

FACTORS INFLUENCING STUDENT'S CHOICE OF THE SPECIALIZATIONS COMPUTER AND ELECTRONICS TECHNOLOGY

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ABSTRACT: Eighty combined Bachelor of Science in Industrial Technology major in Computer Technology students and Bachelor of Science in Industrial Technology major in Electronics Technology students of Negros Oriental State University were made to answer an instrument to determine the extent the factors: program's reputation; school's reputation; equipment; quality education; proximity of the campus; class size; tuition fee; program's best practice; student to faculty ratio; classrooms; uniqueness of the programs in the locality; and, learning environment, influenced their choice of the program they're in.

In this study, the author reports here, that the program's reputation, the school's reputation, equipment, quality education, student-to-faculty ratio, program's best practice, classrooms, and uniqueness of the program in the place, are the key factors that influenced student's preferences in choosing Bachelor of Science in Industrial Technology major in Computer Technology students and Bachelor of Science in Industrial Technology major in Electronics Technology.

Keywords: Computer technology, electronics technology, learning environment, program's best practice, student-to-faculty ratio

1. INTRODUCTION

A dream of many colleges is to admit high-quality students. School administrators strive to keep students who are motivated to learn, believe in their capacity, and more importantly, students who are determined to become competent professionals. This is because the effects of attrition of high-quality graduates may trigger negative effects on the industries that are hiring these graduates.

The results of this study are important in the context of planning activities to promote the said programs.

A couple of studies were conducted to investigate what factors influenced students' choice of their program, students' choice of study destination, or students' choice of whether or not to pursue further studies. For example, the study of Clark, J. M. [1] found that the ten most frequently selected factors recorded as influential in student decisions to enroll in a four-year post-secondary commercial aviation program were: program educational quality, university reputation, condition of equipment, institutional educational quality, location of institution, small class size, safety concerns, program characteristics, student to faculty ratio, and distance from home.

A similar study conducted by Hossler, *et al.* [2] in the non-technical academic field concerning how students choose colleges showed that: special academic programs, tuition costs, availability of financial aid, general academic reputation for quality, location or distance from home, population, social atmosphere were the most important influences to students.

According to Rayfield *et al.* [3], parents were the most influential person regarding choice of major. Also, the University's Internet resources and agricultural-related hobbies were as influential. Scholarships and high school visits from university representatives were the least influential recruitment tool.

Almukhambetova & Kuzhabekova [4] studied the factors affecting the decision of female students to enroll in undergraduate science, technology, engineering, and mathematics majors in Kazakhstan.

Using in-depth interviews with students representing 17 different doctoral programs, Hoskins and Goldberg [5] studied what factors can influence students' decisions to persist or

leave their counselor education doctoral programs. They claimed that the key determinant in attrition or persistence decisions was a match between the student's goals/expectations and the faculty members' expectations and goals for the program.

James-MacEachern and Yun [6] determined the factors that influence international students' choices in selecting a small institution. They compared Chinese students' preferences with other international students in selecting an institution, in terms of information used, usefulness of the information, pull motivations, and reference groups.

Özoğlu *et al.* [7] explored the factors influencing international students' decisions to choose Turkey as their study destination. The results suggest that geographical proximity and cultural, historical, religious, and ethnic affinities seem to be very prominent in international students' decisions to study in Turkey.

Miller and Hurlock [8] reported that females who completed at least one Advanced Placement STEM course in high school influenced their decision to attend a non-research-intensive undergraduate institution.

Edzie [9] investigated what factors influenced and motivated female students to enroll and persist in collegiate STEM programs.

Stallings [10] defined and described the several influences impinging on women's decisions regarding whether to pursue advanced courses in mathematics.

Zhang *et al.* [11] explored which factors influence international students' decision to pursue doctoral studies in Canada.

Gille *et al.* [12] investigated the decision-making processes behind the students' choice of engineering school.

McKinney *et al.* [13] determined where the factors [influencing student's course preference] fell in the three major areas: (1) academic performance, (2) financial considerations and other costs, and (3) advising experiences, with academic performance framing students' discussion.

The personality theory is helpful in explaining why students develop different preferences. The attribution theory also explains how student's choices were influenced by their interpretation of the events around them [3]. These theories

imply that the respondents will have different responses. Thus, it is reasonable to conduct this study.

After obtaining a basic education, most students go to college. It is a common perception that one is more employable if he or she finishes college. This perception is further strengthened by the observation that Bachelor of Science in Industrial Technology major in Computer Technology students and Bachelor of Science in Industrial Technology major in Electronics Technology programs have been producing competent graduates equipped with the necessary knowledge and the necessary practical skills.

The present study seeks to quantify the perceptions of the students on what influences their choice of computers and electronics as their specializations.

Program reputation refers to the achievements earned by the program over time, e.g. employability of graduates. Equipment refers to the availability of hardware and software required in the laboratory subjects. Quality education refers to the high level of accreditation of the program. Proximity of the campus refers to the distance from the residence of the student to the campus, and the availability of transportation. Class size refers to the number of students in a class. Tuition fee refers to the enrolment fees. Student to faculty ratio refers to the quotient, the number of teachers divided number of faculty. Classrooms refers to the number of classrooms devoted to the program. The uniqueness of the programs in the locality refers to the absence of the programs in the neighboring schools. Learning environment refers to the social atmosphere around them.

2. METHODOLOGY

This study employed a quantitative research method as the researcher quantified and analyzed the responses of the respondents. This was done by determining the weighted mean of each of the factors, and then by ranking the weighted means of the factors to determine the factors that influence most.

Inferential Statistics was also used to infer the characteristics of the population with respect to the 12 factors. The inferences were made with 95% certainty.

The respondents were 80 students of Negros Oriental State University. They were randomly chosen from 150 second-year Bachelor of Science in Industrial Technology major in Computer Technology students and 20 Bachelor of Science in

Industrial Technology major in Electronic Technology students.

Table 1. Research Questionnaire

Rate how much each factor influences your choice of the program you're in, with 1 as the lowest and 5 as the highest.

Table 1					
Factors	1	2	3	4	5
1. Program Reputation					
2. University Reputation					
3. Equipment					
4. Quality Education					
5. Proximity of the campus					
6. Class size					
7. Tuition					
8. Program's best practice					
9. Student to faculty ratio					
10. Classrooms					
11. Uniqueness of the programs in the locality					
12. Learning environment					

- 4.1 - 5.0 Very high
- 3.1 - 4.0 High
- 2.1 - 3.0 Moderate
- 1.0 - 2.0 Low

By the probability sampling technique, we can ascertain that the sample of this study is representative of its population.

The factors that may influence one's choice of the program are the program's reputation, university reputation, equipment, quality education, the proximity of the campus, class size, tuition fee, program's best practice, student-to-faculty ratio, classrooms, uniqueness of the programs in the locality, and learning environment. The students were asked to register their level of agreement with the scale items on a five-point Likert scale format from 'low' to 'very high'.

3. RESULTS AND DISCUSSIONS

Fifty-two (52) % of them belong to the low-income family (family monthly income is less than Php10,000 per month). Most of the families have five members. 20.83% of the respondent's fathers do not have jobs, while 18.05% are farmers, and 6.94% are construction workers. Most (56.94%) of the respondent's mothers were housekeepers.

Table 2. The extent of influence in the choice of the programs

Factors	n	\bar{x}	s	Margin Error	Lower Limit	Upper Limit
1. Program Reputation	73	4.0	0.9	0.2	3.8	4.2
2. University Reputation	73	3.9	1.1	0.2	3.7	4.2
3. types of equipment	71	3.7	1.0	0.2	3.5	3.9
4. Quality Education	72	4.1	0.9	0.2	3.9	4.3
5. Proximity of the campus	65	3.4	1.4	0.3	3.0	3.7
6. Class size	70	3.3	1.3	0.3	3.0	3.6
7. Tuition fee	68	3.1	1.7	0.4	2.7	3.5
8. Program's best practice	69	3.8	0.9	0.2	3.6	4.0
9. Student to faculty ratio	69	3.6	1.1	0.2	3.4	3.9
10. Classrooms	72	3.5	1.4	0.3	3.2	3.8
11. Uniqueness of the programs in the locality	72	3.7	1.4	0.3	3.4	4.0
12. Learning environment	59	3.1	0.9	0.2	2.9	3.4

Results show that: the extent the *program's reputation* influences students' choice to enroll in the said programs is from

high to very high; the extent the *school's reputation* influences students' choice to enroll in the said programs is from *high to very high*; the extent the *quality education* influences

student choice to enroll in the said programs is from *high* to *very high*; the extent the *equipment* influences student's choice to enroll in the said programs is *high*; the extent the *program's best practice* influences student's choice to enroll in the said programs is *high*; the extent the *student to faculty ratio* influences student's choice to enroll in the said programs is *high*; the extent the *classrooms* influences student's choice to enroll in the said programs is *high*; and, the extent the *uniqueness of the program in the locality* influences student's choice to enroll in the said programs is *high*.

The result says that the extent of the program's reputation, quality education, and better equipment highly influence students' choice to enroll may be due to the fact that employers want competent graduates. Drawing graduates from a reputable institution assures the company of better employees.

The result which says that the program's best practice, student-to-faculty ratio, and quality of classrooms highly influence students' choice to enroll may be due to the fact that people prefer to be comfortable. We want to be comfortable in everything we do.

4. CONCLUSION

The research found that the *program's reputation*, the *school's reputation*, *quality education*, the *program's best practices*, and the *uniqueness of the program in the place* were the key factors that influence student's preferences in choosing the programs *Bachelor of Science in Industrial Technology major in Computer Technology* and *Bachelor of Science in Industrial Technology major in Electronic Technology*.

The results of this somewhat confirm, to some extent, the claims of Clark, J. M. [1] and Hossler, *et al.* [2] in their study. By maintaining or raising the program's reputation and the quality of instruction, improving the equipment, having best practices, minimizing the student-to-faculty ratio at an appropriate level, and improving classrooms, it is likely that the program can entice more enrollees.

In promoting the programs to increase or sustain the population, the activity may focus on emphasizing the reputation of the program to the industries, the quality of instruction, the equipment available, the best practices, and the comfort of the students when they are in school.

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