FACTORS AFFECTING STUDENT'S CHOICE OF UNIVERSITY, RESEARCH AT THAI NGUYEN UNIVERSITY OF ECONOMICS AND BUSINESS ADMINISTRATION (TUEBA)

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Abstract

This study identifies and measures the factors which influence the university selection decision of TUEBA's students. Data collected from a survey of 344 students of Thai Nguyen University of Economics and Business Administration. By using Exploratory Factor Analysis (EFA), OLS analysis, with the support of SPSS 22.0 software, the factors are found that have influent to university selection decisions of TUEBA's student are: curriculum, learning environment, reputation, providing information...

Keywords: Selection decision, University, Student, EFA, OLS

1. Introduction

In recent years, the number of student applications to attend university has decreased sharply and the too low number of students joint over the years has put enormous pressure on a lot of universities. The same happen with TUEBA, where each year only receive 75% of the target student (statistic in the last 5 years). In addition, many graduate students cannot find a job, many industrial areas have recruited untrained workers, these drive-in difficult for universities in general and TUEBA also. The big question is how to attract the students? To answer these questions, identifying the factors affected to university selection decision of student are needed. This reason why this article is carry out. The found out will suggesting out for university managements to solve their university problems.

2. Literature Review

Research shows that the cost of studying is a factor affecting the student's choice of school. Almost students are low-income person while the tuition of universities are high level so their choices of university are limited (Mbadugha, 2000; Hossler, 1988).

The decision to choose a university is essentially based on the distribution of scarce resources such as income, wealth, material ... According to the approach of human capital investment (Becker, 1993), students will decide whether they go to university or not as an investment decision, by comparing the expected benefits and expected costs.

Some studies have shown the impact of outside relationship in different levels of influence such as parents idea, other family members, friends, teachers, family income, parents' education ... (Blau and Duncan, 1967). This approach will have many advantages in analyzing the influence of reference groups or possible barriers to university choice decisions in each specific context.

Hossler et al., (1985) supposed that "The sociologist approaches the view that: Although students rely on their comparisons, assessments of the expected costs and benefits when they take university choice, their decision still based on personal characteristics (habits, gender, preferences ...), family background as well as direct and indirect effects of the reference group (parents, school, friends ...)".

Nguyen Minh Ha et al. (2011) have pointed out 7 factors affecting students' choice of a university in Ho Chi Minh City, including School's efforts to bring their information to students who are going to be off of a high school; Quality of teaching and learning; Characteristics of students; Future work; Ability to pass school; Family members; Relatives outside the family.

Do Thi Hong Lien et al. (2015) said that the influences on the decision to choose a university are reputation, international language, the reputation of courses, interests, competencies, programs, lecturers with international languages, the reputation of affiliated/collaborating schools, information from the media, alumni, information

directly from admission advice, tuition fees, influence of high school teachers or their friends. These factors are ranked by the influence from highest to lowest, and research data was collected at Hanoi National University.

Research by Mai Thi Ngoc Dao and Anthony Thorpe (2014) was based on the collection of more than 1000 graduate students from universities, they found out the factors influencing the student's choice of schools, these are: equipment and services, training programs, tuition fees, offline information, advice from those around you, online information, enrollment approaches, program terms, advertising. In addition, the authors also studied about the differences by gender and by the types of students affecting the selection decision of a university.

Nguyen Thi Kim Chi (2018) has applied rational behavioural theory (TRA model) to build a research model of factors affecting the decision of high school students when they take their choice of a university. In this model, the factors affecting the university selection behaviour include: (i) Attitude; (ii) Subjective standards, (iii) University reputation; (iv) The Information the student receives from the university; (v) Advice from others.

3. Researching Framework

Inheriting the scales built and developed from previous studies, setting in the context of TUEBA, and further research on decision-making, the research framework is proposed as follows:
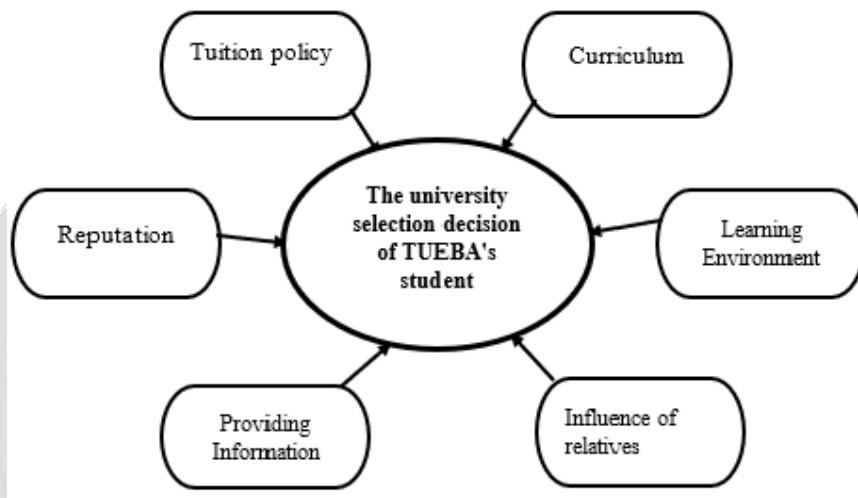

Figure 1. The framework of factors that influence the university selection decision of TUEBA's student

4. Research methodology

Variables and scales

Base on overview from previous studies, 7 groups of factors with 32 items are selected and proposed in this study. These factors are described in Table 1.

Table 1. Summary of factors and scales

Factor	Variable	Selection basis
Tuition policy (CS)	(CS1) Reasonable tuition policy. (CS2) Reasonable living and studying expenses. (CS3) There is a policy of financial support (scholarships, grants, concessional loans ...). (CS4) Flexible fee collection regime.	Joseph (1998, 2000); Karld Wagner (2009); Kee Ming Sia (2013)
Curriculum (CT)	(CT1) Courses/subjects with content and structure and variety for students to choose from. (CT2) Have flexible entry registration procedures. (CT3) Advanced/intensive study programs tailored to students' needs. (CT4) Study program with many practical contents to meet the needs of students. (CT5) Allow flexibility when switching disciplines. (CT6) There are many training systems. (CT7) There are subjects/programs of study available for students to choose from and study throughout the course.	Hooley $ Lynch,1981); Webb (1993) Joshep Kee Ming Sia (2013) Nguyen Thi Kim Chi (2018)
Reputation (DT)	(DT1) The university has a reputation for training economics and economic law. (DT2) The university has	Karl Wagner (2009)

Factor	Variable	Selection basis
	quality and prestigious programs. (DT3) The educational programs are recognized/appreciated for the quality of their training.	
Learning Environment (MT)	(MT1) The university has an ideal location and convenient transportation. (MT2) Training environment that encourages learning for students. (MT3) Facilities and equipment to serve students well for relaxation and entertainment. (MT4) Extracurricular activities, social activities, soft skill development, association activities, groups ... are diverse and abundant. (MT5) Resources needed to well-meet the learning needs of students. (MT6) Safe and clean learning environment. (MT7) Highly qualified and experienced staff and lecturers	Joseph (1998, 2000) Karl Wagner (2009)
Providing Information (TT)	(TT1) The university provides full information related to career opportunities. (TT2) The university provides a full range of information related to the courses. (TT3) The university provides full information related to graduate-level to study at a higher level.	Joseph (1998, 2000); Karl Wagner (2009)
Influence of relatives (AH)	(AH1) Influence from the advice of parents. (AH2) Influence from my friends' advice. (AH3) the Influence from the advice of students and alumni. (AH4) Influence from the advice of a high school teacher. (AH5) Influence from the advice of an admission counsellor.	Joshep (1998, 2000), Karld Wagner (2009). Joseph Kee Ming Sia (2011)
The university selection decision of TUEBA's student (QD)	((QD1) The decision to study at TUEBA was the most suitable choice for me. (QD2) I will continue to study and complete my study at TUEBA. (QD) I will recommend/recommend my relatives/friends to study at TUEBA.	Ajzen (1991)

Data

The research data is collected from March 2020 to April 2020 by three channels: academic advisors (homeroom teachers), student volunteers, and the Student Union. The result, 357 responses from online have collected. After checking, 344 observations which eligible for analysis were retained. The survey questionnaire is built in 2 parts, part 1 is the demographic information; part 2 includes questions related to factors affecting the student's choice of university. The scale used is a 5-level Likert scale: level 1 is completely disagreeing, level 5 is completely agreeing.

Methodology

In this paper, we use EFA and OLS analysis for estimate the influence of factors affecting to student's selection. The OLS regression model writes:

$$Y = \beta_0 + \Sigma_{j=1..p}\, \beta_j X_j + \varepsilon$$

Where:

Y is the dependent variable. In this case of paper, Y is the university selection decision of TUEBA's student (QD)

β_0, is the intercept of the model

X_j corresponds to the jth explanatory variable of the model (j= 1 to 6), X_j including CS, CT, DT, MT, TT, AH.

ε is the random error with expectation 0 and variance σ^2.

5. Research Results

5.1. EFA analysis

Cronbach's Alpha

The analytical results showed that two items: AH1 and AH2 were not reliable and had eliminated. 30 remain items have correlating coefficient with key variable > 0.3 (Table 2). Therefore, these items are kept intact for the next step of Exploratory factor analysis. Cronbach's Alpha coefficient of 7 main variables is bigger than 0.6, so the selected items are reliable to perform EFA analysis.

Table 2. Cronbach's Alpha

Factor	Items	Cronbach's Alpha
Tuition policy (CS)	CS1, CS2, CS3	0.898
Curriculum (CT)	CT1, CT2, CT3, CT4, CT5, CT6, CT7	0.943
Reputation (DT)	DT1, DT2, DT3	0.936
Learning Environment (MT)	MT1, MT2, MT3, MT4, MT5, MT6, MT7	0.944
Providing Information (TT)	TT1, TT2, TT3	0.949
Influence of relatives(AH)	AH3, AH4, AH5	0.665
The university selection decision of TUEBA's student (QD)	QD1, QD2, QD3	0.839

Source: authors calculating

KMO and Bartlett's test

The results of Kaiser-Meywe-Olkin test is shown in Table 3. KMO value is 0.97 (>0.5) indicates that EFA analysis is consistent with research data.

Barlett's test result is 9605,384 at significance level Sig = 0.000 <0.05, this mean factor analysis data is completely consistent.

Table 3: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.970
Bartlett's Test of Sphericity	Approx. Chi-Square	9605.384
	df	351
	Sig.	.000

Source: authors calculating

Rotated matrix result

Through analysis 27 items which belonged to independent variables have divided into 3 groups of factors (MT, CS, AH). The total variance cumulative of 72.53% mean these 3 factors explain 72.53% of the variation of the data, Thus, these factors used to explain the scale for the selection decision of students are reasonable.

Table 4. The new groups of factors

STT	Factors	Items
1	Internal Environment (MT**)**	CT, MT, DT, TT
2	Tuition policy (**CS**)	CS
3	Influence of relatives (AH)	AH
4	The university selection decision of TUEBA's student (QD)	QD

Source: authors calculating

5.2. Multivariate regression result

Multicollinearity test

The result from Multicollinearity test giving VIF <0.2, so there is no multicollinearity and all independent variable is qualified for regression analysis.

Multivariate regression analysis

Table 5. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.760[a]	.578	.571	.45503	1.872

a. Predictors: (Constant), : CS, CT, DT, MT, TT, AH

b. Dependent Variable: QD

The results obtained in the Regression Analysis showed that: the adjusted R2 value is 0.571, this implying 57.1% of the variation of the university selection decision's student are explained by the linear relationship with the independent variables: Region, Gender, Outside relatives, Tuition policy, Internal environment. This means that the regression models is consistent with the research data. Durbin - Watson test: $1.817 < 1.872 < 2.813$, so there is no first-order correlation in the model.

Table 6. ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	95.686	5	19.137	92.428	.000[b]
	Residual	69.983	338	.207		
	Total	165.669	343			

a. Dependent Variable: QD

b. Predictors: (Constant), CS, CT, DT, MT, TT, AH

The results of the F-test in the ANOVA table show that the value sig = 0.000, so this regression model is consistent with the overall study.

The results of factor influence the student's choice are shown in Table 7. According to the Sig value in the Table 7, Tuition policy, Gender and Region are found out to have no effect to university selection decision of Tueba's student by the sig value > 0.05, so these variables are rejected out of this model. There is only two variables affected to students decision, Internal environment and influence of relative at a significant level of 99%.

Table 7. Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.807	.181		4.467	.000
	Internal environment	.689	.060	.676	11.464	.000
	Tuition policy	.047	.058	.047	.815	.416
	Influence of relative	.122	.044	.103	2.765	.006
	Gender	-.091	.056	-.058	-1.625	.105
	Region	-.002	.055	-.001	-.038	.970

a. Dependent Variable: University selection decision of student

Base on the results estimated, the model of factor affecting to the student's choice of Tueba's students is:

$$QD = 0.807 + 0.689.MT + 0.122.AH$$

According to the regression function, the Student's choice of university has a linear relationship with the internal environment (MT) factors (The standardized Beta is 0.689), the influence of relatives (AH) (The standardized beta is 0.122).

The standardized Beta coefficients are bigger than 0, meaning that these independent variables have a positive impact on the students' decisions.

6. Conclusion

This research results provides the evidences and suggestions for Tueba's management boards to take the plans or strategies for TUEBA in order to improve the efficiency student enrollment.

REFERENCES

1. Ajzen, I. (1991), 'The Theory of Planned Behavior', *Organizational Behavior and Human Decision Processes*. 50: 179-211.
2. Arpanet al. (2003), 'A cognitive approach to understanding university image', *Corporate Communications: An International Journal*, 8(2), 97 – 113.
3. Becker (1993), *'Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education'*, University of Chicago Press.
4. Blackwell, R. D., Miniard, P. W., Engel J.F. (2006), '*Consumer Behavior*', Copyright by Thomson Corporation.
5. Blau and Duncan (1967), 'The American Occupational Structure', New York: Wiley
6. Chapman, D.W. (1981), 'A model of student college choice', *The Journal of Higher Education*, 52(5), 490–505.
7. Do Anh Tai (2019), *The Development Strategy of University of Economics and Business Administration for the period 2020-2025, vision to 2030*; Report on Topic level subject, Thai Nguyen University of Economics and Business Administration
8. Do Thi Hong Lien (2015), *The factors influencing the decision of students to choose universities and majors of International Faculty - Hanoi National University*, Ugrassroots scientific topics.
9. Hooley, G. J. & Lynch, J. E. (1981). 'Modelling the Student University Choice Process through the Use of the Conjoint Measurement Techniques, ' *European Research*, 9(4). 158-170
10. Hossler, D., Hu, S., & Schmit, J. (1998, April). *Predicting student sensitivity to tuition and financial aid. Paper presented at the annual meeting of the American Educational Research Association*, San Diego, CA
11. Joseph, M. & Joseph, B. (1998), 'Identifying Need of Potential Students in Tertiary Education for Strategy Development', *Quality Assurance in Education*, 6(2). 90-96
12. Joseph, M. and Joseph, B. (2000), 'Indonesian students' perceptions of choice criteria in the selection of a tertiary institution: strategic implications', *The International Journal of Educational Management*, Vol. 14 No. 1 pp. 40-44
13. Joshep Kee Ming Sia (2013), ' University Choice: Implications for Marketing and Positioning', *Education*, 3(1), 7-14
14. Karl Wagner et al (2009). "*Factors Influencing Malaysian Students' Intention to Study at an HEI*", Chinese American Scholars Association, New York, New York, USA, Retrieved 30 September, 2015, from http://www.gcasa.com/PDF/malaysia/Wagner-Fard.pdf.
15. Kotler, P. and Fox, K.F.A. (1995), '*Strategic Marketing for Educational Institutions*, 2nd ed., Prentice-Hall, New Jersey, NJKotler and Keller (2011)
16. Mai Thi Ngoc Dao, Anthony Thorpe, (2015) 'What factors influence Vietnamese students' choice of university?', *International Journal of Educational Management*, Vol. 29 Issue: 5, pp.666- 681.
17. Mbadugha, L. N. A. (2000), '*The financial nexus between college choice and persistence for community college students: A financial impact model'*, University of New Orleans, United States -- Louisiana. Merriam, S. B. (1998).
18. Moogan Baron & Harris (1999), 'Decision-making behaviour of potential higher education students', *Higher Education Quarterly*, 53(3), 211–224.
19. Nguyen Minh Ha & Ctg (2011), '*Factors influencing on students choosing Ho Chi Minh City Open University'*, Scientific research topic of Ho Chi Minh Open University.
20. Nguyen Thi Kim Chi (2018), *Research on factors influencing the decision of high school students to choose a university - The case of Hanoi*, Doctoral thesis in economics, National Economics University.
21. Tran Van Qui, Cao Hao Thi (2009), 'Factors affecting the decision of high school students to choose a university', *Journal of Science and Technology Development* (No. 15-2009), VNU HCMC.