

Satisfaction With College Major: A Grounded Theory Study

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All college students must eventually choose and complete a major. Many switch majors, and some change it multiple times. Despite extensive literature addressing factors that influence students' initial choice of major, few scholars have examined students' experiences after enrollment in a selected major. In this study, we used a grounded theory study to investigate the experiences of 10 college students in their major with an emphasis on factors that influenced their (dis)satisfaction. An emergent theory explains the development of (dis)satisfaction with choice of college major by highlighting factors related to self and career awareness as well as personal reflection. Implications for college academic advisors are shared.

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Career development is a lifelong process requiring individuals to navigate numerous academic and work-related transitions as they strive to achieve career goals, and choosing a college major is one of many career-related decisions that individuals will make during that process. Nauta (2007) suggested that, consistent with the way they choose jobs, individuals tend to seek college majors that tap into their skills and interests, depict their self-concepts, or offer desired reinforcers. Occupational satisfaction reflects a desired career development outcome, and identification of satisfying college majors reflects a critical step in the career development process (Montmarquette, Cannings, & Mahseredjian, 2002). To promote the future career satisfaction and success of students, academic advisors play important roles in helping advisees make decisions related to their college majors.

Career development theories provide different frameworks for understanding career-related decisions. For example, Holland (1997) suggested that career choice is based on person-environment fit, and Gottfredson (1981) discussed the ways in which individuals narrow down possible career options based on factors such as prestige or

perceived barriers. In their social cognitive career theory, Lent, Brown, and Hackett (1994) explained that individuals make occupational choices based on self-efficacy beliefs and outcome expectations as well as environmental and contextual factors such as socioeconomic status. Although these theories differ, and none specifically addresses decisions about college majors, they all highlight the importance of personal and environmental variables in career-related decision making.

The initial researchers who examined predictors of college major choice used large data sets (e.g., Montmarquette et al., 2002), relied on general quantitative measures involving surveys and assessment instruments (e.g., Galotti, 1999; Galotti et al., 2006; Pulver & Kelly, 2008), or placed an emphasis on specific majors (e.g., Keshishian, Brocavich, Boone, & Pal, 2010; Marrs, Barb, & Ruggiero, 2007). Much of the existing quantitative research led to identification of relevant decisional factors (e.g., expected earnings, curriculum requirements, encouragement from family) or was focused on decision-making styles salient to college major choice. In one study, Montmarquette et al. (2002) conducted research among students in business, liberal arts, science, and education fields of study, and they reported that information gleaned from family members who had attended college influenced undergraduates' college major decisions. They found that students make decisions based on expected earnings from their major. They also defined expected earnings as a combination of the probability of success in the major, the amount of effort needed to complete the program of study, and the expected earnings after graduation. They reported differences by gender and by race; women were less influenced by expected earnings than were men, and Whites were less influenced by expected earnings than were non-Whites.

These studies on majors and decision making have contributed important understanding about the factors, resources, and processes associated with student choice of majors. However, little research has been conducted to determine the level of satisfaction of students enrolled in their selected major. Information on student satisfaction not only adds to the literature base on majors and decidedness but also relates to retention, change

of major, and academic performance (Graunke & Woosley, 2005; Nauta, 2007). For example, Nauta reported positive correlations between college major satisfaction and both grade-point average (GPA) and persistence in the program of study. Success in and completion of a college major both manifest desirable academic outcomes and often foreshadow future career opportunities. Nauta found positive correlations between college major satisfaction and career decision self-efficacy. Nauta also suggested that the accomplishment of choosing a satisfying major may increase a student's confidence in making other career-related decisions.

The limited availability of published research on student satisfaction with college majors culminates in little information on which academic advisors can base their work with students with a declared major. To help students achieve satisfaction as well as eventual academic and career success, advisors need to understand the process by which students develop satisfaction with a college major. Grounded theory methodology allows for an in-depth examination of processes, and we use this aspect of a qualitative study to develop a framework for understanding college major satisfaction. Specifically, we seek to answer: "What is the process by which students become satisfied or dissatisfied with their college major?"

Method

We took a grounded theory approach to explore college students' experiences in their academic major. Grounded theory allowed us to examine the factors that influence college students' satisfaction or dissatisfaction with their major, and it facilitated the generation of a model explaining this development of satisfaction or dissatisfaction (Strauss & Corbin, 1998). Specifically, under a grounded-theory approach, all participants experience the process being studied. Strauss and Corbin (1998) delineated a grounded-theory research process of conducting interviews with participants, analyzing data by coding it into categories, and developing hypotheses to describe the interrelationships of categories. In this manner, the theory that emerges is grounded in data from the participants' experiences.

Participants

The ideal sample size in grounded-theory research is determined by theoretical saturation (Strauss & Corbin, 1998), and the typical number of participants ranges from 8 to 20 individuals

(McLeod, 2011). Using theoretical saturation as the criterion, we completed our study with 10 undergraduates recruited from a large research project we were conducting. We used purposeful sampling to identify a fairly homogeneous set of potential volunteers with experience choosing or changing their college major. Participants fit two criteria for inclusion in the study: They were traditional-age students enrolled in their sophomore, junior, or senior year, and they had declared an academic major.

The participants were studying in undergraduate degree programs at a large research university in the southeastern United States. The institutional database indicates that the university enrolls approximately 17,000 undergraduates with an estimated ethnic breakdown of 83% White, 6% African American, 3% Hispanic/ Latino, 2% Asian/ Pacific Islander, and 6% other or unknown ethnicities. Approximately 54% of the undergraduates are male and 46% are female. The study included six females and four males who ranged in age from 20 to 22 years of age (median age = 21). The participants identified themselves as White ($n = 7$), Black ($n = 1$), Latina ($n = 1$), and multiracial ($n = 1$). Their self-reported GPAs ranged from 2.71 to 3.96 ($M = 3.43$), and they were sophomores ($n = 1$), juniors ($n = 5$), and seniors ($n = 4$). Seven of the participants had started their education at the university and the other three had transferred to the university after completing some course work at another 2- or 4-year institution. Participants were enrolled in majors that included chemistry, civil engineering, computer engineering, electrical engineering, marketing, material science, psychology, and sociology.

Procedures and Data Collection

We collected data via semistructured interviews conducted by Coughlin via questions designed to explore broadly the process of choosing and changing a college major. The interviews lasted between 20 and 50 minutes. Three overarching discussion points were used to guide the interview: (a) "Talk about how you chose your major"; (b) "Talk about your experience in your major" and followed up with "How satisfied have you been?" and "What factors have affected your level of satisfaction?" and (c) "Tell me about your decision either to stay in or to change your major." Follow-up questions were used to elicit details from each participant. Coughlin recorded and transcribed the interviews.

She shared the transcripts with the participants and scheduled additional sessions to discuss the model that emerged from the data analysis (i.e., member checks). The postinterview member-check sessions lasted between 15 and 30 minutes. As per the consent form they signed, participants received a \$10 gift card at the conclusion of their interview, and those who participated in the follow-up meeting received a second \$10 gift card.

Data Analysis

Following methodology described by Strauss and Corbin (1998), we used the constant comparative method and analyzed the data via open and axial coding. We also used memos and diagrams (as per McLeod, 2011) throughout the data analysis. Each of us independently engaged in open coding to identify major categories and codes in the data and subsequently met to compare our results. The beginnings of a model emerged as we identified stages and factors related to college major satisfaction. After coming to consensus on the stages and factors, we reviewed the data again and independently engaged in axial coding to offer further explanation for the findings. We met again to compare our findings so that we could subsequently identify key constructs and develop a model (as per McLeod, 2011) that reflects the numerous personal and environmental factors influential in college major satisfaction. We shared in person or via e-mail the model with interview participants to gather their feedback and to check for accuracy.

Researchers and Trustworthiness

Creswell (2013) discussed the importance of addressing researcher bias, and we considered our own profiles. The first author, Milsom, is White, female, and has worked for 20 years as a middle, high school, or college counselor. Most recently, as a counselor educator, Milsom worked with numerous high school and college students choosing or changing their college major. The second author, Coughlin is White, female, and was completing her master's degree in counselor education with an emphasis in clinical mental health at the time the research was conducted. Coughlin has completed a 600-hour internship at a college counseling center and worked with numerous students struggling with concerns related to their college major. Both of us changed

our college major at some point after applying to our undergraduate institution.

In this study, we used a number of methods to ensure trustworthiness as per McLeod (2011) and Creswell (2013). First, we acknowledged our own experiences and biases and bracketed our knowledge and assumptions, letting the data guide the theory development. Second, we also used memos and diagrams during the data analysis. Finally, we used member checking to affirm and refine the final version of the model.

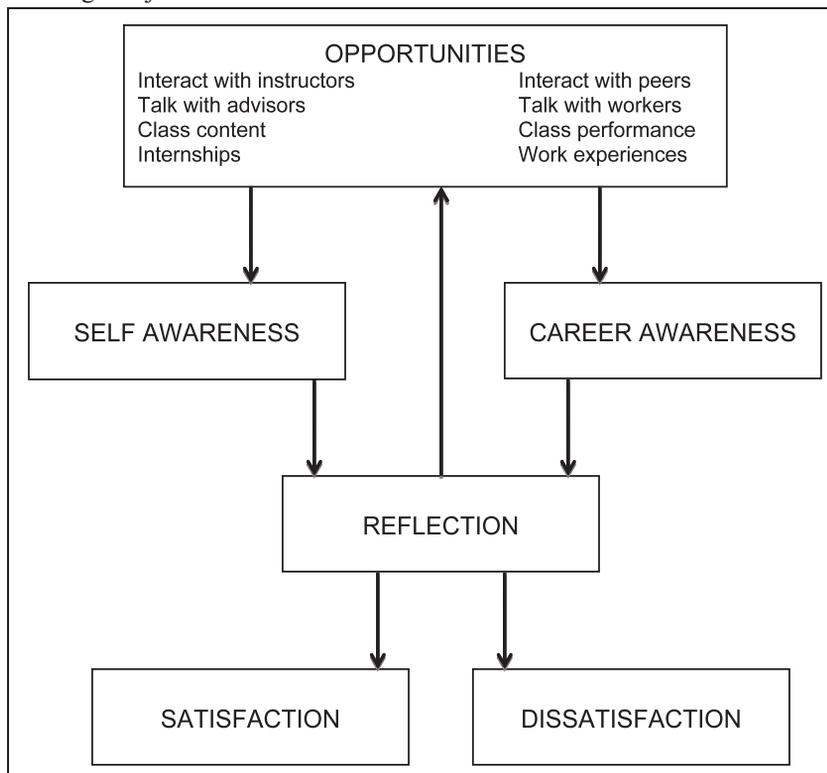
Results

The College Major Satisfaction Model

The college major satisfaction model (see Figure 1) emerged from the participants' descriptions of their experiences initially choosing a college major and while studying within their selected program of study. The model illustrates the process by which the participants developed satisfaction or dissatisfaction with their college majors. The program-of-study selection process relied on the numerous and varied opportunities by which the participants could gain insight, particularly related to their interests, abilities, and values, as well as careers. According to participants, each experiential option provided them with different kinds of information that they contemplated; that is, reaching a state of satisfaction or dissatisfaction hinged on the student's ability to reflect on the learning acquired through the various situations. Feelings of satisfaction or dissatisfaction became clearer over time as the participants gained insight and factored new information into existing knowledge, helping them gain a more comprehensive understanding of themselves and of careers.

The college major satisfaction model (Figure 1) illustrates the way specific kinds of opportunities lead to self and career awareness; it also demonstrates the ways reflection about self and career results in college major satisfaction or dissatisfaction. In addition, the model illustrates that students do not reach a point of satisfaction or dissatisfaction in a completely linear process. Participants reportedly sought out opportunities to acquire information such that they engaged in ongoing cycles of embracing or seeking specific chances to increase self or career awareness. They subsequently reflected on the knowledge they acquired through pursuit of opportunities. Study participants indicated that they gleaned insight through interactions with instructors, peers, advisors, and people employed in the workforce

Figure 1. The college major satisfaction model



as well as activities such as completing assignments, attending class, and engaging in internship and other work experiences.

Process of Gaining Self-awareness

The participants experienced numerous opportunities that helped them increase their self-awareness of interests, abilities, and values. Other situations helped them solidify their current recognition of self factors.

Identifying interests. For many participants, clarity regarding interests emerged from opportunities related to class content. For example, preparing for class led some participants to realize they were either more or less interested in their major than they had originally thought: “I was sitting there either hating what I was reading for marketing [major] or loving what I was reading for psychology [elective].” Many participants indicated that enrolling in a general education or elective course helped them gain awareness of other interests outside their major. One interviewee stated, “I just started taking some of those classes

and realized that I really like sociology,” and when discussing an elective course another student stated, “I really liked it; it was like an intro class but it—I learned like a lot of cool things.” Others commented that they may have recognized their latent interests sooner if they had been exposed to a variety of courses early in their college experience: “If I had had a broader, uh, selection of classes my freshman year I may have chosen something different [for my major].”

The participants’ interests also came into focus as a result of interactions with course instructors and other undergraduates. One participant stated, “I think teachers definitely can really, like if you’re on the fence about something and you’re not sure about it they can definitely make an impact on whether or not you like the subject.” Another stated, “My psych teachers are all pretty interesting and it just made me really like going to class.” In another perspective on the influence of instructors, one student explained feeling discouraged after a chemistry teacher voiced a lack of interest in teaching: “They’d rather do their

own research and complain about being in the classroom; it makes it that much harder to want to be there as a student.”

Participants who valued feeling connected to people in class reported the influence of peers on their satisfaction with a major: “I had some friends in my classes so it was like okay to go to class.” Conversely, a lack of connection with fellow peers precipitated disinterest in the major for one respondent: “I have a lot of classes with a lot of the same people, and uh, it’s just a lot of people that I don’t really mesh with that well.”

Identifying abilities. According to participants, peers proved instrumental in helping participants gain awareness of their abilities. For example, one student gained confidence after comparing his experience with those of his peers: “The people around me, you know, I am able to observe, you know, upperclassmen and fellow classmates, you know, with the same difficulties but they’re also, they’re also managing.” Another participant decided to pursue law school after learning about a friend’s experience: “One of my friends is applying to law school, and I, like, took his LSAT book, and I, like, took some practice tests just for fun, and like I said, I did really good on them.”

The participants also gained insight into their abilities as a result of demonstrated skills through class performance, internships, and work experiences. One interviewee realized that she exhibited stronger capabilities in elective classes and began to doubt that her science major was a source of satisfaction for her:

Basically it was biology and chemistry were just impossible, that was not my, my field. I put all of my work into them and got lower grades and put almost no work into the others and they just came really, really, I understood the material very well.

Another participant’s academic struggles encouraged her to question her chosen field:

Any time that I had a semester where I struggled grade-wise is when I doubted myself that, whether or not it was what I really should be doing ’cause I felt like if I was good at it, that meant that I was, you know, and getting good grades then, you know, it would be something that I was okay with.

For some students, experiences confirmed their abilities: “I had like three or four marketing internships. . . . I’m good at it.”

Identifying values. The participants gained awareness of their values through class content, internship experiences, and interactions with peers and instructors. For example, after learning through classes and internship experiences about specific future work prospects, one participant discussed her values: “I really like the idea that I’m gonna be involved in something that’s gonna have a lasting impact. . . . I’d be contributing something to society that would actually—you know, people would need it and it’d be useful.” Another student indicated that those opportunities helped her recognize the importance of liking a job and that such enjoyment offers a reason to feel satisfied: “Instead of looking at what’s practical and what’s gonna make me a lot of money . . . I’ve sort of moved up something I enjoy at number one.”

Regarding peer influence, one respondent validated her values through a combination of class content as well as interactions with peers and instructors,

I think kind of the reason that everyone else I know got into it is because you can make a lot of money off of it. . . . So then the more I kinda got to, like, be around all these people that are in the major and talk to the professors and start taking a lot more classes and everything, it just kinda seemed [pause] slimy[.] And then I was getting the opposite from psychology where it’s all about finding stuff out and helping people learn more stuff about themselves . . . and it made me happy too, so that . . . it made me angry to go to my marketing classes.

Process of Gaining Career Awareness

The participants entered college with varying levels of career awareness based on different types and levels of opportunities for exposure to occupational information during high school. Many of their college major choices reflected decisions made with little to no exploration; for example, one respondent explained, “My dad was an engineer, and I was always pretty good at math. . . . I didn’t really have any other, like, burning desire to do anything else, so I just kinda decided I would try that [engineering].” A student majoring in business indicated, “Basically I didn’t

know what I wanted to do and it's [business] kinda general, and um, I don't know, I thought it was something I could be good at." Many of the participants either lacked information or expressed inaccurate knowledge about their major and occupations related to their major. Opportunities during college were instrumental in helping them gain more understanding about occupations related and not related to their major.

Information acquired from class content and course-related internships and work experiences helped increase student awareness of the day-to-day requirements of occupations related to their major. One participant described waiting until her second year before she received information in class about occupational information specific to her major:

Because when I first started engineering, you know, they tend to give you the broad general classes . . . and now the classes are like narrowing down. . . . So it was just easier to see what kind of, um, things, you know, they do in the job, um, now that I'm a sophomore and not taking the general classes.

Internships and work experiences where the participants gained firsthand experience in the field helped them understand the nuances of the day-to-day work they may encounter as well as the skills and dispositions needed for success in the field. One interviewee commented that she gained specific knowledge in an internship about a job of interest:

Some of the classes aren't necessarily things that you're gonna be actually doing when you get out. . . . That was something I didn't realize until I got some internship experience. And then you go out to intern and you're like "wait a second . . . depending on where you're working at, the type of work you'll be doing is different."

Another student described work in her professor's research lab: "And when I did my research I became disillusioned with the whole idea to sit in a lab, doing the same thing over and over and over."

Some participants discussed the career awareness they acquired through interactions with people in the workforce or professionals, espe-

cially when they addressed their intended career path. In fact, information gathered from individuals familiar with various occupations—including people in the workforce and academic advisors—helped the participants gain an accurate understanding of the scope of practice as well as positive and negative aspects of various occupations. For example, while visiting a family member in the hospital, one participant majoring in nursing spoke with the hospital staff about various specialties in nursing as well as in related medical professions. Another student observed the difficulties of a family member graduating with the same college degree as she was pursuing: "My sister-in-law was a marketing major when she came here. . . . She left here with a general marketing degree and has, like, no job prospects in marketing." Similarly, information from academic advisors familiar with the job field and desired career path of participants offered helpful input. For example, one participant explained that her academic advisor pointed out facts about the likely work schedule that the advisee had not considered:

She's a wonderful advisor . . . , but she tells it how it is, which is great because [pause] it made me realize that [the chosen career is] not something I wanted to occupy all of my time with. You know, she started talking about, like, if you work in sports marketing . . . you will spend all of your time working and none of your time at home and you won't have any holidays.

Reflection

Students' feelings of satisfaction or dissatisfaction with their college major resulted from reflection on the information they had learned about themselves and careers. In fact, some participants referred to engaging in extensive self-reflection after gaining more career awareness and exposure to various occupations. For example, one interviewee indicated,

The biggest thing I really considered was still my initial question that I knew what I wanted to do just not how I wanted to do, because there's more than one way to help people if that's your only goal, um, and make a living off of it.

For some participants, their reflections related to making sense of multiple factors, including how to rectify conflicting interests and abilities. For example, one participant explained, "There's a difference between being good at it and actually enjoying it." Another said, "The homework levels hasn't been entirely positive, um, but then I've also in some of my courses . . . I've actually enjoyed them."

Other participants described new insights that resulted from their reflections: "So it kinda occurred to me that I needed to be doing something that I loved rather than something that I could finish and get out of the way and graduate with." One respondent explained, "I've always wanted to be a teacher ever since I was little. I just—it took me a long time to realize that that's what I was really good at doing." This student recognized that he could pursue a teaching career through his current major. As another student learned more about his major, the more he imagined himself feeling satisfied with the chosen career in the future: "I really enjoyed that it; it was something that was multi-involved with like other things so I didn't feel like I was pigeon-holed into something."

For some participants, one or two key moments seemed pivotal in confirming their satisfaction or dissatisfaction with their major:

I was sitting in class one day . . . and it was just really windy and the long vertical blinds were, like, smacking me in the face. It was just like an epiphany, like, "I can't do this." Like I just didn't wanna do it anymore, and um, I went to my advisor right after class and was like, "Hey, I wanna get out of this."

Some participants discovered a major that seemed more congruent to them than the one initially chosen, which prompted them to reconsider their current college major: "Basically I heard about psych, well I didn't hear about, but I learned more, became better informed about sociology through psychology, and I got a class and I took it and I was, like, 'Whoa, this is it.'"

Discussion

No matter how they initially chose their college major, study participants described a similar process of growing satisfaction or dissatisfaction with their major. Opportunities to interact with others and engage in their majors in various ways served as critical catalysts for increasing self and

career awareness, and either satisfaction or dissatisfaction emerged as the participants developed a clearer sense of themselves and their goals. All of the participants discussed moments in which they reflected on the fit of their chosen major with their long-term goals; this type of consideration comports with Holland's (1997) discussion of the importance of person–environment fit (e.g., interests, abilities, values) in relation to career satisfaction. By emphasizing the role of self-concept in relation to career satisfaction, Super (1980) also discussed careers that fit an individual's projected image. Consistent with Super, one participant discussed the emerging realization that he wanted a job where he "contributed something," and he began searching for how he could best accomplish this goal.

The participants' identification of reflection in the process of gaining self-knowledge also closely aligns with self-authorship as presented by Baxter Magolda (2001). In summarizing Baxter Magolda's work, Pizzolato (2006) explained,

Because self-authorship combines both contextual knowing and a student's own internally defined goals, values, and sense of self, it may help students make decisions that are logically sound, most comfortable, and most likely to put them on a satisfying achievement trajectory (p. 33).

Pizzolato expounded that self-authored students consider multiple perspectives, take into account personal goals, and factor in limitations (e.g., financial, abilities) when making decisions. Based on this description, the data indicate that participants in our study demonstrated self-authorship to varying degrees; for example, they referred to the usefulness of feedback from various individuals, discussed ways their major would or would not allow them to pursue future goals, and talked about the financial concerns or their own abilities that influenced their decisions.

Although the participants in our study acquired knowledge and reflected on their experiences, the time lines for these milestones differed by individual. By the time some of the participants realized their dissatisfaction with their major, they felt compelled to complete it for financial reasons. Through proactive academic advising focusing on career and self exploration, as well as identification of and reflection about personal goals, students may gain critical self and career awareness earlier in their undergraduate programs so that they can

complete satisfying majors in pursuit of careers that fit their goals and skills. Academic advisors can encourage students to take advantage of opportunities such as benefited the participants in our study.

Implications for Academic Advising

Because many of the participants described experiencing limited exposure to a variety of careers prior to entering college, some discovered majors in which they expressed more interest and ability than their initial choice. These findings suggest that academic advisors might encourage students to take a variety of courses during the first year of college. Many participants realized during their sophomore or junior years that they were more satisfied with courses in a different major and discussed concerns about the time and money necessary to change and complete a more desirable program of study. Although most colleges and universities require students to enroll in general education or elective course work outside of their declared major, some students must sequence introductory classes in their major and cannot accommodate the general education requirements until later years. If they could complete general education or elective course work during their first year, students may make initial major choices that best fit their interests and skills. Academic advisors might initiate discussions about the class order with those who make curricular decisions.

Because many of the participants described limited exposure to information about careers, academic advisors might offer screening to determine which students, such as those entering undeclared, might benefit from participating in a career exploration course. Fouad, Cotter, and Kantamneni (2009) found that completion of a career exploration course during the freshman year was positively correlated with increased self-efficacy and decreased career indecisiveness. Similarly, Thomas and McDaniel (2004) reported increased career knowledge and career decision-making confidence among undergraduate psychology students who had completed a career exploration course. Students who, like many of the participants, initially chose a major based on input from others (and thereby experiencing career foreclosure) might be particularly good candidates for this type of course. By conducting initial meetings with students, academic advisors might readily identify students with limited career exploration opportunities or little self-awareness.

Although career exploration courses are often offered through a career services office, academic advisors can collaborate with personnel in these units to increase formal opportunities for students to explore self and careers. First, academic advisors and career counselors might consider a coteaching approach. Advisors likely know course sequencing and major requirements better than the counselors, but the career counselors may feel more comfortable than advisors leading career exploratory activities. Second, in joint efforts, information about career exploration opportunities could be coordinated and disseminated as part of orientation programs. Finally, the two units could create specialized centers on campus that offer advising and career exploration specifically for students who have not declared a major, similar to the Explore Center at the University of Nebraska.

Because the participants identified experiential opportunities as very helpful in their understanding of careers and of self (e.g., abilities), academic advisors might encourage students to seek out firsthand experience early in their programs of study. Even when internships and cooperative work experiences are typically extended to those in a specific major, students often complete them during the junior and senior year when financial concerns may make major changes impossible. Furthermore, some majors are not associated with field-based work. Academic advisors can work collaboratively with course instructors and career services staff to advocate for and facilitate students' early interactions with work or workers in fields related to their majors.

In addition to facilitating self and career awareness, academic advisors also can proactively encourage student reflection of self with regard to potential careers and in relation to goals. Self-reflection of experiences relates to satisfaction or dissatisfaction with majors, and academic advisors can provide formal opportunities for student contemplation throughout the program of study. Specifically, they can use Pizzolato's (2006) suggestions for promoting self-authorship: By initiating discussions that encourage students to explore career options, identify goals, and examine the impact of choices on their goals, advisors can help increase students' career decision self-efficacy.

Many of the interviewees talked about the positive and negative impact of their course instructors on their overall interest in their major as well as their confidence in their abilities to

complete course work. Academic advisors emphasizing student self-authorship could initiate regular discussions with students to reflect on their experiences in their classes (Pizzolato, 2006). Through these discussions, advisors can help students explore and process their feelings about and reactions to course instructors in relation to other factors important to their career decisions and future goals. In addition, academic advisors can provide information to faculty members and other course instructors (e.g., graduate teaching assistants) about the effect of setting a positive tone in class, providing encouragement, and helping students realistically assess their skills.

Finally, academic advisors must recognize that they are not solely responsible for facilitating students' career development. The participants identified various individuals who contributed to their self and career exploration, and academic advisors should encourage students to seek input from others on campus (e.g., career services) as well as others who might extend some knowledge or experience related to students' future goals. Through collaborative relationships with higher education staff, academic advisors can contribute to large scale initiatives designed to help students achieve career and academic success.

For example, academic advisors and career counselors can collaborate with course instructors to develop and deliver curriculum for first-year experience courses that integrate career and self exploration. Furthermore, they can share with students the importance of seeking opportunities to learn more about themselves and careers, expose them to available resources on campus, and offer examples based on the findings of our study. That is, students may benefit from taking elective courses as soon as possible, talk to or shadow people in various jobs, and initiate meetings with their advisor and career services personnel. Advisors also can help course instructors develop and integrate projects that enable students to explore personal values, identify long-term goals, and consider the way their values and goals inform career satisfaction. By proactively educating students about self-awareness and career topics in collaboration with other higher education personnel, academic advisors might best help students identify potentially satisfying majors early in their college careers.

Limitations and Recommendations for Future Research

Selection bias may characterize this study because the students who volunteered to participate may exhibit specific traits that differ from those who did not respond to the recruitment messages. We cannot know with certainty if the model would have emerged differently with participants chosen in another way or in another place. The students came from the same university, and involving students from other higher education institutions may have resulted in a different model. Also, this study serves as a first step in examining the process by which students feel satisfaction or dissatisfaction with their college majors. Although our results offer new insight on the topic of college major satisfaction and the importance of self and career awareness and reflection, future research should be conducted to expand on our findings.

Specifically, other scholars should consider other means of participant selection and a new methodology. For example, although the participants in this study were diverse, similar research with undergraduates who represent very specific college populations (e.g., first-generation, transfer, nontraditional age) as well as those who attend different types of institutions (e.g., 2-year vs. 4-year) could help determine the applicability of the college major satisfaction model to different populations. Also, quantitative research is needed to examine more fully the relationship between college major satisfaction and outcomes such as completion of major, GPA, graduation rates, and employment. Finally, researchers might use case studies to examine the process of gaining satisfaction or acknowledging dissatisfaction with a college major.

Summary

Academic advisors assume many roles in higher education settings, but facilitating successful outcomes for students forms the basis for them all. Helping students identify and complete a satisfying college major can be accomplished through the integration of intentional interventions and advocacy for campus-wide programming. The participants in this study identified numerous factors that contributed to their self and career awareness, and academic advisors can use the recommendations to provide intentional services to facilitate student awareness and reflection. Their collaborative efforts with career services personnel, in particular, may prove fruitful in comprehensively and proactively helping students choose satisfying majors.

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