Factors influencing decision making on the choice of higher education institutions by prospective students: The experiences of students at Divine Word University in Papua New Guinea

Kaia Gamoga & Tabian Ambang

Abstract

This study was conducted at Divine Word University (DWU) main campus in Madang in 2020, aiming to understand the choice factors that influence the prospective students' decisions in choosing their career path in a tertiary institution in Papua New Guinea (PNG). The study participants were the first-year students across faculties. Factors ranging from entry requirement, interest in the program, future job opportunities, personal reasons, and reputation of the institution were tested using an online survey questionnaire. The main factor that influenced prospective students' decision to select DWU as their first choice was the reputation of the university. Findings of the study indicates a shift in the trend on how students make decisions to pursue their career path in tertiary institutions in PNG. DWU student experiences show that students are more concerned about their future employment prospects by choosing a tertiary institution with reputation and programs that have more opportunity for employment. Findings of the study provides insights on improving student motivation, academic performance, and career path.

Key words: choice factors, decision making, reputation of the institution

Introduction

Choosing a university and a study program is one of the most important decisions students make to pursue their careers. This decision has a major impact on the student's life, which can result in them achieving their goals if selected or wrecking hopes for their future if not selected. According to Ilgan, Ataman, Ugurlu & Yurdunkulu (2018), students tend to be more motivated and committed to their studies when they have considered their choices than those who did not. Furthermore, Partenie (2019) explains that, dissatisfaction, undermotivation for academic success and low progression are indicators for students' pursuing careers in the areas not aligned with their choices and interests.

Studies done by Maringe (2006), Alonderiene & Klimaviciene (2013) and Sabir et al. (2013), have shown that students base their decisions on the benefits of what the particular study program will offer after completion rather than just being interested in the program. Ivy (2010) explained that decisions

students make on a university and program of their choice are not only fixed or based on personal factors, but include a range of institutional and socioeconomic factors that influence their decisions. Evidence from the literature shows that identifying and understanding student choice factors is essential for universities and higher learning institutions to attract, retain and support students to fulfill their career goals.

However, limited information is available in the literature for the experiences of students attending universities and tertiary institutions in PNG. Therefore, this study was conducted at Divine Word University, Madang campus in 2020 to understand the factors that influence students' decisions to choose a tertiary institution to pursue their career path.

Background

Divine Word University is a national university and a leading tertiary institution in Papua New Guinea. Formerly Divine Word Institute, it was established as a University in 1996. DWU is ecumenical, coeducational and privately governed within the Catholic Church, and a major partner with the Government of PNG in the higher educator sector (DWU, 2020). DWU enrolls approximately 3,000 students each year into four faculties which offer full time undergraduate and post graduate degrees as well as flexible learning programs. DWU has five campuses located in Madang, Port Moresby, Wewak, Rabaul and Tabubil (DWU, 2020). This study involved the first year undergraduate students attending DWU main campus in Madang. First year students were selected because they were in a better position to reflect on their recent experiences in relation to choosing a program of study.

Selection process for universities and tertiary institutions in Papua New Guinea

Every year school leavers and non-school leavers are faced with the issue of making a decision in choosing a program and institution to further their education. For school leavers (grade 12), students apply using DHERST online application (DHERST, 2019). The students make their choices online for the courses offered by universities and tertiary institutions. The students' assessment results are accessed by DHERST and the respective universities through the online results made available by the Measurement Service Unit of the Education Department. The online system then selects students according to their final marks and grades. The results are made available online for students to access (DHERST, 2019).

For non-school leavers, the interested candidates apply to the university or institution of their choice by filling a non-school leaver application form. The selection is done by the faculties and departments of the respective institutions. Successful applicants are notified through a letter of acceptance (DWU, 2020). However, there is no guarantee that students will be offered a space based on their first-choice preference of a program and the institution. The selection is determined by the entry requirements and the availability of space for each

program at the institution. In 2019 there were about 29,000 school leavers that exited grade 12, and only 4,000 were selected to continue further studies at tertiary institutions including the six universities (DHERST, 2020).

Methodology

Design of the study

The design of the study was based on quantitative research methodology by using a survey questionnaire. The target population comprised of the undergraduate students at Divine Word University. The study population was the first-year students enrolled at the main campus in Madang. From the target population of approximately 400 students, only 25% of the students (100) were selected through a simple random selection method. They were selected because of their recent experiences as prospective students in 2019. Ethical clearance was given by the DWU Faculty of Medicine and Health Sciences Research Ethics Committee and permission to access students' email was given by the Vice Present for Student Affairs. The selected participants were identified by their ID number and notified through email. Those who accepted the invitation signed a consent form to participate voluntarily. The survey questionnaire was delivered to 100 selected participants. However, only 88 completed forms returned. The other 12 participants decided not to participate due to personal reasons.

Data analysis

The survey was facilitated through an online application called "Google Forms" using an online self-administered questionnaire that contained 10 closed-ended questions with a 5-point Likert scale. The survey questionnaire was emailed to each selected participant. Data was analysed using frequency distribution of participants' responses on a 5-point Likert scale. Frequency analysis is a descriptive statistic tool that is used to analyze one variable at a time by counting the number of times a variable occurs (Mujis, 2010). Participants' responses were filled into a database in an Excel file. After identifying the frequency for each survey question, data were then entered in the frequency tables as well as cross tabulation for further analysis. Findings were interpreted using column charts.

Findings

The discussion is based on the evidence resulted from the data analysis. The most common factors identified in the literature as influencing student decision making in choosing their career path and the institution were (a) entry requirements, (b) personal interest, (c) future job opportunities, (d) reputation of the university, (e) parental influence and (f) location of the university. For the purpose of this paper, only the top five common factors are discussed.

Demographic Information of participants

A survey form was distributed to 100 selected students, but only 88 completed forms returned, as mentioned earlier. Table 1 shows the demographic information for the participants.

Total	Age Group	Male	Female
51	20 or younger	25	26
33	21 to 25	10	23
4	26 to 37	1	3
88		36	52

Table 1: Demographic information of participants

While the majority of the participants are female students, most of them are under the age group of 20 years or younger from which it can be concluded that most of the students are fresh out of high school compared to the 5% grouped under the age group of 26 to 37.

Table 2: Participant program choices

Undergraduate Program	Frequency	%
Bachelor of Health Management	24	27
Bachelor of Business Studies	18	20
Bachelor of Communication Arts	10	11
Bachelor of Information Systems	10	11
Bachelor of PNG Studies and International Relations	6	7
Bachelor of Mathematics and Computer Science	6	7
Bachelor of Environmental Health	3	3
Bachelor of Tourism and Hospitality Management	3	3
Bachelor of Physiotherapy	2	2
Bachelor of Rural Health	2	2
Bachelor of Social and Religious Studies	2	2
Bachelor of Medicine and Bachelor of Surgery	2	2
Total	88	100

Factors influencing student's choice of study program

Review of the literature highlighted the five most common factors that influences student decision making on the choice of the institution and study program. On the survey questionnaire, students were asked to rank each factor on a five-point Likert scale to indicate the level of influence the factor had on their choice starting from question number five to question number ten. Participants' responses to each factor are discussed in line with the question. Question 5: Rank the following factors and their level of influence on your decision to choose your program of choice at DWU (entry requirements, interest in the program, personal reasons, future job opportunities, & university reputation).

Factor 1: Influence of entry requirements on choices

Table 3 represents the ranking and frequency for the factor "entry requirements for the program" which the students ranked according to its influence on their decisions. This factor represents the different criteria or requirements like GPA or subjects attached with the program that students look at when trying to decide on a particular course. In the survey, the factor was ranked by only 87 out of the 88 participants that participated and the findings showed that the majority of the students ranked the factor to be "Influential" rather than most influential in their decision. It is also found that there was an equal distribution of male and female students influenced by the factor. However, more female students found the factor not influential than male students.

Entry requirements	Frequency	%	Male	Female
Most influential	19	21.6	10	9
Influential	23	26.1	9	14
Moderately influential	12	13.6	6	6
Of little influence	15	17.1	4	11
Not influential	18	20.5	6	12
Total	87	98.9	35	52
No responses	1	1.1	1	0
Total participants	88	100	36	52

Table 3: Factor 1. Entry requirements' influence on choice decisions

Figure 1: Influence of entry requirements on student choices



Factor 2: Influence of personal interest in program choices

Just like factor 1, factor 2 had only 95.5% of the participants' responses out of the 88 participants. The findings displayed in Table 4 and Figure 2 show that

the majority of the students were influenced by their interest in the program when trying to decide their program of choice. With half of the students (51.1%) ranking the factor "Most Influential" the other half of the students (44.4%) found it to be "influential" (14 students), "Moderately influential (13 students), of little influence (7 students), and not influential (5 students) in their decision making. The findings also found that there was a balance in both the male and female students' decision making regarding the influence of being interested in the program when choosing a study program.

Ranking	Frequency	%	Male	Female
Most influential	45	51.1	16	29
Influential	14	15.9	5	9
Moderately influential	13	14.8	6	7
Of little influence	7	8.0	5	2
Not influential	5	5.7	1	4
Total response	84	95.5	33	51
No responses	4	4.5	3	1
Total participants	88	100	36	52

Figure 2. Influence of	nonconal interact on	atudant nnagnam ahaiaag
Figure 2: Infinence of	Dersonal Interest on	student program choices
- gar e = minaemee er		state program enoices



Factor 3: Influence of personal reasons on choices

Personal reasons in regards to choosing a particular study program were found to be a mixture of various influences to the students. When analyzing the findings,

the data in Table 5 and Figure 3 show an equal response to the factor being ranked "most influential (23%) and "of little influence" (23%) from the students. However, more female students found the factor to be "most influential" in their decision making rather than male students who found the factor to be "Not influential".

Table 5: Influence of personal reasons for program choices

Ranking	Frequency %		Male	Female
Most influential	19	21.6	5	14
Influential	11	12.5	4	7
Moderately influential	16	18.2	5	11

22 Gamoga & Ambang, Factors influencing decision making on the choice of higher education institutions by prospective students

Of little influence	19	21.6	7	12
Not influential	18	20.4	13	5
Total response	83	94.3	34	49
No responses	5	5.7	2	3
Total participants	88	100	36	52

Figure 3: Influence of personal reasons on student program choices



Factor 4: Influence of future job opportunities on choices

Students were most influenced by future job opportunities associated with the program when making their decision. As depicted in Table 6 and

Figure 4, 51.1% out of the 85 students that responded indicated that the factor was most influential in their choice of study program while only 2% of the students found it not influential. Furthermore, even though both male and female students were influenced by the factor, the study found that female students were more influenced by the factor than the males.

Ranking	Frequency	%	Male	Female
Most influential	45	51.1	18	27
Influential	15	17.1	6	9
Moderately influential	16	18.2	8	8
Of little influence	6	6.8	2	4
Not influential	3	3.4	2	1
Total response	85	96.6	36	49
No response	3	3.4	0	3
Total participants	88	100	36	52

Table 6: Influence of future job opportunities on choices

Figure 4: Influence of future job opportunities on student program choices



Factor 5: Influence of a university's reputation on choices

The last factor that students ranked was the

reputation of the university.

Ranking	Frequency	%	Male	Female
Most influential	43	48.9	18	25
Influential	12	13.6	4	8
Moderately influential	9	10.2	4	5
Of little influence	8	9.1	5	3
Not influential	11	12.5	2	9
Total response	83	94.3	33	50
No responses	5	5.7	3	2
Total participants	88	100	36	52

Table 7: Ranking of influence of a university's reputation on choices

As high as 94.3% of the 88 participants ranked a university's reputation as shown in Table 6. The ranking of the factor displayed in Figure 5 shows that 43 students indicated the factor to be most influential to them while 12.5% of the students found it not influential in their decision.

Figure 5: Influence of a university's reputation on student choices



Factors influencing student choice of the university

Students were given ten factors that were associated with their choice of university and asked to choose the most influential factor for their decision to

choose Divine Word University as their choice of university.

Question 7: What is the most influential factor that influenced your decision to study at Divine Word University?

Factors	Frequency	(%)	Male	Female
University's academic reputation	50	57	25	25
Availability of modern technology	15	17	3	12
Only university offering interested program	13	15	5	8
Parental influence	3	3	1	2
Location of the university	2	2	0	2
University's moral reputation	5	6	2	3
Total	88	100	36	52

Table 8. University Choice Factors

Of the ten influential factors that were listed on the survey for students to choose from, most students indicated that they were influenced by the university's academic reputation (57%) as shown in Table 8, followed by availability of modern technology (17%) and the fact that it was the only university offering their interested program (15%). Parental influence (3%), location of the university (2%) and the university's moral reputation were at the bottom of the table signifying to be the least influential factors in their decision making process.

Figure 6: University choice factors



Sources of information

Different sources of information were given to students to identify which source they consulted and was influential in their decision to choose their study program and university of choice.

Question 6: What source of information was influential in your undergraduate study program?

Sources	Frequency	%	Female	Male
Word of mouth	34	39	25	9
Others	20	23	11	9
School awareness	13	15	7	6
DHERST booklet	10	11	5	5
Social media	7	8	2	5
Teachers	3	3	2	1
University open days	1	1	0	1
Total	88	100	52	36

Table 9. Sources of information for the study program

Figure 7: Sources of information for the study program



The three sources of information that students consulted the most and was influential in their decision to choose an undergraduate study program was word of mouth (39%), others (23%) and school awareness (15%). The Department of Higher Education, Research, Science and Technology (DHERST) booklets were also consulted by the students but was not that influential. Even though the university holds an annual open day for the secondary schools and the public, it had a low influence (1%) on students' decision making.

Question 8: Did you search for further information about the university before deciding?

Besides using the information source to decide on the undergraduate study program that they wanted to choose, students were asked if they did a further search about the university offering the course before deciding. 31% of the students indicated that they did not do such a search while 69% indicated that they did a further search before deciding.





Question 9: What source of information did you use to get information about the institution and the program of your choice and what was their level of influence on your decision?

Table 10 below shows the different information sources that students used to get information about the institution and program of their choice. The summary results show that 69% of the students search for further information about the institution before making their decision. Specific results show that 34% of the students indicated that the university website was consulted to get information about the university, followed by word of mouth which only 27% of the students used. The results also show that their Teacher and Social Media were the least influential sources in their search.

26 Gamoga & Ambang, Factors influencing decision making on the choice of higher education institutions by prospective students

Source	Frequency	%			
University website	30	34			
Word of mouth	24	27			
Other	5	6			
Teacher	1	1			
Social media	1	1			
Base	61	69%			

Table 10. Source of Information for the University

Question 10: How satisfied were you about the information provided?

When asked about the level of satisfaction the students gained from each of the information sources, 23 participants reported that they were satisfied with DWU website, the information that they received from other sources, each source provided satisfactory information as shown in Table 11 below.

Indicator	University Website	Word of mouth	Teacher	Other
Highly dissatisfied				
Dissatisfied	1	1		
Neutral	2	4		1
Satisfied	4	3		2
Highly Satisfied	43	24	1	2
Base	50	32	1	5

Table 11. Satisfaction regarding the information re	received
---	----------

The result shows that 43 participants were satisfied by the information on the institution's website, followed by word of mouth (24). The lowest indicator was teacher (information provided by teacher).

Discussion

The study was guided by the key research question: "What are the common factors that influence students to choose an undergraduate program to study at Divine Word University?" Findings of the study show that the most common factors that influenced students' decision to select Divine Word University as their first choice to purse their career path were future job opportunities associated with the program, student interest in the program and the reputation of the university in which the program was offered. Among the most common factors, the University's reputation was the most influential factor. The least influential factors were parental influence and location of the university.

Students' perception of DWU as a university with a good reputation was enhanced by the information that was available on the DWU website. The majority of the study participants (69%) indicated that they visited DWU website to get information about the university's background and the profile of the programs offered. This implies that the source of the information played an important role in student decision and selection choice. This is evident because of technology significantly increasing in the country (PNG), and mobile phones coverage and internet access has been made easy by internet providers for accessing information. Parental influence and location of the university were the least influential factors which indicates that students are no longer fulfilling their parents' wishes as it was common in the past (Nawabi, 2019). This study reveals that individual students make decision on what they think is best for them when deciding on where to study and what program to study. It is a shift in the trend for students in Papua New Guinea especially in indigenous societies where parents' influence is still common on their children (Nawabi, 2019).

Students' decisions on the institution of their choice and the program were also determined by their concerns about issues related to job insecurity and lack of employment opportunities in PNG. The majority of the students indicated that their chances of getting a job will improve if they graduate from a university with a good reputation, in terms of the university's core values, quality of education, good leadership and management, etc. Word of mouth experiences from former graduates, friends, and family members also had influence on the students' decision to select DWU as their first choice tertiary institution to pursue their career-oriented education. Students' perception of DWU as a university with a good reputation was further reinforced by the experiences and testimonies of the former graduates.

Conclusion

University's reputation was the most influential factor in the prospective students' decision to select DWU as their first choice university when applying for admission in a program of their choice to pursue their career path. Prospective students were well informed about the background of the University and programs offered before they apply. The source of information available to the applicants through DWU website and word of mouth experiences from DWU graduates contributed significantly to influence students' decision to choose DWU as their first choice. Findings of the study also indicate a shift in the trend where students are no longer influenced by their parents, students have autonomy to decide their career path on what to study and where to study.

Students are also well informed of the employment issues such as job insecurity and limited employment opportunities for some professions in PNG. By choosing the university with a good reputation they try to improve their chances of getting a job more quickly after leaving the university. Students are also choosing programs that offer more job opportunities in the employment sector in PNG. Availability of electronic resources and students having access to internet services enables them to be well informed about the institution of their choice and the academic program the institution offers. Finding of the study provides insights on improving student motivation, academic performance, and career path.

References

- Agrey, L., Lampadan, N. (2014). Determinant factors contributing to student's choice in selecting a university. *Journal of Education and Human Development*, 3 (2), 391-404. Retrieved from: http://jehdnet.com/journals/jehd/Vol_3_No_2_June_2014/22.pdf 24th March, 2020.
- Aldonderiene, R., Klimaviciene, A. (2013). Insights into Lithuanian students' choice of University and study program in management and economics. *Journal of Contemporary Management Issues*, 18 (1), 1-22. Retrieved from

https://search.proquest.com/docview/1418198764?accountid=191104 14th March, 2020.

- Briggs, S. (2006). An exploratory study of factors influencing undergraduate student choice: The case of higher education in Scotland. *Studies in Higher Education*, 31(6), 705-722. Retrieved from https://srhe.tandfonline.com/doi/pdf/10.1080/03075070601004333?needA ccess=true 9th March, 2020.
- DHERST (2019). Online selection process. Department of Higher Education, Research and Technology Government of Papua New Guinea. Waigani, Port Moresby.
- DWU (2020). Academic programs and course information. Divine Word University Available at https://www.dwu.ac.pg/en/index.php/about-dwu
- Ilgan, A., Ataman, O., Ugurlu, F., & Yurdunkulu, A. (2018). Factors affecting University choice: A study on university freshman students. The Journal of Buca Faculty of Education, 46, 199-216. Available at: https://www.researchgate.net/publication/325171582_Factors_Affecting_ University_Choice_A_Study_on_University_Freshman_Students_Buca_ Faculty_of_Education_Journal_46_199-216.
- Ivy, J. (2010). Choosing futures: Influence of ethnic origin in university choice. *The International Journal of Educational Management*, 24(5), 391-403. Retrieved from: http://dx.doi.org/10.1108/09513541011055965.
- Maringe, F. (2006). University and course choice: Implications for positioning, recruitment and marketing. *The International Journal of Educational Management*, 20(6), 466-479. Retrieved from: http://dx.doi.org/10.1108/09513540610683711.
- Mujis, D. (Ed.). (2010). Doing quantitative research in education with spss (2nd ed.). Retrieved from: https://www.sagepub.com/sites/default/files/upmbinaries/36869_muijs.pd f 19th March, 2020.
- Nawabi, S. (2019). Parental influence on career choice of their children: Literature Review, *International Journal of Advanced Research*, 7(3):221-27.
- Partenie, C. (2019). From intent to action: A study regarding high school students' motivation in choosing a university. *Studia Universitatis "Vasile*

Goldis'' Arad.Seria Stiinte Economice, 29(2), 17-32. Retrieved from: http://dx.doi.org/10.2478/sues-2019-0006.

Sabir, I. R., Ahmad, W., Ashraf, U.R., & Ahmad, N. (2013). Factors affecting university and course choice: A comparison of undergraduate engineering and business students in Central Punjab, Pakistan. *Journal of Basic and Applied Scientific Research*, 3(10), 298-305. Retrieved from: https://pdfs.semanticscholar.org/1ecf/f3215ff8ecb22770e10abbae94576e0 3d99a.pdf 27th April, 2020.

Authors

Kaia Gamoga was the principal investigator for this study. She was a final year student in the Health Management program at Divine Word University in 2020. She comes from Central Province. In Papua New Guinea. She completed her grade 12 at Lae Secondary School in 2016 and enrolled at Divine Word University in 2017. In 2019, she was part of the exchange program to Japan funded by Jensys.

Tabian Ambang has been a lecturer at Divine Word University teaching management units in the Faculties of Medicine and Health Sciences and Business and Informatics since 2007. His educational qualifications include a Doctor of Philosophy from La Trobe University (Aust.), Master of Commerce in Management from University of Otago (NZ), Graduate Diploma of Business Management from University of Otago (NZ), Master of Health Administration from University of New England (Aust.), Bachelor of Health Administration from University of New England (Aust.) and a Diploma of Teaching from the University of Goroka (PNG).

Email: <u>tambang@dwu.ac.pg</u>

---00000----