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# Influence of socioeconomic status and university's internal environment factors on universitychoice decisions of postgraduate students in Vietnam

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# ABSTRACT

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## **Keywords**

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Postgraduate students' university selection decisions are influenced not only by the students themselves or their families, but also by internal university factors. This study evaluated the reasons for pursuing postgraduate education and investigated how family's socioeconomic status and the university's internal environment factors influenced postgraduate students' university choice decisions. The study surveyed 401 first-year postgraduate students across five member universities of Vietnam National University Ho Chi Minh City using a questionnaire and five semi-structured interviews. The empirical data revealed many reasons behind respondents' decisions, with the mean value ranging from 3.49 to 4.14, including reasons such as the desire to continue to learn and progress professionally, to obtain an additional graduate degree, passion for the graduated field, to pursue their own profession, the opportunity to meet and socialize with new friends, to get a job or find a better one, and to change the course of life. In addition, factors such as socioeconomic status (such as family income) and the university's internal environment (such as curricula, facilities, admissions, marketing and communication, service attitude, and learning environment) have also have different positive and negative effects on their judgments about which universities to select. The study also discussed suggestions for higher education managers and other stakeholders.

**Contribution/Originality:** This is one of very few studies investigating postgraduate students' perceptions of their university choice decisions in Vietnamese higher education institutions. Its primary contribution comes from developing a marketing strategy in higher education setting as an essential tool to draw in students and establishing a competitive advantage against competitors.

# 1. INTRODUCTION

Higher education plays an important role in socioeconomic development and is critical to the growth of every nation (Jover & Ones, 2009; MOET Ministry of Education and Training in Vietnam, 2009). Vietnamese higher education has gradually been reformed in terms of scale, type of institution and form of training, to meet the demands of socioeconomic progression. However, it is faced with major challenges, such as the slow pace of change in state governance of higher education, the lack of a breakthrough solution to promote training quality development, and the poor quality of human resources (MOET Ministry of Education and Training in Vietnam,

2009). Since joining the world trade organization in 2007, Vietnam's higher education system has dramatically changed over the last 15 years. It has undergone a major shift from elite to a more universal and from an annualized to a credit-based training system. This can also be observed in postgraduate education, with master's degree enrollment increasing from 62,705 in 2010 to 94,920 in 2020, and doctorate degree enrollment rising from 4,683 in 2010 to 11,054 in 2020 (General Statistics Office of Vietnam, 2020). Private higher education institutions (HIEs) experienced a sharp growth in student enrollment, while public HIEs saw a minor reduction.

A better understanding of graduate students' university selection decisions can thus help guide marketing practices and customize marketing strategies in HEIs, aiding institutions in attracting more students to enroll in postgraduate programs (Adefulu, Farinlove, & Mogaji, 2020). In Vietnam, student choice research is rarely undertaken, and there are few studies on postgraduate students' university choice decisions. A study by Adefulu et al. (2020) indicates that research on university choice decision-making by postgraduate students has primarily been conducted in Western countries and other developing countries (such as Malaysia and Indonesia), with a particular emphasis on undergraduate students (English & Umbach, 2016) as well as social class inequalities (Reay, David, & Ball, 2005; Shaw, 2013). University choice decisions of postgraduate students are mainly explained through rational choice, social economic status (SES), and university's internal environment. University students' decisions to continue their studies and research in postgraduate educational programs are a complex process which is dependent on a variety of factors (Dawes & Brown, 2005). Students seek graduate studies for a variety of motives, including their motivation, parental expectations, career advancement opportunities, or the prospects of a better job. Liu and Morgan (2020) discover that students follow postgraduate studies for a variety of reasons, including continuing their research path, changing previous research topics, attending an elite university, increasing competition for jobs, personal interests, avoiding work pressure, following the general trend, and others. Meanwhile, Malaney (1987) found that common reasons for this process include a desire to learn more about a major, personal satisfaction, future job prospects, and career advancement. Overall, a student's university selection is complicated, involving many decision makers and multiple factors, which can contain both emotional and rational selection processes.

Some studies have examined the influence of students' family SES on their university choice (Aydın, 2015; Lei & Chuang, 2010; Liu & Morgan, 2020). For example, family income and parental educational attainment impact student enrolment (Declercq & Verboven, 2015; Steiner & Wrohlich, 2012). In addition, students from disadvantaged backgrounds are less ambitious in their postgraduate course selection than their counterparts from privileged backgrounds, despite comparable academic achievement (Parker, Jerrim, Schoon, & Marsh, 2016). Lucas (2001) and Ma (2012) gave insights into the significance of family SES in maintaining educational advantages for students in terms of both quantity and quality of education. Furthermore, students with a poor SES tend to pick majors that may help them to be more financially solid such as engineering and business majors over those in the social sciences and humanities (Ma, 2012).

The following section discusses the theoretical relationship of university internal environment. Numerous aspects, such as a university's internal characteristics such as programs, learning space, campus, amenities, and support services can influence graduate students' selection of an institution (Manoku, 2015; Raposo & Alves, 2007). Ho and Hung (2008) found that student's learning environment (faculty, curriculum, and research) affects their university selection. Additionally, a postgraduate education program with modern approaches, a close relationship to professional practice, and a high degree of internationalization, the prestige and quality of the academic research environment, as well as the high applicability and skill of the academic staff, are major factors in attracting students to universities. According to Wagner and Fard (2009) physical aspects (amenities), and institutional information all have a substantial role in students' decisions to enroll in university. Similarly, Agrey and Lampadan (2014) discovered that students' decisions are positively influenced by learning environment and facilities, reputation, an attractive campus, libraries, computer labs, good sports facilities, health care services, extracurricular activities, a bookstore, and a counseling office.

In light of the aforementioned points, the purpose of this study is to analyze the factors influencing students' decision to attend a postgraduate institution and the effects of socioeconomic status (SES) and university's internal environment elements on their decisions. The study seeks to answer the following questions:

(1) What are the reasons for postgraduate students' decision to pursue postgraduate programs?

(2) How do family socioeconomic status and the university's internal environment impact the postgraduate students' university decisions?

# 2. METHODOLOGY

# 2.1. Sample

A mixed methodology consisting of questionnaires and semi-structured interviews was used in this study. First, a multipart questionnaire was used to collect basic information about students, and data regarding their perceptions of their university's internal environment and choice of university. A random sample of 401 first-year, full-time postgraduate students from five VNU-HCM member institutions was chosen. The sample surveyed 203 female students (50.6%) and 198 male students (49.4%); 55.1% of postgraduate students were from urban areas, whereas the remaining 4.9% were from rural areas. During the second stage, five postgraduate students who responded to the initial survey were interviewed in a semi-structured fashion.

## 2.2. Variables

The dependent variable in this study, university choice decisions, was constructed based on six questionnaire items to measure the choice of postgraduate programs in higher education settings, including: (1) exchange and cooperation programs with prestigious universities, (2) expertise of the academic staff, (3) a high rank on global rankings, (4) student support team's dedication, (5) quality and prestige of postgraduate courses, and (6) accreditation of postgraduate programs. For each item, the respondents were asked to rate the level of university choice decisions made by postgraduate students on a five-point Likert scale ranging from 1 = "strongly disagree" to 5 = "strongly agree."

The reliability of VNU-HCM postgraduate students' university selection decisions was measured using the valuable findings of factor loading, the Kaiser-Meyer-Olkin test of sampling adequacy (KMO), and internal consistency analysis (Cronbach's). The factor loading values for this study's items (0.670 to 0.700) exceeded the allowable level of 0.6 (Hair, Tatham, Anderson, & Black, 2009). The KMO value was 0.822, which surpassed the allowable level of 0.6 and satisfied the requirement for a constructed variable in educational research (Beavers et al., 2013). The internal consistency analysis revealed a Cronbach's coefficient of 0.770, which was greater than the allowed levels of 0.6 (Hair et al., 2009) and 0.7 (Nunnally & Bernstein, 1994) indicating satisfactory reliability. Six factors were found to be acceptable for determining university choice judgments among postgraduate students in this study (Table 1).

Factors	M (SD)	Range of score	Factor loading	
1. Exchange and cooperation programs with prestigious universities	4.05(0.70)		0.700	
2. Expertise of the academic staff	4.19 (0.67)		0.694	
3. A high rank on global rankings	4.07(0.75)	7 (0.75)		
4. Student support team's dedication	4.06(0.72)	1-5	0.674	
5. Quality and prestige of postgraduate courses	4.18 (0.70)		0.670	
6. Accreditation of postgraduate programs	4.16 (0.68)		0.670	
KMO value		0.822		
Cronbach's α		0.770		
M (SD)		4.12(0.48)		

Table 1. The reliability of the six factors constructing postgraduate students' university choice decisions in the VNU-HCM.

Note: Data were analyzed with principal component analysis.

Table 2 shows the relationship between six factors contributing to university selection decisions among VNU-HCM postgraduate students. The correlation coefficient ranged from 0.285 to 0.431, indicating a relatively high correlation among these factors. The strongest link was found between the dedicated service team and top-notch academic staff members (r = 0.431). Significant associations between the accreditation of postgraduate programs and highly qualified academic staff were found to be the weakest. (r = 0.285).

Factors	1	2	3	4	5	6
1. Exchange and cooperation programs with prestigious universities	1					
2. Expertise of the academic staff	$0.354^{**}$	1				
3. A high rank on global rankings	$0.416^{**}$	$0.336^{**}$	1			
4. Student support team's dedication	$0.385^{**}$	0.431**	0.299**	1		
5. Quality and prestige of postgraduate courses	0.331**	$0.425^{**}$	$0.353^{**}$	0.307**	1	
6. Accreditation of postgraduate programs	$0.358^{**}$	$0.285^{**}$	0.419**	$0.343^{**}$	$0.337^{**}$	1

Table 2. The correlation among six factors of the postgraduate students' university choice decisions in the VNU-HCM.

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

This study's independent variables were divided into two categories: (1) family SES and (2) university's internal environment. Family income, parental education, and parental occupation made up family SES (Clarke-Stewart, Gruber, & Fitzgerald, 1994). Meanwhile, there were six factors in the university's internal environment: (1) curricula, (2) facilities, (3) admissions, (4) marketing and communication, (5) service attitude, and (6) learning environment. Table 3 displays the operational definitions, means, and standard deviations of the independent variables in detail.

Table 3. Operational	definitions, means, and	standard deviations of	the independent variables.

I. Family SES
Family income: Measured annually on a 6-point scale, where 1 = Under USD 1,300, 2 = USD 1,300 to under
1,740, 3 = USD 1,740 to under 2,180, 4 = USD 2,180 to under 2,620, 5 = USD 2,620 to under 3,060, and 6 = Over
USD 3,060 (M = 4.71, SD = 2.05).
Father's education: Measured on a 6-point scale, where 1 = Elementary school and lower, 2 = Junior high school,
3 = Senior high school, 4 = Junior college, 5 = University, and 6 = Postgraduate degree (M = 3.27, SD = 1.45).
Mother's education: Measured on the same scale as that for father's education ( $M = 3.18$ , $SD = 1.52$ ).
Father's occupation: Measured on a 3-point scale, where $1 = Blue \ collar$ , $2 = White \ collar$ , $3 =$
professional/executive ( $M = 1.69, SD = 0.73$ ).
Mother's occupation: Measured on the same scale as that for father's occupation ( $M = 1.49$ , $SD = 0.69$ ).
II. University's internal environment
Curricula: Measured on a 5-point scale, where $1 = Never$ and $5 = Always (M = 4.19, SD = 0.41)$ .
Facilities: Measured on the same scale as that for curricula ( $M = 4.02$ , $SD = 0.55$ ).
Admissions: Measured on the same scale as that for curricula ( $M = 4.01$ , $SD = 0.60$ ).
Marketing and communication: Measured on the same scale as that for curricula ( $M = 4.20$ , $SD = 0.38$ )
Service attitude: Measured on the same scale as that for curricula ( $M = 3.95$ , $SD = 0.60$ ).
Learning environment: Measured on the same scale as that for curricula ( $M = 3.97$ , $SD = 0.56$ ).

Note: Every variable is measured with one question item.

# 2.3. Data Analysis

Quantitative data was analyzed using the mathematical statistical methods of descriptive analysis and multiple regression analysis offered by SPSS software. Descriptive analyses of the mean and standard deviations were performed in order to better comprehend the factors influencing the decision-making of postgraduate students. The effects of family SES and internal university environment characteristics on postgraduate students' university choice decisions at VNU-HCM were examined using multiple regression analyses. For qualitative data, each interview lasted approximately 45 minutes and was audio recorded with the participants' consent. The recordings were coded (from PS01 to PS05) and analyzed to produce quantitative data.

## **3. RESULTS AND DISCUSSION**

# 3.1. The Main Reasons for Postgraduate Students' Decision to Pursue Postgraduate Programs in the VNU-HCM

As shown in Figure 1, the sum of the weight value of each option showed that students chose postgraduate programs in HEIs (or university choice decisions) to enhance personal interest and their employment competitiveness which were based on the results from ten questionnaire items. The respondents graded various grounds for their university selection decisions, with the mean value ranging from 3.49 to 4.14, equivalent to a level of 4 (agree level) on a 5-point Likert scale. Figure 1 indicated that there was no significant difference in the motives of "passionate about the graduated field," "desire to obtain a graduate degree," and "pursue my own profession," with M (SD) of 4.05 (0.78), 4.08 (0.75), and 4.03 (0.72), respectively. Similarly, the mean for students' purpose "get a job or find a better one" was nearly identical, with M = 3.86, compared to M = 3.87 for "enjoy postgraduate life" and M = 3.99 for "the opportunity to meet and socialize with new friends." The explanation with the lowest rating is "change course of life," with M = 3.49 (SD = 0.69), and the reason with the highest rating is "continue to learn and progress professionally," M = 4.14 (SD = 0.72).

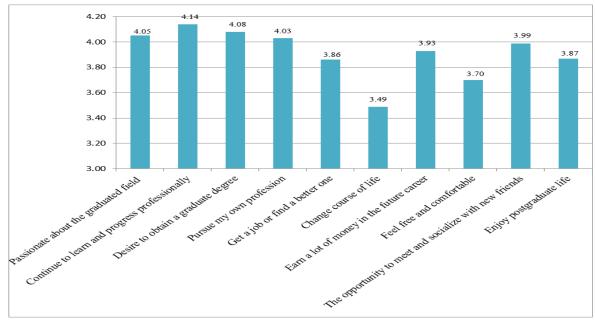


Figure 1. Main reasons for postgraduate students' decision to pursue postgraduate programs

The postgraduate students' interviews revealed that their decision to study at the VNU-HCM was motivated by three factors: 1) career advancement, 2) job requirements, and 3) family expectations. A Master student stated:

... I've personally decided to study at VNU-HCM because the quality of training here will give

me a better chance of finding a job after graduation. Another reason was that my family wanted

(me to get) a more advanced degree (PS03 - female).

## A PhD student said:

... Because of the nature of my work as a university lecturer, I've decided to study here, and I'm

enrolled in a specialized training program (PS05 - male).

The analysis of quantitative and qualitative data collected from postgraduate students shed light on their personal, professional, and familial motivations for enrolling in postgraduate programs at VNU-HCM member universities. Therefore, VNU-HCM and other universities in Vietnam (particularly those in Ho Chi Minh City) need to conduct research to forecast and explore students' aspirations to design policies that best support them in the context of intense competition among universities in major cities. According to the findings of Van Hoof, Wu, and Zhang (2014) study, the ability to stay and work in large cities after graduation affects students' university

selection decisions. Since the value of the required qualifications in job positions is increasing, they must attend postgraduate educational programs to meet the needs of employers.

The results of this study are similar to those of Malaney's (1987) study, which showed that the reasons for students' choice to study postgraduate educational programs in HEIs included deeper understanding of the studied major, satisfaction of personal needs, career prospects, and higher qualifications for career advancement. Other researches found that postgraduate student characteristics like self-interest, personalities, and personal expectations influence postgraduate students' university choice decisions (Vrontis, Thrassou, & Melanthiou, 2007). In addition, Liu and Morgan (2020) discovered that the three main factors for postgraduate students' university choice decisions are to continue academic research, to improve employment competitiveness, and personal interests. Their results indicated additional reasons for students' postgraduate education choice, such as attending an elite university, continuing their research path, avoiding work pressure, changing previous research topics, increasing competition for jobs, going with the flow, and others. Furthermore, employment prospects, including those associated with earning a graduate degree, advancing in their careers, earning a large sum of money, and landing a good job, were found to be one of the key factors encouraging students to pursue postgraduate programs in HEIs (Daymon & Durkin, 2013; Jepsen & Varhegyi, 2011; Liu & Morgan, 2020).

Although this and earlier studies indicated that "employment prospects," "postgraduate qualifications," and "personal interests" are the primary reasons for students to choose postgraduate educational programs, it is imperative that HEIs give students an opportunity to realize that their own expectations would be best met when studying at these establishments. Therefore, they should emphasize their strengths, prestige, and distinguishing characteristics that set them apart from other ones in order to draw in postgraduate students.

# 3.2. Effects of the SES and University's Internal Environment Factors on Postgraduate Students' University Choice Decisions in the VNU-HCM

As shown in Table 4, Model 1 presents the results of the regression analysis of the variables of the SES factor, whereas Model 2 to Model 7 present the results of six variables of university's internal environment factors influencing the university choice decision of postgraduate students at VNU-HCM. Model 8 illustrates the combined effects of both elements (such as family SES and university's internal environment factors). Multicollinearity diagnosis yielded no variance inflation factor (VIF) values greater than 10 in the regression model (in this study, VIF = 1.111 to 2.532), indicating no risk of severe multicollinearity in the model (Hair et al., 2009; StataCorp, 1997). The data display coefficients of  $\beta$  values, with  $\beta > 0$  indicates a positive effect, and  $\beta < 0$  indicates a negative on the university selection decisions of postgraduate students at VNU-HCM.

This study revealed that family SES and university's internal environment have significant relationships with the university selection decisions of VNU-HCM postgraduate students. Based on the results of Model 1, only the variable "family income" has a negative effect on students' university choice decisions ( $\beta = -0.171$ , p < 0.01), and this model explained 2.8% of the variance of personal factors' university choice decisions (Adj,  $R^2 = 0.028$ ).

In Model 2, four out of five items of "curricula" variable, except item of "diverse curricula and programs", exert positive influence on the university choice decisions of postgraduate students. These variables include "modern in the programs" ( $\beta = 0.187$ , p < 0.01), "practical applicability of the curriculum" ( $\beta = 0.156$ , p < 0.01), "flexible and diverse forms of training" ( $\beta = 0.167$ , p < 0.01), and "reasonable proportion of theory and practice" ( $\beta = 0.157$ , p < 0.01). In particular, all items of "facilities" variable in Model 3 are associated with the university choice decisions, but only item of "internet network system" has a negative impact ( $\beta = -0.238$ , p < 0.001) and the rest are positive effects on this decision, namely items of "modern library system and diverse documents", "spacious and comfortable study/research space", "fully equipped and modern classrooms/research labs" and "various student support services" (such as canteens, parking, self-study rooms, counseling rooms, sports houses ...) of  $\beta = 0.193$ , p < 0.001;  $\beta = 0.132$ , p < 0.05 and  $\beta = 0.219$ , p < 0.001, respectively. In Model 4, three items of

"admissions" variable positively affect their judgements, including "transparent admissions information" ( $\beta = 0.183$ , p < 0.01), "specific and clear content of exams" ( $\beta = 0.128$ , p < 0.05), and "informative consultants" ( $\beta = 0.148$ , p < 0.01). Likewise, in the Model 7 also had three items of "learning environment" variable which were positively associated with these ones, such as "opportunities for research activities" ( $\beta = 0.123$ , p < 0.05), "evaluate learning results fairly" ( $\beta = 0.180$ , p < 0.01) and "embrace the difference" ( $\beta = 0.152$ , p < 0.01). Similarly, the findings of Model 5 and 6, both variables of "marketing and communication" and "service attitude" have a positive influence on university choice decisions in the VNU-HCM postgraduate students. In each variable, there are two items affecting their decision; for example, "advertisements on printed newspapers" with  $\beta = 0.103$ , p < 0.05 and "advertisements on electronic newspapers" with  $\beta = 0.212$ , p < 0.001 in Model 5 and items of "students support from program managers" ( $\beta = 0.259$ , p < 0.001) and "students support from academic members" ( $\beta = 0.176$ , p < 0.01) in Model 6.

In the combined Model 8, three items of family SES and university's internal environment factors steadily maintained their significant benefit effects on the university choice decisions of postgraduate students across models., namely, "family income" of the family SES factor ( $\beta = -0.170$ , p < 0.001), "internet network system" of the "facilities" variable ( $\beta = -0.187$ , p < 0.001), and "support students of program manager" of the "service attitude" variable ( $\beta = 0.147$ , p < 0.05). However, this model revealed a variety of influences on students' decisions. The models explained 34% of the variance in university choice decisions based on family SES and university's internal environment factors (Adj,  $R^2 = 0.340$ ).

Comparing the results of this study with those of previous related studies, there were revealed both similarities and differences, as different approaches, survey subjects, and research methods were used. Therefore, future research needs to combine multiple approaches and methods to expand the theoretical and practical database for this topic. Literature review also revealed that most studies of university choice decisions primarily focused on college students (English & Umbach, 2016; Ramirez, 2013). Several other studies on the same topic for postgraduate students were conducted primarily in developed countries, such as the United Kingdom, Australia, the United States, and Western countries (Adefulu et al., 2020; Reay et al., 2005; Shaw, 2013), but few were conducted in developing countries, such as Malaysia and Indonesia. There has not been much research on this topic in HEIs in Vietnam, with the majority of studies focusing on factors influencing the university choice decisions of first-year students.

In terms of family SES, the findings of this study, are similar to those of Aydin (2015) and Aydin and Bayir (2016) in which the family socioeconomic background factor, particularly parental financial support for graduate students, is one of the important factors and has a positive influence on their decision-making process. In the interview, a Master student stated:

...the most important determinant is family income because, when participating in postgraduate

programs ... I've considered how to balance my family's financial situation carefully, especially

with tuition fees rising while income sources remain unchanged (PS02 - female).

A PhD student said:

... My income isn't high enough, and I haven't supplied much for my family though I'm a university lecturer. Nevertheless, due to work requirements, I have to use my parents' money for my studies (PS05 - male).

This study found that postgraduate students from low-income families make different decisions than those from middle-income families. Students from low-income families are more motivated to study because they believe it is the most effective way to better their lives and those of their families. However, the research results of Liu and Morgan (2020) showed the opposite results that middle-income parents consider higher education as the path to economic prosperity and social status as participation in these programs may give their children the opportunity to develop career prospects and high social position in the future and vice versa. Due to their difficult economic background and social standing, low-income families are less interested in graduate programs at HEIs.

Factor	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	VIE
Factor	Beta (β)							VIF	
I. Family SES	·								
Family income	-0.171**							-0.170***	1.281
Father's education	0.066							-0.017	2.532
Mother's education	0.009							0.072	2.530
Father's occupation	0.060							0.050	1.715
Mother's occupation	0.004							0.018	1.758
II. University's internal environment					•	•	•		
1. Curricula									
Diverse curriculum and program		-0.038						0.029	1.605
Modern in the programs		0.187**						0.096	2.015
Practical applicability of the curriculum		0.156**						0.056	2.103
Flexible and diverse forms of training		0.167**						0.059	1.606
Reasonable proportion of theory and		0 1 <b></b> * *						0.101	1.050
practice		0.157**						0.101	1.850
2. Facilities					•	•	•		
Internet network system			-0.238***					-0.187***	1.607
Modern library system and diverse			0.193***					0.000	1.540
documents			0.193***					0.069	1.740
Spacious and comfortable study/Research			0.154**					0.089	1.601
space			0.134					0.089	1.001
Full equipped and modern in the			0.132*					0.111	1.933
classroom/Research labs								0.111	1.933
Various student support services			0.219***					0.063	1.562
3. Admissions									
Transparent admission information				0.183**				0.068	1.694
Simple registration procedures and				0.121				0.023	2.151
documents									
Flexible registration form				-0.020				-0.132*	2.216
Specific and clear content of exams				0.128*				0.077	2.032
Information consultants				0.148**				0.023	1.910
4. Marketing and communication									
Television and radio media					-0.005			-0.076	1.111
Social networking sites					0.085			-0.070	1.339
Advertisements on printed newspapers					0.103*			0.014	1.327
Advertisements on electronic newspapers					0.212***			0.060	1.525
Visiting the school					0.028			0.012	1.251
5. Service attitude									

## Table 4. The results of regression analyses of SES and university's internal environment factors effects on the university choice decisions of postgraduate students in the VNU-HCM.

Students support from department of graduate affairs staff						0.065		-0.047	2.221
Students support from faculty staff						0.069		-0.003	2.203
Students support from university staff						0.030		-0.037	2.161
Students support from program manager						0.259***		0.147*	2.016
Students support from academic member						0.176**		0.033	1.830
6. Learning environment									
Opportunities for research activities							0.123*	0.083	1.918
Design a variety of university activities							0.104	-0.006	1.772
Evaluate learning results fairly							0.180**	0.067	1.996
Acquire students' needs satisfactorily							0.058	-0.032	1.961
Embrace the difference							0.152**	0.031	1.763
F	3.238 ***	27.090 ***	22.216 ***	18.266 ***	8.521 ***	22.778 ***	21.662 ***	6.655 ***	
Adj.R <sup>2</sup>	0.028	0.246	0.210	0.178	0.086	0.214	0.205	0.340	1

**Note:** \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001.

We believe, however, that it may be due to difficult family financial situations that parents do not invest in their own higher education, so they do not fully appreciate the significance of higher education and the long-term benefits of graduate education for their children. In addition, the research of Isaac, Malaney, and Karras (1992) revealed that the father's education level exerts a greater influence on students' university selection than that of the mother. This is partially true in the Confucianism-influenced society of Vietnam, when family decisions tend to be made by the father. Therefore, Vietnamese universities must thoroughly examine SES factors in order to develop policies and action plans to support and attract students to graduate programs.

Regarding university's internal environment aspects, the outcomes of this study correlated with those of Cokgezen (2014); Keling (2006); Raposo and Alves (2007) and Manoku (2015). A wide range of factors, such as marketing, admissions, educational programs, facilities, and support services influenced graduate students' university choices. According to the interview results, a PhD student agreed:

... I am aware that many factors about the university environment can influence my decision to attend this school, such as the quality of the curriculum, the academic environment, the facilities and comfort in studying and researching, as well as learner support services.... and I've researched many different information channels before selecting this university (PS04 - female).

Or another Master student added:

... Based on the recommendations of my friends who have previously studied here, it appears that the quality of training and academic environment here is very good, as are the job opportunities after graduation... So, I've registered to study here (PS03 - female).

Previous research found that admission is a crucial influencing element in students' institution selection (Kim & Gasman, 2011; Lei & Chuang, 2010; Wagner & Fard, 2009). The provision of clear and transparent admission information, as well as dedicated and enthusiastic guidance on exam planning, studying strategies, and plenty opportunities for graduate students to study and research, can form the foundation for the most effective recruitment process. However, they suffer application process anxiety as well as fear of failure (Whitehead, Raffan, & Deaney, 2006). This demonstrated that students' choice of university is highly competitive among candidates, with the labor market favoring prestigious institutions and programs of high caliber. Because of this, higher education administrators must focus on the development and implementation of policies for enrollment management and postgraduate admission (Poock & Love, 2001).

Aside from admissions, communication plays a vital role in students' university choice decisions. For example, an Internet-based university website (Kim & Gasman, 2011; Pampaloni, 2010) printed brochures, and mails (Briggs, 2006). Grosz (1987) discovered that visiting campus and speaking with a university counselor or alumni (Connor, Burton, Pearson, Pollard, & Regan, 1999) are also important factors. Yamamoto (2006) discovers that fliers, posters, billboards, websites, television, and newspaper advertisements are used as communication tools for their judgements. Overall, studies demonstrated there are numerous communication technologies, websites, and catalogs that provide students with information on university postgraduate programs. However, they did not demonstrate the optimal effectiveness of any communication channel, regardless of how frequently students are exposed to that channel. As a result, to inform students about HEI postgraduate programs, HEIs must use a variety of communication channels on technological platforms.

Additional vital elements influencing students' university selection are friendly service, a diversity of courses, extracurricular programs, university activities, affiliations, and the attractiveness of campus facilities. Dugan (2006) and Duong (2020) discovered that participation in university activities (such as curricular engagement and cocurricular involvement) enhances the capacity development of students (such as leadership capacity - one of most important). In addition, factors such as library, facilities, and information technology facilities influence the universities chosen by students (Donaldson & McNicholas, 2004; Price, Matzdorf, Smith, & Agahi, 2003; Sidin, Hussin, & Soon, 2003). Graduate students value scientific, technological, and educational resources because they

support their academic and research endeavors. In today's dynamic learning environment, more than just printed books, facilities such as libraries also need to transition to open sources and digital documents, as well as provide entertainment, rest, and integrated multipurpose meeting rooms. As a result, one of the most important marketing strategies to pull in students may be promoting the university's image by emphasizing the convenience of facilities (such as sports, leisure, or canteens) or the quality of facilities (such as library, computing facilities, campus, and class size) to serve students (Aydın, 2015; Tavares, Tavares, Justino, & Amaral, 2008).

It is crucial to recognize that HEIs must offer top-notch education programs that meet the demands of the labor market in terms of knowledge, skills, competencies, and community responsibility, as well as educational program learning-outcome standards. In addition, these schools must employ teaching and research faculty members with academic prestige, expertise, and good pedagogical skills who can contribute to the enhancement of program quality. Furthermore, students' potential must be fostered through extracurricular activities and admissions procedures. These factors can increase students' motivation to sign up for postgraduate programs at universities in Ho Chi Minh City, especially Vietnam National University Ho Chi Minh city.

# 4. CONCLUSION

The context of intensifying competition between domestic and international HEIs and the increasing demand of the job market for graduate students has made postgraduate students' university choice decisions more important and complicated so they are now carefully choosing what and where to study at university. It should be noted that the Vietnamese government has transformed the financial mechanism in higher education from public provision and funding to financial autonomy, forcing these institutions to engage in student recruitment competitions on their own. As a result, developing a marketing strategy in HEIs is an essential tool to draw in students and establishing a competitive advantage against competitors.

The study's findings are as follows: firstly, there are many reasons why graduate students choose to continue their education in a postgraduate program, with personal interests and career advancement opportunities receiving the greatest attention. Secondly, the effects of postgraduate students' family SES and university's internal environment factors on their preferences on which universities to pursue were mixed, including positive and negative ones. Despite some limitations in this study, we suggest that educational managers in Vietnamese HEIs in general, and the VNU-HCM in particular, should pay special attention to developing positive elements and taking remedial measures for negative ones. As a result, the findings of this study are critical for managers and other stakeholders in HEIs to develop effective recruitment strategies, and to take into account many factors that a postgraduate student would consider in order to recruit the best postgraduate students in an increasingly competitive environment among HEIs.

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