



RESEARCH ARTICLE

The Study Compares The Satisfaction Of Lecturers With The Facilities Of Non-Public Universities

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ABSTRACT

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This study was conducted with the aim of comparing the satisfaction of lecturers with the facilities of non-public universities through survey results. The survey subjects are lecturers in economics and engineering at non-public universities in Vietnam. We use both qualitative and quantitative research methods. Quantitative research methods were carried out with SPSS software, including independent T tests and ANOVA. Research results show that the satisfaction of lecturers with the facilities of non-public universities is highly appreciated. There is no difference in assessing the satisfaction of lecturers with the facilities of non-public universities between different subjects in terms of gender, majors, income, and career seniority. There is a difference in assessing the satisfaction of lecturers with the facilities of non-public universities between different subjects in terms of age. Based on this result, the study proposes some recommendations for nonpublic universities.

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INTRODUCTION

Facilities and equipment serving learning and scientific research activities contribute to determining the quality of training, teaching and research of lecturers and have the effect of supporting learning and scientific research activities of learners to achieve high performance.

With the system of non-public universities being opened in a variety of majors and disciplines, the opportunities for high school graduates to enter university are more open, no longer limited as before; the competition in training quality between universities is increasing, creating opportunities for learners to enjoy better and better education. Currently, non-public universities in Vietnam are determined to build, develop, and improve the quality of human resource training, increasingly affirming their position in the higher education system of Vietnam, actively contributing to the policy of socializing education of the Party and State. However, some non-public universities still show shortcomings such as inadequate school area, lack of facilities, lack of permanent staff and lecturers leading to having to invite guest lecturers, and some schools do not really focus on improving training quality but still focus on profit.

During the process of formation and development, non-public universities have been and are having solutions to meet the training needs, provide a high-quality labor force, contribute effectively to the cause of socio-economic development, and become a basic factor in the implementation of industrialization and modernization of the country. One of those solutions is that schools always pay attention to investing in facilities and teaching and learning equipment. This is demonstrated through

the system of offices, classrooms, libraries and functional rooms with appropriate equipment and learning resources, basically meeting the training and scientific research requirements of lecturers and learners.

To contribute to improving and enhancing the training quality of non-public universities, it is necessary to conduct research on the facilities of non-public universities in order to contribute to developing solutions to improve the training quality.

LITERATURE REVIEW

One of the first researchers to mention satisfaction is Cardozo (1965), who mentioned satisfaction in a study about efforts, expectations, and satisfaction of clients.

Satisfaction is a result of clients' purchases and uses of goods and services as clients compare what they give and take in their purchases; satisfaction is an attitude towards different characteristics of goods and services (Churchill et al., 1982). Satisfaction can also be defined as clients' evaluations of the gap between expectations before purchasing and the actual results after purchasing goods (Tse & Wilton, 1988). Client satisfaction is the suitability between expectations and perceived quality; if the outcomes meet expectations, clients are satisfied with the services; if the expectations are not met, clients are dissatisfied with the services (Ramaswamy, 1996). Client satisfaction includes feelings of fulfillment or disappointment, which are based on comparing the functions and usages of goods and services with clients' expectations (Kotler et al., 1997). Kotler et al. (2008) suggested that client satisfaction is the level of affection derived from comparing the outcome of the products and services with clients' expectations. Depending on the discrepancy between predicted and actual results, satisfaction levels can vary; satisfaction is a function of expectations, perception, and the gap between perception and expectation (Kotler et al., 2008).

Customer satisfaction is considered a vital key to the success of a business (Shemwell et al., 1998), as it allows the service to create more loyal customers (Hanzaee & Nasimi, 2012) and more usage frequency, which indicates that the better the service quality is, the higher the customer satisfaction will be (Dabholkar & Bagozzi, 2002).

METHODOLOGY

The research implemented a method combining secondary data, in-depth interviews, and lectures in economics and engineering at non-public universities in Hanoi surveys. 250 lecturers in non-public universities in Hanoi were selected for the survey using a convenient method. This sample size meets the minimum sample size of Hair et al. (2009) (see table 1).

The satisfaction of lecturers with the facilities of non-public universities includes SAT1-SAT5 (Nguyen et al., 2024).

SPSS 22 software was used to process the analyses in this study. Analytical tools, including the independent T-test and ANOVA analysis, were performed to measure, analyze, and compare the assessment results of the satisfaction of lecturers with the facilities of non-public universities among survey subjects.

Table 1. Respondents by genders, ages, major, income

	Frequency	Percent	Cumulative Percent
Genders			
Male	64	37.6	37.6
Female	106	62.4	100.0
Ages			
From 22 to 35 years old	69	40.6	40.6
From 35 to 45 years old	61	35.9	76.5
45 years old or older	40	23.5	100.0
Major			
Economic sector	100	58.8	58.8
Engineering	70	41.2	100.0

Income			
Smaller than 15 million VND	49	28.8	28.8
15 million VND or higher	121	71.2	100.0
Total	195	100.0	

Source: Prepared by the authors (2023) and SPSS software.

Information on the data collected is shown in Table 1. It shows that among the respondents, 62.4% were female and 37.6% were male. Among the respondents, 69 participants are 22 to 35 years old, accounting for 40.6%; 61 participants are from 35 to 45 years old, accounting for 35.9%; and the remaining respondents are 45 years old or older, accounting for 23.5%. Respondents teaching economics are 100, accounting for 58.8%; the rest teaching engineering, accounting for 41.2%. Finally, respondents with income smaller than 15 million VND are 49, accounting for 28.8%; the rest with income from 15 million VND or higher, accounting for 71.2%.

RESULTS

Independent T-test: different genders

A comparison of the results of the evaluation of the differences in the satisfaction of lecturers with the facilities of non-public universities with participants of different genders (male and female) can be seen in Table 2. According to the results shown in Table 2, sig Levene's test is 0.035, which is less than 0.05. The variance between males and females is different. Moreover, the sig value t-test is 0.125, which is more than 0.05, which means that there is no statistically significant difference in the satisfaction of lecturers with the facilities of non-public universities between these different genders (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 2. Differences in the satisfaction of lecturers with the facilities of non-public universities with participants of different genders - Independent Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SAT	Equal variances assumed	4.523	.035	-1.599	168	.112	-.18998	.11877	-.42446	.04450
	Equal variances not assumed			-1.544	118.481	.125	-.18998	.12305	-.43363	.05368

Source: Prepared by the authors (2023) and SPSS software.

Independent T-test: majors

A comparison of the results of the evaluation of the differences in the satisfaction of lecturers with the facilities of non-public universities with participants of different majors (economic sector ics and technical lecturer) can be seen in Table 3. According to the results shown in Table 3, sig Levene's test is 0.900, which is more than 0.05. The variance between economic sector and technical lecturer is not different. Moreover, the sig value t-test is 0.722, which is more than 0.05, which means that there is no statistically significant difference in the satisfaction of lecturers with the facilities of non-public universities between these different majors (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 3. Differences in the satisfaction of lecturers with the facilities of non-public universities with participants of different majors - Independent Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper

SAT	Equal variances assumed	.016	.900	.357	168	.722	.04200	.11777	-.19050	.27450
	Equal variances not assumed			.357	149.698	.721	.04200	.11753	-.19024	.27424

Source: Prepared by the authors (2023) and SPSS software.

Independent T-test: income

A comparison of the results of the evaluation of the differences in the satisfaction of lecturers with the facilities of non-public universities with participants of different income (less than 15 million dong and 15 million dong or higher) can be seen in Table 4. According to the results shown in Table 4, sig Levene's test is 0.598, which is more than 0.05. The variance between less than 15 million dong and 15 million dong or higher is not different. Moreover, the sig value t-test is 0.685, which is more than 0.05, which means that there is no statistically significant difference in the satisfaction of lecturers with the facilities of non-public universities between these different incomes (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 4. Differences in the satisfaction of lecturers with the facilities of non-public universities with participants of different income - Independent Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
SAT	Equal variances assumed	.279	.598	-.406	168	.685	-.05191	.12795	-.30451	.20068
	Equal variances not assumed			-.402	87.025	.689	-.05191	.12926	-.30883	.20500

Source: Prepared by the authors (2023) and SPSS software.

ANOVA - Ages

An ANOVA test was needed to make a comparison of the results of the evaluation of the differences in the satisfaction of lecturers with the facilities of non-public universities between the three subjects, including participants who are from 22 to 35 years old, participants who are from 35 to 45 years old, and participants who are 45 years old or older. Table 5 shows that the sig Levene statistic of 0.205 is larger than 0.05, which means that the hypothesis of homogeneity of variance among the variable value groups (different ages) has not been violated. Table 6 shows that sig. is 0.016, which is less than 0.05, which indicates that there is a statistically significant difference in the satisfaction of lecturers with the facilities of non-public universities between the mentioned three groups of ages (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 5. Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.602	2	167	.205

Source: Prepared by the authors (2023) and SPSS software.

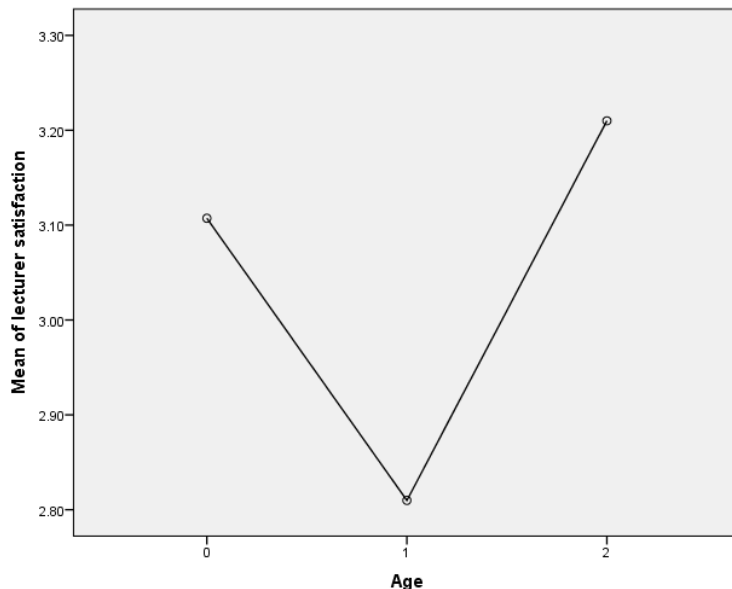
Table 6. ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4.660	2	2.330	4.259	.016
Within Groups	91.356	167	.547		
Total	96.016	169			

Source: Prepared by the authors (2023) and SPSS software.

The relationship between the satisfaction of lecturers with the facilities of non-public universities - Ages

Next, the line graph shows the relationship between the satisfaction of lecturers with the facilities of non-public universities and each respondent's age (Figure 1). Figure 1 shows that this line tends to go down when the respondents' ages range from 35 to 45 years old. But this line tends to slope up when the respondents' ages are 45 years old or older.



Source: Prepared by the authors (2023) and SPSS software.

Figure 1: The line graph shows the relationship between the satisfaction of lecturers with the facilities of non-public universities and each respondent's ages.

ANOVA - career seniority

An ANOVA test was needed to make a comparison of the results of the evaluation of the differences in the satisfaction of lecturers with the facilities of non-public universities between the three subjects, including participants who have career seniority smaller than 5 years, participants who have career seniority from 5 to 10 years, and participants who have career seniority 10 years or higher. Table 7 shows that the sig Levene statistic of 0.367 is larger than 0.05, which means that the hypothesis of homogeneity of variance among the variable value groups (different career seniority) has not been violated. Table 8 shows that sig. is 0.451, which is more than 0.05, which indicates that there is not a statistically significant difference in the satisfaction of lecturers with the facilities of non-public universities between the mentioned three groups of career seniority (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 7. Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
1.008	2	167	.367

Source: Prepared by the authors (2023) and SPSS software.

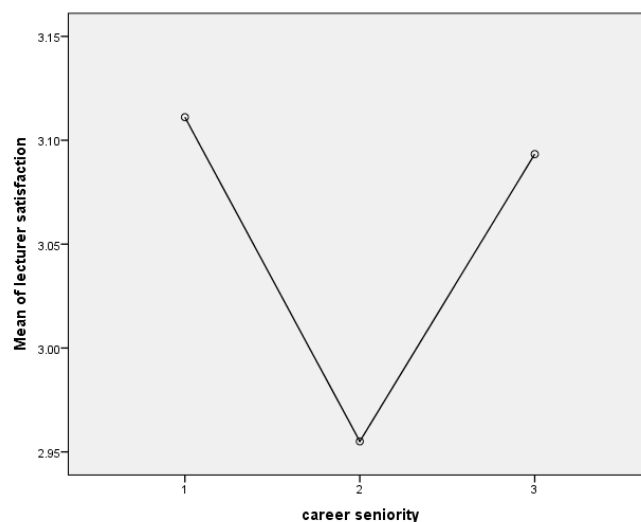
Table 8. ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	.912	2	.456	.801	.451
Within Groups	95.104	167	.569		
Total	96.016	169			

Source: Prepared by the authors (2023) and SPSS software.

The relationship between the satisfaction of lecturers with the facilities of non-public universities – career seniority

Next, the line graph shows the relationship between the satisfaction of lecturers with the facilities of non-public universities and each respondent's career seniority (Figure 2). Figure 2 shows that this line tends to go down when the respondents have career seniority from 5 to 10 years. But this line tends to slope up when the respondents have career seniority of 10 years or higher.



Source: Prepared by the authors (2023) and SPSS software.

Figure 2: The line graph shows the relationship between the satisfaction of lecturers with the facilities of non-public universities and each respondent's career seniority.

DISCUSSION AND IMPLICATIONS

For offices for staff, lecturers and permanent employees: Most non-public universities basically meet the working requirements of staff, lecturers and permanent employees. These offices are arranged centrally and separately between teaching units and management units, which will be convenient for staff in the school as well as students and units outside the school to come to work.

The classroom and auditorium systems of non-public universities are quite complete with different sizes and areas, meeting a variety of purposes such as meetings and training at the beginning of the course, combined learning for basic subjects, and separate learning for specialized subjects.

Offices, classrooms and functional rooms ensure the prescribed area/student ratio to support training activities serving the training program according to current regulations. Most offices are equipped with computers, printers, air conditioners, desks and chairs. Most classrooms and functional rooms are fully equipped with computers, projectors, televisions, sound systems, boards, desks and chairs, fans, etc.

Most non-public universities have adequate equipment for teaching, learning and scientific research of students; facilities such as lecture halls, desks and chairs meet the learning needs of students.

Most classroom systems and classroom equipment are used properly, at full capacity, 3 shifts/day.

Every year, based on the revenue and actual needs of non-public universities, most schools have plans to propose purchasing new and upgrading facilities and equipment. From 2018 to this month, some schools have continuously renovated, repaired facilities, and upgraded and replaced equipment, such as installing new electronic libraries; repairing and installing new classrooms, meeting rooms, conference rooms, and halls with appropriate equipment to meet training requirements. In addition, some schools have purchased and replaced hundreds of new computers, servers, printers, projectors, screens, photocopiers, televisions, tables, chairs, cabinets of all kinds, etc. In addition, some schools are continuing to invest in repairing, renovating, upgrading, purchasing and installing new equipment with quite large investment costs, such as repairing and replacing the entire roof, re-tiling the floor, and replacing all types of doors and bathroom equipment.

All investment funds for purchasing facilities are monitored, managed and publicly reported by the Accounting and Finance Department of non-public universities on the financial situation actually spent during the year, publicly announced before the year-end staff and civil servant meeting of the school, clearly stating the funding sources for strengthening facilities, purchasing and major repairs of assets.

However, some offices of specialized departments of non-public universities are not fully equipped with modern facilities for scientific research and teaching.

In order to effectively exploit and use facilities and equipment serving learners' learning activities; maintain, preserve and regularly supplement to form a complete system of facilities and equipment to achieve the goals in learners' activities, non-public universities should (i) Focus on investing, building and supplementing to form a system of facilities and equipment serving learners' and lecturers' learning and scientific research activities; (ii) Maintain and preserve facilities and equipment serving learners' and lecturers' learning and scientific research activities; (iii) Develop a plan to equip facilities and equipment; (iv) Raise awareness of managers, lecturers, academic advisors and learners about facilities and equipment; (v) Mobilize forces to participate in developing facilities and equipment.

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