to do. For others, choice overload can lead to decision paralysis. This study aims to explore how transformational experiences can influence decision making, specifically in the case of choosing an undergraduate major. Through storytelling, this mixed-methods study aims to gain personal insights into the decision-making process of students through their perspectives.

Project Overview

Transformational experiences are experiences that create a change in an individual and that have a “profound effect on the individual you are” (Rossman et al., 2019, p. 38). That change/effect can be in how the individual views themselves, others, or the world. L. A. Paul (2016) defines personal transformational experiences as ones that alter your priorities, preferences, or self-conception. Common transformational experiences include becoming a parent, going to college, starting a career, experiencing tragedy, getting married, changing religious affiliations, and more.

Because transformational experiences are experiences that create a meaningful change in someone, they have the power to influence decision making. Under the right conditions, experiences can shape individuals’ self-perception. It is important to note, however, that transformational experiences are personal, and what might be

transformational for one person might not be for another (Barnes, 2015). If an individual is open to transformation, they are more likely to be transformed by the events naturally occurring in their lives. This openness leaves room for individuals to change how they perceive themselves and act accordingly.

Within the aspects of choosing a major, transformational experiences can offer opportunities for individuals to redefine how they view their career and personal goals. Research into academic and career choice conducted by Kevin J. Pugh (2021), a professor of educational psychology, found that for female students, transformational experiences were influential in making their career choices. Transformational experiences can expand individuals' perceptions and as such, can influence decision making.

One of the main sources we find meaning in is storytelling (Smith, 2017). People tell stories and create internal narratives to try and make sense of the world. In this study, insights were found through the power of storytelling. In one-on-one in-depth interviews, participants shared stories about how they chose their major from their own perspectives. The goal of qualitative research is to understand an experience through the perspectives of those who have lived that experience (Bailey & Tilley, 2002). The researcher chose to gather both quantitative and qualitative data through storytelling because it offers personal insights given through the lens of the storyteller. Quantitative data was gathered through ordinal questions and qualitative data was gathered through descriptive questions. The hope is that through storytelling, the researcher can gain unique insights into how students choose their major, and how transformational experiences have an influence in this.

II. Literature Review

Much research has been done on the influence of transformational experiences in higher education when it comes to curriculum formation and teaching experiences (Kumi-Yeboah, 2014; Pitchford et al., 2021; Preston et al., 2014; White & Nitkin, 2014). Transformational learning was first written about by Mezirow (1991), who claims it is a type of learning “that involves reflectively transforming the beliefs, attitudes, opinions, and emotional reactions that constitute our meaning schemes” (p. 223). With this line of thinking, transformations can be shifts in knowledge, attitudes, or perspectives (White & Nitkin, 2014). Dirkx’s (1998) exploration into transformational learning concluded that learners need to be active and engaged participants in their learning, co-creating their experience with their instructor. From all the research conducted, it was clear that transformational learning experiences hinged on students being open to the learning process and taking responsibility for their learning. In different studies, this was done through interdisciplinary learning, collaborative learning, experiential learning, and mentorship. Self-reflection was also an important aspect of transformational learning that was discussed by different researchers.

Research has also been conducted on the influence of decision-making processes when it comes to choosing a major. In a study surveying undergraduate students at the beginning stages of choosing a major, it was found that decision-making styles may affect how people conceptualize their decisions (Galotti et al., 2006). The study also found that different styles did not affect how information was gathered by students searching for their major. In a similar study done with Belgian students in their senior year of high school, four different decision-making profiles were found, ranging in intensity of

exploration, commitment, confidence, and adaptiveness (Germeijs et al., 2012). From these two studies, different types of decision-making styles seem to have a great influence on the beginning stages of decision making, specifically when it comes to goal setting.

Montmarquette, Cannings, and Mahseredjian's study challenged previous research by arguing that individual expectations and circumstances play a significant role in choosing a major (2002). The study proposed a personalized "expected earnings" variable for students that considered the perceived chance that they will be successful in the major, the predicted earnings after graduation, and the predictive earnings if they do not complete college. This study considers individual circumstances and personal considerations that can have an influence on the decision-making process. This then calls into question what factors influence individual circumstances, and how transformational experiences are involved.

In the study of higher education and career choices, it is also important to note research that has been conducted on vocational identity, which is a clear understanding of one's "career goals, abilities, educational interests, and personal values" (Koo & Kim, 2016, para. 1). The influence of forming vocational identity has been shown to be a major influence in adolescent's ability to make career decisions (Feldman & Bolino, 1996). Relations between identity formation and decision-making processes has also been found (Blustein & Phillips, 1990). One's identity development has an influence in how students approach the problem of what major to choose and the more that identity is developed, the more rational and systemic of a decision-making process students have.

While there is research on transformational experiences when it comes to learning processes, there is little research in relation to transformational experiences' influence on decision making, specifically when it comes to choosing a major. There is research on transformational leadership and its influence on decision making, but it is hard to find any on actual experiences influencing decisions. Because transformational experiences can alter one's priorities, preferences, or self-conception, there is room to believe that transformational experiences can have an influence on students who are choosing their undergraduate majors. For this reason, this study aims to focus on the influence of transformational experiences on decision making processes related to choosing a major. It was decided to approach this research through a mixed-methods study to accomplish two things: understand the intricacies of student's decisions through qualitative questioning and to also compare participants responses to each other by collecting quantitative data.

III. Methodology

Sample

This study was conducted with 30 individuals ranging from sophomores to seniors in their undergraduate degrees. Of those 30, 8 participants were sophomores (27%), 5 juniors (17%), and 17 seniors (57%). Each participant has declared their major or is preparing to apply to their major. This study was also approved by the Institutional Review Board (IRB).

Participant Recruitment

Recruitment of participants was done via class email, verbal announcements, and word of mouth. The researcher's email was distributed to individuals through the advertisement outlets used, and a calendar link was shared with all individuals who reached out wishing to participate. Individuals could then sign up for a time to meet with the researcher for a one-on-one in-depth interview (Legard et al., 2003).

Participants were incentivized with a \$20 Amazon gift card to participate in the study. It was explained to the participants that they would receive an email with the gift card link once they completed the interview.

Procedure

When conducting research, a researcher can either conduct quantitative or qualitative research. Qualitative research is chosen when the nature of the study is exploratory, or the research is trying to "find the meaning of or understand the experience of a given situation to a group of individuals" (Thomson, 2011). The researcher chose to conduct qualitative research through in-depth interviews because the research aims to understand how students choose their major, which is an exploratory issue. To get the

best data results, the researcher chose to interview students so that the results would be from their own perspectives.

Pre-Interview Process

The questions for the one-on-one interviews were developed and prepared by the primary researcher. The primary researcher used the skills learned in Brigham Young University's class *Experience Needfinding*, a qualitative analysis class that is part of the Experience Design and Management program, to develop the interview questions. Eleven questions were decided on for the survey and were finalized by the primary researcher's advisor and the Institutional Review Board (IRB). The 11 questions asked are in Figure 1 below.

Figure 1

Interview Questions

1. On a scale of 1-10, how in love would you say you are with your major?
2. How did you first hear about your major?
3. What aspect of your major was the most enticing when you were first considering it?
4. Would you consider your major to be a good fit for you? Why?
5. When and how did you discover that your major was a good fit for you? Can you tell me about a specific experience that helped you realize this?
6. Did you have a mentor that helped you in your decision to major in__? If so, how were they an integral part in choosing your major?
7. What values do you have that you see within your major?
8. How well does your major match up with your personality (1-5)?
9. From strongly disagree to strongly agree, how much do you agree with the following sentence:
 - a. The experience I talked about was one of the major influences in me choosing my major.
 - b. My identity/personality and values have a strong influence in my affinity towards my major
10. Is there a specific memory that you associate with choosing your major? aha moment when it felt right
11. If you were to do it all over again, would you have still chosen your major?

In preparation for meeting up with the participants, the primary researcher updated the calendar link with the location that the interview would take place at. This was done at least 24 hours before the interview was conducted. Any questions that participants had about the interview were answered via email.

Interview Process

Before the interview began and the participant arrived, the researcher would prep the room that the interview was being held in. If the room had a white board, the researcher wrote a five-point scale from strongly disagree to strongly agree for participants to refer to when answering two of the questions.

The primary researcher and participants met one-on-one in the location designated by the primary researcher. When the two would meet, the primary researcher introduced the purpose of the study, and went over the consent form. The consent form goes into further depth about the purpose of the study, the risks and benefits associated, the compensation, and the data privacy and disposal procedure. After the participants read the consent form and all questions were answered, they signed it.

During the interview process, the primary researcher asked questions that are listed in Figure 1. The researcher also asked any follow-up questions necessary to understand the responses that participants gave. Interviews on average were 14 minutes, with the shortest interview being 7 minutes and the longest being 24 minutes. Participants were given as much time as they needed to explain their answers to the questions and to tell any stories relevant to the topics talked about. Participants were encouraged to take as much time as they needed to help them not feel rushed. All interviews were recorded on the researcher's computer using a program that transcribed the interview in real time.

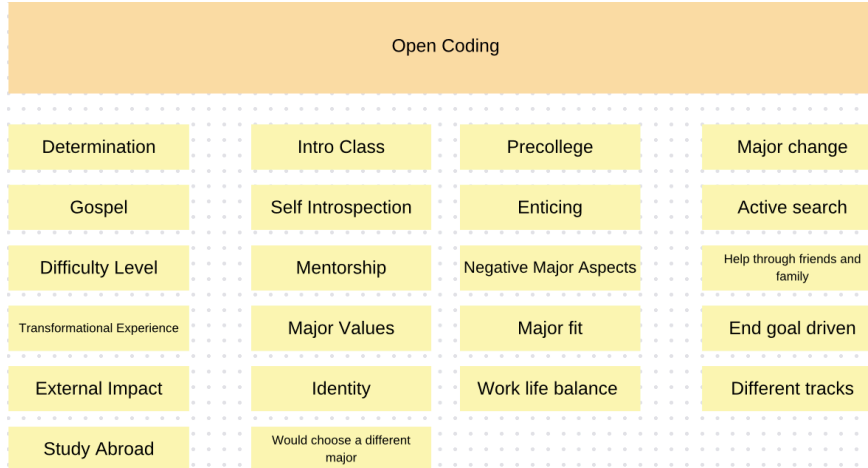
Once the interviews were completed, participants gave the researcher the email that they preferred to get their amazon gift card sent to. Participants were then thanked for their time and left the room.

Data Analysis

After the interview was complete, the researcher reread the transcript, looking for any mistakes in spelling or in the text to speaker designation. The transcript for the interviews was an intelligent transcription, meaning that some interpretation was made, and grammar was cleaned up (McMullin, 2021). After reviewing the transcripts, they were uploaded to the cloud where they will be stored for the next three years.

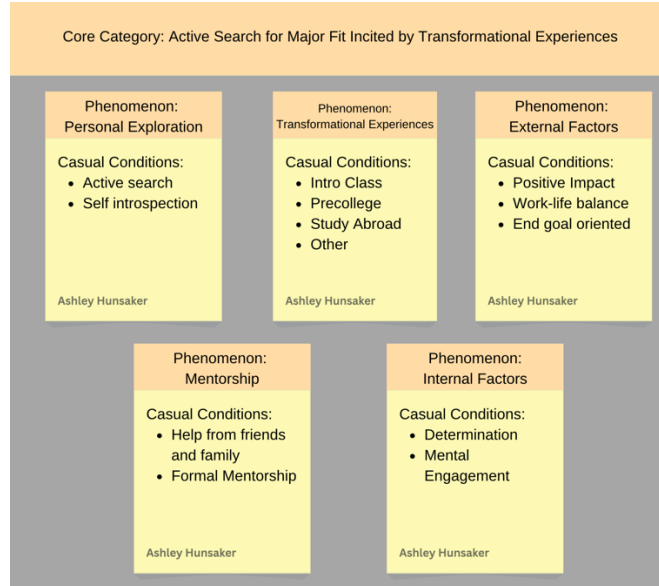
After all the interviews were collected and saved to the cloud, the researcher then underwent open coding, a method of coding that is part of grounded theory methodology, pioneered by Glaser and Strauss (1967). Instead of creating a hypothesis and seeing if the data supports it, in grounded theory, data is collected and analyzed and then theories are derived from the data. Open coding is the first step of the grounded theory analysis approach. With open coding, data is broken into discrete parts and codes are created to label these parts. By doing this, preconceived notions and biases can be avoided as codes are created straight from the transcripts. Through affinity diagramming (Lucero, 2015), themes were marked in the transcripts to make up the codes. See Figure 2 for a list of the codes found through open coding.

Figure 2



After open coding, axial coding was used to draw relationships between codes and create overarching categories for those codes (Williams & Moser, 2019). To help with axial coding, a coding paradigm developed by Corbin and Strauss (1999) was used to ensure the categories developed are fully explored. From the codes created during open coding, phenomena were identified by finding common experiences shared by several of the participants. Then casual conditions explaining these phenomena were pulled from the open codes. Overall, five overarching themes were developed during axial coding, which can be seen in Figure 3.

Figure 3



Finally, after open and axial coding, the researcher engaged in selective coding, the final step in grounded theory. Selective coding aims to define the overarching “core” category that encompasses all the themes identified through open and axial coding (Williams & Moser, 2019). The main category or theme found through selective coding was “belonging and fit found through transformational experiences, external and internal factors, and mentorship.” After developing this category, the researcher read through the transcripts again to fully understand the impact of this code on the participants.

Data Quality/Validity

In qualitative research, data quality/validity is extremely important to maintain. Validity has to do with whether something measures what it was intended to measure (Joppe, 2006). In other words, validity has to do with the accuracy of results. Because qualitative research is very interpretive, extra measures need to be taken to ensure that the quality of the research is still intact. The following steps were taken to increase the validity of the research:

Good Sample Group

To obtain good results, sample groups need to be representative of the audience being studied. Because the research is focused on evaluating how undergraduate students choose their major, only those who had chosen or declared their major were able to participate in the study. This allowed for the sample group to be a fair representation of the population the researcher is wanting to study.

Sample Size

For this study, a sample size of 30 participants were interviewed. A sample size of 30 was chosen because it was estimated to be large enough to reach theoretical saturation. This concept is connected to the grounded theory qualitative methodology and describes the point at which the analysis of collected data is not producing any additional thematic codes (Fusch & Ness, 2015). This sample size is proposed to be an adequate amount of qualitative data to reach theoretical saturation.

Triangulation

Another way to ensure data quality and validity is to use triangulation methods when collecting data. Triangulation helps improve validity and decrease research bias in a research project by using different methods to collect data (Golafshani, 2015). In this study, the researcher used theory triangulation to approach the interviews from different points of view and with different questions in mind (Rugg, 2010). The primary researcher did not enter the interviews with a specific hypothesis in mind, but instead entered with an open mind to what the data might say. While analyzing the data, the researcher also evaluated the interviews from different points of view, searching for themes derived directly from the transcript.

Researcher Bias

Researcher bias is a factor that threatens research validity, specifically in qualitative research (Wadams & Park, 2018). To avoid researcher bias, the researcher participated in bracketing, which is refraining from any judgement or preconceived notions to separate the researcher's experiences from the participants' (Weatherford & Maitra, 2019).

IV. Results

Through axial coding, five different themes emerged from the data. These themes are all factors influencing the decisions of students to choose and stay in their major. For each theme, there are subthemes that dive further into the main theme. Student quotes will be offered throughout the explanation of the themes to corroborate the findings discussed. The themes that emerged are the following:

1. Transformational experiences
2. External factors
3. Internal factors
4. Mentorship
5. Personal exploration

The overall theme that emerged from the data is the following: Transformational experiences, external and internal factors, and mentorship led students to choose and stick with a major where they felt a sense of belonging and “fit.”

Transformational Experiences

Transformational experiences are experiences that create a change in an individual and as stated by Rossman et al. (2019), “lead directly to personal changes born out of the experience” (p. 38). One of those changes “born out of the experience” can be choosing one’s major. In the interview, students were asked if they had a specific experience or memory associated with them choosing their major or if they had an “aha” moment where everything “clicked” for them. Of the 30 students interviewed, 16 students talked about one of three different transformational experiences: intro classes, precollege interactions, and study abroad experiences. Students who participated in these types of

experiences talked about how the experience introduced them to the major and made them feel a sense of belonging within it. These transformational experiences offered opportunities for students to interact with different aspects of their potential major in ways that they could draw personal connection.

Intro Class Experiences

A handful of students talked about how they took an intro class that piqued their interest in their respective major. When asked about their intro class, one student responded: “We were doing these awesome things and I was learning in such a new way that I felt was really enhancing my life and that really connected where I was like, ‘Oh, yeah this is the perfect major for me.’” Another student stated: “Then my second semester, I took more philosophy classes, and one of them was intro to logic. So, we were studying formal logic and arguments and reasoning, and I think that was when I realized how much I loved it and what a good fit it was for me.” For many students in the intro classes, they gained insights into what their potential major could offer.

Precollege Experiences

Some students were introduced to their major before ever starting college through different experiences in high school or on missions. The following quotes are from students who were introduced to their major through these means:

- “During a visit to a community college in high school (when I was doing robotics stuff), we interfaced with some community college in Utah, but the one that I saw there was an electromechanical engineering associates’ program. That spun into me looking for the next closest thing to get into robots.”

- “The reason why I was attracted to the advertising program is because back in high school, I was very active in all of our film.”
- “I was a junior in high school, and I was taking the SAT and I had to answer questions about an article and the article was all about why we need more philosophy majors and what skills you learn from it. And I think that's the first time that I realized that it was something that I could major in in college.”

After discovering these potential majors, students talked about how the experience led to further exploration in what their major could entail.

Study Abroad Experiences

Participating in a study abroad was another avenue through which students participated in a transformational experience. When you participate in a study abroad, you are immersing yourselves within different classes in an entirely different way than if you were to take the class on campus. When asked about her study abroad, one student stated: “I remember just being like, this is so awesome that I'm learning all these skills about solving problems, that through these experiences I can help people.” Another student stated: “And then we just had to design an experience for the rest of our classmates that was based on like, our interest and wondering... And I think just doing that activity was what really prompted me to be like, okay, this is it, this is what the classes are going to be like, that's where I want to be.”

External Factors

For this study, external factors are defined as factors outside of the major and college itself that motivated students to pick that major. These were factors that students considered in relation to how they want their life to look after graduation. The biggest

external factors found were having a positive impact externally, having a good work-life balance, and having specific end goals that they needed their major to match up with.

Positive Impact

Students with a desire to impact their environment and the people around them let this be a heavy influencer in choosing their major. Of the students interviewed, those who had a high drive to serve others and better their conditions ended up in majors within science, technology, engineering, and mathematics (STEM). For example, the main career routes spotted were pre-med tracks, computer science, and engineering. One student put it this way: “I mean, a good reason to get into medicine is because you want to help people.” Students within Experience Design and Management also expressed desires to impact others, but through creating experiences for them. One student described it as “a culture around people, wanting to make it a good time for people and caring about people's experiences.”

When specific students were asked about why they chose their major, they talked about the external impact they wished to have throughout their careers. Here are a few quotes from these students:

- “I had this vague notion that I might do robots that extend lives through prosthesis and the vague picture is still the same.”
- “Being able to do good things with what you're building I specifically liked about engineering and computer science because whatever you built in that field you could use to positively influence some or impact.”
- “Yea, also like having that positive impact at the same time. That was just a really good example. Yeah, type of thing I want to be able to do.”

- “It’s just a culture around people wanting to make it a good time for people on caring about people’s experiences.”

One student had experiences on his mission where he interacted with individuals with physical ailments. “I had no idea what to do. And that was actually super motivating to me to say I don’t know this, but if I did, I could have helped. And I came home from the mission, I was like, okay, so I could help people that have conditions.”

Work-Life Balance

Work-life balance also influenced some students to choose majors that would not demand too much of them once they are in the field. While out with a friend, one student noticed something about his friend’s work life balance. “We went to lunch on like a Tuesday at 3pm. And he was like, just at his house with his kids. And it seemed like a really nice work-life kind of balance that he had that I really wanted.”

Family values and community indebtedness were high factors that students wished to balance with work. One student expressed how with a good work-life balance, you are more “able to help others” and “more able to help your family, in the church, or in your community.” Students with these desires seemed to steer away from careers that lead to graduate or medical school. One student who debated going to medical school put it this way: “the amount of effort it would take me to be successful in medical school, I would not have the necessary time or emotional energy to foster relationships with a spouse or kids in the early years of a family when it’s so important.”

End Goal Oriented

Students who were end-goal oriented looked at choosing a major through a different lens than other students did. Instead of focusing on how good of a fit the major

was or how much they liked the major, they focused on whether that major would serve them in reaching their end goals. “So I had an end goal or an idea a little bit of what the end goal was, and finance just seemed to be the major that would get me closest to that.”

Students who were end goal driven were asked what aspects they like about their major. The following quotes are some of their responses:

- “There have been experiences that have pushed me forward to more toward my goals...And generally, it gives me more insights to get to my goals.”
- “I wanted to find something that would actually benefit me with the goals that I had... So I think that just trying to find something that aligns with my goals is what influenced me the most.”
- “But I also liked the fact that the business school was kind of in a sense preparing me for the real world as well by installing these values right now”
- “The majority of my major allows me to stay focused in my goals.”

Internal Factors

Internal factors are intrinsic factors that influence students in their decisions on what to major in. The two internal factors that showed up in the data are determination and mental engagement. These two factors were big influencers in whether students would stick with their major after choosing it.

Determination

Students who mentioned determination in their majors had high desires to stay in their major, even when it got hard. Below are a couple of quotes from students that showcase their levels of determination:

- “I just kind of have to bite the bullet and just push against the grain. But yeah, every semester, every day, I have to just keep trying hard, study hard, but I'm determined to do so and I'm enjoying it.”
- “I had a moment of like, I'm gonna do this thing. Like I'm gonna give it my all I don't know if I'll be able to but I'm gonna give it my all.”
- “I like the grind. Honestly, I spent a lot of hours on campus and in that stupid building. But I'm okay with it at the same time, because I just I do really like learning.”

Mental Engagement

Many of the students interviewed wanted to choose majors that would challenge them just enough that they felt mentally engaged. When a student was asked what part of his major was the most enticing, he responded, “It was enticing because it had enough science bases that I felt like I was going to be challenged but not too hard of science that I wouldn't enjoy it.” Another student said, “It had a good blend of the things that I thought were enjoyable, but also some rigors as well because I wanted my education to be challenging.”

Those whose majors were overly challenging were the students who did not enjoy their major as much and were debating whether they should switch majors or not. Students who were weren't challenged enough expressed that they wished they had chosen a more rigorous major. “I think I should have done the marketing major... it's a little more competitive, a little more push.”

Mentorship

Many students found external support either through close ones like friends and family, or through formal mentors like professors and academic advisors. Those with friends and family in their corner felt extra support as they strived to study out their major. Those with formal mentors felt official support within their major, which in turn helped them feel like they belonged in the major. The presence of both informal and formal mentorship also helped students discover their major, which is how 12 students found theirs.

Friends and Family

Students who experienced help from individuals such as friends and family stated feeling supported in their endeavors, which pushed them to stick with their major, even when it got hard. Students expressed how “family was encouraging” and “they were very supportive” of their endeavors.

Student friendships had a high influence on whether students would choose a major. Students who had friends in their classes or in their major were quick to identify these individuals by name and share how they impacted their experience, whether it was convincing them to take a class with them or to change their major altogether. “It wasn't till my girlfriend got in the class and she's like, ‘You should totally take this class with me.’ Now, after the first day, it was almost like I like visualize it. It was possible that I could do this.” Another student said: “I'd see him and he would say things like, ‘Oh, you gotta switch to CS. It's like that's a better major, you should do it.’”

Other friendships were sources of information that students would turn to when actively searching out what to major in. “Accounting and finance are what I came across

and then I talked to some friends that I had that were working in those industries, to figure out what was the difference between the two.” Another student said, “I knew a couple people and they just talked about like how fun it was and like how like, they got to like know their cohort really well and like how they love their class and they're passionate about it.” Friends also made an impact by creating a community in which students feel like they belong to. “I met X and X in there and they were just such fun people, both English majors.”

Formal Mentors

The presence of official mentors within the program or within an advisory role was crucial for students doubting their fit in their major or struggling with the difficulty levels. “Last year he like totally sat down with me too and said, ‘you’re absolutely smart enough to be here’... So yeah, a lot of people that believe in me is helpful and probably the only reason I’m still in there.” Students who had official mentors felt more capable and felt more feelings of belonging within their major than they would have without. “I think they were good at helping me like understand that it [the major] was a good fit.”

On the other hand, students who lacked a level of mentorship that they desired struggled with feeling like they belonged in their major. One student was asked about why they switched majors, and they accredited it to not having a mentor within their original major. “I think I didn’t [have mentors] and it was something I really wanted, because there’s definitely aspects of engineering that I really loved...But I had more mentor figures in computer science than I did in engineering.” The same student expanded further, saying, “I almost stayed in engineering, but what I was missing was like a support structure of people.”

Personal Exploration

Several students engaged in a form of exploration when searching for their major. 8 students actively searched either within themselves and/or within external sources for a major that would fit them best. Some students took their major decision into their own hands and were proactive about searching for the right major. These students went to the college catalog to search through all the available majors. “I had an entire major catalog in front of me and I crossed out (took me like a month) I crossed out all the majors I wasn't interested in and then I had a list of all the ones I was and I explored each one of those.” Another student said “I just went through all the BYU majors and like, picked out the ones that looked interesting to me and made a list.”

Towards the end of students' active search, they began to participate in self-introspection, focusing on aspects of their identity and their perceived major fit. “I spent a lot of time when I was picking my major and even now deciding if med school is what I want to do and then what can I do after I want to be I look at what gifts and strengths that I have.” Another student said, “After I reflected about creating a good life and just creating these happy transformative experiences, I was like, oh, it kind of really aligns with my personality and what I want to do.”

Other Findings

On top of analyzing the themes listed above, the primary researcher also investigated the relationship between major fit and how much students love their major, shown in Figure 4. After running a regression statistic (Table 1), the relationship between the two was found to be statistically strong and significant with a t value < 0.05 ($r^2 = 0.78$).

Figure 4

Line Chart Infographic

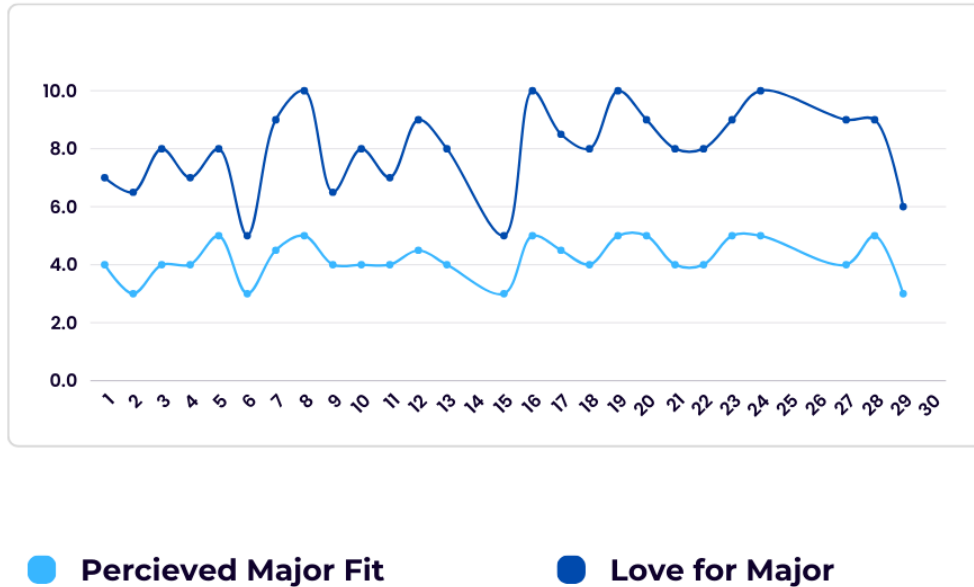


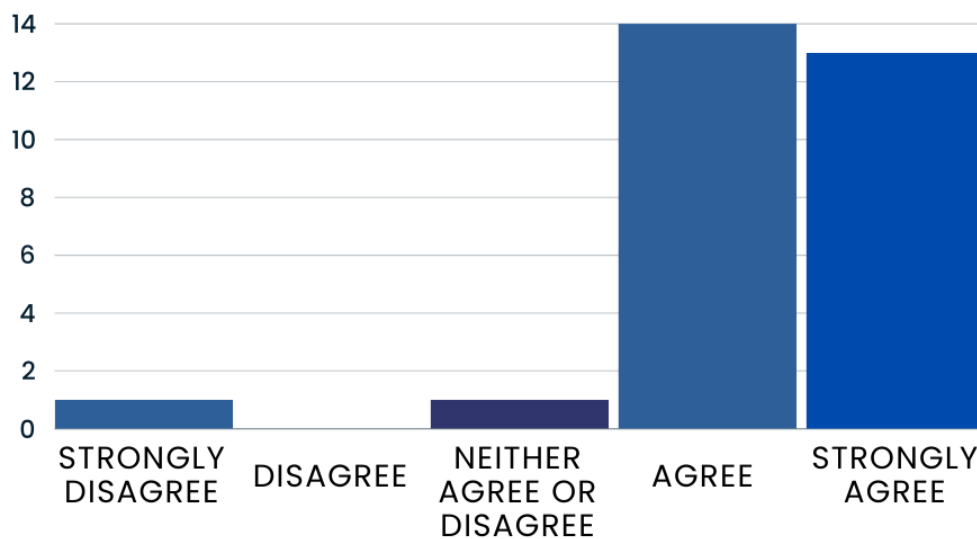
Table 1

| SUMMARY OUTPUT | | | | | |
|-----------------------|-------------|----------|----------|----------|----------------|
| Regression Statistics | | | | | |
| Multiple R | 0.883996358 | | | | |
| R Square | 0.78144956 | | | | |
| Adjusted R Square | 0.772343292 | | | | |
| Standard Error | 0.324823226 | | | | |
| Observations | 26 | | | | |
| ANOVA | | | | | |
| | df | SS | MS | F | Significance F |
| Regression | 1 | 9.054295 | 9.054295 | 85.81447 | 2.1425E-09 |
| Residual | 24 | 2.532243 | 0.10551 | | |
| Total | 25 | 11.58654 | | | |

Students were also asked to rate how influential the experiences they talked about were in them choosing their major. The data for this information can be found in Figure 5.

Figure 5

THE EXPERIENCE I TALKED ABOUT WAS ONE OF THE MAJOR INFLUENCES IN ME CHOOSING MY MAJOR.



V. Discussion

This study aimed at understanding how transformational experiences influence decision making, specifically when it comes to deciding on a major. The results showed five different themes: transformational experiences, external factors, internal factors, mentorship, and personal exploration. Of these themes, it was found that the presence of different transformational experiences and internal (determination and mental engagement) and external (positive impact, work-life balance, end-goal oriented) factors are heavy influencers in aiding students in their decision-making processes when it comes to choosing their major. It was also found that the presence of mentorship (whether through familial relationships or university connections) has an influence on perceived major fit and belonging.

For the case of students who talked about intro class, precollege, or study abroad experiences, there were factors of originality or uniqueness in their experience that differed from their everyday experiences. It was these factors that led students to view their potential major in a new way and become more curious about it. It is possible that when students are exposed to something that differs from what they expected, their attention is more acute. Acuteness offers greater chances for curiosity to push students to explore that major more. This acuteness might also be due to the involvement of several sensory items in the experience such as interactive, hands-on experiences, visual demonstrations, and immersive cultural experiences.

Creating more memorable experiences taps into students' emotions, which is a large factor that plays in the decision-making processes of adults (Feng et al., 2022). Creating learning experiences that are unique and differ from typical everyday class

structure is a positive way to introduce students to new majors. The unique learning opportunities that transformational experiences provide can aid students in seeing the potential of what a major offers long-term. It also grants students the chance to interact with the major in a personal way where students can make meaningful connections that last longer than the interactions everyday class structure provides.

For 14 students, there wasn't a specific transformational experience that led them to their major. The reason why transformational experiences did not make as big of an impact on the decision-making process of these individuals could be due to the multifaceted nature of decision making for young adults in general. Making hard decisions falls under system two thinking, which is where "the conscious, reasoning self that has beliefs, makes choices and decides what to think about and what to do" (Kahneman, 2011). This line of thinking involves different factors when it comes to making a decision. Within this study, career outlook, personal attributes (such as creativity or logistical thinking), community impact, work-life balance, major rigor, and belonging were identified as factors influencing the decision of choosing a major. Because there are so many factors, both logistical and emotional, that go into deciding one's major, it would make sense that for many students one distinct experience did not decide their major for them.

Most students who expressed a desire to make a positive influence in the community were in majors within the science, technology, engineering, and mathematics (STEM) fields. The reason for this connection might be due to these majors being presented as heavy influencers on the community. When students think about science related majors, they think of medical school, which involves healing people. When

people think about engineering, they think about improving infrastructure for communities. When they think about computer science or other technological majors, they think about creating new interfaces for technological users. Many fields within STEM have taken on a connotation related to community impact. When students are interested in making a difference, they might be prone to think of these routes where they can directly help people or create things to aid people in their everyday lives.

Students who were end-goal oriented did not focus on if their major was a good fit and some students actually rated their enjoyment with the major relatively lower than other students. These low ratings might be because students who are end-goal oriented only see their major as a means to an end. Even if those means are not enjoyable or at the time do not seem like a good fit, if they aid in bringing students to the goals they want to achieve, then it is worth it.

Those who relied heavily on external factors (positive impact, work-life balance, and end-goal oriented) to guide them in their decisions on choice of major were more focused on how they want their life to look outside of a 9-5 job. For some that might mean wanting to get more involved in the community; for others it might be about having more time to be with family. Either way, these external factors appear to be personal considerations and circumstances that should be taken into account when trying to understand the decision making process of students.

Students with high levels of determination stuck with their major, even when things were hard and unenjoyable. Why is this the case? It is possible that students with higher levels of determination are more likely to choose more rigorous majors because that is where they think they will be challenged the most. There is a delicate balance

when it comes to mental engagement. Students are in search of a major that has just the right amount of engagement: too little and they are under stimulated, too much and their load becomes overbearing.

Determination and mental engagement seem to go hand in hand. Students with high determination levels appear to have a good understanding of what majors will challenge them enough to reach mental engagement. Then, when things get hard, their determination isn't misplaced because they know that the material before them isn't too hard to accomplish.

Mentorship is possibly the most important indicator of major fit found within this study. Students who had both familial and formal mentors in their lives commented on these individuals helping them feel like they belonged within their major. Twelve students also claimed that it was through mentors in their life that they were first introduced to their major. These results show how important feedback and the opinions of others are to students when choosing and sticking with their major. This may have to do with the fact that humans are naturally drawn to communities because of the need for social interaction and belonging. The desire to belong is an ancestral human motivation that "permeates our thoughts, feelings and behaviors" (Allen et al., 2021, para. 2). Turning towards others to create a sense of belonging establishes a sense of security that humans naturally desire.

When friends within a major encourage a student to join that major, they create a sense of welcoming and the chance to be a part of a close community. When professors play a hand in student's lives by offering encouragement, it provides reassurance that once again, the student belongs in that community. Students' desire to belong and be a part of something could be a big reason why support from friends, family, and university

personnel has such a big influence on students' choice of major and their perceived fit. This could also be why when students don't have mentors or familial support in their life, they struggle with feelings of belonging. Within this study, students who were struggling with the difficulty of their major were also students who felt misplaced in their major or felt a lack of mentorship. These students are more prone to feeling alone while struggling in difficult classes because they lack comradery through other students or support through professors.

Identity also had a major impact in students' decision-making processes. Many students when actively searching for their major engaged in a form of self-introspection. The reason behind this has to do with the importance of understanding one's identity and its influence in making decisions (Blustein & Phillips, 1990). One's vocational identity includes career goals, abilities, educational interests, and personal values (Koo & Kim, 2016). The better students understand these aspects of their identity, the more equipped they are to decide on a major and stay in it.

Aspects of identity that came up in the study were student end-goal motivation, desire for positive impact, and determination. Students that were high in any of these three subthemes were committed to their major and focused on their goals. Aspects of identity also came up when students were asked to identify personal values that they saw displayed within their major. Every student was able to find shared values, even those that did not feel like they fit in their major. This may be because humans need to find some aspect of connectedness to feel like they belong.

As seen in Table 1, there is a 78% overlap in the movement of perceived major fit and students' love for their major. Love for one's major seems to be linked to how good

students perceive their major fit to be and as discussed earlier, a factor influencing major fit could be the need for community. Understanding this, it is possible that the more students feel like they belong within their major and have a sense of community within it, the more they enjoy it.

Each student talked about a handful of experiences that led them to their major. The overwhelming majority (93%) said that these experiences were major influencers in them ultimately deciding on their major. The experiences discussed all fall under one of the 5 themes listed earlier. As such, the more that these experiences can be fostered, the better chance students have at finding their major.

Implications

The higher education system expects students to choose their majors early on in their educational career, as early as their first year in college or even their final year of high school (Germeijs et al., 2012). As such, pressure is put on students to know what major they are going into. Of students who enter college undecided, 84% reported feelings of anxiety around not knowing what they are going to major in (Gordon et.al., 2003). It is also important to note the existence of choice overload, which can be brought on by high levels of decision difficulty, choice complexity, and uncertainty around preferences, all of which can occur when searching for a major (Chernev et al., 2014). With so many students experiencing choice overload and anxiety about choosing their major, it is important to understand how to best support these students. The first step in this is understanding the factors that influence students' decision-making patterns.

Understanding the factors that go into the decision-making processes of students can help college advisory centers better support their students in their journeys to finding

the best major for them. The findings of this study can help college advisory centers to better support students and understand more about the factors that influence their decisions when it comes to picking a major. The findings are also of benefit to researchers hoping to understand more about the decision-making processes of students choosing their majors.

Transformational experiences, external factors, internal factors, and mentorship all have a heavy influence on the decision-making processes of students choosing their major. Transformational experiences offer unique learning opportunities. External and internal factors influence the type of major students will choose. Mentorship influences how students will find their major and if they will feel like they belong in it. With this understanding, universities should implement each theme into their offerings to students. By implementing these themes, universities can focus on decreasing the stress that revolves around choosing a major.

It is important for colleges to offer unique learning opportunities to students where they get to interact with different majors in a personal way. Passive learning has become the norm in classrooms, but through hands-on learning, logical thinking is improved and students' interactions with professors and mentors can be increased (Handur et al., 2016). By introducing students to majors through hands-on learning, students get to experience said majors in a way that stands out to them.

Students who actively searched out their major engaged in some sort of self-introspection where they considered their interests, abilities, attributes, and other aspects of their identity. These factors have been identified in other studies as influencers on students' major choices (Beggs et al., 2008). Research on vocational identity has also

shown a positive correlation between developing identity and career decision-making in adolescents (Gushue et al., 2006). The better students understand aspects of their identity such as their skills, goals, and attributes, the more equipped they are to decide on a major. This is why it is important to provide spaces for students to explore aspects of themselves and see which majors match up best with their skills and goals. Many universities have already realized this and have encouraged students to discover these things about themselves through development classes. Universities should focus on helping students develop their long-term professional goals and explore what skills they have that match up with current majors.

Transformational experiences also have benefits when it comes to identity formation. Because these experiences focus on reflection, emotion, and discovery, they can create significant change in how one view's themselves, thus strengthening their understanding of themselves (Rossman et al., 2019). The best transformational experiences for this kind of change is precollege and study abroad experiences. If colleges can create unique experiences for high school students early on, it is more likely to impact their identity formation because they are in a developmental stage of life. Study abroad experiences are also strong influencers on identity formation. In a study abroad, students are being exposed to new cultures and are living under different circumstances that teaches strong lessons in a short period of time.

Universities need to provide opportunities and events for student's to socially engage with others in their major to create connection and a sense of community within the major. Current research shows that students need a sense of community and when a community is available for students, they are more engaged and dedicated to school, or in

this case, their major (Osterman, 2000). This is especially imperative for students who struggle with feeling like they belong in their major. It is recommended that each major should create some form of a mentorship program either with professors or with academic advisors. Within the job force, the presence of mentorship programs has been shown to increase job satisfaction (Kay et al., 2009). If applied to college majors and programs, universities can expect the same to happen with students' satisfaction levels in their major.

Finally, a positive correlation was found between students' scores on how well they thought their major fit and how much they loved their major. Ensuring major fit and feelings of belonging are fostered could help in establishing higher levels of affinity towards students' majors.

Limitations of Study

Due to the study being so small and the outlets of recruitment being limited, it was difficult to employ a completely random approach. Nine of the thirty students interviewed were Experience Design and Management students. The concentration of students within this major was due to the researcher's proximity to students in the major and the classes offered within the major. Because of this, the interview recruitment process was not completely random and was somewhat saturated by one major.

The researcher also acknowledges that interpretation was made to find the themes discussed. These interpretations made are subject to biases, as it is impossible for the researcher to remove themselves completely from the data. Even though the researcher worked to remove biases during the study, they still have the potential to influence how the data was interpreted.

Recommendations for Future Studies

A recommendation for future studies would be to investigate the influence of identity perception on how well students feel like their major fits. Another recommendation for future research would be to investigate other types of transformational experiences and their influence on decision making in career choice, marital decisions, and other life changing events/decisions. Research could also be done to see if there is a correlation between determination and mentorship.

VI. Conclusion

The purpose of this study was to understand the influence of transformational experiences on decision making when it comes to college majors. Thirty students participated in the research process by attending one-on-one interviews with the researcher. Storytelling was utilized to gather data from the perspectives of the students who participated. Qualitative research methods such as grounded theory were used to analyze the data.

Results showed that transformational experiences had an influence on how students discovered their major. Internal and external factors had an influence on how students chose their major and why they stayed in it. Findings also indicated that belonging and fit were mainly obtained through the presence of mentorship.

These findings have important implications for university advisement centers. It also has implications for researchers searching to understand the factors that influence decision making patterns of students or even adults making life changing decisions such as career paths.

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