

# FACTORS INFLUENCING 12<sup>TH</sup> GRADE STUDENT'S DECISIONS TO CHOOSE THE UNIVERSITY OF ECONOMICS, HUE UNIVERSITY IN THUA THIEN HUE PROVINCE

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**Abstract**. This study examines factors influencing decisions to choose the University of Economics, Hue University among 12<sup>th</sup> grade students in Thua Thien Hue Province. The quota sampling technique is applied to collect 200 students enrolled in the University of Economics, Hue University. Research results of multiple linear regression models show that university characteristics, employability potential offered by the major, reference groups, communication activities, and personal characteristics of students are five factors affecting 12<sup>th</sup> grade students' choice of the University of Economic, Hue University.

Keyword: 12th grade students, factors influencing decisions, University of Economics

# 1 Introduction

A good education system is one of the essential foundations for national development. In the context of Vietnam, higher education is the highest level in the national education system and plays a key role in training and developing high-quality human resources. Students at this level are provided basic and advanced professional knowledge, as well as skills needed for career development in the future. In reality, most high school students have problems with their choice of majors and universities after graduating from national high school examinations. According to Nu Vuong [1], experts in the field of admissions argued that students often choose majors based on emotions, tendencies, or family orientations without considering carefully whether their chosen field is suitable for them. Choosing inappropriate universities and majors can create wrong choices that lead to the inability to fully utilize capabilities, reduced productivity and efficiency in studying, and working and difficulty getting jobs after graduation. Therefore, it wastes the resources of students and society.

On the supply side of the education market, a social enterprise in the higher education sector leads to a rise in competition among universities, creating both opportunities and threats for high school students' choices. According to the Ministry of Education and Training (MOET), Vietnam has 236 universities, of which 171 are public and 65 are non-public [2]. In addition, the

Ministry of Education and Training has reformed national high school exams and university entrance examinations in recent years. These two factors are increasing the intensity of competition among universities in attracting potential students. As higher education competition rises, the need for a better understanding of how high school students choose which universities to attend (and majors thereof) is becoming more pressing for each university.

# 2 Literature review and Hypotheses

### 2.1 Customers

Peter Drucker, the father of modern management, defined customers as those who are willing to pay for goods and services, who make economic resources into wealth; and materials into goods [3]. He emphasized the importance of customers to the success of companies, and that one of companies' goals is to create customers.

Bean (cited in Kotler) said that "the customer is the most important person to our company. They don't depend on us, we depend on them. They are not outsiders but a part of our business. When we serve our customers, we are not only helping them but also they are helping us by giving us the opportunity to serve" [4].

As may be clear, the customer is a vital part of the business operation, who plays a pivotal role in the existence and development of the enterprise. Kotler divided customers into two groups: individual customers, who are also final consumers (including individuals and households) and organizational customers (including manufacturing firms, commercial enterprises, government organizations and non-profit organizations) [5].

#### 2.2 Customers Buying Behavior

The concept of consumer buying behavior has been accorded several definitions by several authors. Kotler et al. defined consumer behavior as a reflection of the buying behavior of the final consumer - the individuals and households that buy goods and services for personal consumption [5]. According to Solomon, consumer behavior is a process that involves an individual or a group of people choosing, buying, using, or discarding a product or service, ideas or experiences to satisfy their needs and wants [6]. Schiffman and Wisenblit defined consumer behavior as consumers' actions in the process of finding, buying, using, evaluating, and rejecting products or services that they expect to satisfy their needs [7]. Vu Huy Thong argued that consumer behavior is the behavior that consumers conduct in searching, evaluating, buying and freely using products and services that they expect will satisfy their needs and wants [8].

Neal et al. contended that consumer behavior explains how and why consumers choose to buy a good or service [9]. The American Marketing Association (cited in Peter & Olson) defined consumer behavior as interactions among cognition, affect, behaviors, and the environmental events, by which people conduct exchange activities in their lives [10]. According to this view, consumer behavior is dynamic, interactive, and related to exchange activities.

As per the definitions mentioned above, the concept of customer behavior refers to a human process in which an individual forms a response to one's own needs. This process includes the awareness and action on a consumer's part.

## 2.3 Factors affecting customer decisions

Prior research has attempted to establish factors affecting customer decisions and behaviors. Schiffman and Wisenblit recognize the customer as an individual and being affected by socio-cultural characteristics. These two sets of factors, Schiffman and Wisenblit argue, influence customer behavior. Personal factors include motivation, personality, awareness, attitude, and reception whereas socio-cultural factors include family and social norms, cultural impacts, cultural branches, and cultural variation [7].

Neal et al. divided the impact factors into two groups: internal and external factors. The group of internal factors includes awareness, reception and remembering, motivations, personality and emotions, and attitudes of consumers. The xternal factors group comprises social characteristics, household structure, reference or influence group, social class, and culture [9]. Solomon also has the same division as Neal et al. However, in addition to the above factors, Solomon added factors related to the consumer's personal characteristics such as self-opinion, gender characteristics, and self-image [6].

Kotler has a fairly comprehensive view of the factors affecting customer behavior. He proposes factors affecting customer behavior as including (1) cultural factors are comprise culture, cultural branch and social class; (2) social factors are reference group and social networks, family, role and personal status; (3) personal factors comprising age and life cycle, occupation, economic status, lifestyle, personality and self-image and (4) psychological factors which comprise motivation, awareness, reception, beliefs and attitudes [5].

#### 2.4 Hypotheses and Research model

There are three main groups of models researching factors that influence university choice among high school students, which include economic models, sociological models and information processing models. In this paper, the information processing model, especially that proposed by Chapman is used. According to Chapman, in the process of choosing a university, students are strongly influenced by the advice of their friends and family. These individuals, Chapman argues, influence students' choices in three ways: (1) their opinions on a particular university shape the students' expectations of a particular university; (2) they can give direct

advice on where students should apply and (3) in the case of close friends, the place where best friends apply can influence the student's university choice [11].

The reference group factor is also experimentally proven by domestic researchers Tran Van Qui and Cao Hao Thi [12], Nguyen Minh Ha et al. [13], Nguyen Ngoc Thi Kim Loan [14], Vu Thi Hue et al. [15].

Furthermore, Hossler and Gallagher affirmed that besides the strong impact of parents, friends are also one of the strong influences on students' decisions to choose universities.

Hossler and Gallagher also said that individuals at the students' high school also have a significant effect on the student's university choice [16]. Considering the educational conditions of Vietnam, one group of individuals who has a great influence on the students' university choice is their high school teachers. Therefore, in this paper, family, parents, siblings, close friends, and high school teachers are considered as the factors influencing students' university choice.

Accordingly, hypotheses are proposed:

*H*<sub>1</sub>: *The larger the reference group's influence on students' choice of university is, the more likely the students are to choose that university.* 

Chapman proposed that fixed factors of the university such as tuition fees, geographic location, cost support policy or dormitory environment will influence the student's decision to choose a university [11]. Burns added many factors about university characteristics in his research. Specifically, scholarship factors, dormitory safety conditions, the quality of the students at the university, the degree of popularity and the reputation of the school, the competitive rate of application, the school's benchmarks, and the level of attractiveness of the major field are among the factors that influence students' university choice [17]. Vietnamese authors such as Luu Chi Danh and Lam Ngoc Le [18], Tran Van Qui and Cao Hao Thi [12], Nguyen Ngoc Thi Kim Loan [14], Vu Thi Hue et al. [15] also demonstrated that this is a variable influencing the student's choice of school.

As a result of the above literature, hypothesis H<sub>2</sub> is proposed as follows:

*H*<sub>2</sub>: *The better the characteristics of the university are, the more likely the students are to choose that university.* 

Chapman also specifically emphasized the influence of the school's communication efforts with students on students' university choice. Universities' images are improved through activities to introduce and advertise the universities to potential students such as introducing scholarships or exchange programs, advertising on magazines and television and cultural and sports activities to attract the interest of students and their families. Chapman also argued that the availability of documents and materials affects the student's school choice process.

Choosing a school is, for students, a decision that requires a lot of information. Therefore, the quality of information and the availability of information in available documents such as websites or other printed materials will be significant support in a student's choice.

According to Hossler and Gallagher [16], direct school visits or school introductions also influence students' school choice.

Based on factors to do with the school's communication efforts with students such as school visits, participation in school presentations, scholarship recommendations, newspaper, magazine or television advertisements and completeness and quality of the information provided in the available documents, the hypothesis 3 is proposed as follows:

*H*<sub>3</sub>: The more effort the university puts into communication with students, the more likely the students are to choose that university.

According to Cabera and La Nasa, in addition to expectations about learning, expectations about future jobs are also one of the factors affecting students' decisions to choose schools [19]. Washburn et al. argued that students' readiness for work and the possibility to find a job after graduation are factors affecting the students' college choice [20] v.v.

Thus, we hypothesize:

*H*<sub>4</sub>: *The higher the employability potential after graduating from a university is, the more likely the students are to choose that university.* 

Chapman argued that the individual factors of the students are one of the groups of influences on their university choice. Among those, the factors of the student's abilities and interests are the most obvious influences on the university choice.

Thus, we hypothesize:

 $H_5$ : The more relevant to the students' competencies and interests in the majors in the university are, the more likely the students are to choose that university.

Based on the hypotheses mentioned above, we present our complete model of factors influencing the university choice of grade 12<sup>th</sup> students in Thua Thien Hue Province in the diagram below (Diagram 1).



Diagram 1. Research model

# 3 Methods

The research model includes one dependent variable and five groups of independent variables. With an independent impact relationship, the measurement and estimation of the influence of each group of independent variables on the dependent variable were performed through multiple linear regression models.

Regarding the surveyed sample, based on the data reported internally by the Admission Advisory Board of University of Economics, Hue University, the authors identified a number of high schools in Thua Thien Hue province whose students have been enrolled at the University of Economics, Hue University in large numbers over the years.

Thereafter, this research applied the quota sampling method with the quota allocation criteria being the proportion of high school students enrolled at the University of Economics, Hue University. Then, we applied direct investigative approaches to collect all 200 samples.

To measure and estimate the impact of factors on students' university choice, the authors inherited the related studies of Chapman [11], Tran Van Qui and Cao Hao Thi [12], Vu Thi Hue, Le Dinh Hai, and Nguyen Van Phu [15] and Nguyen Minh Ha, Huynh Gia Xuyen and Huynh Thi Kim Tuyet [13] and combined qualitative surveys to build the scale.

Factors	Scale	sources
Personal characteristics of students	The family's economic condition is guaranteed Self-gifted by the field of study Expect the chosen studying field to have good prospects in the future Good high school study results	Chapman [11] and authors' qualitative research results
	Individual hobbies are relevant to the field of study The school's location is convenient	
University characteristics	The cost of studying is suitable Good learning environment Attractive and appropriate curriculum Benchmark level matching capacity The popularity of the school	Chapman [11], Burns [17], Danh & Le [18], Qui & Thi [12], Loan [14], Hue, Hai & Phu [15] and authors' qualitative research results
	The facilities are good Teachers are of high quality There are abundant extracurricular activities	
Reference group	My choice of major was influenced by my teachers My choice of major was influenced by my parents My choice of major was influenced by my siblings My choice of major was influenced by	Chapman [11], Hossler & Gallagher [16], Qui & Thi [12], Ha, Xuyen & Tuyet [13], Loan [14], Hue, Hai & Phu [15] and authors' qualitative research results
	my friends My choice of major was influenced by an admissions advisory staff	
Communication activities of the university	Enrollment orientation sessions have good information contents The school's website is full of information Experience programs of Youth Union and Student Union is attractive Advertising channels are full of information	Chapman [11], Hossler & Gallagher [16]
Employability potential	Chances of finding a job are high Opportunity to find a job with high income Chances of finding a job with a good social position	Cabrera & Nasa [19], Washburn, Garton & Vaughn [20]

## Table 1. Research scale

## 4 Research results

Statistics on sample characteristics based on 200 survey elements including students who want to choose University of Economics, Hue University (Table 2).

The results of evaluating the reliability of the scales of variables through Cronbach's Alpha coefficients show that reliable values of the scale are guaranteed to have good value, above 0.7 (Table 3).

Based on the results of factor analysis to narrow the data and evaluate the effects of factors on the student's university choice, the authors group obtained the model with the index R = 0.535, that means the model explaining 53.5% of the variation of the data; Durbin Watson value of 2.014 is in the range of DU and 4- dU (1.82-2.18), so we conclude that there is no correlation; VIF coefficients are all less than 10, so there is no multicollinearity phenomenon.

Characteristics		Number	Proportion
Gender	Male	42	21.00
Gender	Female	158	79.00
	Excellent	4	2.00
	Good	30	15.00
Academic capacity	Average	147	73.50
	Poor	19	9.50
	First choice	116	58.00
The order to choose University of	Second choice	45	22.50
Economics, Hue University	Third choice	15	7.50
	Fourth choice and after	24	12.00
Summary		200	100.00

<b>Table 2.</b> Characteristics of the research sample
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Source: Survey results 2021

Factors	Number of variables	Cronbach Alpha
Personal characteristics of students	5	0.836
University characteristics	9	0.867
Reference group	5	0.776
Communication activities of the university	4	0.891
Employability potential	3	0.725
University Choice	3	0.731

Source: Survey results 2021

Model	Standardized coefficients	t	Sig
Constant		0.000	1.000
University characteristics	0.627	12.970	0.000
Communication activities of the university	0.191	3.944	0.000
Reference group	0.233	4.817	0.000
Employability potential	0.229	4.734	0.000
Personal characteristics of students	0.104	2.157	0.032

Table 4. Results of multiple linear regression using the Enter method

The regression results of factors affecting students' university choice are as follows:

Source: Survey results 2021

The test results for the Sig values are all less than 0.05 (Table 4), so the variables are significant in the model. Variables in the model affect the student's university choice through coefficient B. Variables with partial regression coefficients have positive values, representing a positive interaction (proportional) between the independent variables and the dependent variable.

The estimation model could be rewritten as follows:

University choice =  $0.627 \times$  University Characteristics +  $0.191 \times$  Communication activities of the university +  $0.233 \times$  Reference Group +  $0.229 \times$  Employability potential +  $0.104 \times$  Personal characteristics of students.

To the estimation results, three factors have relatively strong influences on university choice compared to the rest, which are University Characteristics (0.627), Reference Group (0.233) and Employability potential (0.229).

# 5 Conclusion

The study discovered and estimated the impact of factors on the decision to choose the University of Economics, Hue University among high school students in Thua Thien Hue Province.

The results show that universities need to make efforts in building school characteristics, especially the traits that students have a high interest in such as competency-matching benchmarks, attractive curriculum, and convenient geographic location. In addition, universities also need to change their market orientations, considering themselves as a service provider in the market and focusing on communication activities and promotions to students. Moreover, building a beautiful image of the school to the public also has the effect of creating a good impression on reference groups such as students' parents, siblings, friends, and high

school teachers. Employability potential is also a factor that needs to be focused on – schools need to pay attention to aligning their curriculum to societal needs to increase the employability of students after they graduate. Finally, to help students make good choices, universities should consider investing in online advisory tools for potential students such as real-time one-to-one advisories; and respect students' individual characteristics to guide them to choose the right major. This would help avoid the wastage of societal resources which would come about due to poor student performance owed to improper choices of majors. Besides, schools can also gain the lifetime value of customers from students choosing a major which is in line with their passion and hence pursuing their studies until the end.

## References

- Nu Vuong (2021), Mistakes when choosing university, Thanh Nien Electronics Newspapers, https://thanhnien.vn/giao-duc/cac-sai-lam-can-tranh-khi-dang-ky-nguyen-vong-1369853.html, accessed 11/05/2021.
- Thuy Linh (2018), Vietnam has exceeded the target number of universities, *Retrieved from* Vietnam Education Electronics Magazine, https://giaoduc.net.vn/giao-duc-24h/viet-nam-davuot-so-luong-truong-dai-hoc-theo-muc-tieu-de-ra-post193670.gd, accessed 15/03/2021.
- 3. Drucker, P. F. (1954), The Practice of Management (1 ed.), Harper & Roe, USA.
- 4. Kotler, P. (2003), *Marketing insights from A to Z (1 ed.)*, John Wiley & Sons, USA.
- 5. Kotler, P., Gary, A., & Marc, O. O. (2018), Principles of Marketing (17 ed.), Pearson, USA.
- 6. Solomon, M. R. (2017), Consumer Behavior: Buying, Having, and Being (12 ed.), Pearson, England.
- 7. Schiffman, L. G., & Wisenblit, J. L. (2015), Consumer Behavior (11 ed.), Pearson, USA.
- 8. Vu Huy Thong, Nguyen Ngoc Quang, Nguyen Thi Tam, Pham Thi Huyen and Pham Hong Hoa (2010), *Textbook on Consumer Behavior, National Economics University Publisher*.
- 9. Neal, C., Quester, P., & Hawkins, D. (2004), Consumer behaviour, implications for Marketing strategy (4 ed.), McGraw-Hill, Australia.
- 10. Peter, J. P., & Olson, J. (2002), *Consumer behavior and Marketing strategy (6 ed.)*, McGraw-Hill, Australia.
- Chapman, D. W. (1981), A Model of Student College Choice, Ohio State University Press, 52(5), 490–505.
- 12. Tran Van Qui and Cao Hao Thi (2009), Factors affecting high school students' decision to choose a University, *Journal of Science and Technology Development*, 12(15), 87–102.
- 13. Nguyen Minh Ha, Huynh Gia Xuyen and Huynh Thi Kim Tuyet (2011), The factors influencing student's choice of Ho Chi Minh City Open University, *Scientific Journal of Ho*

Chi Minh City Open University, 6(2), 107–117.

- 14. Nguyen Ngoc Thi Kim Loan (2017), Factors affecting the decision of 12th grade students to choose a university, *Lac Hong Science Journal*, 11/2017, 134–140.
- 15. Vu Thi Hue, Le Dinh Hai, & Nguyen Van Phu (2017), Apply the exploratory factor analysis method in the research of factors that influence the high school student's decision to study at the University of Forestry's Branch in Dong Nai province, *Journal of Forestry Science and Technology*, 4, 172–180.
- 16. Hossler, D., & Gallagher, K. S. (1987), Studying Student College Choice: A Three-Phase Model and the Implications for Policymakers, *College and University*, 62(3), 207–221.
- 17. Burns, M. J. (2006), Factors influencing the college choice of African-American students admitted to the College of Agriculture, *Food and Natural Resources*, University of Missouri-Columbia, USA.
- Luu Chi Danh and Lam Ngoc Le (2018), Factors affecting first-year students' choice of Van Lang University, *Science Journal of Van Lang University*, 12, 85–93.
- 19. Cabrera, A. F., & Nasa, S. M. (2000), Understanding the College-Choice Process, *New Directions For Institutional Research*, 107, 5–22.
- 20. Washburn, S. G., Garton, B., & Vaughn, P. (2000), Factors Influencing College Choice of Agriculture Students College-Wide Compared with Students Majoring in Agricultural Education, University of Florida, USA.