Why take BS Industrial Technology?: Exploring career choice factors among freshmen of a state university's external campus

ABSTRACT

Aims: The study identified the dominating factors of the career choice of first year students taking up Bachelor of Science in Industrial Technology in UEP Laoang Campus. The data derived from the study were used to draw inputs on enhancing career guidance services.
Study design: Descriptive research design
Place and Duration of Study: University of Eastern Philippines Laoang Campus, Department of Industrial Technology, Second Semester, SY 2022-2023
Methodology: Two hundred eight first year students participated in the study which used an open-ended survey instrument. The respondents were made to write the top three reasons of choosing BS Industrial Technology (BSIT) as their course. The responses were subjected to open coding scheme. Responses were grouped into similar categories to come up with themes. Frequency counts and percentages were used as statistical tools
Results: Majority of the respondents are males. Majority stated that the course was not their first option. Using thematic analysis, factors considered as reasons in taking up Bachelor of Science in Industrial Technology were lack of opportunities to enroll in other courses, need to develop skills, interest for the course, opportunities for future work, prior learning experience, and influence of other people.
Conclusion: The course BSIT was not the primary intended course of the respondents as they had no opportunities to be enrolled in other courses. Other reasons focus on development of skills, interests, career prospects, prior knowledge on the program's content and other people's influence. The study affirmed the three-dimensional framework by Carpenter and Foster and Beyon et al.

Keywords: career choice, career preference, college freshmen, Bachelor of Science in Industrial Technology

1. INTRODUCTION

The choice of a course in college is very essential in establishing a good career. With a good choice of a course where a student will enjoy learning, it will be ensured that the student will have chances of a better future, especially in the world of work. Choosing the right career is important in ensuring that individuals lead rewarding lives, are motivated at their jobs and can achieve remarkable productivity, thus setting the stage for organizational success and sustainability (Nyamwange, 2016).

According to Maina (2013), career choice is the selection of a course of study which leads to a specific profession according to one's interest, passion and ability as influenced by factors such as parental factors, peers, and role model. Global literature is rich in empirical evidence about the factors influencing career decision-making, some of which are family influence, passion, capacity, self-efficacy, apparent difficulty, values, sense of belonging, gender and race (Bieri Buschor, Berweger, Keck Frei, & Kappler, 2014). Norhidayah (2017) found that family and friends influence factors were the strongest factor among Asian students to make their decision to pursue their studies. Interest is significant in determining career choice decisions for an individual's career (Tukiran, et al., 2021; Sadjail, et al., 2022). In the study of Leal & Zavala (2022), the top five factors of career choice are: multiple areas in which to work, the class format that makes it possible to combine work and study, the provided tools that enable the exercise of good leadership, a high employability rate, and the tools offered which facilitate entrepreneurship.

The most widely used classification in career choice studies is the three-dimensional framework by Carpenter and Foster (1977) and Beyon et al. (1998). The three factors are: (1) intrinsic (interest in the job, personally satisfying work); (2) extrinsic (availability of jobs, well-paying occupations); and (3) interpersonal (influence of parents and significant others). However, Abe & Chikoko (2020) categorized responses of students on what influences career decision-making into interpersonal, intrapersonal and expectancy outcomes. Parson (1909) suggested that vocational choices should be based on three broad factors: a clear understanding of yourself, your aptitude, abilities, interests, ambitions, resources, limitations, and knowledge of their causes; knowledge of the requirements, conditions, success, advantages and disadvantaged, compensation, opportunities, and prospects in different lines of work; and the true reasoning on the relations of these two groups of facts. These three broad factors of vocational choice provided simple guidelines for individuals to consider when choosing their career and emphasized the importance of individuals having and understanding of themselves, their career alternatives and how to use this information for rational career decision making (Jones 1994). Studies have shown that the main intrinsic factors responsible for influencing career choice decisions include an individual's personality, interests, self-concept, attitudes and cultural identity. On the other hand, the main extrinsic factors include social contacts, role models; availability of resources such as information and finances, globalization, ethnic background, level of educational attainment, choice of subjects of study and differences in job characteristics (Kerka, 2000; Bandura, Barbaranelli, Caprara & Pastorelli, 2001; McQuaid & Bond, 2003).

Kazi & Achlaq (2017) found that the parents influence as most significant, followed by influence from peers, gender, print media, financial reasons, interest and others. The study of Humayon, et al. (2018) revealed that family influence, personal interest and economic considerations have a significant positive impact on the career choice of undergraduate students of higher educational institutions. Quiño, J. (2022) found that personal interest, family influence, peer influence, job opportunities, financial condition were influences in the career preferences of senior high school students during the pandemic. Stage and Hossler (2000) proposed that the effects of external influences such as parents, teachers, and friends on students' career choices may play a role in students' "subsequent satisfaction, and possibly ultimate persistence". Edmonds (2012) emphasized that the process of choosing a college major can be very convoluted and it is a cause of great anxiety, because for most it will likely be one of the most important life decisions they make. Wright (2018) studied the potential causes and effects of changing college majors at least once or multiple times which is very common behavior to students. The personal aspect of choosing college degree is also critical in the future success of students' learning experiences towards the success of their future careers. Porter and Umbach (2006) mentioned about the alignment of students' personality,

interests, beliefs, and even political views in choosing a college degree is an essential component in order to have most successful outcomes which is called “Person-Environment Fit”. Ghosh and Fouad (2016) studied the role of family influence on careers in the context of Asian parent–child dyad which include these factors: acculturation, cultural values, and conflict within the family. Considering the situation of the social environment on how maritime profession contributes to the economic growth of the society and country is essential aspect to explore in the study. Several studies emphasized the importance of high employability rating and job placement of the graduates in any particular degree program in college so that prospective students would be attracted to take the program (Laguador & Orence, 2013; Ungui et al., 2014; Chavez, Dotong, Camello, & Laguador, 2016; De Castro, Prenda, & Dotong, 2017; Chavez, De Castro, Camello, Dolot, & Laguador, 2016; Aguila et al., 2016; De Catsro et al., 2016; Dotong et al., 2017; Laguador, 2015; Dotong, 2014; Felicen & Borbon, 2017). The behavioral factor of the students might also influence the decision of students in making choices of their future career through taking the right degree program in college. Walls (2009) emphasized some factors influencing postsecondary students' career choice and how those factors impact college outcomes, including motivation towards, satisfaction with, and achievement in their chosen major field, appear to be more obscure and uneven.

Ming (2016) conducted a study to determine the impact of factors affecting students career decision making and revealed that the important factor affecting student’s career decision is “Personal factors”, while for students and parents mid-to high educational attainment, “family factors” are the most influential factors of student career decisions. Students enrolled in homemaking courses, “school factors” are the most important factors of student career decisions. Moreover, most of the studies examined the factors influencing career choices of undergraduate students identified some related factors such as socio economic, educational and cultural background (Noreen & Khalid, 2012). The results of the study conducted by Nazet. al. (2014) revealed that although family i.e. parents and other family members primarily transformed the behavior of the children in multiple ways, peer influence is an asset for developing career opportunities and decision making among youth.

Every year, higher education institutions like the University of Eastern Philippines, is admitting thousands of first year students. These students undergo rigorous admission requirements set by the institution. However, it has been observed that some students are admitted in courses which they do not like. Some are forced to be in courses because of limited quota of number of students. There are still others who graduate with their respective courses who turn out to work in fields other than the specialization they finished.

The University of Eastern Philippines Laoang Campus, one of the two external campuses of the University of Eastern Philippines, the only state university in the province of Northern Samar, Philippines, offers a four-year degree course named Bachelor of Science in Industrial Technology (BSIT) which offers field of specialization along Electrical Technology, Electronics Technology, Food Technology, Cosmetology Technology, Garments Technology, and Automotive Technology. In the past two years, the enrolment of the program had a very significant increase. However, it had been noted that many students who were not admitted in other courses comprised the enrolment of the program. Hence, admitting students who do not like the course at the very start may influence the interest of these students towards finishing the program.

Hence, it is imperative that higher education institutions be aware of the reasons why students enroll in a certain program. Knowing the factors underlying a career choice allows an institution to focus the search for prospective students efficiently and optimize the utilization of resources to attain new enrollments, develop transversal strategies for all the university programs and customize them based on specific factors relevant to each career (Leal &

Zavala, 2022). Consequently, there is a need to study the factors that prompt students to choose their respective courses so that guidance units could help in coming up with intervention activities to improve the delivery of career guidance in schools.

2. METHODOLOGY

The study was conducted in the University of Eastern Philippines Laoang Campus particularly, in the Department of Industrial Technology. The study utilized the descriptive research design to describe the factors considered by the first year BS Industrial Technology in choosing their present course. Two hundred eight (208) first year students were included as respondents. Of this number, majority (58.17%) are males. An open-ended survey instrument was used in the study. The respondents were made to write the top three reasons of choosing BS Industrial Technology as their course. The responses were subjected to open coding scheme. Responses were grouped into similar categories to come up with themes. Frequency counts and percentages were used as statistical tools.

3. RESULTS AND DISCUSSION

Result of the preliminary question asked to the respondents was on their preference of the course. Data revealed that only 69 (33.17%) stated that the course was their first choice. It means majority (66.83%) did not like BSIT as their first course.

Out of the responses of the 208 first year Bachelor of Science in Industrial Technology students, six categories of factors were considered as reasons why the students took the course: lack of opportunities to enroll in other courses, need to develop skills, interest for the course, opportunities for future work, prior learning experience, and influence of other people.

3.1 Factors in choosing BSIT as a course

3.1.1 Lack of opportunities to enroll in other courses

An overwhelming reason why the students took BS Industrial Technology is that they had no opportunity to be admitted in other courses which were their first or second choice. Most of the courses preferred by the respondents were Criminology or Teacher Education programs. Some also failed in the grade requirement of other courses.

Sample responses from respondents were:

"Because my grades are not enough to enroll in other courses" (ET32)
"This is the only course that is available during my enrolment" (ET11)
"Because my first choice is officially closed when I enrolled" (ET8)
"I didn't pass in the course I wanted" (CT9)
"I had no other choice" (FT15)

3.1.2 Need to develop skills

Another reason of taking BS Industrial Technology is that the respondents need to develop their skills along the different majors of the BSIT program. The BSIT program aims to develop and enhance skills of students along the areas of specialization.

Sample responses from respondents were:

"I want to enhance my skills in electrical'" (ET17)

"You can take a National Certificate (NCII)" (CT8)
"This course will help me build my skills" (ET27)
"To enhance my skills, not only in academics" (FT1)
"I want to improve my cooking skills" (FT60)

3.1.3 Interest for the course

One of the reasons of taking BSIT according to the respondents is their interest for the course. Others call it the passion or even the love for the course. Porter and Umbach (2006) considered the alignment of students' interests in choosing a college degree as an essential component in order to have most successful outcomes.

Sample responses from respondents were:

"I like to experiment on new dishes." (FT 56)
"I want to try new ways of preparing food" (FT24)
"It is my hobby to cook" (FT12)
"I am confident in operating gadgets" (ELT14)
"I love nail art" (CT7)
"My passion is in here" (ET85)

3.1.4 Opportunities for future work

The respondents have foreseen the opportunities that are offered once they graduate in the BS Industrial Technology program. Since the nature of the course is skills-based, graduates are bound to be hired in industries. Graduates of these skills-based courses are also among the usual ones hired abroad.

Sample responses from respondents were:

"To achieve my dream of becoming a chef" (FT2)
"Dahil dito madaling makahanap ng trabaho" (Because of this course, it is easy to look for a job) (ET79)
"To become a registered master electrician" (ET59)
"The course is in demand" (CT5)
"To know more on how to manage business in the future" (FT4)
"So I can have my own restaurant'" (FT3)
"I can go abroad" (CT6)
"There are many job opportunities in other countries looking for skilled workers" (ET1)

3.1.5 Prior learning experience

Some respondents have experiences related to the major areas of BS Industrial Technology before their enrolment in the course. Some of these students have Senior High School tracks along Technology Vocational Livelihood education, which are precursors of the BS Industrial Technology course. Hence, they carry the entry knowledge which could give them the edge over other students.

Sample responses from respondents were:

"Naranasan ko na ring mag-wiring" (I have already experienced to do wiring) (ET62)
"Connected to my strand in Senior High School which is Cookery" (FT50)
"I want to continue what I learned from my course before" (ET30)

"Dahil may kaunting kaalaman na ako sa electrical" (I have a little background on electrical concepts" (ET49)

3.1.6 Influence of other people

Enrolment in the BS Industrial Technology program has been influenced by other people particularly the parents. Others have been influenced by their role models. Mzobe (2014) confirmed the role played by family in the career decision of students was more significant than monetary influences.

Sample responses from respondents were:

"Because my parents told me to enhance my talent in cooking" (FT58)
"Dahil nandito ang mga kaibigan ko" (My friends are also enrolled in this course) (ET55)
"My mother told me to have this course" (FT17)
"My uncle who is a chef is my inspiration for the course" (FT47)

3.2 Inputs to career guidance

The findings of the study pose scenario for improvement in the career development of prospective learners who might be helped in the future by activities or strategies which could help in making the course more viable.

Guiding the inputs forwarded by this study is the career-related learning concept of Hutchinson (2013) which includes three components: career information, advice and guidance; career education (including self-development, exploration and management); and work-related learning (about types of work, developing skills for, and through work).

Table 1. Proposed activities/strategies for career development

Component of career development	Activities/Strategies
Information, advice and guidance	• Intensive career campaign to senior high school students, especially in Technical Vocational Livelihood tracks
Career education	• Intensive skills development provided by faculty members, particularly in laboratory classes • Constant follow-through with their studies to ensure their chances of finishing the program
Work-related learning	• Facilitating the assessment of students for National Certificates aligned with their specializations • Holistic development provided by the on-the-job training experience

4. CONCLUSION

The study explored the reasons why first year Bachelor of Science in Industrial Technology students took up the said course. Two hundred eight freshmen participated in the study and identified reasons, among which were: lack of opportunities to enroll in other courses, need to

develop skills, interest for the course, opportunities for future work, prior learning experience, and influence of other people.

It could be concluded that the course BSIT was not the primary intended course for the respondents and that they had no opportunities for other courses so they chose the program. Other reasons focus on development of skills, interests, career prospects, prior knowledge on the program's content and other people's influence. The study affirmed the three-dimensional framework by Carpenter and Foster (1977) and Beyon, et al. (1998). The freshmen Bachelor of Science in Industrial Technology students' reasons in choosing the course are along the three factors of the framework: interest for the course, an intrinsic factor, opportunities for future work, an extrinsic factor; and influence of other people, an interpersonal factor.

There is a need for the Industrial Technology Department of the UEP Laoang Campus to conduct intensive career campaigns to senior high schools to enhance the awareness of the probable career opportunities for graduates of the program, particularly to senior high schools with Technology Vocational Livelihood tracks as these students possess the requisite knowledge on the course. The faculty members should provide the best learning experience to students so their skills are fully developed and their interests are enhanced towards finishing the program. The inputs drawn from the study need to be considered for implementation by the campus to enhance career development of the BSIT students.

ETHICAL REVIEW

The study underwent the assessment of the Institutional Ethics Review Committee of the University.

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