南華大學管理學院企業管理學系管理科學碩士班

碩士論文

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Master Thesis

探討服務品質和學生滿意度對學生就學意願的影響：以口碑為中介變項

The Effect of Service Quality and Student Satisfaction on Student Enrollment Intention, Word-of-mouth as a Moderator Variable: Study on Higher Education Students in Universities of North Viet Nam

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探討服務品質和學生滿意度對學生就學意願的影響－以口碑為中介
變項

The Effect of Service Quality and Student Satisfaction on
Student Enrollment Intention, Word-of-mouth as a Moderator
Variable: Study on Higher Education Students in Universities of
North Viet Nam

研 究 生： 阮德忠 Trung. NGUYEN DUC TRUNG

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口試委員：

指導教授：

系主任(所長)：

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MBA RECOMMENDATION LETTER

準碩士推薦函

本校企業管理學系管理科學碩士班研究生__阮德忠__君在本系修業_2_年，已經完成本系碩士班規定之修業課程及論文研究之訓練。

1、在修業課程方面：__阮德忠_君已修滿__36__學分，其中必修科目：：研究方法、_____管理科學_____等科目，成績及格(請查閱碩士班歷年成績)。

2、在論文研究方面：_阮德忠_君在學期間已完成下列論文：

(1)碩士論文：探討服務品質和學生滿意度對學生就學意願的影響---以口碑為中介變項

(2)學術期刊：2022 International Conference on Economic Development and Business Management (ICEDBM)

本人認為___阮德忠___君已完成南華大學企業管理學系管理科學碩士班之碩士養成教育，符合訓練水準，並具備本校碩士學位考試之申請資格，特向碩士資格審查小組推薦其初稿，名稱：探討柬埔寨食品外送的服務品質對行為意向之研究--以主　觀規範與網路口碑為干擾變數，以參加碩士論文口試。

指導教授：〔簽名〕簽章

中華民國　　　年　　　月　　　日

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Due to limited time and experience, the thesis cannot avoid insufficiency. I really appreciate hearing contribution from Professors and interested readers.

Nguyen Duc Trung

June 2022

南華大學管理學院企業管理學系管理科學碩士班

110學年度第2學期碩士論文摘要

論文題目：探討服務品質和學生滿意度對學生就學意願的影響：以口碑
為中介變項

研究生：阮德忠　　　　　　　　　　　指導教授：紀信光　博士

論文摘要內容：

長期以來，招收學生一直是高等教育機構的一項重要活動。然而，高校
的快速發展、高等教育價格的大幅上漲以及人口統計趨勢可能要求大學
重新評估學生滿意度對其生存的重要性（Kotler 和 Fox，1995）。以
前的研究已經關注服務質量如何影響學生滿意度，但還沒有任何關於學
生滿意度如何影響學生入學意願的研究。本研究的目的是調查服務質量、
學生滿意度、學生忠誠度、大學聲譽和入學意願之間變量之間的交互作
用，使用口碑（WOM）作為調節因子。（EOCBE）之間的關係。本研究還
探討了研究意義和前景。

關鍵詞：服務質量、學生滿意度、學生忠誠度、大學聲譽、口碑、招生
　　　　意向

Title of Thesis: The Effect of Service Quality and Student Satisfaction on Student Enrollment Intention, Word-of-mouth as a Moderator Variable: Study on Higher Education Students in Universities of North Viet Nam

Department: Master Program in Management Sciences, Department of Business Administration, Nanhua University

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Name of Student: Nguyen Duc Trung   Advisor: Hsin-Kuang Chi, Ph.D.

ABSTRACT

Recruiting students has long been a critical activity for higher education institutions. However, the rapid progress of colleges and universities, huge price rises in higher education, and population demographic trends may require universities to reassess the importance role of student satisfaction in their survival (Kotler and Fox, 1995). Previous research has looked at how service quality affects student satisfaction, but there haven't been any studies on how student satisfaction affects student enrollment intention. Purpose of the current study is to investigate the interaction of variables between service quality, student satisfaction, student loyalty, university reputation and enrollment intention using word-of-mouth (WOM) as a moderator.

Keywords: Service Quality, Student Satisfaction, Student Loyalty, University Reputation, Word-of-mouth, Enrollment Intention

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CHAPTER ONE

INTRODUCTION

1.1 Research Background and Research Motivation

Recruiting students has long been a critical mission to higher education organizations. However, the rapid progress of colleges and universities, huge price rises in higher education, and population demographic trends may require universities to reassess the importance role of student satisfaction in their survival (Kotler and Fox, 1995). Despite the fact that the accomplishment and advancement of student's learning are the factors for the establishment of higher educational organizations, university managers spend significantly more effort on student recruitment and admissions initiatives than on enrollment administration.

The present globally and intense competition climate to all colleges is increasing the need for them to adopt distinctive tactics for promoting with a "greater focus on the student" to help them make a statement. As a result, colleges must grasp the aspects that assist to increase dominance and awareness of which drives student views of the quality they received in order to impact and accomplish greater experiences and higher levels of student loyalty percentage (D.Moore, J.L.Bowden-Everson, 2012). According to Helgesen (O.Helgesen, 2008), student retention is just as crucial as recruiting them.

Similarly, under this notion of "more attention on the consumer," Co-creation seems to be a new suggestion with numerous prospects, since it is viewed as a possible element of competitive value for enterprises or organizations (C.K Prahalad and Hary.Bus, 2000). Mathis (E.F. Mathis, 2013) observes that co-creation is a very recent field of study topic to various potential applications. Carvalho and De Oliveira Mota (S.W Carvalho, M. de Oliveira, 2010) emphasize that the direct student–teacher

founder process relates to the student's impression of worth.

Furthermore, according to recent study from the Fraunhofer Institute, universities are not taking use of the huge possibility of co-creation and the prospect of incorporating students on a daily foundation so as to assist to the development. Ribes and Peralt (G.R.Giner, A.Peralt 2014) emphasize the relevance of co-creation in education as a unique competitive approach in their recent writings. Finally, Daz-Mendez and Gummesson (M.Daz-Mendez and E. Gummesson, 2012) argue that universities should shift their focus from serving students to co-creating education with them by developing educational services with their active involvement.

Good service quality increases student satisfaction, which results in long-term increases in sales and earnings (Anderson, Fornell & Lehmann, 1994). In today's higher education, there is fierce rivalry not just for the domestic market, but also for the worldwide market. To get a large revenue, student satisfaction and loyalty must be optimize, and one strategy is to provide good quality of service (Stevens, Knutson, & Patton, 1995). In the business sector, studies on education service quality are regarded novel. As a result, it is pushed to the level of a national goal (Sultan & Yin Wong, 2010).

The Vietnamese education ministry has prioritized enhancing educational service quality, particularly in higher education organization, by combining the ministries of higher education, research and technology for the greatest results. Beside from that, the government enables international institutions and colleges to enter the domestic sector. As a result, rivalry between local and foreign institutions or schools becomes more intense. Students choose higher education that delivers greater service quality and student satisfaction (Tahir, Bakar, & Ismail, 2010), which influences student loyalty both directly and indirectly (Annamdevula & Bellamkonda, 2016b). Students who are immensely satisfied will remain loyalty to the universities

they have selected (Alves & Raposo, 2009).

(Annamdevula & Bellamkonda, 2016b) conducted study in India and discovered favorable connections among service quality and student satisfaction, service quality and student loyalty, student satisfaction and student loyalty. It was also reinforced by research on higher education in Portugal conducted by Duarte et al. (2012). In contrast, Dib and Mokhles (2013) discovered no significant association among service quality and student satisfaction in a research conducted in Syria. The relationship between student quality and student loyalty yields the same outcome, they did, however, discover a strong link between student satisfaction and student loyalty. This study will reexamine the relationships between service quality and student satisfaction, student satisfaction and student loyalty, student satisfaction and enrollment intention, student royalty and enrollment intention, and university reputation and enrollment intention, with word-of-mouth acting as a moderator.

Besides, previous studies have examined at student satisfaction will be positively impacted by service quality, but there is no specific studies on student satisfaction toward student enrollment intention, so this study will address this in this respect. Believe that student loyalty and student satisfaction have an important influence on enrollment intention, therefore based on that proposal the overarching aim of the current study is to investigate the interaction of variables between service quality, student satisfaction, student loyalty, university reputation and enrollment intention using word-of-mouth (WOM) as a moderator. In addition, these also are new contributions of this study in the context of Vietnam, this study can generate ideas for universities improve service quality and reputation, thus can help the universities gain more and more students.

1.2 Research Objective

This study collects and analyzes data samples from students at universities in North of Vietnam. There are eleven goals for this study that are shown below:

1. To investigate the relationship between service quality and student satisfaction

2. To examine the relationship between student satisfaction and enrollment intention

3. To investigate the relationship between student satisfaction and university reputation

4. To examine the relationship between university reputation and enrollment intention

5. To examine the relationship between student satisfaction and student loyalty

6. To investigate the relationship between student loyalty and enrollment intention

7. To examine the relationship between word-of-mouth (WOM) and enrollment intention

8. To examine the moderating role of word-of-mouth (WOM) on university reputation toward enrollment intention

9. To Investigate the mediating role of Student Satisfaction on Service Quality toward Enrollment Intention

10. To Investigate the mediating role of Student Loyalty on Student Satisfaction toward Enrollment Intention

11. To Investigate the mediating role of University Reputation on Student Satisfaction toward Enrollment Intention

1.3 Subject and Research Scope

Based on the above discussions, the scope of the research is developed and is detailed in the table below.

Table 1.1: The Scope of the Study

Items	Scope of The Study
Types of research	The nature of this research is quantitative. Review literature to create a foundation of hypotheses and frameworks. Research methods are designed to collect data using questionnaires and data analysis to test hypotheses and find results.
Key Issue	Consider the impact of Service Quality to Student Satisfaction and Student Satisfaction to Enrollment Intention, using Word-of-Mouth as a moderator
Dependent variables	Enrollment Intention
Moderating variable	Word-of-Mouth (WOM)
Mediating variable	Student Satisfaction, Student Loyalty, University Reputation
Underlying theory	Theory of Planned Behavior (TPB)
Testing location	Vietnam
Analyzed Unit	Individual
Research method	SPSS version 22.0

Source: This study

1.4 Procedure and Research Structure

To conduct the investigation, this research process includes the following steps. First of all, the study has chosen the topic of service quality, student satisfaction, student loyalty, university reputation, word of mouth to affect

enrollment intention. After the idea of carrying out this study, the research modified various studies to have the most completed view on this issue. The research background, objectives and motivation are determined, leading to the development of the research framework. After that, a literature review was shown about the relationship between the six research structures above.

The conceptual model and the hypotheses that correlate each structure have been explored. To test each hypothesis in the model, a survey with a quantitative questionnaire will be conducted based on the research method shown. Questionnaires and data samples are designed, focused on Vietnamese students and distributed via online platforms by sending them links to fill out the survey. Next, data analysis and testing happened. Subsequently, discussions about these variables were displayed based on the results. Finally, conclusions and implications were drawn based on the results of this thesis. Respondents are students studying in North of Vietnam.

SPSS version 22.0 was used in data analysis. Methods of data analysis and hypothesis will be techniques: Descriptive statistical analysis, Factor analysis and Reliability test, Independence T-test, ANOVA, Regression analysis (Simple regression and Hierarchical regression).

The research process is depicted in Figure 1.1 as shown below:

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┌─────────────────────────────────────────────────────────────────┐
│ Gather information from previous studies to get an overview of    │
│ this issue                                                        │
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                                │
                                ▼
┌─────────────────────────────────────────────────────────────────┐
│ Recognize the purpose and motivation of the research             │
└─────────────────────────────────────────────────────────────────┘
                                │
                                ▼
┌─────────────────────────────────────────────────────────────────┐
│ Create conceptual models and develop hypotheses                  │
└─────────────────────────────────────────────────────────────────┘
                                │
                                ▼
┌─────────────────────────────────────────────────────────────────┐
│ Create a research method and sample design                       │
└─────────────────────────────────────────────────────────────────┘
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                                ▼
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│ Conducting surveys and data collection                           │
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                                │
                                ▼
┌─────────────────────────────────────────────────────────────────┐
│ Test and analyze data                                            │
└─────────────────────────────────────────────────────────────────┘
                                │
                                ▼
┌─────────────────────────────────────────────────────────────────┐
│ Discuss the results                                              │
└─────────────────────────────────────────────────────────────────┘
                                │
                                ▼
┌─────────────────────────────────────────────────────────────────┐
│ Conclusion and implication                                       │
└─────────────────────────────────────────────────────────────────┘
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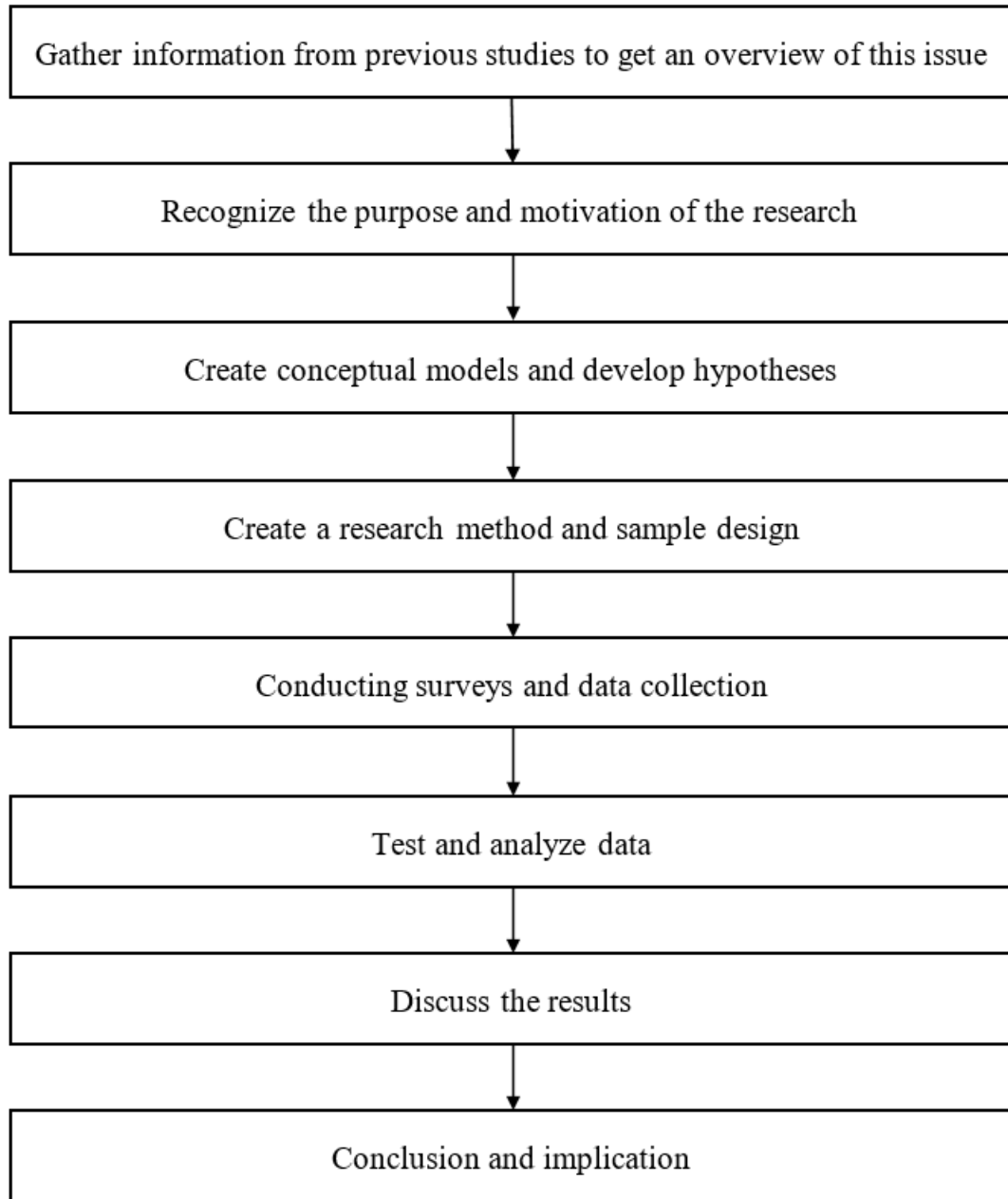
Figure 1.1: Flow of Chart of the Research Process

Source: This study

The content of this study is divided into 5 chapters: Introduction, Literature Review, Research Methodology, Data Analysis and Results, Conclusions and Suggestions.

Chapter one introduces and explains what is the research background and motivation for investigating this research; research purposes and objectives, contributions, topics, and scopes of the research; then rely on the research and

establishment process to enhance the goals. Besides, it also shows the general procedure and structure of the study.

Chapter two presents the literature review related to service quality, student satisfaction, student loyalty, university reputation, word of mouth, and enrollment intention. From the review of previous studies, including evaluating the important features of each factor, explain the definition of research variables. It then leads to the basis for the content of chapter three, which is the relationship between the six constructs. These relationships are developments to make the hypotheses in this chapter.

Chapter three presents the research methodology and research design. In this chapter, the research framework model has been established. Accordingly, the construction of scales to investigate the relationship between variables and research design has been outlined. Besides, sampling plans, questionnaire design to research surveys, data collection, and data analysis procedures are also discussed in this chapter to ensure the comprehensiveness of the research model and complete the items of the survey question.

Chapter four presents data analysis and implies the results. The results are presented running the analysis. Display descriptive statistics for respondents' question items, factor analysis, reliability check and validity of scales, independent

T-test, ANOVA, and related regression results in each hypothesis developed in chapter three. Then the results for each hypothesis will be presented for discussion.

Chapter five presents conclusions, summarizing the main results of the study after discussion, its findings, implications, contributions, and limitations. Based on the results, suggestions for future studies are also presented.

CHAPTER TWO

LITERATURE REVIEW

This chapter will discuss previous studies of the six constructs and related theories. Then the hypothesis will be displayed. Related constructs include Service Quality, Student Satisfaction, Student Loyalty, University Reputation, Word of Mouth, and Enrollment Intention and the correlation between variables.

2.1 Theoretical Background

2.1.1 Service Quality

A service, according to Zeithaml and Bitner (2000), is any economic endeavor supplied by a specific factor to a second factor primarily intangible and through trade and fulfills a recognized demand. Quality is imagined as a concept from the aspect of products/services in industry, and it had been noticed that developing the notion of requirement of quality in the service field is the most difficult due to the intangibility character or attributes of service (Küçü-kaltan, 2007). Due to Yilmaz (2007), service quality may be defined as an experience based on student's expectations and views of the service provided. As a result, whether the supplied service does not correspond to or surpass student hopes, the service quality would be regarded as lacking; but, if it surpasses student hopes, the service quality would be seemed as high (Akbaba and Kilinc, 2001).

Parasuraman et al. (1988) created many elements that universities may use to evaluate service quality, and these components are frequently discussed by researchers in service quality evaluation. They applied the ten factors, which included physical attributes, courteousness, responsiveness, security/safety, competence, credibility, reliability, communication, convenience, and customer comprehension, and then advanced the SERVQUAL measure, which includes twenty two dimensions in five

measurements. These are the metrics proposed by Parasuraman et al. (1988) and Zeithaml et al. (2009):

i. Tangible/Physical characteristics: The appearance of structures, equipment and tools, and student throughout service delivery.

ii. Reliability: The university ability to supply services in an acceptable and dependable manner is confirmed.

iii. Responsiveness: The willingness to assist the student and give prompt service.

iv. Assurance: The ability of the service provider to be well-mannered, well-informed, and to instill confidence in the student.

v. Empathy: The university capacity to envision itself as the student, to pay personal attention to student, and to show a particular interest in student. As a result, in order to remain relevant in a competitive context, HEI must embrace and manage service quality.

2.1.2 Theory of Planned Behavior (TPB)

TPB (The theory of planned behavior) is defined as "a theory attempting to predict and explain human behavior in certain settings" (Ajzen, 1991). TPB is a theory of reasoned action extension (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). The specific's purpose to undertake a certain activity is a key aspect in TPB. Intentions are supposed to indicate the motivational elements which drive conduct; they are indications of how difficult people are ready to try as well as how much commitment they plan to put in to complete the task. TPB's initial derivation (Ajzen, 1985) defined intention (and its other theoretical elements) in terms of attempting to accomplish a certain behavior rather than actual execution (Ajzen, 1991).

Furthermore, TPB is one of the most widely used hypotheses in environmental research (Nye and Hargreaves, 2010). Following the TPB, an individual's behavioral intents and behaviors are influenced by his or her behavioral attitude, subjective standards, and perceived behavioral control

(Blok et al. 2015).

A person's perception of behavior and capacity to manage behavior in a scenario where he or she is expected to respond and behave in a specific way, according to Ajzen and Fishbein (2000). Perception is linked to a person's emotional response to the effects of various environmental activities (Cordano et al., 2010). Organizational behavior entails a person's affective that they 'have toward over' the performance of the surroundings (Ajzen, 1991). Rioux used the TPB in the context of pro-environmental conduct (2011). Other researchers (Whitmarsh and O'Neill, 2010; Wall et al. 2007) used the TPB to explain pro-environmental behavior.

2.1.3 Student Satisfaction

As shown by Lupiyoadi (2016), a consumer is a person that returns to a certain location on a regular basis to satisfy his demands by purchasing items or obtaining a service and fulfilling that good or service which is habituated to purchasing products or services inside a location. According to Greenwood and Helen (1994), IWA (2007), and Sakthivel et al., consumers in the educational field are student or people who get education, and clients in the college world are colleger (2005).

Satisfaction is described as a feeling of receiving satisfactory service (Oliver, 1997). Several studies have identified client satisfaction criteria such as convenience of acquiring knowledge, achievement attributes (Oliva et al., 1992), prior studies (Bolton & Drew, 1991), and time consumption while choosing products (Andersen & Sullivan, 1993). The gap between the client's perception of service quality as well as what the client expectations is widely considered to determine the degree of satisfaction (Parasuraman et al., 1986).

Thus according Elliot and Healy (2001), the definition of customer satisfaction in education is that student satisfaction is obtained through assessing their engagement with academic services supplied. Individual characteristics associated with students and organizational characteristics

based on educational engagement influence student satisfaction (Brokaw et al., 2004; Stokes, 2003). Organizational characteristics include trainer style of teaching (Dana et al., 2001), methods of instruction (DeBourgh, 2003), accuracy and speed respond mostly from professor, connection with colleagues (Fredericksen et al., 2000), and physical equipment (Helgesen, 2007). As shown by Salis (2012), students serve as customers in tertiary institutions, so if students are happy with their courses, then would be involved and persistent in taking courses.

Students are the key clients for universities in the academic industry, hence an institution's success or failure is mostly determined by student satisfaction. Student satisfaction, according to Sapri et al., (2009), is a brief attitude emerging with an appraisal of their engagement with educational services obtained. As seen by Kotler and Clarke (1987), contentment is the desired consequence of an activity or occupation that raises one's personality. Malik et al. (2010) define satisfaction as "deliberate behavior that results in one delight."

There have been studies on student satisfaction that are focused with the quality of courses and instructors (Mavondo, & Zaman, 2000, & Sapri, et al, 2009). There is no question that such a measure of student satisfaction is crucial for universities since it informs students about their needs and expectations; such investigations should be treated as the foundation of optimal qualities of the service offered by universities (Arambewela, 2008).

2.1.4 Student Loyalty

Student loyalty is increasingly seen as an important metric of HEI (Higher Education Institution) performance via the worldwide studies on student behavior (Rojas-Mendez, Vasquez-Parraga, Kara, & Cerda-Urrutia, 2009). Student loyalty is defined as the degree to what they feel linked to the school and how their attitudes and behaviors reflect

this relationship (Nesset & Helgesen, 2009).

Loyalty is comprised of two components: attitude and actions (Hallowell, 1996). In higher education organizations, a loyal behavior might be a reference to students' (good) attitudes toward their officer staff and university. Student loyalty manifests itself through loyalty intents and conduct during the time they enroll in the university, such as positive introduction from students regarding their educational officer staff and university, or active engagement in extra interests. In terms of engagement, HEIs profit from devoted and successful students. Prior study on student loyalty has provided some insight on its association with favorable word-of-mouth about the university (Alves & Raposo, 2007) and dedication to the organization (Perin, Sampaio, Simes, & de Pólvora, 2012).

Other research papers had looked at potential student loyalty factors like faith, dedication, generate good, price perception, service quality, and reputation are all important considerations (e.g., Brown & Mazzarol, 2009; Carvalho & de Oliveira Mota, 2010; Nesset & Helgesen, 2009). As a result, colleges must establish favorable connections with their students in order to encourage supporting actions, for instance positive introductions or contributions from students (Sung & Yang, 2009).

2.1.5 University Reputation

Reputation is described as (a) share holder evaluation of the business in achieving expectations, (b) a collaborative framework of affective faith between social participants, (c) competency includes believe in the organization's environment, (d) corporation observed events to identify and consistency, and (e) collaborative representations that many people have about an organization on occasion (Alessandri et al., 2006). According to

Eckert (2017), an institution's reputation is generally stable and long-term in nature as a consequence of collective evaluation of its actions and successes by outsiders. The reputation of a corporation, according to Hoffmann et al. (2016), demonstrates its genuineness. Jsang et al. (2007) define reputation as anything about a person's character or attitude that is often spoken or believed.

The recognition or subjective and collective assessment of stakeholders to the university, which shows their viewpoints, behaviours, assessments, degree of trust, appreciation, happiness, and recognition of the university as a result of the university's earlier acts, from time to time, which can add to the university's long-term competitive advantage, is defined as the university's reputation, Lupiyoadi (2016).

A university's reputation may be developed in a variety of ways, according to Aula and Tienari (2011), including "societal relevance, multidisciplinary innovativeness, and symbolic rupture with the past." Incorporate the goals of becoming the world's greatest university and creating a one-of-a-kind multidisciplinary institution that fosters innovation related to business sectors via the most effective studies and instruction. Symbols that are not directly linked to the institution are used to emphasize new things and fresh beginnings. The three themes mentioned above are three key columns for establishing a high university reputation.

2.1.6 Word of Mouth – WOM

Katz and Lazarsfeld's (1955) research had been the groundbreaking study just on concept by word of mouth. Researchers learn this consumer-driven word-of-mouth offers a bigger as well as greater powerful influence than advertising. According to De Matos and Rossi (2008), WOM is impacted by a multitude of factors, including client satisfaction and interactions, shop decor, and the service quality workers. A reference item might be any aspect of a restaurant's brand. Alexandrov et al. (2013) suggest positively and

negatively WOM (thus PWOM and NWOM), mirroring Richins' (1983) technique. The amount of scientific, according to Chawdhary and Dall'Olmo Riley (2015), focuses on the impact of WOM on customers. Few, though, separate WOM as PWOM and NWOM, with the first being prioritized above the later.

In reality, students' behavior is influenced by both optimistic and bad feelings (Jang et al., 2011; Liu and Jang, 2009; Mattila and Ro, 2008). According to Kim and Moon (2009), students' great experiences (such as enjoyment and relaxation) increase their willingness to return to a location. Unpleasant feelings (including sadness and guilt), according to Mattila and Ro (2008), are significantly linked with behavioural outcomes (i.e., NWOM intentions). Some studies investigate how joyful and sad emotions influence intentions and behavior. Studies find that both good (e.g., joy and excitement) and negative (e.g., boredom and fury) emotions influence intentions and behavior including willingness to return and advise (Jang et al., 2011; Liu and Jang, 2009).

2.1.7 Enrollment Intention

In the Theory of Planned Conduct (TPB), intention is mentioned as a individual's activity toward a certain behavior (Teo & Chwee, 2010). Teo and Chwee were of the opinion which attitude determines behavioral intentions. Furthermore, according to an Attitude-Conduct Relations Theory, there is a substantial link among attitude and behavior (Ajzen & Fishbein, 1977). A person's activity, according to Ajzen (1991), is driven by behavioral goals, which are impacted by an attitude toward the conduct and subjective standards. Intention is sometimes described as the likelihood of acting so as to attain meaningful goals (van der Hoek, Jamroga & Wooldridge, 2007). According to Van der Hoek, Jamroga, and Wooldridge (2007), an individual will only relinquish an objective if he/she feels it had been attained or is impossible.

According to several academics, demographic factors such as gender impact people's propensity to enroll in Science programs at HEIs (Barnes, McInerney & Marsh, 2005). According to Barnes et al., interventions aiming at minimizing gender disparities in enrollment intention in optional science programs might positive impacted from concentrating on gender disparities in the considerations for students' interests, careers, and performance. The disparities in enrolment behavior are mostly due to variances in these three notions. Other investigations have stressed the impacts of a country's and higher education's reputation, attitude, topic norm, and perceived behavior control on students' enrollment intentions toward offshore programs (Li, 2008), as well as a program's course content (Dyer, Lacey & Osborne, 1996).

To increase student enrolment at HEIs, education directors must be knowledgeable about educational services (Javalgi, Joseph & LaRosa, 2009). In order to expand into new worldwide markets, education administrators need to develop promoting strategies that understand Characteristics of student wish and consumption, along with service planning and implementation alternatives that meet field demands for their HEIs. Bennett, Mousley, and AliChoudhury (2008) investigate the function of the student affairs department at HEIs as a significant success item for future student enrollment intention in a related literature. Students who claimed to have benefited is the most members from individuals in the office of student affairs considered to be "academic" and intensely committed to be a student and passionately eager to learn, possessed a strong academic personality, were technically capable, and had been well-prepared for university life before to enrollment.

2.2 Hypotheses Development

2.2.1 Relationship between Service Quality toward Student Satisfaction

Service quality and student satisfaction are two distinct concerns that can be strongly interconnected. Service Quality is considered as an attitude in general, while satisfaction is linked to a specific transaction (Gruber et al., 2010 & Farrell et al., 2001), however some writers (e.g., Parasuraman et al., 1988) regard student satisfaction seem like a predictor of service quality. According to the most of recent publications, service quality is a requirement for student satisfaction (Carrillat et al., 2007 & Zeithaml, et al., 2008).

Student satisfaction, researched by Oliver (1989), is fairly related to the value paid. This is consistent with the theories of Parasuraman, Zeithaml, and Berry (1985), who contend that students might experience both satisfaction and discontent as a result of the service delivered and the money spent. Students are pleased when the services given exceed the price paid, and they are disappointed when the services offered fall short of the price paid. Furthermore, student satisfaction does not always correlate with complaints, implying the students that never complain are not always content (Kitapci & Taylan, 2009). Due to the complexities of higher education, there are few research on student satisfaction (Marzo Navarro, Pedraja Iglesias, & Rivera Torres, 2005).

Service quality is strongly mentioned as a vital requirement for creating and maintaining fulfilling relationships with valued students. As a result, the relationship between service quality and student satisfaction has arisen as a key and strategic concern (Cronin and Taylor, 1992). In summary, perceived service quality leads satisfaction (Spreng and Mckoy, 1996). Thus, in a competitive market, a good understanding of the origins and causes influencing student happiness may be regarded as having an especially high financial value organization (Lassar, Manolis and Winsor, 2000).

So, this study hypothesizes that:

H1: Service Quality positively effects on Student Satisfaction

2.2.2 Relationship between Student Satisfaction toward Enrollment Intention

The study by Boulding et al. (1993) included university students and discovered substantial correlations among service quality and bright future behavioral intentions, as well as their strategy value to institutions. These positive future behavioral intentions included enjoying the university, committing money to the graduating class, and preparing to promote the university to staffs as a desirable location to recruit. Similarly, Athyiaman's (1997) prior investigation of Australian university students' experiences indicated that service quality and satisfaction were both associated to the bright future behavioral intention construct.

Students enrollment intention in a HEI to gain information as part as their individuals growth (Ravindran & Kalplan, 2012); as a result, it is evident that measuring student satisfaction is difficult and subjective (Osman & Saputra, 2019). In the literature, the level of student satisfaction has been assessed in a variety of ways. It was previously assessed using 'emotional environment, day by day living experiences, assistance services, well-being of students, administrative activities, security, specialized services, resources, and procedures on campus at the university (Helgesen & Nesse, 2007; Thomas, 2011).

It has recently been assessed utilizing the institution's innovative facilities, the availability of experienced professors, and the presence of a friendly interaction between professors and students during lectures (Keong et al., 2018), as well as evaluation comments (Keong et al., 2018), and a favorable environment for learning (Kashif & Cheewakrakokbit, 2018). As HEIs seek to make value, it is vital to have a broad curriculum in order to compete worldwide for potential students (Lai et al., 2015), and detailed

understanding of the factors that contribute to student satisfaction, as this will support in the creation of satisfying experiences that will result in positive WOM and student enrollment intentions.

Therefore, this study hypothesizes that:

H2: Student Satisfaction positively effects on Enrollment Intention

H9: Student Satisfaction as a significant mediating effect on the relationship between Service Quality and Enrollment Intention

2.2.3 Relationship between Student Satisfaction toward University Reputation

According to Selnes (1993), the fundamentals of loyalty include reputation with reference to someone's or something's personality or attitude, student satisfaction, and university reputation. Service quality and institutional work are the two major elements of reputation. Service Quality is defined as the entire completeness of a product's or service's features that are capable of satisfying demands. Satisfaction is influenced by a solid business reputation (Andreassen & Lindestad, 1998). The whole customer opinion of the firm, both directly and indirectly linked, and what students should expect when purchasing a product or service from the university, is referred to as reputation (Fombrun & Shanley, 1990).

As suggested by Thomas (2011), the university's reputation may promote student satisfaction and loyalty in two ways: the public's opinion of the university overall reputation and evaluations of study courses reputation. Other study found that reputation has a crucial impact in student satisfaction and loyalty (Caruana et al., 2004). There is a considerable link among reputation, student satisfaction, trust, and student loyalty, according to Gul's (2014).

Image or reputation of the University is the overall perception they have of a subject. It is based on insufficient information and varies between

universities (Kotler & Fox, 1995). In many ways, a university's reputation influences student views of its communications and operations (Gronroos, 2001). If students believed they might gain advantages or interests from colleges, universities would be viewed to have a good reputation. A university's positive reputation may be valuable in a competitive market since it may distinguish an organization from its competitors (Mohamad, 2009).

Reputation is mostly one of the characteristics that has the biggest direct impact on satisfaction and also has a significant impact on loyalty (Alves & Raposo, 2007). According to evaluations of the research (Helgesen & Nesset, 2007; Mohamad, 2009; Brown & Mazzarol, 2006), a university's reputation has a direct and beneficial impact on student loyalty. Furthermore, the influence of student satisfaction was discovered to considerably moderate the association between university reputation and student loyalty. Nonetheless, while reputation is the most influential factor in the development of contentment, there are other factors that impact university reputation and the outcomes of student satisfaction.

The following hypothesis has been formulated:

H3: Student Satisfaction positively effects on University Reputation

2.2.4 Relationship between University Reputation toward Enrollment Intention

The entire impression created on the public's thoughts about the organization is referred to as the university's reputation. It was connected to the numerous physiological and psychological characteristics of the institution, for instance tradition, reputation, company name, philosophy, service variety, and the quality impression transmitted by each individuals dealing with clients (LeBlanc and Nguyen, 2001). For an educational institutions, university reputation is defined as the total of all opinions that a personal has about an organization (Jiewanto et al., 2012), and it is critical to

impress, recruit, and retain students (Helgesen and Nesset, 2007). As a result, the university should establish a distinct reputation in a competitive field (Palacio et al., 2002). A university's distinctive reputation could lead to student satisfaction and, as a result, loyalty. In this connection, Alves and Raposo (2010) proposed that higher education organizations make a determined attempt to assess the university reputation held by its students in addition the wider public among possible future students.

The link among reputation and student enrollment intention has been a source of contention. According to studies, university reputation is a significant component affecting student loyalty, and a positive reputation can inspire return students (Hu et al., 2009; Lai et al., 2009). In higher education, university reputation is seen as an important predictor of satisfaction and loyalty (Alves and Raposo, 2007; Brown and Mazzarol, 2008). Alvec and Raposo (2010) explored the influence of a university's reputation on student intention. The findings demonstrated that a university reputation has a substantial impact on student satisfaction and loyalty. Furthermore, the findings revealed that reputation is one of the ancestors with the greatest effect on the satisfaction formation process. As a result, they proposed that if educational organizations must compete based on reputation, the first step should be to assess the university reputation established by its students. Jiewanto et al. (2012) and Kheiry (2012) explored the impact of university reputation on student conduct in a similar way. They demonstrated that a student's future enrollment intention is highly influenced by university reputation.

Yavas and Shemwell (1996), Landrum et al. (1998), and Parameswaran and Glowacka (1995) discovered that higher education institutions must retain or acquire a specific reputation in order to gain a competitive edge in an industry that is becoming increasingly competitive. According to these writers, one of the most important factors influencing student intention to

apply for enrolment is reputation. When donors evaluate endowments or firms choose an organization to conduct contractual research and development, the reputation of the university is also significant. According to Dowling (1988), colleges have several reputations rather than simply one.

Therefore, this study hypothesizes that:

H4: University Reputation positively effects on Enrollment Intention

H11: University Reputation as a significant mediating effect on the relationship between Student Satisfaction and Enrollment Intention

2.2.5 Relationship between Student Satisfaction toward Student Loyalty

Nevertheless, they were able to establish that student satisfaction has a positive and considerable effect on student loyalty. Another study created by Annamdevula and Bellamkonda (2016a, b) demonstrates that service quality has a favorable and substantial effect on student satisfaction in boosting student loyalty. It is reasonable to expect that the higher the service quality, the greater the student satisfaction.

Furthermore, higher service quality enhances student loyalty in both direct and indirect ways. Duarte et al. (2012) performed a research on universities in Portugal, the findings show that service quality has a favorable impact on student satisfaction. Asree et al. (2010) investigated how administration qualities influenced staffs performance, which in turn influenced receptivity and, as a result, organizational performance.

The authors selected the service sector (particularly hotels) as the focus of their research and discovered a favorable relationship between leadership qualities and organizational success. The authors discovered that particular leadership abilities resulted in higher staff happiness, which resulted in improved customer service, which resulted in increased customer loyalty.

Furthermore, they discovered a favorable relationship between student satisfaction and student loyalty. The similar outcome relates to both present and previous pupils. Loyal students contribute positively to institutions in

developing the most effective marketing strategy and development plan to ensure long-term success for current and previous students.

There had been a lot of studies done on the link between student satisfaction and student loyalty. The majority of the academics concentrated on the relationship or correlation between student satisfaction and loyalty. According to the studies, there is a favorable association between student loyalty and satisfaction. According to studies conducted on the banking business in Iran, there is a favorable association between client satisfaction and loyalty. It was also revealed that client loyalty is significantly related to the bank's financial success. This suggests that happy consumers become loyal customers, which supports the company's financial performance (Nayebzadeh, Jalaly, & Shamsi, 2013).

Another study was carried out on Portuguese universities to determine the relationship between student satisfaction, service quality, and enrollment intentions (which are fundamentally related with recurring purchasing behavior, which is a sign of loyalty). According to the survey, student happiness has a direct impact on student loyalty (Bastos, & Gallego, n.d.).

Based on what has been said above, this study hypothesizes:

H5: Student Satisfaction t positively effects on Student Loyalty

2.2.6 Relationship between Student Loyalty toward Enrollment Intention

Student loyalty based on attitudinal and behavioral intents has the ability to raise student enrolment intentions (Keong et al., 2018). Student loyalty, like student satisfaction, is a tactic result of HEIs (Gallegos & Vasquez, 2019) because of its ability to attract new students by 'participating in positive WOM to educate friends and others' (Subrahmanyam, 2017) and enroll in postgraduate courses (Helgesen & Nesset, 2007; Mavondo et al., 2004). Attitude is the first component of loyalty that causes people to consider purchasing a product or service (Ahluwalia, 2000). This psychological

condition is frequently influenced by student satisfaction (Oliver, 1999) and is crucial in shaping WOM (word-of-mouth) promotion of the product or service. Furthermore, behavioral loyalty, another aspect of loyalty, is frequently quantified by repurchasing (Vukasovi, 2015).

Loyalty has been conceptualized in general marketing sciences utilizing behavioral and attitudinal factors (Oliver, 1999; Park et al., 2010). In terms of behavior, loyalty has been quantified using purchase intentions, whilst attitudes have been centered on good WOM and advising others to make a purchase (Oliver, 1980). WOM is a socially complicated construct comprised of self-reputation, compassion for others, and favorable evaluation (Berger & Schwartz, 2011). WOM is frequently influenced by behavioral and attitudinal factors. As a result of student loyalty, students frequently demonstrate positive affiliation and suggest others (Watson et al., 2015). This shows that behavioral and attitudinal loyalty has a major impact on WOM. As a result, students with high HEI loyalty are more likely to communicate positive WOM regarding postgraduate enrollment plans. In the HE setting, components of loyalty have also been transmitted and quantified (Arboleda & Alonso, 2017).

On the other hand, in the HE setting, intention has been the primary emphasis and application of loyalty. Student loyalty is mentioned as the ability of students to refer the HEI to other potential students (Amegbe et al., 2019), implying that WOM is an important component in student intention efforts (Mallika Appuhamilage & Torii, 2019). As a result, the conversations students have about a HEI are crucial in forming their perceptions of the institution and its services. These are frequently demonstrated by their goals and acts, such as enrollment and suggestions.

According to Amegbe et al. (2019), student loyalty entails actively cultivating a positive reputation of a HEI and then making efforts to propagate positive messages. Thus, loyal students serve as a recommendation for potential students who wish to study at the same HEI (Amegbe et al., 2019).

However, Henning-Thurau et al. (2001) observe that student loyalty lasts longer due to the method in which educational services are delivered. As a result, student loyalty can also apply to their actions both during and after graduation (Henning-Thurau et al., 2001). Before graduation, students might discuss positive features of their institution or urge others to apply to the similar HEI they are joining (Arboleda & Alonso, 2017).

Loyalty after graduated is shown in alumni and is of immense importance for HEIs because of the time and money students may spend on their former institution (Snijders et al., 2019). Alumni may be a tremendous source of motivation for future students (Arboleda & Alonso, 2017; Snijders et al., 2019). Thus, student loyalty is a concept concerned with students' motives to recommend, return to (in this example, enroll in postgraduate programs), and graduate from a HEI, which are influenced by the students' entire experience at a HEI (Bowden, 2011). (Arboleda & Alonso, 2017). Both of these dimensions of loyalty have not been examined in the context of a developing nation, particularly one with political and economic issues, such as Zimbabwe. Some claim that student loyalty does not appear to be dependent on student pleasure (Gallegos & Vasquez, 2019, p. 525).

This, however, is not a general viewpoint, since others believe that student loyalty is formed through student satisfaction and experiences (Arboleda & Alonso, 2017). Student satisfaction leads to student loyalty and other contributing to sustainable development behavior, which is based on enrollment intentions (Keong & Baharun, 2017). Thus, student loyalty is substantially influenced by the student-HEI interaction, as well as the degree to which students are happy with the performance of educational services. Furthermore, a devoted student will help the HEI by spreading favorable word about it.

Based on what has been said above, this study hypothesizes:

H6: Student Loyalty positively effects on Enrollment Intention

H10: Student Loyalty as a significant mediating effect on the relationship between Student Satisfaction and Enrollment Intention

2.2.7 Relationship between Word-of-Mouth (WOM) toward Enrollment Intention

Word-of-mouth recommendations are compliments that have a significant influence on a consumer's purchase choice intention (Hsu, Chuan-Chuan & Chiang, 2013). Introduction could be positive or negative; it was obvious that students who are satisfied with their educational organization tend to give positive recommendation and commendation among their colleagues and family members, whereas students who are disappointed with their educational institution's lack of facilities and support tend to give negative recommendation and commendation (Bontis, Booker & Serenko, 2007). According to Reichheld (2003), praise and its intentions are the unrivaled criteria for predicting not just students' recommending intention, but also their purchase and intention behavior.

Over time, the idea of enrollment intention has changed. It was recognized as one of the student behavior outcome factors arising from high value and pleasure, which leads to loyalty. Previous research focused mainly on the behavioral component of loyalty, i.e. the enrollment dimension. Cognitive loyalty is a higher order component that involves the student's cognitive decision-making process in evaluating different brands prior to making a purchase (Caruana, 2002). Loyal students are also important since they can generate favorable WOM recommendations. WOM is a non-commercial, casual face-to-face communication regarding HEI (Chen, 2016).

This is often impacted by student satisfaction, which has already been explored in this research. Students are the primary consumers in higher education (Guilbault, 2016), and ensuring their satisfaction is important for HE management since it improves loyalty, retention perceptions, and WOM communication. Furthermore, service quality and innovation experiences

improve WOM (Manohar, 2018), which has the ability to affect enrollment intentions in postgraduate programs. The decision to promote good WOM, on the other hand, is multidimensional (Dao & Thorpe, 2015).

Therefore, this study proposes the following hypothesis:

H7: Word-of-Mouth (WOM) positively effects on Enrollment Intention

2.2.8 The moderating role of Word-of-Mouth (WOM) on University Reputation toward Enrollment Intention

In education, university reputation had been commonly implemented as a positioning technique to impact the interest of potential students while selecting an university (Weissman, 1990 in Nguyen and LeBlanc, 2001). The reputation of a university is highly connected with student loyalty (Dick and Basu, 1994 in Nguyen and LeBlanc, 2001), a better behavior (word of mouth, repeat purchasing intention, or a referral), or conduct (or during a particular time frame, repurchase the same brand option). Bigne et al., (2005) conducted tourist research that supports the positive association between reputation and word of mouth. Aside from word of mouth, reputation has an impact on student happiness (Amin et al., 2013; Bigne et al., 2005; Bloemer and de Ruyter, 1998). In Brunner et al., (2008), Bitner (1990) and Swan & Oliver (1989) noted that student satisfaction has a favorable impact on word of mouth.

Although word of mouth had been widely studied in relationship to student satisfaction, reputation has gotten far less attention. Institution reputation has been characterized in the literature as an impression of quality linked with the university image (Aaker and Keller, 1990). On the corporate level, reputation had been described as an organization's impression as reflected in the relationship preserved in student mind (Keller, 1993). Selnes (1993) proposed that reputation, along with contentment, be integrated into a framework of loyalty; he discovered that both variables, reputation and satisfaction, were connected with WOM. The total impression created on the

minds of the public about a university is referred to as a university's reputation (Kotler and Barich, 1991). According to Nguyen and Leblanc (2001), university reputation is connected to physical and behavioral qualities of the organization, such as university name, architecture, range of goods / services, and the quality impression transmitted by each individual engaging with the business's clients. The reputation of a university is the product of a process (McInnis and Price, 1987 in Aydin and Ozer, 2005).

The recovery of ideas, feelings, and consumption experience with an organization from memory and their translation into mental representations are the first steps in the process (Yuille and Catchpole, 1977 in Aydin and Ozer, 2005). As a consequence, university reputation is the product of an assessment procedure. Although a student may lack sufficient information about an institution, information collected the development of a university's reputation will be influenced by different factors such as advertisements and Word-of-mouth.

Word of mouth (WOM) is one of the most effective techniques to market goods and services. In everyday life, students have been subjected to many forms of huge promotion. However, the impact of promotional communications on student perceptions of a product or service is not as significant as the impact of WOM (Sweeney et al., 2008). It is vital to stress that a person who provides favorable WOM has no material interest, making WOM a very credible advertising approach for improving institution reputation. As a result, in education, WOM has a significant impact on the establishment of university reputation, which has an impact on student enrollment intention.

Based on what has been said above, this study hypothesizes:

H8: Word-of-Mouth has a significant moderating effect on the relationship between University Reputation and Enrollment Intention.

CHAPTER THREE
RESEARCH METHODOLOGY

In this chapter, the purpose is to introduce the research framework model and hypotheses, along with measuring six research constructs. In addition, it also refers to the design of research methods to test hypotheses; presenting sampling plans, designing questionnaires, collecting and analyzing data.

3.1 Research Framework

Based on the results from all the hypotheses evaluated in chapter two, this study developed a research framework model, as shown in Figure 3-1 below.
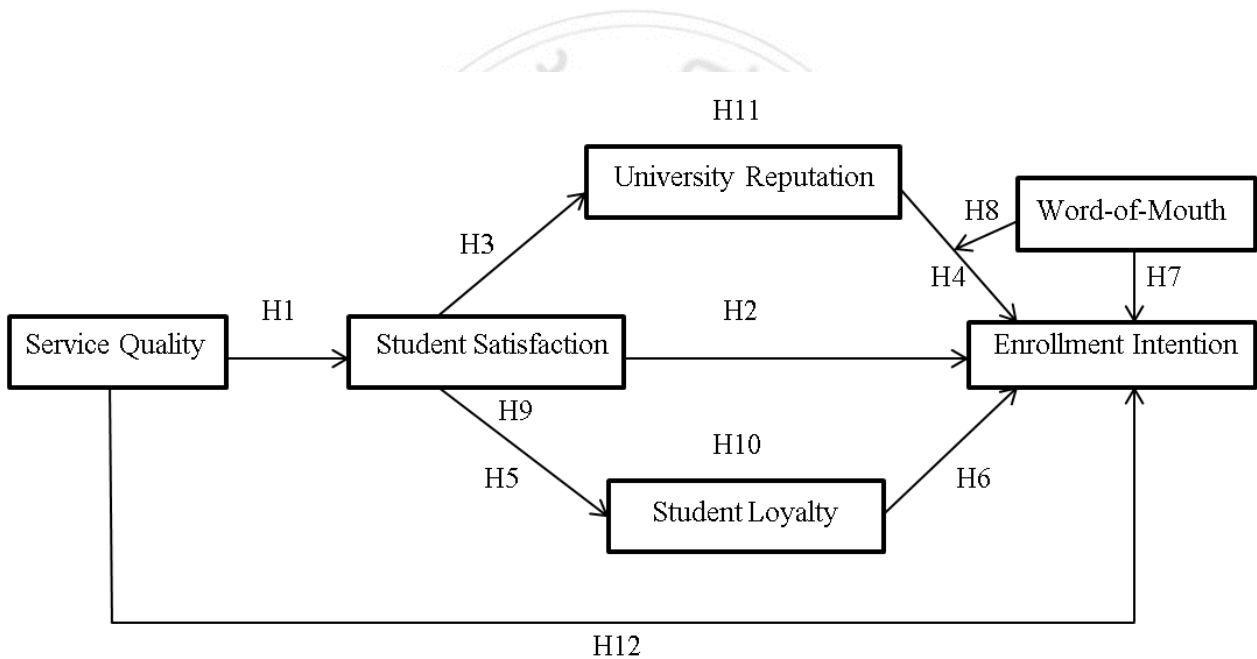
Figure 3.1: The Framework model

Source: This study

According to the research model, the hypotheses for this study are:

Hypothesis 1 – H1: Service Quality positively effects on Student Satisfaction

Hypothesis 2 – H2: Student Satisfaction positively effects on Enrollment Intention

Hypothesis 3 – H3: Student Satisfaction positively effects on University Reputation

Hypothesis 4 – H4: University Reputation positively effects on Enrollment Intention

Hypothesis 5 – H5: Student Satisfaction positively effects on Student Loyalty

Hypothesis 6 – H6: Student Loyalty positively effects on Enrollment Intention

Hypothesis 7– H7: Word-of-Mouth positively effects on Enrollment Intention

Hypothesis 8 – H8: Word-of-Mouth as a significant moderating effect on the relationship between University Reputation and Enrollment Intention

Hypothesis 9 – H9: Student Satisfaction as a significant mediating effect on the relationship between Service Quality and Enrollment Intention

Hypothesis 10 – H10: Student Loyalty as a significant mediating effect on the relationship between Student Satisfaction and Enrollment Intention

Hypothesis 11 – H11: University Reputation as a significant mediating effect on the relationship between Student Satisfaction and Enrollment Intention

Hypothesis 12 – H12: Service Quality positively effects on Enrollment Intention

3.2 Research Design

This study uses quantitative research to solve hypotheses. This quantitative research method is mainly related to the forms of surveys in collecting, analyzing and interpreting data that researchers were proposed. The survey in this study included a questionnaire about the relevant variables that were carried out by students studying in higher education institution. By conducting a sample survey of each respondent and information about Student Satisfaction, Enrollment Intention and other constructs will be displayed to test hypotheses and achieve the purpose of the investigation. Students

answered questions using a 7 point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Respondents were asked to rate the survey.

3.3 Research Instrument and Questionnaire Design

3.3.1 Research Instrument and Measurement

This study identified six research structures and assessed the correlation between these research structures. SER (Service Quality), SAT (Student Satisfaction), LOY (Student Loyalty), UR (University Reputation), WOM (Word-of-Mouth), EI (Enrollment Intention) is the research structure. For each structure, the operational concept and the measurement items are also defined. There is a survey to collect data for research variables. The final detailed questionnaire was completed in English first then carefully translated into Vietnamese (see Appendix I and Appendix II). The specific questionnaire for each construct will be shown below.

3.1.1.1　Service Quality (SER)

SER used a ten items scale measurement adjusted from Annamdevula & Bellamkonda, (2016a & 2016b) and de Jager & Gbadamosi (2010). Detailed questionnaires for SER are shown below:

[SER1] Teachers at your university treat all students in equal manner

[SER2] Teachers at your university follow good teaching practices

[SER3] Course content at your university develops student's knowledge

[SER4] Teachers at your university are responsive and accessible

[SER5] Administration staffs at your university are courteous and willing to help

[SER6] Computer/science labs at your university are well equipped

[SER7] Library at your university has adequate academic resources

[SER8] Your university provides counseling services

[SER9] Your university environment is convenient to study well

[SER10] Your university has safety and security measures

3.3.1.2 Student Satisfaction (SAT)

SAT is measured by scale of five items. Student satisfaction (SAT) has been evaluated because many studies have evidenced that student satisfaction results from the findings of their evaluation of educational services obtained (Brokaw et al., 2004; Stokes, 2003). Detailed questionnaires for SAT are shown below:

[SAT1] I satisfied with the quality of academic services

[SAT2] I satisfied with the quality of teachers

[SAT3] I satisfied with the quality of administrative services

[SAT4] I satisfied with the quality of equipment and facilities

[SAT5] I satisfied with the decision to attend this university

3.3.1.3 Student Loyalty (LOY)

LOY used a four items scale measurement adjusted from Annamdevula & Bellamkonda (2016a). Student loyalty describes how students feel about the university and how their attitudes and/or behaviors reflect that feeling (Nesset & Helgesen, 2009). Detailed questionnaires for LOY are shown below:

[LOY1] This university gives a positive impression to me

[LOY2] I feel proud to be associated with the university's activities

[LOY3] I will write a positive impression about this university in social media

[LOY4] I have no intention of moving to another university

3.3.1.4 University Reputation (UR)

UR used a four items scale measurement adjusted by Nguyen and LeBlanc (2001). The acknowledgment or subjective and collective appraisal of stakeholders to university is how a university's reputation is defined. Lupiyoadi, (2016). Detailed questionnaires for UR are shown below:

[UR1] This university has a good reputation

[UR2] In general, I believe that this university always fulfills the promises it makes to its students

[UR3] I believe that the reputation of this University is better than others universities

[UR4] I enrolled in this university because of its reputation

3.3.1.5 Word-of-Mouth (WOM)

WOM is measured by a scale of five items. Consumers advocate WOM, which has a larger and more effective influence than advertising, (Katz and Lazarsfeld's study 1955). Detailed questionnaires for WOM are shown below:

[WOM1] I like talking about this university to my friends

[WOM2] I like helping potential students by providing them with information about this university and its courses

[WOM3] People ask me for information about courses offered at this university

[WOM4] I would recommend this university as the best service quality in the area

[WOM5] I would encourage friends and relatives to enroll in this university

3.3.1.6 Enrollment Intention (EI)

EI is measured by a six items scale adjusted by Athiyaman (1997). In the Theory of Planned Behavior (TPB), the term intention refers to a person's conduct toward a certain behavior (Teo & Chwee, 2010). Intention may alternatively be defined as the likelihood of acting in order to attain meaningful goals (van der Hoek, Jamroga & Wooldridge, 2007). Detailed questionnaires for EI are shown below:

[EI1] If I had needed educational services now, this university would be my first choice

[EI2] My choice to enroll in this university was a wise one

[EI3] I enrolled in this university because of offering the courses

[EI4] I think I did the right thing when I decided to enroll in this university.

3.3.2 Questionnaire Design

According to Figure 3.1, the questionnaire of this study includes the following six constructs: (1) Service quality, (2) Student quality, (3) Student loyalty, (4) University reputation, (5) Word-of-mouth, (6) Enrollment intention

The questionnaire for this study has 33 items and includes six sections. Each section asks respondents to express their opinions on SER, SAT, LOY, UR, WOM, EI. These are the number of methods that assist researchers in collecting data in which one method will involve the use of a scale. Likert scales are often used for measurement. For objective reasons, the information will be collected by online survey methods. After collecting the answers, the data will be calculated to produce research results.

Respondents were asked how strongly he/she agreed or disagreed with a statement. This study uses a seven-point Likert scale that ranges from 1 = strongly disagree to 7 = strongly agree, to measure data. The answers to the questionnaire were analyzed statistically by SPSS 22.0, regarding the weight of the Likert scale.

3.3.3 Questionnaire Translation

This study was conducted in Vietnam with respondents who are students in Vietnam. Therefore, Vietnamese plays an important role in data collection. First, the survey questionnaire was designed in English then translated into Vietnamese by a professional translation company in Hanoi, Vietnam. The questionnaire was then translated back into English to check for corrections, incorrect words were deleted, and the final version was completed. The final version of the questionnaire in Vietnamese was completed after careful

discussion and revision (see Appendix I and Appendix II). The questions have been translated into the Vietnamese version so the respondent can better understand and answer the questions carefully. The benefits of translation help respondents understand the meaning and structure of the answers. The definition of the question and the structure have been checked by the translator to match between the English and Vietnamese versions.

3.3.4 Sample and Data Collection

To explore the relationship among six constructs: SER, SAT, LOY, UR, WOM, EI; the survey will be implemented with a total of 300 respondents who are the current students in Vietnam so that they could provide evaluate responses for the research. Those respondents have different ages, education backgrounds, and studying experience as well as demographic factors, which guarantees the variety of samples. Because of objective reasons, the information would be collected by the online survey method. After gathering the answers, the data would be computed to generate the research findings.

Data collection consisted of five steps. Firstly, identifying related research variables through literature review and advice from the thesis advisor. The second step was to complete the drafting of the survey questionnaire. Next, the third step, translating the research questionnaires into Vietnamese and then translate them back into English one more time to double-check the meaning of the items remained the same. Fourthly, running a pre-test of the Vietnamese questionnaires to check α (alpha), 50 respondents were invited for the pre-test, who are the current students in Vietnam and 27 effective respondents were accepted. Based on the pre-test, an internal consistency reliability coefficient of each item was computed. If the consistency reliability coefficient of each question cannot be achieved, the questionnaire was modified one more time as a result to reach greater consistency. The final step was to deliver the Vietnamese questionnaire indirectly to Vietnamese respondents. When the data was completed, it could be used for analysis in the following step.

The data in this thesis was collected by sending 300 questionnaire items to students in Vietnam. The sample planning was designed to ensure that the precise characteristics of respondents are encompassed in this study. The students, who are studying in Northern Vietnam, were asked for answering the survey. It took approximately two months (from July to August 2020) for completing the survey. In total, 300 survey questionnaires were delivered to the students.

3.4 Data analysis method

Use SPSS 22.0 software to calculate data. To test the hypotheses developed from this study, five methods were applied:

- Descriptive Statistic Analysis
- Factor Analysis and Reliabilities Test
- Independent Sample T-test
- One way ANOVA (stand for analysis of variance)
- Regression analysis

3.4.1 Descriptive Statistics

Descriptive statistics are applied as the first level of analysis. It is used to explain the characteristics of all variables in quantitative terms. Descriptive statistics calculate the frequency, means, average value, percentage, range and standard deviation of each variable in the study. Descriptive statistical analysis is extremely helpful.

3.4.2 Factor Analysis and Reliabilities Test

3.4.2.1 Factor Analysis

The purpose of factor analysis is to analyze the basic variance structure of a set of correlation coefficients. It may be related to probing and validation purposes. Factor analysis is used to summarize or reduce data on a large number of variables into some explainable basic factors. Moreover, the relationship of each variable with the base element is represented by the so-called factor loading. According to Hair et al. (2010), items will be deleted unless they adapt

to the factor loading requirement of more than 0.6. Measurements with a coefficient factor loading greater than 0.6 will be selected as members of a particular factor. At the end of the factor load analysis, the study will use reliability to test Cronbach's α and the correlation between the entries.

The factor loading analysis criteria include: Kaiser-Meyer-Olkin Measure (KMO) is above 0.5, Factor Loading is above 0.6, Eigenvalue >1, Explained Variance >0.6 (this is to reduce the number of items/questions to explain the factor), Item-to-total correlation >0.5 (This is the relationship between the item and the total, and what part of the total the item represents) Communality >0.5, Cronbach's alpha >0.6 (Hair et al. 2010).

3.4.2.2 Reliabilities Test

The reliability test is performed after the factor analysis results. After running the reliability test of the structures, the correlation between items and Cronbach's α will be displayed. Cronbach's α must be above 0.6 and Item-to-total correlation must be greater than 0.5 and KMO must be higher than 0.5. Correlated items lower than 0.5 will be deleted from the analysis (Hair et al. 2010).

3.4.3 Independent Sample T-test

To test whether the significant difference between the means of the two groups is related to a variable, the independent t-test is used in this case. In this study, it was applied to compare the differences between male and female students in the six constructs.

3.4.4 One-way Analysis of Variance (ANOVA)

To test whether the significant difference between the means of more than two independent groups is related to a variable, one-way variance analysis is used in this case. The result will be significant if the F value is above 4 and the p-value is below 0.05 (Hair et al. 2010).

3.4.5 Regression Analysis

There are two types of regression analysis used in this study:

Regression analysis is used to analyze the relationship between a single dependent variable and several independent variables. Another goal of regression is to maximize the overall predictability of the independent variables as expressed in the variance. Simple regression analysis can also meet the goal of comparing two or more independent variables to determine the predictability of each variable. The analysis results will be significant when the square of R is higher than 0.1, the correlation is higher than 0.3, the F value is higher than 4, the VIF is lower than 3, the Durbin-Watson Statistic (DW) index is between 1.5 and 2.5 and p-value is lower than 0.05 (Hair et al. 2010). Because there is a mediator variable in the framework of the research model, it is necessary to examine the effect of the mediation variable on the relationship between the independent and dependent variables. According to Preacher and Hayes (2004), the Sobel test and Bootstrapped Confidence Intervals test were applied in this research to modify the mediating effect, with the criterions are P value should lower than 0.05 and t value should be higher 1.96.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

In this chapter, the results of the study have been presented. The first section was the descriptive analysis of the respondents including demographics, characteristics of respondents, and the measurement results of variables. The second section is the result of Descriptive Analysis, factor loading, independent T-test, One-way Anova, and Simple reression.

4.1 Descriptive Analysis

To have a better understanding of the characteristics of research structure and demographic information, descriptive statistics analysis was performed to illustrate the mean and standard deviation for all of the research variables as well as the frequency for demographic information was conducted in this section.

4.1.1 The Characteristics of Respondents

There are five control variables, which present characteristics of respondents in this research: gender, age, educational level, time to study, and grades status. In Grades Status include Juniors which means students at first and second year, and Seniors which means students at third and fourth year.

Table 4.1 below would show these factors, in total 300 effective respondents, female respondents are 42% while man respondents are 58%. In this research area on this group of age: 49.3% (n=148) of them are from 18 to 25 years old; and 34% (n=102) of respondents are from 26 to 35 years old; while only 16.7% (n=50) of them are over 35 years old.

Bachelor is educational level of a large portion of research's respondents, which is 43.7% (n=131); while percentage of respondents who are master student are 36.3% (n= 109), Doctor is educational level that is smallest portion of research's respondent with 20% (n= 60).

About the time to study, the rate of the respondents has 2 years of study time are 36.7% (n= 110) and 63.7% of them have 4 years of study time, this figure is the largest portion of the respondents. The percent of the total number of respondents who has more than 4 years of study time are 9.7% (n= 29), which is the smallest portion of the respondents.

Most of the respondents are junior students with 53.7% (n= 161), and 46.3% of them are senior students (n= 139).

Table 4.1: Characteristics of Respondents (n=300)

Item	Description	Frequency	Percentage (%)
Gender	Male	174	58
	Female	126	42
Age	18–25	148	49.3
	26–35	102	34
	> 35	50	16.7
Educational level	Bachelor	131	43.7
	Master	109	36.3
	Doctor	60	20
Time to study	2 years	110	36.7
	4 years	161	53.7
	> 4 years	29	9.7
Grades status	Juniors	161	53.7
	Seniors	139	46.3

Source: This study

4.1.2 Descriptive Statistics of Questionnaire Items

Table 4.2 below shows the descriptive statistics of research variables for 300 respondents. There are 33 questionnaire items in this research in terms of mean value and standard deviation for each item, which presents the tendency of respondents' choice for a particular construct. There are ten items for Service Quality, five items for Student Satisfaction, four items for Student Loyalty, four items for University Reputation, five items for Word-of-Mouth and four items for Enrollment Intention. Most of the mean values are above 4 for all the items in research constructs of the framework, which indicated the high agree levels of respondents.

As shown in Table 4.2, for Service Quality, the sample cases show a range of item's mean value from 4.61 to 4.88 in the 7 – point Likert scale. Moreover, Item SER9 has highest mean value in factor which is 4.88 which indicates that the majority of respondents have the high agree levels with the statements. In term of Student Satisfaction, the highest mean value is SAT5 which is 5.017, while the lowest mean value are SAT2, where still quite high which is 4.867 indicating that the majority of respondents have the lower agree levels with the statements.

Furthermore, Student Loyalty has a range of item's mean value from 5.083 (LOY1) to 4.860 (LOY2) in 7 – point Likert scale. Beside, in term of University Reputation, there is a highest items' mean value, which is UR3 (4.88). While UR4 has the lowest mean value which is 4.82, it is show in this variable the range of item's mean value is insignificant. For Word-of-Mouth, there are a similarity between items' mean value, which are WOM1 (4.887) and WOM5 (4.887), while WOM3 has the lowest item's mean value with 4.74. Finally, in term of Enrollment Intention the range between mean value of the items is from 4.92 (EI4) to 4.84 (EI1).

Table 4.2 below also shown that in term of Service Quality, item SER10 has the highest standard deviation of 1.422 indicating the responses are more dispersed. Meanwhile, SER2 has the lowest standard deviation indicating the less dispersed in responses with 1.22. For the construct of Student Satisfaction, item SAT5 has the highest standard deviation with 1.345 with high value of mean indicating that most of the respondents are agree with the statements.

Moreover, for Student Loyalty item LOY1 has the highest standard deviation value of 1.379 compared to others item, indicating that the statement has the most variety of responses. In terms of University Reputation, the standard deviation has the range of 1.280 − 1.402 which means all of the statements has the high variety in responses.

Furthermore, for Word-of-Mouth construct, the highest standard deviation value is 1.470 (WOM1), while the lowest standard deviation value is 1.34 (WOM2). Finally, in term of Enrollment Intention, the range for standard deviation is from 1.29-1.44 which means all of the statements have the high variety in responses, with EI1 is the highest item and EI2 is the lowest item.

Table 4.2: Results of Mean and Standard Deviation of Items

Items	Descriptions	Mean	Standard Deviation
Service Quality			
SER1	Teachers at your university treat all students in equal manner	4.713	1.4229
SER2	Teachers at your university follow good teaching practices	4.793	1.2580
SER3	Course content at your university develops student's knowledge	4.833	1.2901
SER4	Teachers at your university are responsive and accessible	4.837	1.2631

Items	Descriptions	Mean	Standard Deviation
SER5	Administration staffs at your university are courteous and willing to help	4.680	1.3628
SER6	Computer/science labs at your university are well equipped	4.720	1.3569
SER7	Library at your university has adequate academic resources	4.703	1.3296
SER8	Your university provides counseling services	4.617	1.3400
SER9	Your university environment is convenient to study well	4.880	1.3435
SER10	Your university has safety and security measures	4.760	1.4292

Source: This study

Table 4.2: Results of Mean and Standard Deviation of Items (Continue)

Items	Descriptions	Mean	Standard Deviation
Student Satisfaction			
SAT1	I satisfied with the quality of academic services	4.973	1.3411
SAT2	I satisfied with the quality of teachers	4.867	1.2862
SAT3	I satisfied with the quality of administrative services	4.980	1.2695
SAT4	I satisfied with the quality of equipment and facilities	4.970	1.2941
SAT5	I satisfied with the decision to attend this university	5.017	1.3450
Student Loyalty			
LOY1	This university gives a positive impression to me	5.083	1.3794
LOY2	I feel proud to be associated with the university's activities	4.860	1.3138
LOY3	I will write a positive impression about this university in social media	4.950	1.2935
LOY4	I have no intention of moving to another university	5.023	1.3173

Source: This study

Table 4.2: Results of Mean and Standard Deviation of Items (Continue)

Items	Descriptions	Mean	Standard Deviation
University Reputation			
UR1	This university has a good reputation	4.830	1.3884
UR2	In general, I believe that this university always fulfills the promises it makes to its students	4.840	1.2806
UR3	I believe that the reputation of this University is better than others universities	4.880	1.3485
UR4	I enrolled in this university because of its reputation	4.820	1.4027
Word-of-Mouth			
WOM1	I like talking about this university to my friends	4.887	1.4700
WOM2	I like helping potential students by providing them with information about this university and its courses	4.830	1.3418
WOM3	People ask me for information about courses offered at this university	4.743	1.3725
WOM4	I would recommend this university as the best service quality in the area	4.817	1.3987
WOM5	I would encourage friends and relatives to enroll in this university	4.887	1.3564
Enrollment Intention			
EI1	If I had needed educational services now, this university would be my first choice	4.840	1.4473
EI2	My choice to enroll in this university was a wise one	4.887	1.2959
EI3	I enrolled in this university because of offering the courses	4.873	1.3075
EI4	I think I did the right thing when I decided to enroll in this university	4.920	1.4072

Source: This study

To identify the dimensionalities and reliability of the research constructs, the measurement items' purification procedure is conducted as necessary. The purification process including factor analysis, correlation analysis, and internal consistency analysis (Cronbach's alpha) was conducted. After factor analysis, to identify the internal consistency and reliability of the construct measurement, the item-to-total correlation, Cronbach's alpha are calculated.

Kaiser-Meyer-Olkin Measure (KMO) greater than 0.5, factor loadings are higher than 0.6, accumulated explained variance >0.6, Item-to- total correlation >0.5, and Cronbach's alpha (α) >0.6 were also adopted. In this study, all the items loading exceed 0.60, and Cronbach's alpha (α) exceeds 0.7. The complete results of the factor analysis and reliability test were presented from Table 4.3 to Table 4.8.

4.2 Factor Analysis and Reliability Tests
4.2.1 Service Quality (SER)

Table 4.3 presents the results of factor loading for the measurement of SER. There is a total of ten items were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. Since the results of the initial running test for this factor already met all of the criteria for factor analysis, therefore, none of the items were removed during the factor analysis test.

Table 4.3: Results of Factor Analysis and Reliability Tests on SER

Research construct	Research items	Factor loading	Eigen value	Accumulative explained	Item to total correlation	Cronbach's alpha
Service Quality			6.758	67.576		0.947
KMO = 0.954	SER9	0.833			0.788	
	SER4	0.831			0.787	
	SER7	0.829			0.784	
	SER10	0.826			0.781	
	SER3	0.823			0.777	
	SER2	0.823			0.777	
	SER8	0.820			0.773	
	SER6	0.816			0.770	
	SER1	0.815			0.767	
	SER5	0.804			0.755	

Source: This study

SER9 has the highest factor loading of 0.833, and the lowest is SER5 with a factor loading of 0.804. KMO is 0.954 and the variance explained by this factor was 67.576%. All items within this variable had a coefficient of item-to-total correlation are greater than 0.5 (0.755 - 0.788), Cronbach's α = 0.947, eigenvalue = 6.758. Based on all criteria, can conclude that the reliability and internal consistency of this variable are acceptable, it can be said that all items are highly reliable.

4.2.2 Student Satisfaction (SAT)

Table 4.4 presents the results of factor loading for the measurement of SAT. There is a total of five items were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. Since the results of the initial running test for this factor already met all of the criteria for factor analysis, therefore, none of the items were removed during the factor analysis test.

Table 4.4: Results of Factor Analysis and Reliability Tests on SAT

Research construct	Research items	Factor loading	Eigen value	Accumulative explained	Item to total correlation	Cronbach's alpha
Student Satisfaction			3.648	72.956		0.907
KMO = 0.888	SAT2	0.866			0.783	
	SAT5	0.862			0.777	
	SAT1	0.856			0.769	
	SAT4	0.854			0.767	
	SAT3	0.831			0.735	

Source: This study

SAT2 has the highest factor loading of 0.866, and the lowest is SAT3 with a factor loading of 0.831. KMO is 0.888 and the variance explained by this factor was 72.956%. All items within this variable had a coefficient of item-to-total correlation are greater than 0.5 (0.783 - 0.735), Cronbach's α = 0.907, eigenvalue = 3.648. Based on all criteria, can conclude that the reliability and internal consistency of this variable are acceptable, it can be said that all items are highly reliable.

4.2.3 Student Loyalty (LOY)

Table 4.5 presents the results of factor loading for the measurement of LOY. There is a total of four items were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. Since the results of the initial running test for this factor already met all of the criteria for factor analysis, therefore, none of the items were removed during the factor analysis test.

Table 4.5: Results of Factor Analysis and Reliability Tests on LOY

Research construct	Research items	Factor loading	Eigen value	Accumulative explained	Item to total correlation	Cronbach's alpha
Student Loyalty			2.857	71.425		0.867
KMO = 0.826	LOY3	0.864			0.744	
	LOY1	0.852			0.726	
	LOY2	0.839			0.708	
	LOY4	0.826			0.689	

Source: This study

LOY3 has the highest factor loading of 0.864, and the lowest is LOY4 with a factor loading of 0.826. KMO is 0.867 and the variance explained by this factor was 71.425%. All items within this variable had a coefficient of item-to-total correlation are greater than 0.5 (0.689 - 0.744), Cronbach's α = 0.867, eigenvalue = 2.857. Based on all criteria, can conclude that the reliability and internal consistency of this variable are acceptable, it can be said that all items are highly reliable.

4.2.4 University Reputation (UR)

Table 4.6 presents the results of factor loading for the measurement of UR. There is a total of four items were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. Since the results of the initial running test for this factor already met all of the criteria for factor analysis, therefore, none of the items were removed during the factor analysis test.

Table 4.6: Results of Factor Analysis and Reliability Tests on UR

Research construct	Research items	Factor loading	Eigen value	Accumulative explained	Item to total correlation	Cronbach's alpha
University Reputation			2.922	73.055		0.877
KMO = 0.832	UR3	0.877			0.769	
	UR1	0.863			0.746	
	UR4	0.850			0.728	
	UR2	0.829			0.697	

Source: This study

UR3 has the highest factor loading of 0.877, and the lowest is UR2 with a factor loading of 0.829. KMO is 0.832 and the variance explained by this factor was 73.055%. All items within this variable had a coefficient of item-to-total correlation are greater than 0.5 (0.697 - 0.769), Cronbach's α = 0.877, eigenvalue = 2.922. Based on all criteria, can conclude that the reliability and internal consistency of this variable are acceptable, it can be said that all items are highly reliable.

4.2.5 Word-of-Mouth (WOM)

Table 4.7 presents the results of factor loading for the measurement of WOM. There is a total of five items were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. Since the results of the initial running test for this factor already met all of the criteria for factor analysis, therefore, none of the items were removed during the factor analysis test.

Table 4.7: Results of Factor Analysis and Reliability Tests on WOM

Research construct	Research items	Factor loading	Eigen value	Accumulative explained	Item to total correlation	Cronbach's alpha
Word-of-Mouth			3.664	73.282		0.909
KMO = 0.880	WOM5	0.865			0.781	
	WOM4	0.864			0.780	
	WOM2	0.856			0.770	
	WOM1	0.853			0.765	
	WOM3	0.843			0.751	

Source: This study

WOM5 has the highest factor loading of 0.865, and the lowest is WOM3 with a factor loading of 0.843. KMO is 0.880 and the variance explained by this factor was 73.282%. All items within this variable had a coefficient of item-to-total correlation are greater than 0.5 (0.781 - 0.751), Cronbach's α = 0.909, eigenvalue = 3.664. Based on all criteria, can conclude that the reliability and internal consistency of this variable are acceptable, it can be said that all items are highly reliable.

4.2.6 Enrollment Intention (EI)

Table 4.8 presents the results of factor loading for the measurement of EI. There is a total of four items were selected for analysis. The results showed that they have a significantly high loading score with all items have factor loading greater than 0.6. Since the results of the initial running test for this factor already met all of the criteria for factor analysis, therefore, none of the items were removed during the factor analysis test.

Table 4.8: Results of Factor Analysis and Reliability Tests on EI

Research construct	Research items	Factor loading	Eigen value	Accumulative explained	Item to total correlation	Cronbach's alpha
Erollment Intention			2.971	74.27		0.884
KMO = 0.830	EI4	0.881			0.776	
	EI2	0.875			0.769	
	EI1	0.857			0.74	
	EI3	0.834			0.708	

Source: This study

EI4 has the highest factor loading of 0.881, and the lowest is EI3 with a factor loading of 0.834. KMO is 0.830 and the variance explained by this factor was 74.270%. All items within this variable had a coefficient of item-to-total correlation are greater than 0.5 (0.776 - 0.708), Cronbach's α = 0.884, eigenvalue = 2.971. Based on all criteria, can conclude that the reliability and internal consistency of this variable are acceptable, it can be said that all items are highly reliable.

4.3 Independent Sample T-test

To identify the differences between males and females of six constructs. The independent sample t-test was used to compare means for group male and group female, group juniors and group seniors students on their perception of SER, SAT, LOY, UR, WOM, EI. In this study, the difference is considered as significance whether $p\text{-value} < 0.05$ and absolute value of t-value ≥ 1.96.

4.3.1 Gender

The independent t-test results were present in Table 4.9. It showed that there is no significant difference in the agreement level of respondents of different sexes in three constructs SAT, LOY, UR.

Except for the SER, WOM, and EI constructs, t-test results indicated that there are differences between males and females in these three constructs. Since the p value is < 0.05 and t-value is >= 1.96.

Table 4.9: Independent T-test Results

Factor	Name	Male (N=174)	Female (N=126)	t- value	P- value
SER	Service Quality	4.8908	4.5643	2.513	0.013*
SAT	Student Satisfaction	5.0678	4.8143	1.950	0.052
LOY	Student Loyalty	5.0546	4.8750	1.347	0.179
UR	University Reputation	4.9555	4.6865	1.875	0.065
WOM	Word-of-Mouth	5.0241	4.5683	3.230	0.001**
EI	Enrollment Intention	5.0532	4.6409	2.952	0.003**

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

Source: This study

For SER, male respondents higher than female respondents with mean = 4.8908 and 4.5643 respectively. For WOM, male respondents higher than female respondents with mean = 5.0241 and 4.5683 respectively. For EI, male respondents higher than female respondents with mean = 5.0532 and 4.6409 respectively.

4.3.2 Grades Status

The independent t-test results were present in Table 4.10. It showed that there is no significant difference in the agreement level of respondents of different Grades Status in four constructs SAT, LOY, UR, and WOM.

Except for the SER, and EI constructs, t-test results indicated that there are differences between juniors and seniors in these two constructs. Since the p value is < 0.05 and t-value is $>= 1.96$.

Table 4.10: Independent T-test Results (continue)

Factor	Name	Juniors (N=161)	Seniors (N=139)	t- value	P- value
SER	Service Quality	4.6292	4.8978	2.128	0.034*
SAT	Student Satisfaction	4.8621	5.0763	1.661	0.098
LOY	Student Loyalty	4.9053	5.0647	1.230	0.220
UR	University Reputation	4.7857	4.9083	0.914	0.362
WOM	Word-of-Mouth	4.7255	4.9568	1.687	0.093
EI	Enrollment Intention	4.7267	5.0576	2.450	0.015*

Note: *** $p < 0.001$, ** $p<0.01$, * $p< 0.05$

Source: This study

For SER, seniors respondents higher than juniors respondents with mean = 4.8978 and 4.6292 respectively. For EI, seniors respondents also higher than juniors respondents with mean = 5.0576 and 4.7267 respectively. Indicate that seniors are more likely agree with the question statements.

4.4. One-way Analysis of variance (ANOVA)

One-way ANOVA was used in this research to identify the significant difference among two or more groups of respondents' Ages, Educational level, Time to Study based on the mean score of each construct in each group.

4.4.1 Age

A one-way ANOVA was performed to compare the effect of respondents' age on Service Quality (SER), Student Satisfaction (SAT), Student Loyalty (LOY), University Reputation (UR), Word-of-Mouth (WOM) and Enrollment Intention (EI).

Table 4.11: Results of the Different Level of Age among the six Constructs

Constructs	18 - 25 years old N = 148 (1)	26 – 35 years old N = 102 (2)	> 35 years old N = 50 (3)	F-value	P-value	Differences between group
SER	4.7885	4.7255	4.7080	0.150	0.861	N.S
SAT	4.9811	4.8824	5.0640	0.488	0.614	N.S
LOY	4.9949	4.9706	4.9500	0.034	0.966	N.S
UR	4.8547	4.8162	4.8600	0.040	0.961	N.S
WOM	4.8851	4.7353	4.8760	0.518	0.596	N.S
EI	4.9206	4.7966	4.93	0.388	0.678	N.S

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ N.S =

Not Significant

Source: This study

A one-way ANOVA revealed that there was not a statistically difference in Service Quality, Student Satisfaction, Student Loyalty, University Reputation , Word-of-Mouth, and Enrollment Intention between respondents' age with F-value 0.150, 0.488, 0.034, 0.040, 0.518, and 0.388 respectively. And All six constructs checked with ANOVA have p-value larger than 0.05.

4.4.2 Educational Level

A one-way ANOVA was performed to compare the effect of respondents' educational level on Service Quality (SER), Student Satisfaction (SAT), Student Loyalty (LOY), University Reputation (UR), Word-of-Mouth (WOM) and Enrollment Intention (EI).

Table 4.12: Results of the Different Level of Educational Level among the six Constructs

Constructs	Bachelor N = 131 (1)	Master N = 109 (2)	Doctor N = 60 (3)	F-value	P-value	Differences between group
SER	4.7267	4.8174	4.6967	0.301	.740	N.S
SAT	4.9542	4.9046	5.0800	0.481	.619	N.S
LOY	4.9466	5.0000	5.0125	0.100	.905	N.S
UR	4.8607	4.8028	4.8750	0.103	.902	N.S
WOM	4.8763	4.7780	4.8367	0.203	.816	N.S
EI	4.9179	4.8142	4.9167	0.267	.766	N.S

Note: *** p < 0.001, ** p < 0.01, * p < 0.05 N.S =

Not Significant

Source: This study

A one-way ANOVA revealed that there was not a statistically difference in Service Quality, Student Satisfaction, Student Loyalty, University Reputation , Word-of-Mouth, and Enrollment Intention between respondents' educational level with F-value 0.301, 0.481, 0.100, 0.103, 0.203, and 0.267 respectively. And All six constructs checked with ANOVA have p-value larger than 0.05.

4.4.3 Time to Study

A one-way ANOVA was performed to compare the effect of respondents' time to study on Service Quality (SER), Student Satisfaction (SAT), Student Loyalty (LOY), University Reputation (UR), Word-of-Mouth (WOM) and Enrollment Intention (EI).

Table 4.13: Results of the Different Level of Time to Study among the six Constructs

Constructs	2 years N = 110 (1)	4 years N = 161 (2)	> 4 years N = 29 (3)	F-value	P-value	Differences between group
SER	4.8173	4.6901	4.8655	0.600	0.549	N.S
SAT	4.8982	4.9764	5.1172	0.472	0.625	N.S
LOY	4.9932	4.9581	5.0431	0.084	0.920	N.S
UR	4.8023	4.8463	4.9741	0.253	0.777	N.S
WOM	4.7673	4.8534	4.9655	0.371	0.690	N.S
EI	4.8227	4.8960	5.0086	0.317	0.728	N.S

Note: *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$ N.S =

Not Significant

Source: This study

A one-way ANOVA revealed that there was not a statistically difference in Service Quality, Student Satisfaction, Student Loyalty, University Reputation , Word-of-Mouth, and Enrollment Intention between respondents' time to study with F-value 0.600, 0.472, 0.084, 0.253, 0.371, and 0.317 respectively. And All six constructs checked with ANOVA have p-value larger than 0.05.

4.5 Regression Analysis

Regression Analysis was used in this study to test the relationship and impact between "Service Quality" and "Student Satisfaction" towards "Enrollment Intention". There are 3 steps that are used in this regressions analysis to measure the results. The first one is the result of F-value to measure the fitness of the model. Second is the R^2 to get the explaining ability for the model. And lastly, the information to get regression coefficient, whether regression coefficient is significant and whether the coefficient had a positive or negative influence. Regression analysis results will be presented in Table 4.15 below.

4.5.1 Correlation among the Six Constructs

The table 4.14 below showed the relationship between each pair of a factor in the framework. As the results presented, the highest mean score among the four constructs was 4.9792, belonged to LOY with a standard deviation equal to 1.12055. On the other hand, the factor, which had the lowest mean score was SER with 4.7537 of average score and 1.10106 of standard deviation. As the table showed, each construct in the research model has a positively significant correlation with the others.

Table 4.14: Results of Correlation of the Research Constructs (N=300)

Constructs	SER	SAT	LOY	UR	WOM	EI	Mean	Std. Dev
SER	1						4.7537	1.10106
SAT	.890***	1					4.9613	1.11666
LOY	.834**	.852**	1				4.9792	1.12055
UR	.792**	.791**	.790**	1			4.8425	1.15843
WOM	.822**	.833**	.822**	.813**	1		4.8327	1.18807
EI	.829**	.834**	.840**	.830**	.882**	1	4.8800	1.17606

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

Sample correlation coefficient

Source: This study

First, when it comes to the relationship between SER with SAT, LOY, UR, WOM as well as EI, the positive relation was set with r = 0.890 for the first, 0.834 for the second, 0.792 for the third, 0.822 for the fourth, and 0.834 for the last when the p-value was all lower than 0.001 with two stars significance. Second, SAT also showed the positive correlation with LOY (r=0.852, p<0.001), UR (r=0.791, p<0.001), WOM (r= 0.833, p<0.001), and EI (r= 0.829, p<0.001). Third, LOY was also found to be positively correlated with UR, WOM and EI with (r=0.790, p<0.001), (r=0.822, p<0.001), and (r=0.840, p<0.001) respectively. Fourth, UR was also found to be positively correlated with WOM and EI, with (r=0.813, p<0.001) for WOM and (r=0.830, p<0.001) for EI. Last, WOM was found to be positively correlated with EI with (r=0.882, p<0.001).

The pair with the closest relationship among four constructs belongs to SER with SAT. The weakest correlation is between LOY and UR.

4.5.2 The Influence of Student Satisfaction and Student Loyalty, on Enrollment Intention

Table 4.15 below showed how SAT and LOY affect EI of the student in Vietnam

Independent Variables	Dependent Variable		
	EI		LOY
	Model 1	Model 2	Model 3
SAT	0.834***		0.890***
LOY		0.829***	
R2	0.696	0.687	0.793
Adj-R^2	0.695	0.686	0.792
F-value	681.518	653.374	1140.699
P-value	0.000	0.000	0.000

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

β = Standardized coefficient

Source: This study

Model 1 shows that SAT has a significantly positive influence on EI with β = 0.834, p < 0.001. Furthermore, the results show that R^2 = 0.696 and adjust R^2 = 0.695, it means that 69.5% variance of EI can be explained by an independent variable namely SAT. Additionally, F-value= 681.518 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H2 is supported, Student Satisfaction positively effects on Enrollment Intention.

Model 2 shows that LOY has a significantly positive influence on EI with β = 0.829, p < 0.001. Furthermore, the results show that R^2 = 0.687 and adjust R^2 = 0.686, it means that 68.6% variance of EI can be explained by an

independent variable namely LOY. Additionally, F-value = 653.374 (p- value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H6 is supported, Student Loyalty positively effects on Enrollment Intention.

Model 3 shows that SAT has a significantly positive influence on LOY with β = 0.890, p < 0.001. Furthermore, the results show that R^2 = 0.793 and adjust R^2 = 0.792, it means that 79.2% variance of LOY can be explained by an independent variable namely SAT. Additionally, F-value = 1140.699 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H5 is supported, Student Satisfaction positively effects on Student Loyalty.
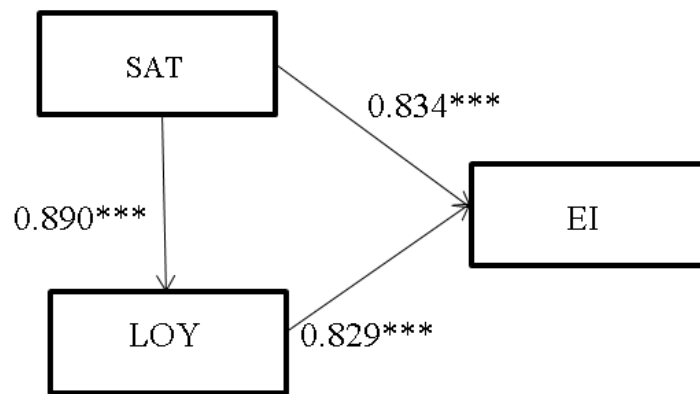
Figure 4.1: Influence of SAT and LOY on EI

Source: This study

4.6 The Moderating Effect of Word-of-Mouth between University Reputation and Enrollment Intention

To test the moderating effects of Green Human Resource Management Practice, the study followed Baron & Kenny's (1986) procedure for applying the hierarchical regression test, creating the interaction term after inserting the main impact from the interacting variables. All of the variables related to the interaction terms were centered to minimize multicollinearity problems (Aiken et al., 1991).

Table 4.16 presents the results of a hierarchical regression analysis that considered the moderating effects of Word-of-Mouth between University Reputation and Enrollment Intention. Besides, Table 4.16 also showed how Word-of-Mouth affects Enrollment Intention of the student in Vietnam.

Table 4.16: The Moderating Effects of WOM on the Relationship between UR and EI

Variables	EI			
	Model 1	Model 2	Model 3	Model 4
Independent variable **UR**	0.830***		0.333***	0.321***
Moderating variable **WOM**		0.882***	0.611***	0.598
Interactive effect **URxWOM**				0.036
R	0.83	0.882	0.903	0.903
R2	0.689	0.778	0.815	0.816
Adj-R^2	0.688	0.777	0.814	0.814
F-value	660.379	1042.549	655.38	437.41
p-value	0.000	0.000	0.000	0.000
D-W	1.729	2.006	1.875	1.862
VIF	1.000	1.000	2.956	1.878-3.196

Note: *** $p < 0.001$, ** $p<0.01$, * $p< 0.05$

As shown in Model 1, the result discloses that University Reputation (β = 0.830, p<0.001) is positively and significantly affected to Enrollment Intention. Therefore, model 1 is supported. Furthermore, the results show that R^2 = 0.689 and adjust R^2 = 0.688, which means that 68.8% variance of Enrollment Intention can be explained by an independent variable namely University Reputation. Additionally, F- value = 660.379 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H4 is supported, University Reputation positively effects on Enrollment Intention.

Model 2 shows that WOM has a significantly positive influence on Ei with β = 0.882, p < 0.001. Furthermore, the results show that R^2 = 0.778 and adjust R^2 = 0.777, which means that 77.7% variance of Enrollment Intention can be explained by an independent variable namely Word-of-Mouth. Additionally, F- value = 1042.549 (p-value < 0.001) and is significant, meaning that this linear regression model provides a good fit to the data. The VIF is 1.000 which means we don't need to concern about multicollinearity. Based on the above results, H7 is supported, Word-of-Mouth positively effects on Enrollment Intention.

Model 3 in table 4.16, the result showed that the independent variable (UR, β=0.333, p<0.001) is significantly affected to the dependent variable (EI) and the moderating variable (WOM, β=0.611, p>0.05) is not significantly affected to the dependent variable (EI).

Besides, the result in Model 4 revealed the interaction effect (R^2= 0.816, β = 0.036, p>0.05) of UR and WOM is not significant effect to EI. This meant that Word-of-Mouth is not a moderator in the relationship between University Reputation and Enrollment Intention. Therefore, H8 is not supported.
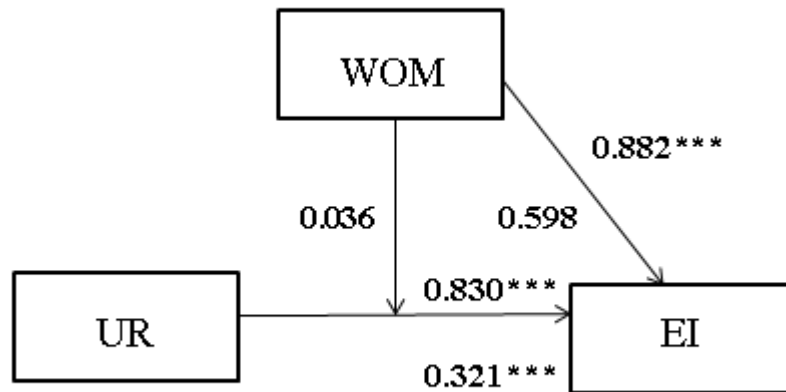
Figure 4.2: Moderating Effect of WOM on the Relationship of UR and EI

Source: This study

4.7 The Mediating Effect of Student Satisfaction between Service Quality and Enrollment Intention

To test how SAT mediates on the relationship between SER and EI (H9), this study follow Baron and Kenny's (1986) approach. According to Baron and Kenny's (1986), The following requirements must be met, the independent variable must impact the mediator in the first equation; the independent variable must affect the dependent variable in the second equation; and the mediator must affect the dependent variable in the third equation to demonstrate mediation effect .If all of these requirements hold in the anticipated direction, the independent variable's influence on the dependent variable in the third equation must be less than in the second. Perfect mediation holds if the independent variable has no impact when the mediator is controlled.

Then, to test if the mediation effects are statistically significant, researchers may choose one of the various methods as the Test of Joint Significance, Sobel Test, or Bootstrapped Confidence Intervals.

Table 4.17: Mediation Test of SAT between SER and EI

Constructs	SAT	EI		
	Model 1	Model 2	Model 3	Model 4
SER	0.852***	0.875***		0.465***
SAT			0.834***	0.415***
R2	0.726	0.758	0.696	0.731
Adj-R2	0.725	0.757	0.695	0.730
F-value	788.306	802.762	681.518	404.491
P-value	0.000	0.000	0.000	0.000
D-W	1.989	2.069	2.023	1.684
VIF	1.000	1.000	1.000	4.828

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

Source: This study

According to table 4.17, Model 1 tested the relationship between SER (independent variable) and SAT (mediator variable). The results show that SER is significant and positively affected to SAT ($\beta = 0.852$, $p < 0.001$). Next, SER and SAT are the independent variables and EI is inputted as a dependent variable in Model 2 and Model 3 respectively; the results performed that both of them are significant and positively affected to EI. For SER, $\beta = 0.875$, $p < 0.001$; for SAT, $\beta = 0.834$, $p < 0.001$. Finally, SER and SAT regressed with EI ($\beta = 0.465$, $p < 0.001$; $\beta = 0.415$, $p < 0.001$) in Model 4. The results in Model 4 showed that $R^2 = 0.731$ and the adjusted $R^2 = 0.730$, meaning that 73.0% of the variance in EI can be predicted from SER and SAT. F-value = 404.491 (p-value < 0.001) is significant, meaning that this linear regression model provides a good fit to the data. We don't need to

worry about multicollinearity because VIF is 4.828 (lower than 5).

According to the results above, the beta value of SER decreases from 0.875 in Model 2 to 0.465 in Model 4, besides, both SER and SAT have a significant correlation with EI. Hence, H9 is supported, SAT generates a partial mediation effect on the relationship between SER and EI.
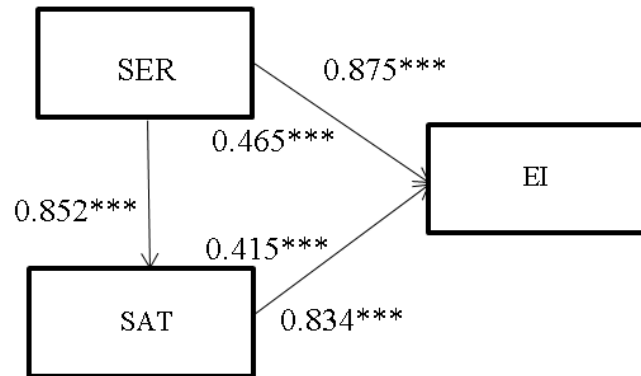
Figure 4.3: Mediating Effect of SAT on the Relationship of SER and EI

Source: This study

Table 4.18: The Results of the Regression Analysis of the Indirect Effects of SER on EI

Direct effect and the total effect	B	SE	t	p
SER -> EI	0.8910	0.0341	26.1059	0.000
SER -> SAT	0.9030	0.0267	33.7742	0.000
SAT -> EI, SER is controlled	0.4372	0.0696	6.2829	0.000
SER -> EI, SAT is controlled	0.4961	0.0706	7.0305	0.000
Indirect effect and significance using the normal distribution				
	Value	SE	LL95%CI	UL95%CI	z	p
Sobel	0.3948	0.0639	0.2695	0.5201	6.1743	0.000
Bootstrap results for indirect effects				
	Value	SE	LL95%CI	UL95%CI	Mean	p
Effect	0.3948	0.0675	0.2605	0.5293	0.3939	0.000

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

N= 300, Number of Bootstrap Resamples = 1000

LL = Lower Limit, CI = Confidence Interval; UL = Upper Limit;

β = Unstandardized Coefficient

Source: This study

According to Preacher and Hayes (2004), the Sobel test and Bootstrapped Confidence Intervals test were applied in this research to modify the mediating effect. Firstly, without presence of SAT, SER was significantly regressed on EI with β = 0.8910, Standard Error = 0.0341, t-value = 26.1059 > 1.96 and p-value = 0.0000. Secondly, SER was significantly regressed on the mediator SAT as well with β = 0.9030, Standard Error = 0.0267, t-value = 33.7742 > 1.96 and p-value = 0.0000. Thirdly, when SER was controlled, the mediator SAT was significantly regressed on EI with β = 0.4372, Standard Error = 0.0696, t-value = 6.2829 > 1.96 and p-value = 0.0000. Fourthly, when the mediator was controlled, SER was significantly regressed on EI with β = 0.4961, Standard Error = 0. 0706, t-value = 7.0305 > 1.96 and p-value = 0.0000. The results showed in the table below also indicated that the Sobel test is significant with the z-value = 6.1743 (higher than 1.96, meaning that p < 0.05), on the other hand, the value of the mediating effect is 0.3948. Besides, Bootstrap confidence intervals (CIs) were determined to verify the results of the Sobel test; the results of bootstrapping also presented the same value of mediating effect with CIs are within LL95% and UL95% (not including 0) and significant. Those provide evidence to prove that there is a partial mediating effect of SAT on the relationship between SER and EI. Therefore, H9 received confirmation.

4.8 The Mediating Effect of Student Loyalty between Student Satisfaction and Enrollment Intention

To test how SAT mediates on the relationship between SER and EI (H9), this study follow Baron and Kenny's (1986) approach. According to Baron and Kenny's (1986), The following requirements must be met, the independent variable must impact the mediator in the first equation; the independent variable must affect the dependent variable in the second equation; and the mediator must affect the dependent variable in the third equation to demonstrate mediation effect .If all of these requirements hold in the anticipated direction, the independent variable's influence on the dependent variable in the third equation must be less than in the second. Perfect mediation holds if the independent variable has no impact when the mediator is controlled.

Then, to test if the mediation effects are statistically significant, researchers may choose one of the various methods as the Test of Joint Significance, Sobel Test, or Bootstrapped Confidence Intervals.

Table 4.19: Mediation Test of LOY between SAT and EI

Constructs	LOY	EI		
	Model 1	Model 2	Model 3	Model 4
SAT	0.890***	0.834***		0.414***
LOY			0.829***	0.487***
R2	0.793	0.696	0.687	0.752
Adj-R2	0.792	0.695	0.686	0.750
F-value	1140.699	681.518	653.374	449.893
P-value	0.000	0.000	0.000	0.000
D-W	1.707	2.023	2.027	1.665
VIF	1.000	1.000	1.000	3.645

Note: *** $p < 0.001$, ** $p<0.01$, * $p< 0.05$

According to table 4.19, Model 1 tested the relationship between SAT (independent variable) and LOY (mediator variable). The results show that SAT is significant and positively affected to LOY ($\beta = 0.890$, $p < 0.001$). Next, SAT and LOY are the independent variables and EI is inputted as a dependent variable in Model 2 and Model 3 respectively; the results performed that both of them are significant and positively affected to EI. For SAT, $\beta = 0.834$, $p < 0.001$; for LOY, $\beta = 0.829$, $p < 0.001$. Finally, SAT and LOY regressed with EI ($\beta = 0.414$, $p < 0.001$; $\beta = 0.487$, $p < 0.001$) in Model 4. The results in Model 4 showed that $R^2 = 0.752$ and the adjusted $R^2 = 0.750$, meaning that 75.0% of the variance in EI can be predicted from SAT and LOY. F-value = 449.893 (p-value < 0.001) is significant, meaning that this linear regression model provides a good fit to the data. We don't need to worry about multicollinearity because VIF is 3.645 (lower than 5).

According to the results above, the beta value of SAT decreases from 0.834 in Model 2 to 0.414 in Model 4, besides, both SAT and LOY have a significant correlation with EI. Hence, H10 is supported, LOY generates a partial mediation effect on the relationship between SAT and EI.
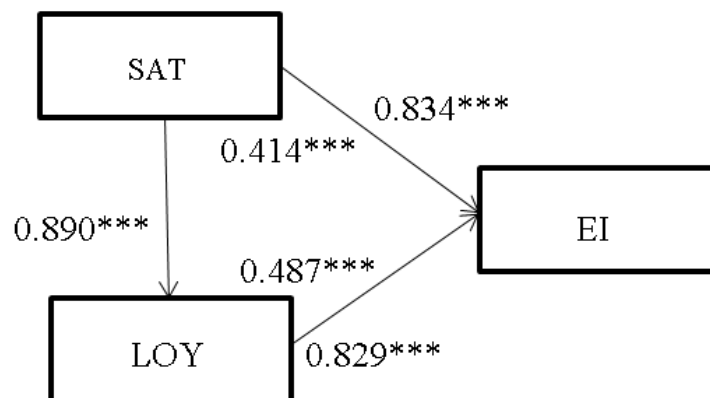
Figure 4.4: Mediating Effect of LOY on the Relationship of SAT and EI

Table 4.20: The Results of the Regression Analysis of the Indirect Effects of SAT on EI (Mediator LOY)

Direct effect and the total effect	B	SE	t	p
SAT -> EI	0.8728	0.0341	25.5612	0.000
SAT -> LOY	0.8548	0.0304	28.0768	0.000
LOY -> EI, SAT is controlled	0.5111	0.0579	8.8244	0.000
SAT -> EI, LOY is controlled	0.4359	0.0581	7.4985	0.000
Indirect effect and significance using the normal distribution				
	Value	SE	LL95%CI	UL95%CI	z	P
Sobel	0.4369	0.0519	0.3352	0.5387	8.4136	0.000
Bootstrap results for indirect effects				
	Value	SE	LL95%CI	UL95%CI	Mean	P
Effect	0.4369	0.0727	0.3053	0.5909	0.4386	0.000

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

N= 300, Number of Bootstrap Resamples = 1000

LL = Lower Limit, CI = Confidence Interval; UL = Upper Limit;

β = Unstandardized Coefficient

Source: This study

According to Preacher and Hayes (2004), the Sobel test and Bootstrapped Confidence Intervals test were applied in this research to modify the mediating effect. Firstly, without presence of LOY, SAT was significantly regressed on EI with β = 0.8728, Standard Error = 0.0341, t-value = 25.5612 > 1.96 and p-value = 0.0000. Secondly, SAT was significantly regressed on the mediator LOY as well with β = 0.8548, Standard Error = 0.0304, t-value = 28.0768 > 1.96 and p-value = 0.0000. Thirdly, when SAT was controlled, the mediator LOY was significantly regressed on EI with β = 0.5111, Standard Error = 0.0579, t-value = 8.8244 > 1.96 and p-value = 0.0000. Fourthly, when the mediator was controlled, SAT was significantly regressed on EI with β = 0.4359, Standard Error = 0. 0581, t-value = 7.4985 > 1.96 and p-value =

0.0000. The results showed in the table below also indicated that the Sobel test is significant with the z-value = 8.4136 (higher than 1.96, meaning that $p < 0.05$), on the other hand, the value of the mediating effect is 0.4369. Besides, Bootstrap confidence intervals (CIs) were determined to verify the results of the Sobel test; the results of bootstrapping also presented the same value of mediating effect with CIs are within LL95% and UL95% (not including 0) and significant. Those provide evidence to prove that there is a partial mediating effect of LOY on the relationship between SAT and EI. Therefore, H10 received confirmation.

4.9 The Mediating Effect of University Reputation between Student Satisfaction and Enrollment Intention

To test how SAT mediates on the relationship between SER and EI (H9), this study follow Baron and Kenny's (1986) approach. According to Baron and Kenny's (1986), The following requirements must be met, the independent variable must impact the mediator in the first equation; the independent variable must affect the dependent variable in the second equation; and the mediator must affect the dependent variable in the third equation to demonstrate mediation effect .If all of these requirements hold in the anticipated direction, the independent variable's influence on the dependent variable in the third equation must be less than in the second. Perfect mediation holds if the independent variable has no impact when the mediator is controlled.

Then, to test if the mediation effects are statistically significant, researchers may choose one of the various methods as the Test of Joint Significance, Sobel Test, or Bootstrapped Confidence Intervals.

Table 4.21: Mediation Test of UR between SAT and EI

Constructs	UR	EI		
	Model 1	Model 2	Model 3	Model 4
SAT	0.791***	0.834***		0.460***
UR			0.830***	0.466***
R2	0.626	0.696	0.689	0.768
Adj-R2	0.625	0.695	0.688	0.767
F-value	498.389	681.518	653.374	492.023
P-value	0.000	0.000	0.000	0.000
D-W	1.232	2.023	1.502	1.770
VIF	1.000	1.000	1.000	2.672

Note: *** $p < 0.001$, ** $p<0.01$, * $p< 0.05$

Source: This study

According to table 4.21, Model 1 tested the relationship between SAT (independent variable) and UR (mediator variable). The results show that SAT is significant and positively affected to UR ($\beta = 0.791$, $p < 0.001$). Next, SAT and UR are the independent variables and EI is inputted as a dependent variable in Model 2 and Model 3 respectively; the results performed that both of them are significant and positively affected to EI. For SAT, $\beta = 0.834$, $p < 0.001$; for UR, $\beta = 0.830$, $p < 0.001$. Finally, SAT and UR regressed with EI ($\beta = 0.460$, $p < 0.001$; $\beta = 0.466$, $p < 0.001$) in Model 4. The results in Model 4 showed that $R^2 = 0.768$ and the adjusted $R^2 = 0.767$, meaning that 76.7% of the variance in EI can be predicted from SAT and UR. F-value = 492.023 (p-value < 0.001) is significant, meaning that this linear regression model provides a good fit to the data. We don't need to worry about multicollinearity because VIF is 2.672 (lower than 5).

According to the results above, the beta value of SAT decreases from 0.834 in Model 2 to 0.460 in Model 4, besides, both SAT and UR have a significant correlation with EI. Hence, H11 is supported, UR generates a partial mediation effect on the relationship between SAT and EI.
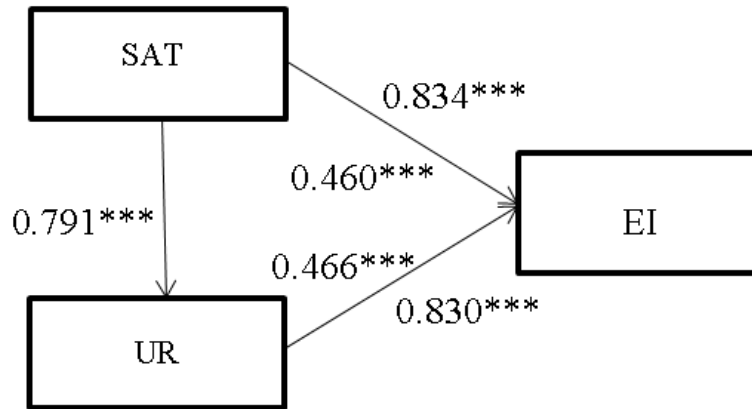
Figure 4.5: Mediating Effect of UR on the Relationship of SAT and EI

Source: This study

Table 4.22: The Results of the Regression Analysis of the Indirect Effects of SAT on EI (Mediator UR)

Direct effect and the total effect	B	SE	t	p
SAT -> EI	0.8728	0.0341	25.5612	0.000
SAT -> UR	0.8207	0.0368	22.3246	0.000
UR -> EI, SAT is controlled	0.4735	0.0464	10.2109	0.000
SAT -> EI, UR is controlled	0.4842	0.0481	10.0663	0.000
Indirect effect and significance using the normal distribution				
	Value	SE	LL95%CI	UL95%CI	z	P
Sobel	0.3886	0.0419	0.3065	0.4707	9.278	0.000
Bootstrap results for indirect effects				
	Value	SE	LL95%CI	UL95%CI	Mean	P
Effect	0.3886	0.0551	0.2776	0.493	0.3851	0.000

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

N= 300, Number of Bootstrap Resamples = 1000

LL = Lower Limit, CI = Confidence Interval; UL = Upper Limit;

β = Unstandardized Coefficient

According to Preacher and Hayes (2004), the Sobel test and Bootstrapped Confidence Intervals test were applied in this research to modify the mediating effect. Firstly, without presence of UR, SAT was significantly regressed on EI with β = 0.8728, Standard Error = 0.0341, t-value = 25.5612 > 1.96 and p-value = 0.0000. Secondly, SAT was significantly regressed on the mediator UR as well with β = 0.8207, Standard Error = 0.0368, t-value = 22.3246 > 1.96 and p-value = 0.0000. Thirdly, when SAT was controlled, the mediator UR was significantly regressed on EI with β = 0.4735, Standard Error = 0.0464, t-value = 10.2109 > 1.96 and p-value = 0.0000. Fourthly, when the mediator was controlled, SAT was significantly regressed on EI with β = 0.4842, Standard Error = 0. 0481, t-value = 10.0663 > 1.96 and p-value = 0.0000. The results showed in the table below also indicated that the Sobel test is significant with the z-value = 9.2780 (higher than 1.96, meaning that p < 0.05), on the other hand, the value of the mediating effect is 0.3886. Besides, Bootstrap confidence intervals (CIs) were determined to verify the results of the Sobel test; the results of bootstrapping also presented the same value of mediating effect with CIs are within LL95% and UL95% (not including 0) and significant. Those provide evidence to prove that there is a partial mediating effect of UR on the relationship between SAT and EI. Therefore, H11 received confirmation.

CHAPTER FIVE
CONCLUSIONS AND SUGGESTIONS

In this final chapter, the summary of the research would be shown with the following primary part: (1) Concluding the findings of the research, (2) Giving discussion with previous studies, theoretical and practical contribution of research, and (3) Identifying research limitation and give several suggestions for future research.

5.1 Research Conclusion

As mentioned in chapter 1, the purposes of this study are (i) to investigate the relationship between service quality and student satisfaction (ii) examine the relationship between student satisfaction and enrollment intention, (iii) to check the effect the relationship between student satisfaction and university reputation, (iv) to examine the relationship between university reputation and enrollment intention, (v) to analyze the effect of student satisfaction on student loyalty, (vi) To investigate the relationship between student loyalty and enrollment intention, (vii) to examine the relationship between word-of-mouth (WOM) and enrollment intention, (viii) To examine the moderating role word-of-mouth (WOM) on university reputation toward enrollment intention, (ix) to examine whether Student Satisfaction is mediator in the relationship between Service Quality and Enrollment Intention, (x) to examine whether Student Loyalty is mediator in the relationship between Student Satisfaction and Enrollment Intention, (xi) to examine whether University Reputation is mediator in the relationship between Student Satisfaction and Enrollment Intention.

Through reviewing the previous literature and researches, chapter 2 of this research established a foundation to distribute eleven hypotheses which were shown, tested and brought a couple of results in chapters 3 and 4. Following the findings from the previous chapter, the conclusion shown in the below table

Table 5.1: Result of the Tested Hypotheses

	Hypotheses	Results
H1	Service quality positively effects on Student satisfaction	Supported
H2	Student satisfaction positively effects on Enrollment intention	Supported
H3	Student satisfaction positively effects on University reputation	Supported
H4	University reputation positively effects on Enrollment intention	Supported
H5	Student satisfaction positively effects on Student loyalty	Supported
H6	Student loyalty positively effects on Enrollment intention	Supported
H7	Word-of-mouth positively effects on Enrollment intention	Supported
H8	Word-of-mouth as a significant moderating effect on the relationship between University reputation and Enrollment intention	Not Supported
H9	Student Satisfaction as a significant mediating effect on the relationship between Service Quality and Enrollment Intention	Supported
H10	Student Loyalty as a significant mediating effect on the relationship between Student Satisfaction and Enrollment Intention	Supported
H11	University Reputation as a significant mediating effect on the relationship between Student Satisfaction and Enrollment Intention	Supported
H12	Service quality positively effects on Enrollment Intention	Supported

Source: This study

According to the results, some conclusions have been drawn in the study. First of all, this research indicates that Service Quality positively effects on Student Satisfaction, which followed the previous studies of Gruber et al., 2010 & Farrell et al., (2001), Carrillat et al., 2007 & Zeithaml, et al., (2008), Oliver (1989), Kitapci & Taylan, (2009), Marzo Navarro, Pedraja Iglesias, & Rivera Torres, (2005). Specifically, the study shows that students prefer to study in universities, institutions with good Service Quality.

The second conclusion showed that Student Satisfaction positively effects on Enrollment Intention, which are the same idea as the study results of Boulding et al. (1993), Ravindran & Kalplan, (2012) , Osman & Saputra, (2019), Helgesen & Nesse, 2007; Thomas, (2011). That means Student Satisfaction is an important construct with Enrollment Intention. To the extent that students have satisfaction with the university, are willing to enroll the university, and accept the university goals and values, they will direct their intention in ways that they perceive will accomplish things that are valued by the university. Students with a strong satisfaction with the university will engage in Enrollment Intention more than those with a weak satisfaction to the organization.

Third, following the studies of Andreassen & Lindestad, (1998), Thomas (2011), Caruana et al., (2004), Gul's (2014), Student Satisfaction is one more time is affirmed to have an active impact on University Reputation through this research. Moreover, the results showed that Student Satisfaction has positive impact on Student Loyalty, students with a high level of satisfaction are likely to stay loyal to their university. Follow by LeBlanc and Nguyen, (2001), Jiewanto et al., (2012), Helgesen and Nesset, (2007), and Jiewanto et al. (2012) and Kheiry (2012), University Reputation is a significant component affecting student loyalty, and a positive reputation can inspire return students, student's future enrollment intention is highly influenced by University Reputation.

Fourth, The study proposed a hypothesis that investigates the mediation effect of Student Satisfaction on the relationship between Service Quality and Enrollment Intention, the mediation effect of Student Loyalty on the relationship between Student Satisfaction and Enrollment Intention, the mediation effect of University Reputation on the relationship between Student Satisfaction and Enrollment Intention and found that they are supported.

Although this study wants to contribute new results that Word-of-Mouth has a significant moderating effect on the relationship between University Reputation and Enrollment Intention. However in this study, following the results revealed that Word-of-Mouth has no significant moderating effect on University Reputation and Enrollment Intention.

5.2 Research Limitation and Future Research Suggestion

The study has certain disadvantages that should be addressed in future research. Due to some difficulties and the period of time that the survey was conducted, the way to choose a sample for this study is based on convenience, thus the results somewhat cannot be representative of the whole students in Vietnam. Nevertheless, the data collected from multiple sources through the perceptions, the participant's responses may not represent what happened.

Because this study was based on data from Vietnamese education institution, its findings may be restricted in their applicability to other industries and circumstances. As a result, this study should be reproduced in various sorts of organizations, such as businesses, hospitals, restaurants, and hotels.

Future studies should investigate into other mediators and moderators for Enrollment Intention. Further study should be done with a larger size and specific sample in order to increase the representation of everyone.

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APPENDIX

Survey questionnaire in English

The Effect of Service quality and student satisfaction on student enrollment intention, word-of-mouth as a moderator variable: Study on higher education students in universities of North Viet Nam

Nanhua University

QUESTIONNAIRE

Dear Sir/Madam,

My name is Nguyen Duc Trung, I'm a student who is studying Business Administration at Nanhua University, Taiwan. I am researching "The Effect of Service quality and student satisfaction on student enrollment intention, word-of-mouth as a moderator variable: Study on higher education students in universities of North Viet Nam".

I would be grateful if you could spend a few minutes filling out the questionnaire below. Your response will be beneficial in helping us to understand the issues. No personal information will be made public. Please be assured that your answer will be kept in strict confidence and take the time to fill out this questionnaire as accurately as possible.

Thank you for sparing your valuable time. I deeply appreciate your kind cooperation.

Respondent Information

For our information, would you please indicate the following questions:

1. Gender: Male Female

2. Age: 18-25 26-35 >35

3. Education: Bachelor Master

         Doctor   Above Doctor

4. Time to study: 2 years   4 years > 4years

5. Grades Status: Juniors   Seniors

Please CIRCLE the level of agreement on each of the items below based on your opinion		Levels of Agreement						
		Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
Section 1: Service Quality								
1	Teachers treat all students in equal manner	1	2	3	4	5	6	7
2	Teachers follow good teaching practices	1	2	3	4	5	6	7
3	Course content develops student's knowledge	1	2	3	4	5	6	7
4	Teachers are responsive and accessible	1	2	3	4	5	6	7
5	Administration staffs are courteous and willing to help	1	2	3	4	5	6	7
6	Computer/science labs are well equipped	1	2	3	4	5	6	7
7	Library has adequate academic resources	1	2	3	4	5	6	7
8	University provides consulting services	1	2	3	4	4	6	7
9	University environment is convenient to study well	1	2	3	4	5	6	7
10	University has safety and security measures	1	2	3	4	5	6	7
Section 2: Student Satisfaction								
1	Satisfaction with the quality of academic services	1	2	3	4	5	6	7

2	Satisfaction with the quality of teachers	1	2	3	4	5	6	7
3	Satisfaction with the quality of administrative services	1	2	3	4	5	6	7
4	Satisfaction with the quality of equipment and facilities	1	2	3	4	5	6	7
5	Satisfaction with the decision to attend this university	1	2	3	4	5	6	7
Section 3: Student Loyalty								
1	This university gives a positive impression to me	1	2	3	4	5	6	7
2	Feeling proud to be associated with the university's activities	1	2	3	4	5	6	7
3	I will write a positive impression about this university in social media	1	2	3	4	5	6	7
4	I have no intention of moving to another university	1	2	3	4	5	6	7
Section 4: University reputation								
1	This university has a good reputation	1	2	3	4	5	6	7
2	In general, I believe that this university always fulfills the promises it makes to its students	1	2	3	4	5	6	7
3	I believe that the reputation of this	1	2	3	4	5	6	7

	University is better than others universities							
4	I enrolled in this university because of its reputation	1	2	3	4	5	6	7

Section 5: Word-of-mouth

1	I like talking about this university to my friends	1	2	3	4	5	6	7
2	I like helping potential students by providing them with information about this university and its courses	1	2	3	4	5	6	7
3	People ask me for information about courses offered at this university	1	2	3	4	5	6	7
4	I would recommend this university as the best service quality in the area	1	2	3	4	5	6	7
5	I would encourage friends and relatives to enroll in this university	1	2	3	4	5	6	7

Section 6: Enrollment intention

1	If I had needed educational services now, this university would be my first choice	1	2	3	4	5	6	7
2	My choice to enroll in this university was a wise one	1	2	3	4	5	6	7
3	I enrolled in this university because of offering the courses	1	2	3	4	5	6	7
4	I feel bad about my decision to enroll in this university	1	2	3	4	5	6	7
5	I think I did the right thing enrolled in this university	1	2	3	4	5	6	7

Ảnh hưởng của chất lượng dịch vụ và sự hài lòng của sinh viên đến ý định nhập học của sinh viên, truyền miệng như một biến điều tiết: Nghiên cứu về sinh viên giáo dục đại học ở các trường đại học ở miền Bắc Việt Nam.

Đại học Nanhua
BẢNG KHẢO SÁT

Kính gửi Qúy Anh/chị,

Tôi tên là Nguyễn Đức Trung, hiện là học viên sau đại học tại ngành Quản trị kinh doanh. Tôi đang thực hiện nghiên cứu về đề tài "Ảnh hưởng của chất lượng dịch vụ và sự hài lòng của sinh viên đến ý định nhập học của sinh viên, truyền miệng như một biến điều tiết: Nghiên cứu về sinh viên giáo dục đại học ở các trường đại học ở miền Bắc Việt Nam".

Rất mong Quý Anh/Chị dành một vài phút tham gia cuộc khảo sát. Ý kiến của Quý Anh/Chị rất quý báu trong công việc hoàn thành đề tài luận văn này. Tôi xin cam đoan mọi thông tin Quý Anh/Chị cung cấp sẽ không được công khai và chỉ dành cho mục đích nghiên cứu. Xin vui lòng chọn ý kiến phù hợp với Quý Anh/Chị trong khoảng tin cậy và chính xác nhất có thể.

Xin chân thành cảm ơn Quý Anh/Chị đã dành thời gian quý báu, tôi vô cùng biết ơn sự hợp tác của Quý Anh/Chị. Chúc Quý Anh/Chị một ngày tốt lành!

Thông tin chung:

Xin Quý Anh/Chị cho biết thông tin sau:

1. Giới tính: Nam   Nữ

2. Độ tuổi: 18-25   26-35   >35

3. Trình độ học vấn: Đại học   Thạc sĩ

                        Tiến sĩ   Trên tiến sĩ

4. Thời gian học tập: 2 năm   4 năm   > 4 năm

5. Tình trạng sinh viên: Sinh viên đầu cấp   Sinh viên cuối cấp

Vui lòng khoanh tròn vào lựa chọn phù hợp với ý kiến của Quý Anh/Chị		Mức độ đồng ý						
		Rất không đồng ý	Không đồng ý	Phần nào không đồng ý	Bình thường – Không ý kiến	Phần nào đồng ý	Đồng ý	Rất đồng ý
Phần 1: Chất lượng dịch vụ								
1	Giảng viên đối xử bình đẳng với tất cả sinh viên	1	2	3	4	5	6	7
2	Giảng viên áp dụng tốt giảng dạy mang tính thực tiễn	1	2	3	4	5	6	7
3	Nội dung các môn học giúp phát triển kiến thức sinh viên	1	2	3	4	5	6	7
4	Giảng viên có trách nhiệm và nhiệt tình	1	2	3	4	5	6	7
5	Nhân viên tại văn phòng luôn sẵn sàng giúp đỡ	1	2	3	4	5	6	7
6	Cơ sở vật chất được trang bị tốt	1	2	3	4	5	6	7
7	Thư viện có đầy đủ tài liệu học tập	1	2	3	4	5	6	7
8	Trường đại học có cung cấp dịch vụ tư vấn	1	2	3	4	5	6	7
9	Môi trường thuận lợi để học tập tốt	1	2	3	4	5	6	7
10	Trường đại học có các biện pháp an ninh an toàn	1	2	3	4	5	6	7
Phần 2: Mức độ hài lòng của sinh viên								
1	Tôi hài lòng với chất lượng đào tạo	1	2	3	4	5	6	7
2	Tôi hài lòng với chất lượng giảng viên	1	2	3	4	5	6	7
3	Tôi hài lòng với chất lượng dịch vụ quản lí	1	2	3	4	5	6	7
4	Tôi hài lòng với cơ sở vật chất	1	2	3	4	5	6	7

5	Tôi hài lòng với quyết định nhập học của mình	1	2	3	4	5	6	7
Phần 3: Mức độ trung thành của sinh viên								
1	Trường đại học này tạo ấn tượng tốt cho tôi	1	2	3	4	5	6	7
2	Tôi cảm thấy tự hào khi tham gia các hoạt động của trường	1	2	3	4	5	6	7
3	Tôi sẽ viết những nhận xét tích cực về trường trên mạng xã hội	1	2	3	4	5	6	7
4	Tôi không có ý định chuyển trường	1	2	3	4	5	6	7
Phần 4: Danh tiếng của trường đại học								
1	Trường đại học này có danh tiếng tốt	1	2	3	4	5	6	7
2	Tôi tin trường đại học này thực hiện đúng những lời hứa với sinh viên	1	2	3	4	5	6	7
3	Danh tiếng của trường đại học này tốt hơn những trường khác	1	2	3	4	5	6	7
4	Tôi nhập học trường này vì danh tiếng của họ	1	2	3	4	5	6	7
Phần 5: Truyền miệng								
1	Tôi thích nói về trường đại học này	1	2	3	4	5	6	7
2	Tôi thích cung cấp thông tin về trường đại học này cho những sinh viên khác	1	2	3	4	5	6	7
3	Nhiều người hỏi tôi về thông tin các môn học của trường đại học này	1	2	3	4	5	6	7
4	Tôi sẽ giới thiệu trường đại học này cung cấp chất lượng đạo tạo tốt nhất trong khu vực	1	2	3	4	5	6	7
5	Tôi sẽ khuyến khích bạn bè và người thân nhập học trường này	1	2	3	4	5	6	7
Phần 6: Sự nhập học								
1	Nếu hiện tại tôi cần dịch vụ học tập trường đại học này sẽ là lựa chọn đầu tiên của tôi	1	2	3	4	5	6	7

2	Lựa chọn học tại đây là lựa chọn sáng suốt của tôi	1	2	3	4	5	6	7
3	Tôi nhập học trường này vì họ cung cấp những môn học tôi cần	1	2	3	4	5	6	7
4	Tôi nghĩ tôi đã quyết định đúng khi nhập học tại trường này	1	2	3	4	5	6	7