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FACTORS INFLUENCING TO THE UNIVERSITY CHOICE OF HIGH-SCHOOLS PUPILS - AN EMPIRICAL STUDY OF LAM DONG PROVINCE, VIETNAM

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Abstract

Higher education environment has changed dramatically and faced competitively. Right choice of a tertiary institution is very crucial for all of the students because the process of university choice is highly complex. This study explores the impacting factors on the decision of university choice among high-school pupils in Lam Dong Province, Vietnam. The secondary data has been collected and used from previous studies and the primary data is done through 7 experts, 3 in-depths structured interviews with 10 pupils, and 273 survey questionnaires with high-school pupils. The findings show that the university reputation, tuition fee, matriculation chance, employment opportunities, and influential individuals are factors that influence high school pupils' decision of university choice to study. Furthermore, recommendations for university administrators and related others and the limitations of this study have also been presented.

Keywords--Employment opportunities, influential individuals, matriculation chance, tuition fee, university choice, university reputation.

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INTRODUCTION

In recent years, higher education activities have changed dramatically and marvelously. Tertiary institutions face with the ever-increasing difficulties and compete with each other in student attraction and recruitment (Maring et al, 2006; Harden, Davis & Mengersen, 2014; ManhXuan, 2017, Minh Hien, 2017). Tertiary education has always been viewed as a luxury activity rather than a necessity activity (Tansel & Bircan, 2006) or as an elitist activity (Eckel & King, 2004). In such a dynamic environment, choosing right higher education institution is very crucial for all of the students (Oya, 2015) and the process of university choice is highly complex (Lindong, 2007; Marginson, 2006; Sabir et al, 2013) because it not only affects students' orientation of future career but also impacts on study motivation, commitment, and interaction of the students with the university (Sabir et al, 2013).

In the aspects of the tertiary institutions, there are many benefits for understanding impacting factors on the university choice of students or related individuals as its foundation of recruiting strategies, implementation of training programs, and institutions' development of each university in the competitive environment (Ming & Kee, 2010, Avram, 2014). In the students' perspectives, enrollment decisions at a specific university are crucial in the life (Avram, 2014) such as their future careers. Higher levels of education will lead the way to higher incomes, longer professional lives, extra employment opportunities, and raised life satisfaction (Leslie & Brinkman, 1988; Pascarella & Terenzini, 1991). In contrast, the wrong choice could completely damage the life of the student.

In the Vietnam context, at the end of each academic year, new students will enroll to universities in Vietnam. According to the latest statistics of the Ministry of Education and Training of Vietnam (MOET), in 2019, more than 653.000 candidates has registered for the entrance exam or enrollment to 237 universities/academies. In Lam Dong province, a promising region of the South Central Highlands has the largest tea growing area in Vietnam. However, the province's revenue mostly comes from tourism development and coffee exports.

The study at the higher education institution is more important to the students and all of the stakeholders. This is because, in this modern time, parents and educational administrators or policy-makers and other stakeholders believe higher education and preparation are in need of all human beings due to a bright future as higher incomes, longer professional lives, and extra employment opportunities, etc. University choice is a complex process which involves many individuals including high-school pupils, family members, university managers/ administrator, and policy-makers, etc. Understanding the reasons why candidates choose the university to pursuit of their studies and determining impacting factors on their choices are crucial to study. Therefore, this study is aiming at exploring significant factors influencing the university choice of the high-school pupils in Lam Dong Province which assists them to make the right decision and help universities to understand these factors to launch out suitable administration programs.

LITERATURE REVIEW

Choice Theory and Behavioral Decision-Making

Glasser's Choice Theory (1998) is the explanation of mankind's behavior pursuant to internal motivation and similar needs will be shared by people in general. All of the people's behavior is chosen because there is a continual attempt to meet one or more of the five basic needs as the Basic Needs, the Quality World, the Perceived World, the Comparing Place, and the Total Behavior System that are part of our genetic structure. Various theories are existing for explaining choice and behavior. West & Turner (2007) depict, for a person, costs are for relational life with negative value and rewards are for the constituents with positive values. Regarding the theory of social exchange, a relationship will be continued if the 'costs' are lower the 'rewards' or vice versa. Also, economic and social exchanges are distinct and they are identified subtly (Stafford, 2008). Furthermore, in the study of Crossman (2010), economics performs a crucial role in mankind's behavior. In the economics theories, the production, the allocation, and the utilization of goods and services are taken into account and systematized financially. Human beings are generally 'monetarily motivated', meaning the opportunity of profit-making will be considered and the feasible costs and

benefits of future engagement are appraised in their decision-making. On the other hand, decisions are made upon the 'costs' and 'rewards' of actions. Behavioral decision-making could also be explained and described by choice and preference behavior (Tversky & Kahneman, 1981) in which the decision-making behavior of the individuals prevail the relative outcomes and values on losses and equivalent gains. Blau's rational choice theory (1964), Coleman (1973) and Cook (1977) suggest, to grasp human relationships, the basic principles can be employed where the issues as the time, the information, the approval, and the prestige are the resources being exchanged (Scott, 2000). As such, the factors for individual motivation are personal wants and goals. In addition, human beings are mostly driven by personal desires in which individuals are not always attained all of the wanted things. Thus, alternatives and the most suitable choice should be considered. More of that, the individual rational choice is made upon on the most suitability to their satisfaction (Coleman 1973; Heath 1976; Carling 1992).

Understanding the consumer behavior

In the online dictionary of Merriam Webster dictionary, the university is understood as a place for teaching and research and authorization to grant academic degrees specifically bachelor's degrees, master's degrees, and doctoral degrees. And, the university is a place to provide a very special service in which the customers of the university are students or learners. More of that, the customer is the receiver of the outputs of work efforts or the product or service buyers/ users (Taiwo, 2010). Under the market and marketing viewpoints, the university should explore their customer behavior and stakeholder viewpoints to provide the best service and products. According to Engel et al. (1995), consumer behavior includes engagement activities of the people to obtain and consume products and services. Consumer behavior is to understand how people decide to use up their resources as time, funds, etc. for actions of selection, obtainment, usage, and movement of goods and services (Schiffman & Kanuk, 2000). According to Kotler (2001), understanding consumer behavior is a crucial duty for the decision-making process on marketing strategies. Consumer behavior is explaining the reasons why individuals select, buy, and use or dispose of products and services (Kotler, 2001; Solomon et al., 2014). For Mowen & Minor (2003), consumer behavior is to understand the purchasing and trading processes relating to the acquirement, usage, and disposal of goods and/or services and/or experiences and/or ideas. The study of consumer behavior is for the demand requirements of the customers (Karsaklian, 2008). According to Solomon (2014), consumer behavior research is to study the processes relating to an individual or a group selecting, buying, using, or offering products and/or services and/or ideas and/or experiences to achieve the satisfaction of their needs and wants. Objectively, consumer behavior is a series of complex behavioral stages determined by the characteristics of consumers under the impact of marketing activities. Significantly, understanding the factors impacting the choice of university is considered as an approach to explore the consumer behavior and it is for the development of institutional enrollment and admissions, and for marketing practices (Kinzie, et al., 2004).

Previous related studies on the tertiary institution choice or selection of the students and pupils

In terms of the studies on the tertiary institution selection, in a very early time, during the 1930s, students have been put into consideration for their institutions' choice process. Sidin, Hussin and Soon (2003) affirm students' university selection are including the academic quality, university facilities, the surroundings of the university campus, and students' personal characteristics. Additionally, facilities or infrastructure as the dormitory, the learning resource and library, the laboratory, the cafeteria, and the student unions, the buildings, the academic

staff such as teaching quality, staff qualifications, the mediums of instruction, reputation, and the institutional image have been taken into account (Tang, Tang & Tang, 2004). Furthermore, Drewes & Michael (2006) depicts students choose universities upon on the location and costs of living. Also, by focusing on reputation, Drewes & Michael (2006) indicate that students decide to select in the pursuit of their studies at the university based on their grades/ marks and chance of admission.

Regarding the economic perspective, some studies show, when choosing to enroll in a university, the university has been considered as "a product" and compared values which they can gain from the university (Hossler, Braxton & Coopersmith, 1989; Paulsen, 2001; DesJardins & Toutkoushian, 2005). Meanwhile, based on the social perspective focused on individuals' needs and interests personal and social characteristics are impacted (Perna, 2006; Kitsawad, 2013). Under both social and economic endeavors, but the decision making procedure is divided and analyzed in different steps (Perna, 2006). As in the study of Keling (2006), the image and reputation of the institution, tuition fees, and education programs have a high power to explain how students decide and select a specific university to study at. However, Shanka et al (2006) affirm the institutions' location and other people's opinions like parents, family members, teachers, friends, etc. moderate significantly university choice of students to pursuit their studies. This result also shows in the studies of Karl and Yousefi (2009) and Beneke et al. (2010). In the same year, Zuker (2006) reports seven factors as academic environment, university size, university location, offered majors, social environment, extra activities, and costs effect to the selection of the students' to the university. In the other aspect, a study conducted in Turkey, Tatar and Oktay (2006) shows the most crucial factors influencing the choice of the university are the scores of the entrance exam. Later, Hagel and Shaw (2008) confirm academic reputation, the availability of the courses or programs, the university location, tuition costs, campus facilities, the modes of the study, and the university itself are crucial for the student choice. A study by Yusof et al (2008) points out the availability of the courses or programs and financial assistance like scholarships are the impacting factors for the students' selection of a university.

Also, in the literature, the determinant of the choice are external interested parties as economics (i.e employers and industries) and societal (i.e families, potential students, and professional communities, academic majors and others providers) relating to the selection of the students for a specific university to the pursuit of their studies (Houston, 2008). Moreover, Ivy (2008) finds facilities and conveniences like parking areas and sport facilities impacting on the decisions of the students to choose a university. Other studies as Keling et al (2007) and Ariffin et al (2008) affirms marketing strategies are influential to student choices. This is also shown in the studies of Ismail (2009) and Kusumawati et al. (2010). Gibbons and Vignoles (2009) present commutation or relocation costs are crucial factors and Wagner & Fard (2009) identify education costs, subjects, degree structures, other people as family members, friends, physical aspects, and institutions' facilities, and information influence on students' intentions. In addition, Kusumwati et al. (2010) suggest the reputation of the institution and the parents of the students are the significant factors to their decisions for further study. This is totally agreed by Aguado, Laguador and Deligero (2015) and Proboyo and Soedarsono (2015); because parents are the key financiers to the education of their children. Confirming by Fernandez (2010), a number of factors of own characteristics of students, other people, students' perceptions about value and costs, and institution characteristics impact on students' selections to choose a university for study. But, in Hsieh (2010), Hsieh confirms the importance of quality, academic programs,

and teaching staff is a moderator to the decisions to choose a university to study of the students. As shown in the study of Baharun et al. (2011), the mass-media, parents' preferences, the peers' influences, university location, cost and characteristics of the host countries/ locality, learning and political environment, students' concerns, tuition fees, and institution facilities are reviewed. And in the study of Amca (2011), four different factors influencing the students' choices for university study are the employment possibility after graduation, graduation degree, education cost, and living conditions. Next of that, Akar (2012) finds the most important factor affecting students' university choices are academic reputation and prestige of the universities, university location, and related information such as the university website; parents, peers, and teachers. On the other hand, the city population, university's academic performance, and lecturing language are determinants (Cokgezen, 2012). Mubaira and Fatoki (2012) find learning facilities and accessibilities like information communication technologies (ICT), cultural diversity, international relationships, institutional social exchange and relations, admission requirements, study modes, and campus attraction are related to the students' decisions to choose for studies. Besides, Agrey and Lampadan (2014) point out factors impacting on the decision-making to choose a university to study at are the support systems including both physical as bookshops and counseling offices and non-physical as scholarship availability, credit transferability, etc., the learning environment, university facilities and reputation, learning resources, labs, tuition fees, etc., employment prospects after graduation life programs as health care, dormitory, and extra activities, environment as safe campus and supportive staff. The studies of Hagel and Shaw (2008), Baharun et al (2011), Ciriaci & Muscio (2011) and Cokgezen (2012) have also confirmed the same results. Later, Kurt (2013) concludes that students' family members, university location, and the university entrance exam score are the most important factors affecting students' choices.

Studies undertaken in the Vietnam context

In the study of the factors affecting to the factors impacting on the university decision of high-school students, Qui and Thi (2009) confirm that employment opportunities; the information and advertising; students themselves; Influential individuals; university characteristics and infrastructure. In addition, in 2013, Phong (2013) depicts there are four groups of factors that influence student's choice of the university like fixed university's characteristics, Influential individuals, university's communication efforts, and students themselves.

Also, in the master's thesis of Thu (2014), Thu identifies 3 factors influencing the choice of the university from the high-school pupils as the characteristics and communication efforts of universities, the opportunity to order, and the opportunity to future. Furthermore, Lien, Hoa and Anh (2015) suggest four groups of factors as the prestigious educational partner, tuition fee or other people's opinion, students' perception as university characteristics, university's communicative effort and students' interest and ability are affecting to the university choice of the high-school pupils. Le, Robinson and Dobele (2019) show the findings of the key factors as the future employment prospects, education quality, staff expertise, and program quality/ contents and parents. Linh and Quy (2020) show there are 4 key factors affecting the decision on university choice for high-school pupils as information and advertising, reputation and employment, students themselves, tuition fees, and infrastructure.

The suggested research model

Resulting from the above analysis, a research model of 6 independence factors as university reputation, tuition fee, matriculation chances, employment opportunities, Influential individuals and admissions counseling activities of universities and 1 dependence factor as students' decision of the university choice and hypotheses are formed as below:

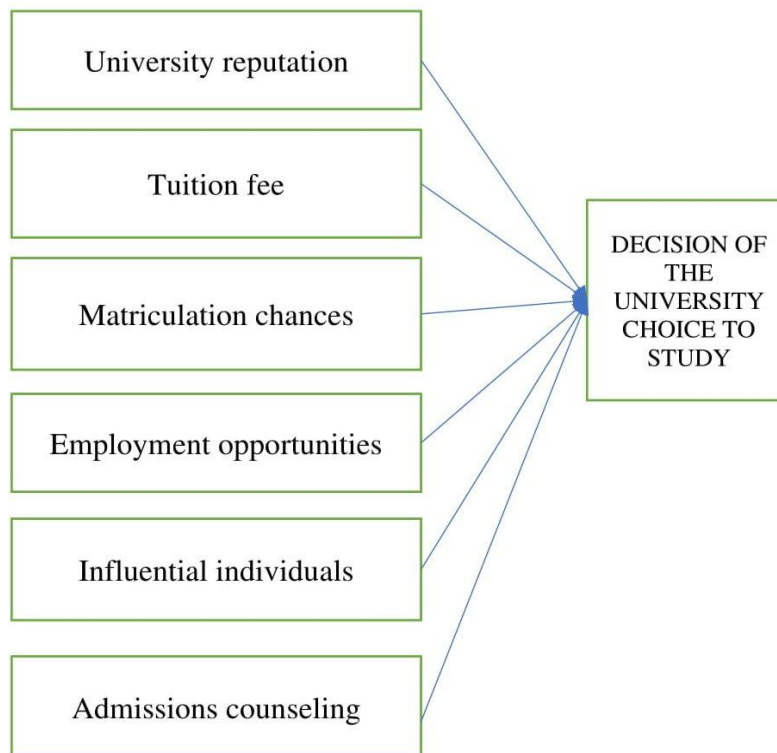


Figure 1. Proposed research model
Source: own (2020)

Hypothesis H₁: University reputation impact on students' decision of the university choice.

Hypothesis H₂: Tuition fee affects students' decision of the university choice.

Hypothesis H₃: Matriculation chances have the impact on students' decision of the university choice.

Hypothesis H₄: Employment opportunities influence students' decision of the university choice.

Hypothesis H₅: The Influential individuals effect students' decision of the university choice.

Hypothesis H₆: Admissions counseling activities impact on students' decision of the university choice.

Table 1. Summary of the independence factors

No.	Factors	Authors
1	University reputation	Tang, Tang and Tang (2004); Keling (2006), Shanka et al (2006); Zuker (2006); Hagel and Shaw (2008); Houston (2008); Karl and Yousefi (2009); Gibbons and Vignoles (2009); Qui and Thi (2009); Beneke et al. (2010); Kusumwati et al. (2010); Fernandez (2010); Baharun et al. (2011); Baharun et al (2011); Ciriaci&Muscio (2011); Hagel and Shaw (2008); Houston (2008); Akar (2012); Cokgezen (2012); Phong (2013); Lien, Hoa and Anh (2015); Le, Robinson and Dobebe (2019); Linh and Quy (2020)
2	Tuition fee	Drewes& Michael (2006); Keling (2006); Zuker (2006); Hagel and Shaw (2008); Gibbons and Vignoles (2009); Fernandez (2010); Amca (2011); Baharun et al. (2011); Ciriaci&Muscio (2011); Cokgezen (2012); Agrey and Lampadan (2014); Lien, Hoa and Anh (2015); Linh and Quy (2020)
3	Matriculation chances	Drewes& Michael (2006); Tatar and Oktay (2006); Fernandez (2010); Mubaira and Fatoki (2012); Kurt (2013); Thu (2014); Lien, Hoa and Anh (2015); Linh and Quy (2020)
4	Employment opportunities	Houston (2008); Qui and Thi (2009); Amca (2011); Agrey and Lampadan (2014); Thu (2014); Le, Robinson and Dobebe (2019); Linh and Quy (2020)
5	Influential individuals	Shanka et al (2006); Hagel and Shaw (2008); Houston (2008); Qui and Thi (2009); Karl and Yousefi (2009); Beneke et al. (2010); Fernandez (2010); Kusumwati et al. (2010); Baharun et al. (2011); Ciriaci&Muscio (2011); Akar (2012); Cokgezen (2012); Phong (2013); Kurt (2013) Lien, Hoa and Anh (2015); Aguado, Laguador and Deligero (2015); Proboyo and Soedarsono (2015); Le, Robinson and Dobebe (2019).
6	Admissions counseling	Keling et al (2007); Ariffin et al (2008); Hagel and Shaw (2008); Qui and Thi (2009); Gibbons and Vignoles (2009); Ismail (2009); Kusumawati et al. (2010); Baharun et al. (2011); Ciriaci&Muscio (2011); Akar (2012); Mubaira and Fatoki (2012); Cokgezen (2012); Phong (2013); Thu (2014); Agrey and Lampadan (2014); Lien, Hoa and Anh (2015); Linh and Quy (2020).

Source: own (2020)

RESEARCH METHODOLOGY

The study uses 2 kinds of secondary data and primary data with qualitative and quantitative research methods.

- As for the secondary data, content analysis of the related theories as to the choice theory and behavioral decision-making theory, and consumer behavior has been used to seek and determine factors affecting the university choice of the high-school pupils in Lam Dong Province in the published journals, books and other sources like websites, businesses' reports, etc.
- And for the primary data, some techniques and tools are completed under the qualitative and quantitative modes. Firstly, the authors operate the consultations with 7 experts including researchers and university administrators for the exploration of the hidden factors and measurement scales for the study. Furthermore, group discussions and 3 in-depths structured interviews have been done with 10 random pupils to gain a deep understanding of the observed variables as a crosscheck for better results. Later, the questionnaire is built as the key tool to collect data. The questionnaire content is adapted from previous studies as listed in the table of summary of independence factors. Before launching out for the official survey, pilot tests have been

done with 15 pupils to check comprehensibility and deliver feedback to improve the clarity of the questionnaire.

The main research rigor of this study is on the post-positivism direction and Hair et al. (2010) defines the sample size should be as $N = 5 \times \text{item}$ (where item means observed variables) and Tabachnick & Fidell (2013) confirms the sample size should be as $N = 8 \times \text{var} + 50$ (where var means independence variables using in the regression model). According to the sampling formula, the appropriate sample size should be 250 for the study. Moreover, the study has used 273 samples as questionnaires with pupils at the high-schools in Lam Dong Province. It is also noted that the high-school pupils hereinafter are in the grade 12 pupils who will complete their high-school programs and enroll to the university and the university is understood as higher education institutions including bachelor education, master education, and doctoral education under the Education Law of Vietnam launched out by National Assembly in 2019. In addition, it should be explained that the sampling technique is the convenience technique. After all, the data is processed with statistical techniques as Cronbach's Alpha, EFA, T-Test, ANOVA, etc. for answering research questions.

FINDINGS AND DISCUSSIONS

Findings

Table 2. Demography analysis

Items	Amounts	Ratio
Gender		
Female	151	55.31%
Male	122	44.69%
Total	273	100%
Schools		
Di Linh High-School	107	39.19%
PhanBoiChau High-School	83	30.41%

Nguyen Viet Xuan High-School	40	14.65%
Le Hong Phong High-School	43	15.75%
Total	273	100%
Student results		
Great	63	23.08%
Rather	112	41.02%
Medium	98	35.90%
Weak	0	0.00%
Total	273	100%

Source: Own (2020)

Table 3. Sample descriptions

	Minimum	Maximum	Mean	Std. Deviation
Employment chances (CE)	1.00	5.00	3.9615	.75967
University reputation (UR)	1.00	5.00	3.6000	.85749
Tuition fee (TF)	1.00	5.00	3.4432	.78599
Influential individuals (RP)	1.00	5.00	2.8434	.61385
Admissions counseling (AC)	1.00	5.00	3.7399	.78511
Matriculation chances (CM)	1.00	5.00	3.5582	.74232
Students' decision (DUC)	1.00	5.00	3.5778	.72389
Valid N (listwise)				

Source: Own (2020)

The results show the highest Mean is "Employment opportunities" indicating that students place a high level of interest in future career opportunities. This is a great impression with employers that students concern the ability to find future

jobs, future jobs that are relevant to their study majors, and the ability to meet expectations about future earnings. The lowest Mean is "Influential individuals (RP)" meaning students often make decisions based on their own understanding.

Table 4. Cronbach's Alpha coefficients of the scales

Items	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Employment opportunities(CE)				Cronbach's Alpha = 0.797
CE1	11.773	5.117	.675	.712
CE2	11.722	4.996	.770	.663
CE3	12.121	5.651	.580	.761
CE4	11.923	6.417	.428	.827
University reputation (UR)				Cronbach's Alpha = 0.902
UR1	14.348	12.287	.720	.888
UR2	14.487	12.604	.698	.892
UR3	14.484	11.714	.763	.879
UR4	14.447	11.689	.806	.869
UR5	14.234	11.974	.791	.872
Tuition fee (TF)				Cronbach's Alpha = 0.806
TF1	6.952	2.516	.639	.756
TF2	6.879	2.813	.649	.739
TF3	6.828	2.805	.679	.711
Influential individuals (RP)				Cronbach's Alpha = 0.806
RP1	7.810	4.544	.225	.781
RP2	8.938	3.889	.598	.584
RP3	8.667	2.892	.655	.511
RP4	8.707	3.598	.525	.610
Admissions counseling (AC)				Cronbach's Alpha = 0.844
AC1	11.084	6.019	.630	.823
AC2	11.183	6.238	.642	.818
AC3	11.308	5.611	.699	.794
AC4	11.304	5.477	.750	.770
Matriculation chances (CM)				Cronbach's Alpha = 0.816
CM1	14.136	10.897	.349	.847
CM2	14.429	8.518	.747	.736
CM3	14.385	7.767	.807	.712
CM4	14.077	8.704	.651	.766
CM5	14.139	10.223	.499	.810
Students' decision (DUC)				Cronbach's Alpha = 0.775
DUC1	10.502	5.641	.480	.767

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DUC2	10.817	5.010	.596	.711
DUC3	10.663	5.165	.632	.696
DUC4	10.952	4.465	.618	.701

Source: Own (2020)

The result shows the variable RP1= 0.225 < 0.3 and it is removed from out of the model. Thus, there are 24 observed variables accepted and included in the EFA factor analysis. The following is the result of EFA

Table 5. Rotated Component Matrix^a

items	Components						Factors
	1	2	3	4	5	6	
UR1	.846						University reputation
UR4	.833						
UR5	.823						
UR3	.764						
UR2	.740						
CM3		.939					Matriculation chances
CM2		.890					
CM4		.771					
CM5		.597					
AC4			.868				
AC3			.840				
AC2			.801				
AC1			.785				
CE2				.821			Employment opportunities
CE1				.806			
CE4				.621			
CE3				.600			
RP3					.889		Influential individuals
RP2					.792		
RP4					.774		
TF2						.831	Tuition fee
TF3						.773	
TF1						.760	

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.^a
 a. Rotation converged in 5 iterations.

Source: Own (2020)

The EFA results show that the EFA factor analysis is very appropriate. The EFA analysis results of the dependent variable are as follows:

Table 6. Rotated component matrix of the dependent variable

	Component	Factor
	1	
DUC4	.812	Students' decision (DUC)
DUC3	.809	
DUC2	.780	
DUC1	.691	

Extraction Method: Principal Component Analysis.
 a. 1 components extracted.

Source: Own (2020)

Table 7. Pearson correlation coefficient

	DUC	UR	CM	AC	CE	RP	TF
Pearson Correlation	1	.527**	.404**	.029	.453**	.296**	.692**
Sig. (2-tailed)		.000	.000	.630	.000	.000	.000
N	273	273	273	273	273	273	273
Pearson Correlation	.527**	1	.162**	-.017	.514**	.214**	.463**
Sig. (2-tailed)	.000		.007	.781	.000	.000	.000
N	273	273	273	273	273	273	273
Pearson Correlation	.404**	.162**	1	-.086	.240**	.061	.356**
Sig. (2-tailed)	.000	.007		.156	.000	.314	.000
N	273	273	273	273	273	273	273
Pearson Correlation	.029	-.017	-.086	1	-.060	-.008	-.016

Sig. (2-tailed)	.630	.781	.156		.320	.892	.798
N	273	273	273	273	273	273	273
Pearson Correlation	.453**	.514**	.240**	-.060	1	.293**	.324**
Sig. (2-tailed)	.000	.000	.000	.320		.000	.000
N	273	273	273	273	273	273	273
Pearson Correlation	.296**	.214**	.061	-.008	.293**	1	.141*
Sig. (2-tailed)	.000	.000	.314	.892	.000		.020
N	273	273	273	273	273	273	273
Pearson Correlation	.692**	.463**	.356**	-.016	.324**	.141*	1
Sig. (2-tailed)	.000	.000	.000	.798	.000	.020	
N	273	273	273	273	273	273	273

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

Source: Own (2020)

This result depicts violate multicollinearity or autocorrelation does not exist in the model. Also, regression analysis results are displayed as follows:

Table 8. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.773 ^a	.598	.590	.46342	2.141

a. Predictors: (Constant), TF, RP, CM, CE, UR

b. Dependent Variable: DUC

Source: Own (2020)

Table 9. Regression results of the model

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	.133	.193		.691	.490		
UR	.152	.041	.180	3.688	.000	.631	1.584
CM	.143	.037	.163	3.869	.000	.851	1.175
CE	.115	.045	.121	2.553	.011	.675	1.482
RP	.145	.042	.143	3.505	.001	.907	1.102
TF	.453	.043	.491	10.603	.000	.702	1.425

a. Dependent Variable: DUC

Source: Own (2020)

The result shows that the factors University reputation, Influential individuals, Tuition fee, Matriculation chances, Employment opportunities are statistically significant in the model and have a positive impact on the university choice of high-schoolpupils in Lam Dong Province. Finally, the linear regression equation is as follows:

$$DUC = 0.180*UR + 0.163*CM + 0.121*CE + 0.143*RP + 0.491*TF$$

On the other hand, the regression equation was not auto correlated.

DISCUSSIONS

The result of this study identifies 5 factors affecting the decision of university choice among pupils at high-schools in Lam Dong Province.

"TuitionFee(TF)" factor reaches the largest β coefficient at 0.491, it is concluded that tuition fee has a positive impact on pupils' decisions of university choice to study at. Hence, the university should develop a suitable tuition fee to attract students strongly. This is especially meaningful for high-school pupils in Lam Dong Province because the majority of the residents employ in the agricultural sector and have not had a really high income although, in recent years. Residents' living standards have been improved. In addition, in Lam Dong Province, ethnic minorities make up the majority and are facing economic

difficulties. Therefore, the tuition fee is a crucial issue for pupils in this locality.

The remaining factors are University Reputation, Matriculation Chances, Employment Opportunities and Influential Individuals reaches beta coefficients range from 0.121 - 0.180 are > 0 , and completely, they have a positive impact on pupils' decisions of university choice. As a consequence, it is concluded that Hypotheses H_1, H_2, H_3, H_4, H_5 are accepted.

Recommendations to related authorities

From the findings, it is considered that high-school pupils areas the main input of universities, thus, universities need to pay attention to improving the reputation, enhancing education and training programs, developing management policies, and create a competitive advantage. The recommendations are detailed as follows:

- In the context of limited resources, the universities need to focus on launching out the appropriate policies for students. The tuition fee and benefits must be balanced. The clear and stable tuition fee is an advantage for universities to attract students. Besides special cases, the university must pay attention to encourage and support students in the study process. Funds for a scholarship should be established.
- The university should have programs and make its reputation increase in the society by innovation and enhancement of education/training programs adapting to the social changes and requirements. Lecturers should be

standardized and improve their career skills and experiences through scientific research activities, professional work at organizations. Furthermore, the university's reputation can be promoted through the facilities investment, development of international cooperation, and increase of social responsibility.

- The university should also encourage businesses and experts to join lecturing activities in aiming to practical equipment to students out of the theoretical lectures and the increase of job opportunities for students after graduation.
- The university should promote enrollment activities through public or mass media such as advertising TV, brochures, websites, Facebook, Instagram, etc. Additionally, the university must enhance the direct enrollment counseling activities at the high-schools to assist and support students, family members, and friends.

CONCLUSIONS

As founding from choice theory and behavioral decision-making theory, and consumer behavior with using the qualitative and quantitative research methods, the study identifies five factors that influence university choice of the high-school students, namely: (1) tuition fee, (2) matriculation chances, (3) employment opportunities, (4) university reputation, and (5) influential individuals. As a consequence, some recommendations and implications for university administrators and related others are formulated to improve. However, the limitations of the study exist. The first limitation is the sample size. The study is done with small samples and results may be more accurate with larger sample sizes. Secondly, the study is only conducted in Lam Dong province that is one of 63 cities and provinces in Vietnam and will open up further studies to contribute to management practices and theories.

REFERENCES

1. Agrey, L. & Lampadan, N. (2014). Determinant factors contributing to student choice in selecting a university. *Journal of Education and Human Development*, 3(2), 391-404.
2. Aguado, C. L., Laguador, J. M. & Deligero, J. C. L. (2015). Factors affecting the choice of school and students' level of interest towards Maritime programmes. *Asian Journal of Science*, 11(21), 231-239.
3. Akar, C. (2012) Factors Affecting University Preference: A Study on the Students of Economics and Administrative Sciences. *Eskisehir Osmangazi University IIBF Journal*, 7, 97-120.
4. Amca, H. (2011). Üniversitelerintercihedilmesini etkileyen faktörler [Factor effecting university preference] Retrieved from <http://www.emu.edu.tr/amca/universitelerinTercihiEdilm esiniEtkileyenFaktorler.pdf>
5. Ariffin, A. A., Ahmad, A. H., Ahmad, M. S. & Ibrahim, M. A. (2008). Determining decision-making styles and demographic differences in selecting higher education services among Malaysian. *International Journal of Business and Society*, 9(1), 1-18.
6. Avram, E.M. (2014). Higher education Students choice influencing factors. *Holistic Marketing Management*, 2(2), 59-64.
7. Baharun, R., Awang, Z., & Padlee, S. F. (2011). International students' choice criteria for selection of higher learning in Malaysian private universities. *African Journal of Business Management*, 5, 4704 - 4714.
8. Beneke, J. & Human, G. (2010). Student recruitment marketing in South Africa – An exploratory study into the adoption of a relationship orientation. *African Journal of Business Management*, 4(4), 437-447.
9. Blau, P. M. (1964). *Exchange and power in social life*. New York: JohnWiley
10. Carling, A. (1992). Social divisions. In Scott, J. (2000). *Rational choice theory*. In G. Browning, H. Halcli & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: Sage
11. Ciriaci, D. & Muscio, A. (2011). University choice, research quality and graduates' employability: Evidence from Italian national survey data. *Alma Laurea Working Paper*, 49, 1-14.
12. Çokgezen, M. (2012). Determinants of University Choice: A Study on Economics Departments in Turkey. *Yükseköğretim Dergisi*, 1-9.
13. Coleman, J. (1973). The mathematics of collective action. In Scott, J. (2000). *Rational choice theory*. In G. Browning, H. Halcli & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: Sage.
14. Cook, K. S. (1977). Exchange and power in networks of interorganizational relations. *The Sociological Quarterly*, 18(1), 62-82
15. Crossman, A. (2010). *Rational choice theory: An overview*. Retrieved from https://www.researchgate.net/publication/33681049_9_RATIONAL_CHOICE_THEORY_OVERVIEW
16. Desjardins, S. L., & Toutkoushian, R. K. (2005). Are students really rational? The development of rational thought and its application to student choice. In J. Smart (Ed.), *Higher education: Handbook of theory and research*, 20, 191 - 240. Dordrecht: Springer
17. Drewes, T. & Michael, C. (2006). How do students choose a university? An analysis of Applications to universities in Ontario, Canada. *Research in Higher Education* 47, 781-800.
18. Eckel, P. D. & King, J. E. (2004). An Overview of Higher Education in the United States: Diversity, Access, and the Role of the Marketplace. *American Council on Education*
19. Engel, J. F., Blackwell, R. D., & Miniard, P. W. (1995). *Consumer behavior*. Florida
20. Fernandez, J. L. (2010). An exploratory study of factors influencing the decision of students to study at Universiti Sains Malaysia. *Kajian Malaysia*, 28(2), 107-136.
21. Gibbons, S & Vignoles, A. (2009). *Access, Choice and Participation in Higher Education* London, England: Centre for the Economics of Education, London School of Economics.
22. Glasser, W. (1998). *Choice theory: A new psychology of personal freedom*. New York: HarperPerennial.
23. Hagel, P. & Shaw, R. (2008). The Influence of Delivery Mode on Consumer Choice of University. *European Advances in Consumer Research*, 8, 531-536.
24. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis*. Upper Saddle River, NJ: Pearson.
25. Harden, F., Davis, G., & Mengersen, K. (2014). The tertiary debate: A case analysis of factors considered when applying for university entry by traditional age school leavers in Brisbane. *Australian Universities' Review*, 56(1), 39-46.
26. Heath, A. (1976). Rational choice and social exchange. In Scott, J. (2000). *Rational choice theory*. In G. Browning, H. Halcli & F. Webster (Eds.), *Understanding contemporary society: Theories of the present* (pp. 126-138). Thousand Oaks, CA: Sage.
27. Hossler, D., Braxton, J., & Coopersmith, G. (1989). Understanding student college choice. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (pp. 231-288). New York: Agathon Press.
28. Houston D (2008). Rethinking quality and improvement in higher education. *Quality Assurance in Education*, 16, 61-79.
29. Hsieh, Y. J. (2010). The decision-making process of international students in Taiwan: A case study. Paper

- presented in The Fifth APAIE 2010 Conference, Griffith University, Australia April 14-16, 2010. International Islamic University Malaysia (2008). IIUM Annual Report. IIUM Press.
30. Ismail, N. (2009). Mediating effect of information satisfaction on college choice. Paper presented in Oxford Business & Economics Conference Program. UK.
 31. Ivy, J. 2008, 'A new higher education marketing mix: the 7Ps for MBA marketing', The International Journal of Educational Management, vol. 22, no. 4, pp. 288-299.
 32. Karl, W. & Yousefi, F. P. (2009). Factors Influencing Malaysian Students Intention to Study at a Higher Educational Institution. Kuala Lumpur: E-Leader.
 33. Karsaklian, E. (2008). Consumer behavior. Paulo: Atlas.
 34. Keling, S. B. A. (2006). Institutional factors attracting students to Malaysian institutions of higher learning. International Review of Business Research Papers, 2(1), 46-64.
 35. Kinzie, J., Palmer, M., Hayek, J., Hossler, D., Jacob, S. A., & Cummings, H. (2004). Fifty years of college choice: Social, political and institutional influences on the decision-making process. New Agenda Series (Volume 5, Number 3). Lumina Foundation for Education. Indianapolis, IN: Lumina Foundation for Education. Retrieved from <https://www.luminafoundation.org/files/publications/Hossler.pdf>
 36. Kitsawad, K. (2013). An investigation of factors affecting high school student's choice of university in Thailand. Dissertation. The University of Wollongong Thesis Collection.
 37. Kotler, P. (2001). A Framework for Marketing Management. Prentice Hall.
 38. Kurt, A. (2013). Üniversitelerihederkenneleredikatedilmeli? [What should be considered for university preference] Retrieved from http://mebk12.meb.gov.tr/meb_iys_dosyalar/01/17/950146/icerikler/universite-tercih-ederken-nelere-dikkat-edilmeli_355325.html.maringe
 39. Kusumawati, A. (2010), Privatisation and Marketisation of Indonesian Public University: A Systematic Review of Student Choice Criteria Literature. Proceedings of The Indonesian Students International Conference, Melbourne: School of Business and Law, Victoria University, 16-18 July 2010
 40. Kusumawati, A., Yanamandram, V. K. & Perera, N. (2010). Exploring Student Choice Criteria for Selecting an Indonesian Public University: A Preliminary Finding. ANZMAC 2010 Doctoral Colloquium (pp. 1-27). Christchurch, New Zealand: ANZMAC.
 41. Kusumawati, A., Yanamandram, V. K., & Perera, N. (2010). University marketing and consumer behaviour concerns: the shifting preference of university selection criteria in Indonesia. Asian Studies Association of Australia 18th Biennial Conference, Adelaide, South Australia.
 42. Le, D. T., Robinson, J. L., & Dobebe, R. A. (2019). Understanding high school students use of choice factors and word-of-mouth information sources in university selection. Studies in Higher Education, DOI: 10.1080/03075079.2018.1564259.
 43. Leslie, L., & Brinkman, P. (1988). The economic value of higher education. NewYork: Macmillan.
 44. Lien, Đ. T. H., Hoa N. T. N., & Anh, N. T. L. (2015). Factors Influencing VNU-IS Students' Choice of University. VNU Journal of Science: Social Sciences and Humanities, 31(4), 67-76.
 45. Linh, L. T. M & Khuc, Q. V. (2020). Factors influencing university choice decision of high school students in Vietnam: Evidence from the survey in 2020. 1-14. Available from https://www.researchgate.net/publication/341277513_Factors_influencing_university_choice_decision_of_high_school_students_in_Vietnam_Evidence_from_the_survey_in_2020
 46. Long, B. T. (2004). How have college decisions changed over time? An application of the conditional logistic choice model. Journal of Econometrics, 121, 271-296.
 47. ManhXuan (2017) Competition in the education. https://www.nhandan.com.vn/nation_news/item/33427702-canh-tranh-trong-giao-duc-dai-hoc.html
 48. Marginson, S. (2006). Dynamics of national and global competition in higher education. Higher Education, 52(1), 1-39.
 49. Maringe, F. (2006). University and course choice: Implications for positioning, recruitment and marketing. International Journal of Educational Management, 20(6), 466 - 479.
 50. Ming, J. & Kee, S. (2010). Institutional Factors Influencing Students' College Choice Decision in Malaysia: A Conceptual Framework. International Journal of Business and Social Science, 1(3), 53-58.
 51. Minh Hien (2017). Competition among Universities. <https://giaoducthoidai.vn/cac-truong-dai-hoc-canh-tranh-3370274.html>
 52. Mubaira, T. C., & Fatoki O. (2012). The Determinants of the Choice of Universities by Foreign Business Students in South Africa. Asian Journal of Business and Management Sciences, 1(8), 9-21.
 53. National Assembly of Vietnam (2019). Law of Education. Retrieved from <https://hethongphapluat.com/law-no-43-2019-qh14-dated-june-14-2019-education.html>
 54. Oya. T. A. (2015). University Choice Process: A Literature Review on Models and Factors Affecting the Process. YuksekogretimDergisi – Journal of Higher Education 5, 1-9.
 55. Pascarella, E. T., & Terenzini, P. T. (1991). How college affects students: Findingsand insights form twenty years of research. San Francisco, CA: Jossey-Bass.
 56. Paulsen, M. B. (2001). The economics of human capital and investment in higher education. In M. B. Paulsen & J. C. Smart (Eds.), The Finance of Higher Education. Theory, Research, Policy, and Practice, 55 - 94. New York: Agathon Press.
 57. Perna, L. W. (2006). Studying college choice: A proposed conceptual model. In J. C. Smart (Ed.). Higher education: Handbook of theory and research, 21, 91 - 157. New York: Springer.
 58. Phong, N. T. (2013). The factors for decision of university choice high school pupils in TienGiang province. Available from <https://www.slideshare.net/anbcde5/yu-t-quyt-nh-chn-trng-htg-ca-hc-sinh-trung-hc-ph-thng-trn-a-bn-tnh-tin-giang>
 59. Proboyo, A., & Soedarsono, R. (2015). Influential factors in choosing higher education institutions: A case study of a private higher education in Surabaya. Jurnal Manajemen Pemasaran, 9(1), 1-7.
 60. Sabir, R. I., Ahmad, W., Ashraf, R. U., & Ahmad, N. (2013). Factor 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.
 61. Schiffman, G. & Kanuk, L. (2000). Consumer Behavior. Prentice Hall, Inc., Englewood Cliff.
 62. Scott, J. (2000). Rational choice theory. In G. Browning, H. Halcli& F.Webster (Eds.), Understanding contemporary society: Theories of the present (pp.126-138). Thousand Oaks, CA:Sage.
 63. Shanka T., Quintal, V., & Taylor, R. (2006). Factors Influencing International Students' Choice of an Education

- Destination–A Correspondence Analysis. *Journal of Marketing for Higher Education*, 15(2), 31-46.
64. Sidin, S. M., Hussin, S. R., & Soon, T. H. (2003). An exploratory study of factors influencing the college choice decision of undergraduate students in Malaysia. *Asia Pacific Management Review*, 8(3), 259–280
65. Solomon, M., Bamossy, G., Askegaard, S., & Hogg, M. (2014). *Consumer behavior: A European perspective*. Harlow: Pearson Higher Education.
66. Stafford, L. (2008). Social exchange theories. In L. A. Baxter & D. O. Braithwaite (Eds.), *Engaging theories in interpersonal communication: Multiple perspectives* (pp. 377-389). Thousand Oaks, CA: Sage.
67. Tabachnick, B. & Fidell, L. L. S. (2001). *Using multivariate statistics* (4th Ed). Needham Heights, MA: Allyn & Bacon.
68. Tabachnick, B. & Fidell, L. L. S. (2007). *Using multivariate statistics* (6th Ed). Needham Heights, MA: Allyn & Bacon.
69. Taiwo, A. S. (2010). Customers: Identifying the needs in higher education. *Educational Research*, 1(7), 210-218
70. Tang, T. L., Tang, D. S. & Tang, C. S. (2004), College tuition and perceptions of private university quality. *International Journal of Educational Management*, 18, 304-316.
71. Tansel, A., & Bircan, F. (2006). Demand for education in Turkey: a tobit analysis of private tutoring expenditure. *Economics of education review*, 25(3), 303-313.
72. Tatar E., & Oktay M. (2006). Search, choice and persistence for higher education a case study in Turkey. *Eurasia Journal of Mathematics, Science and Technology Education*, 2(2), 115-129.
73. Thu, D. T. N. (2014). Studying the factors affecting the university choice of high school pupils in Ho Chi Minh City, Vietnam. Master's thesis of Ho Chi Minh City University of Economics.
74. Tran, V.Q & Cao, H.T. (2009), Factors affecting the decision on university choice for high school students, *Journal of Science & Technology*, 15 (12).
75. Tversky, A., & Kahneman, D. (1981). The framing of decisions and the psychology of choice. *Science*, 211(4481), 453-458.
76. Wagner, K. & Fard, P. Y. 2009, "Factors Influencing Malaysian Students' Intention to Study at a Higher Educational Institution." *Chinese American Scholars Association*, New York, New York, USA, Retrieved 11 July, 2009, from <http://www.g-casa.com/PDF/malaysia/Wagner-Fard.pdf>
77. Wargner, K, & Fard, P. -Y. (2009). Factors influencing Malaysian students' intention to study higher educational institution. Retrieved from <http://library.oum.edu.my/repository/365/1/Wagner>
78. West, R. L., & Turner, L. H. (2007). *Introducing communication theory: Analysis and application* (3rded.) Boston, MA: McGrawHill
79. Yusof, M., Ahmad, S. N. B., Tajudin, M., & sRavindran, R. (2008). A study of factors influencing the selection of a higher education institution. *UNITAR e-journal*, 4(2), 27-40.
80. Zuker, R. F. (2006). Factors to Consider in Selecting a University. Retrieved from <https://www.educationcorner.com/factors-choosing-a-college.html>