

Factors Impacting Thai Students' Satisfaction With Higher Vocational Colleges In Chongqing, China

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Abstract

Purpose: This study examined the impact of five independent variables—teaching quality, facilities, university image, service quality, and organizational identification—on a dependent variable, student satisfaction, and explored whether there were significant differences among the variables. **Research design, data and methodology:** This study first assessed validity using the Item-Objective Congruence Index (IOC) through expert review and reliability using the Cronbach's alpha coefficient ($n=30$). Secondly, multiple linear regression analysis was used to examine the relationships between variables in questionnaire data from Thai students at three higher vocational colleges in Chongqing. Finally, a 16-week strategic planning (SP) project was implemented with 30 Thai students, and a paired-samples t-test was conducted to compare student satisfaction levels before and after the implementation of the strategic plan. **Results:** Multiple linear regression confirmed the significant impact of teaching quality, facilities, university image, service quality, and organizational identification on student satisfaction. Furthermore, paired-sample t-tests indicated significant differences in student satisfaction after the Strategic Plan (SP). **Conclusions:** The findings clearly demonstrate that all five hypotheses of this study are consistent with the research objectives. These findings are not only significant for vocational colleges in Chongqing but also provide practical recommendations for education administrators aiming to improve student satisfaction in similar institutions.

Keywords: Student Satisfaction, Teaching Quality, Facility, University Image, Service Quality

JEL Classification Code: D90, I23, L84, M10

1. Introduction

In recent years, with the rapid development of international vocational education, the satisfaction and quality of education for international students in host countries have received increasing attention. As a key participant in international vocational education cooperation, China's vocational education sector has attracted a large number of international students, with a particularly significant increase in Thai students. Thai students in China face dual challenges: widespread cross-cultural adaptation difficulties and the need to navigate differences between the Chinese and Thai vocational education systems. Therefore, understanding the factors influencing Thai students' satisfaction with Chinese higher vocational institutions is crucial for enhancing their educational experience and optimizing educational outcomes.

Student satisfaction is a complex concept influenced by multiple factors, including institutional reputation, teaching quality, campus facilities, and career prospects. Existing research indicates that teaching quality, campus environment, and student support services are key factors influencing student satisfaction (Gu & Lu, 2023). In higher vocational education, the alignment of course content with industry demands is considered a critical factor in shaping perceptions of educational value (Ou et al., 2024). However, for international students, additional challenges such as cultural adaptation, language barriers, and social integration further complicate the impact on satisfaction (Jiang et al., 2020). Thai students face unique challenges when studying abroad. A study on Chinese students' satisfaction at Thai universities found that institutional reputation, cultural compatibility, and student support services are critical to student satisfaction (Songsathaphorn et al., 2014). Similar

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principles can be applied to Thai students' experiences studying in China. Additionally, infrastructure, teacher-student relationships, and administrative efficiency play important roles in assessing overall satisfaction (Mastoi & Saengkrod, 2019).

This study aims to explore the key factors influencing Thai students' satisfaction at higher vocational colleges in Chongqing, China. By analyzing key variables such as teaching quality, service quality, and organizational identity, it provides practical recommendations for policymakers and educators.

2. Literature Review

2.1 Student Satisfaction

Student satisfaction is widely considered to be a short-term attitude towards the evaluation of educational experience. Elliott and Healy (2001) believe that the educational experience here includes learning related experiences, as well as personal life and social interactions in school. Sojkin et al. (2012) believe that satisfaction is affected by factors such as social environment, knowledge practicality, educational facilities, curriculum settings, and teachers' teaching and learning achievements. Weerasinghe and Fernando (2017) added the evaluation of services and facilities to the definition of satisfaction based on Elliott's research. Suryanto (2023) research believes that the three variables of teaching performance, academic management services, and learning facilities can have a significant impact on student satisfaction.

However, although many studies have explored student satisfaction in a broader educational context, there is limited research on the satisfaction of Thai students receiving vocational education in China. The unique challenges faced by these students include bilingual communication skills, cultural adaptability, and differences in the Chinese and Thai education systems, which may create additional stress or motivational factors. Therefore, it is crucial to understand the variables that affect student satisfaction.

2.2 Teaching Quality

Teaching quality is a multidimensional concept that includes teachers' professional knowledge, teaching skills, and the ability to effectively apply this knowledge in different classroom environments (Darling-Hammond, 2014). In higher education and vocational education environments, teaching quality not only determines students' learning experience, but also directly affects their employability and satisfaction (Greatbatch, 2016).

Douglas et al. (2006) pointed out that the practicality of teaching content, the professional level of teachers, classroom interaction and timely feedback mechanisms have a significant positive impact on student satisfaction. Especially in the context of international education, whether teachers can integrate multicultural resources, stimulate students' enthusiasm for participation and adopt flexible teaching strategies is particularly important for improving student experience (Lizzio et al., 2002).

However, some studies have pointed out that even if the teaching quality is high, student satisfaction may still be affected by other factors, such as student expectations, course difficulty and cultural differences (Telford & Masson, 2005; Wilkins & Stephens Balakrishnan, 2013). In international cooperative vocational education projects, language barriers, cultural barriers and differences in course expectations may weaken the impact of teaching quality on student satisfaction.

Despite these interfering factors, the vast majority of empirical studies show that teaching quality is still the key variable affecting student satisfaction (Douglas et al., 2006; Lizzio et al., 2002). Especially in cross-cultural and international vocational education, high-quality teaching can not only enhance students' learning experience, but also enhance students' sense of belonging and identity to the learning environment, thereby improving overall satisfaction. Through literature review, this paper proposes the following hypothesis:

H1: Teaching quality has a significant impact on student satisfaction.

2.3 Facility

School facilities are an important part of higher education institutions, including libraries, dormitories, sports fields, laboratories, teaching buildings, cultural squares, parking lots, etc. (Song, 2022). Perfect facilities not only carry teaching functions, but also directly affect students' learning efficiency, life experience and overall satisfaction. Good facilities can improve the practicality and modernization of the educational process, especially in technology-intensive majors (such as machinery, etc.) (Douglas et al., 2008).

It is worth noting that school facilities not only affect the teaching experience, but also play a potential role in students' social, emotional support and mental health. The modern teaching environment also conveys the school's positive image in educational investment and teaching modernization, further enhancing students' overall satisfaction and loyalty to the school (Cardona & Bravo, 2012).

However, some studies have pointed out that facilities alone are not enough to improve satisfaction comprehensively. Some studies have pointed out that if the facilities are advanced but underutilized, poorly maintained or lack technical support, it may also lead to negative evaluations by students (Oldfield & Baron, 2000). Therefore, the true manifestation of facility effectiveness depends not only on the quantity and quality of material resources, but also on the degree of fit with teaching practice and whether it can meet students' actual learning and living needs.

In summary, despite certain controversies, a large number of empirical studies have confirmed that school facilities, as an important dimension of university service quality, play an important role in the formation of student satisfaction. Especially in the context of international vocational education cooperation, the degree of modernization of infrastructure not only reflects the school's operating level, but also directly affects the adaptation and evaluation of international students. Therefore, this paper proposes the following hypothesis:

H2: Facility has significant impact on student satisfaction.

2.4 University Image

University image is a complex concept. It is the overall impression of an individual or group on a university, including cognitive and emotional evaluations derived from various characteristics, experiences and interactions with the university (Lafuente-Ruiz-de-Sabando et al., 2018). A good university image can not only enhance students' sense of identity with the school, but also improve their learning motivation and satisfaction (Nguyen & LeBlanc, 2001).

Research shows that university image affects student experience through multiple channels. Including school reputation, social identity, brand value and visual environment (Hemsley-Brown & Goonawardana, 2007; Maringe, 2006). However, some studies have pointed out that a good university image alone is not enough to maintain high satisfaction. If there is a gap between the actual teaching quality, teacher-student interaction or service experience and student expectations, the positive effect of the image will be weakened (Anderson & Gerbing, 1988). Especially in international vocational education projects, if the school's brand image is over-promoted and the actual experience is not good, it is easy to cause students to be disappointed and even affect their willingness to continue learning.

Based on the above literature, it can be seen that university image plays a significant role in the process of educational choice and experience. However, its mechanism of action depends on whether the school can maintain the consistency between image and experience through high-

level teaching and service. Therefore, this paper proposes the following hypothesis:

H3: University image has significant impact on student satisfaction.

2.5 Service Quality

Zeithaml et al. (2018) defined service quality as "an evaluation focus that reflects the customer's views on specific dimensions of the services provided". In higher education, it is regarded as a comprehensive performance of a series of support services provided by academic institutions, including administrative support, logistics support, and teacher-student interaction (Parasuraman et al., 1988).

Empirical studies have shown that in higher education, there is a significant positive correlation between service quality and student satisfaction. For example, Ali et al. (2016) found in a study of Malaysian public universities that all five dimensions of service quality had a significant positive impact on international student satisfaction. Darawong and Sandmaung (2019) also pointed out in Thailand's international education program that the responsiveness, empathy and facilities of service quality have a particularly significant impact on student satisfaction.

However, some studies also pointed out that the strength of the effects of service dimensions is not exactly the same: for example, Darawong and Sandmaung (2019) pointed out that students in Thailand believe that facilities and responsiveness are more important than other dimensions; while in Pakistani studies, assurance is the most important service dimension.

Based on the literature, a large number of empirical studies have verified that service quality is an important variable in predicting student satisfaction, especially in the context of internationalization and cross-cultural education. Therefore, this paper proposes the following hypothesis:

H4: Service quality has significant impact on student satisfaction.

2.6 Organizational Identification

Organizational identification refers to students' psychological identification with the school and their identification with its values, goals and culture (Wilkins et al., 2016). Whether students identify with the culture, mission and image of their school often directly affects their learning satisfaction and behavioral attitudes.

Wilkins et al. (2016) showed in a large empirical study covering British universities that when students cognitively recognize and accept the core values of their university, they will show higher learning engagement and stronger

satisfaction. Similarly, Abdelmaaboud et al. (2021) found in their study of Arab college students that when students establish an emotional identification and trust foundation for the school, they are more willing to participate in school activities, recommend the school, and show a stronger sense of belonging and higher satisfaction.

Although the mechanism of organizational identification affecting student satisfaction may vary under different cultural and institutional backgrounds, a number of empirical studies still show that organizational identification is a key psychological factor in enhancing satisfaction under a genuine voluntary framework. Therefore, this paper proposes the following hypothesis:

H5: Organizational identification has significant impact on student satisfaction.

3. Research Methods and Materials

3.1 Research Framework

The researchers integrated the three theoretical models of Song (2022), Chandra et al. (2019), and Al Hassani and Wilkins (2022) to systematically identify the key independent variables that affect student satisfaction. Each study started from different dimensions and provided complementary theoretical support for the conceptual framework shown in Figure 1.

Song (2022) focused on teaching quality (TQ) and facilities (FA), believing that the professional level and teaching ability of teachers directly determine the core evaluation of students on educational services. At the same time, it also emphasized that learning resources, campus environment and teaching support facilities have an important impact on students' learning experience and satisfaction. Chandra et al. (2019) focused on university image (UI) and service quality (SQ). The results showed that a good university image and high-quality services can significantly improve students' satisfaction and loyalty to the school. Al Hassani and Wilkins (2022)'s research highlights the core role of organizational identity (OI). When students identify with the values and culture of the school, they are more likely to establish a sense of belonging, thereby enhancing overall satisfaction. By integrating these models, this study constructed a multidimensional analytical framework covering teaching quality, facilities, university image, service quality and organizational identity, striving to gain a comprehensive understanding of the mechanisms that affect student satisfaction.

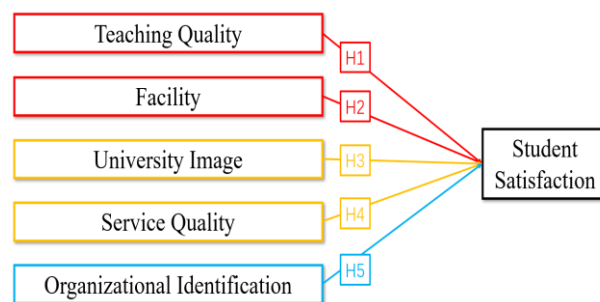


Figure 1: Conceptual Framework

3.2 Research Methodology

The research process was divided into four different phases, which aimed to systematically test the research objectives and hypotheses.

In the first phase, we surveyed the research subjects, namely Thai students, to collect data based on the constructed conceptual framework. The sample size of this study was 80, and the actual number of questionnaires returned was 95. According to the study of (Hair et al., 2014), the sample size ($n=80$) is the minimum sampling number, so the researchers considered that these 95 questionnaires could be used. This sample size ensured sufficient representation among the Thai student population while ensuring the feasibility of in-depth statistical analysis. All hypotheses were tested using multiple linear regression and their significance was assessed at a threshold of p value less than 0.05. Hypotheses that received statistical support were retained for further research.

In the second phase, we conducted a strategic plan survey on the same 95 participants, focusing on the variables in the supported hypotheses. This step helped to determine the baseline conditions and key areas for improvement before implementing the intervention.

In the third phase, we implemented a 16-week Strategic Plan (SP) intervention with a total of 30 participants, focusing on structured professional development activities. Weeks 1-4 included forming a team, setting goals, and conducting a SWOT analysis to assess challenges and opportunities; weeks 5-12 set goals and strategies and carried out implementation plans; the intervention ended in weeks 13-16 with interviews and summary discussions to assess progress and impact.

In the fourth phase, 30 SP participants completed a post-intervention survey. Paired sample t -tests were used to analyze pre- and post-intervention evaluation data to compare the difference between the current situation and the expected situation to measure the effectiveness of the intervention.

This study followed strict ethical guidelines, and all respondents voluntarily participated in this study with informed consent. The collected data maintained confidentiality by anonymous responses, and data security was maintained by limiting access to authorized researchers. Ethical approval was obtained before conducting the study.

3.3 Research Population, Sample Size, and Sampling Procedures

3.3.1 Research Population

The research population of this study was 240 Thai international students studying in vocational colleges in Chongqing, including Chongqing Engineering Vocational College, Chongqing Technology and Business Vocational College, and Chongqing University of Urban Management. The researchers received 95 questionnaires and verified and confirmed the validity of these 95 questionnaires. The number of returned questionnaires met the minimum sample size requirement ($n=80$) (Hair et al., 2014).

3.3.2 Sample Size

The researchers conducted a preliminary survey on 30 Thai students and verified the reliability of the survey through preliminary testing. After that, the researchers identified 95 Thai students as the research subjects and obtained 95 valid questionnaires. Subsequently, the researchers used multiple linear regression analysis to determine the relationship between the independent variables and the dependent variables. Finally, the researchers selected 30 volunteer students who participated in the SP intervention phase.

3.3.3 Sampling Procedures

The researchers adopted a multi-stage sampling method. The specific sampling procedures are as follows:

Stage1: Purposive Sampling

The researchers selected three vocational colleges in Chongqing as the research subjects because these three colleges enrolled the largest number of Thai students, with a total of 240 Thai students.

Stage2: Stratified Random Sampling

The researchers used the proportional allocation method to determine the sample size of students. Students were selected according to the scale of each school. A total of 95 valid questionnaires were collected. The researchers randomly selected 30 students for the survey and provided feedback on the results of the pilot and pilot tests.

Stage3: Sampling for Strategic Plan

The researchers randomly selected 30 students from the Thai students who participated in the questionnaire survey. These students participated in the strategic plan on a voluntary basis.

3.4 Research Instruments

3.4.1 Questionnaire Design

The researcher designed the questionnaire in the following three steps.

Step 1: Identify the questionnaire source from six publicly published articles (Kaushal et al., 2023; Mellado-Moreno et al., 2022; Mutum et al., 2023; Negricea et al., 2014; Nguyen et al., 2024; Wilkins et al., 2016).

Step 2: Adapt and present the questionnaire on the context of Thai international students studying in higher vocational colleges in China.

Step 3: Implement the strategic plan.

3.4.2 Questionnaire Components

The questionnaire project consists of the following three parts:

Part I: Screening questions, which exclude non-research populations.

Part II: Demographic questions: Basic information of the research population, including gender, age, grade, etc., is obtained through questions.

Part III: Pre-survey questions: A questionnaire survey was conducted on 95 Thai students to understand their Chinese proficiency.

3.4.3 IOC Results

Three independent experts were invited to implement the IOC test. Two of the three experts were university lecturers with more than 5 years of experience in education management, and the other was the director of the education management department. They completed the questionnaire evaluation independently. The scores were scored according to the standard: +1 = consistent; 0 = suspicious; -1 = inconsistent. In this study, all questionnaire items were greater than 0.67, so the researcher retained all questionnaire items.

3.4.4 Reliability and Validity

The researchers randomly selected 30 Thai international students to conduct a preliminary questionnaire survey and provide feedback. In the reliability test, the researchers distributed a 30-question student satisfaction questionnaire to the respondents. The scores of all dimensions in this study exceeded the standard of 0.67. The following table lists the test results and their corresponding reliability coefficients.

Table 1: Pilot Test Result

Variable	No. of Items	Cronbach's Alpha	Strength of Association
Teaching Quality (TQ)	6	0.908	Excellent
Facility (FA)	4	0.748	Acceptable
University Image (UI)	5	0.739	Acceptable
Service Quality (SQ)	5	0.901	Excellent

Variable	No. of Items	Cronbach's Alpha	Strength of Association
Organizational Identification (OI)	4	0.880	Good
Student Satisfaction (SS)	6	0.815	Good

4. Results and Discussion

4.1 Demographic Profile

The researchers presented the demographic profile of the entire study population (n = 95) as shown in Table 2.

Table 2: Demographic Profile

Entire Research Population (n=95)		Frequency	Percentage
Gender	Male	66	69.50
	Female	29	30.50
Age	20 years old and below	17	17.90
	20-30 years old	63	66.32
	30-40 years old	13	13.68
	40 years old and above	2	2.1
Academic year	2021	18	18.95
	2022	23	24.21
	2023	32	33.68
	2024	22	23.16

4.2 Multiple Linear Regression

The researchers conducted a multiple linear regression (MLR) on a total of 95 questionnaire results and tested whether each hypothesis was supported. There were five research hypotheses, five of which were related to student satisfaction (SS). Based on the variance inflation factor (VIF) analysis, it can be concluded that multicollinearity is not a problem because the VIF value is less than 5 (Hair et al., 2014). The R square (R²) in the multiple linear regression model with five independent variables can explain 80.4% of the variability in creativity.

Table 3: The Multiple Linear Regression of Five Independent Variables on Student Satisfaction

Variable	Standardize Coefficients Beta Value	t-value	p-value	VIF	R ²
TQ	-0.125	-2.47	0.016	1.17	0.804
FA	-0.104	-2.03	0.045	1.18	

Variable	Standardize Coefficients Beta Value	t-value	p-value	VIF	R ²
UI	0.116	2.14	0.035	1.34	
SQ	0.565	6.97	<.001	2.98	
OI	0.361	4.43	<.001	3.03	

Note: p-value <0.05*

The summary of the analysis in Table 3 shows that the five hypotheses (H1, H2, H3, H4, and H5) were supported.

Among the five variables, service quality ($\beta = 0.565$, $p < 0.001$, $VIF = 2.98$) showed the strongest predictive power, highlighting the key role of management efficiency, timeliness of administrative services, and responsiveness to the personalized needs of Thai students in improving student satisfaction (Darawong & Widayati, 2022). High-quality service experience helps students gain emotional support and a sense of identity during their learning process, thereby significantly enhancing their overall satisfaction.

Secondly, organizational identification ($\beta=0.361$, $p<0.001$, $VIF=3.03$) also showed a significant positive effect. This shows that once students emotionally identify with the school's mission and culture, their satisfaction will be significantly improved. Wilkins et al. (2016) also pointed out that the emotional bond between students and the school directly promotes learning engagement and satisfaction.

It is worth noting that although the impact of university image ($\beta = 0.116$, $p = 0.035$, $VIF = 1.34$) is relatively weak, its positive effect reveals the "trust premium" of brand reputation. Lamberti et al. (2023) pointed out that "schools with a good international reputation are more likely to gain student trust and induce higher satisfaction".

In contrast, teaching quality ($\beta=-0.125$, $p=0.016$, $VIF=1.17$) showed an unexpected negative correlation, which may reflect that Thai students are highly sensitive to language adaptation and teaching style in a cross-cultural teaching environment, and have a high gap in teaching standards. Gu and Lu (2023) emphasized that the direction of the influence of this variable will be significantly moderated by communication adaptation in the context of international vocational education.

Finally, facility conditions ($\beta=-0.104$, $p=0.045$, $VIF=1.18$) also showed a negative impact, indicating that even if the hardware configuration is complete, if it is poorly maintained, culturally insensitive, or inconvenient to use, it will cause student dissatisfaction. Napitupulu et al. (2018) pointed out in academic research that the key to infrastructure is the adaptability to meet learning needs and cultural background.

Based on the above analysis, the research hypotheses of this study were tested and supported by the results of

multiple linear regression (MLR), and other research hypotheses were proposed based on the results.

H6: There is a significant difference in Teaching Quality between pre- strategic plan and post- strategic plan stages.

H7: There is a significant difference in Facility between pre- strategic plan and post- strategic plan stages.

H8: There is a significant difference in University Image between pre- strategic plan and post- strategic plan stages.

H9: There is a significant difference in Service Quality between pre- strategic plan and post- strategic plan stages.

H10: There is a significant difference in Organizational Identification between pre- strategic plan and post- strategic plan stages.

H11: There is a significant difference in Student Satisfaction between pre- strategic plan and post- strategic plan stages.

4.3 Strategic Plan Process

The detailed design of the Strategic Plan phase covers the entire semester, a total of 16 weeks. The strategic plan includes the time and location, the people involved, the strategic plan goals and tools, and the specific activities carried out in this phase, as shown in Table 1.

Table 4: Strategic Plan

No.	Phase and Duration	Implementation keywords
1	Diagnosis Week 1-4	Define mission and vision
		Identify Stakeholders managers Participants
		SWOT diagnostic analytic tool
2	Implementing Week 5-12	Set goals and strategies
		Implement plans
3	Evaluating Week13-16	Plan Adjustment and Improvement
		Plan Results and Sustainability

4.4 Results Comparison between Current and Expected Situation

The researchers conducted paired sample t-test analysis on the five variables to understand whether there is a difference in student satisfaction between the current situation and the expected situation. The following tables show the paired sample t-test analysis of the five variables.

Table 5: Paired-sample T-test Results

Variable	Mean	SD	SE	p-value
Teaching Quality				
Pre-SP	3.81	0.654	0.119	<0.05
Post-SP	4.15	0.542	0.099	
Facility				
Pre-SP	3.99	0.519	0.094	<0.05

Variable	Mean	SD	SE	p-value
University Image				
Pre-SP	4.05	0.512	0.093	<0.05
Post-SP	4.30	0.655	0.119	
Service Quality				
Pre-SP	3.79	0.643	0.117	<0.05
Post-SP	4.20	0.685	0.125	
Organizational Identification				
Pre-SP	3.85	0.586	0.106	>0.05
Post-SP	3.98	0.929	0.169	
Student Satisfaction				
Pre-SP	3.89	0.453	0.082	<0.05
Post-SP	4.19	0.738	0.134	

Table 5 illustrates the results of the paired-sample t-test analysis of pre-SP and post-SP comparison as follows:

There was a significant difference between students' actual perception of teaching quality (M=4.15, SD=0.542) and their expectations (M=3.81, SD=0.654); $t(29) = -2.25$, $p = 0.037$, with a mean difference of 0.34. Therefore, H1 was supported by the data, and the mean difference in teaching quality between pre-SP and post-SP was significant.

There was also a significant difference in students' perception of campus facilities between their actual experience (M=4.24, SD=0.519) and their expectations (M=3.99, SD=0.519); $t(29) = -2.35$, $p = 0.027$, with a mean difference of 0.25. Therefore, H2 was supported by the data, and the actual performance of the facilities was significantly better than the students' expectations.

Students' perception of the school's image also showed a statistically significant difference between the pre- and post-SP stages (Pre-SP: M=4.05, SD=0.512; Post-SP: M=4.30, SD=0.655); $t(29) = -2.16$, $p = 0.041$, with a mean difference of 0.25. Therefore, H3 was supported, indicating that the overall image of higher vocational colleges in the minds of students has significantly improved.

The actual experience of service quality (M=4.20, SD=0.685) was significantly higher than students' expectations (M=3.79, SD=0.643); $t(29) = -2.55$, $p = 0.020$, with a mean difference of 0.41. Therefore, H4 was supported, and students had a significantly positive experience with campus services.

In terms of organizational identification, although students' actual perception (M=3.98, SD=0.929) was slightly higher than their expectations (M=3.85, SD=0.586), the difference did not reach statistical significance; $t(29) = -0.61$, $p = 0.544$, with a mean difference of 0.13. Therefore, H5 was not supported, indicating that students'

organizational identification did not change much in the short term and may still be affected by language and cultural adaptation factors.

The overall satisfaction of students showed a significant difference from their expectations ($M=3.89$, $SD=0.453$) to their actual experience ($M=4.19$, $SD=0.738$); $t(29) = -2.15$, $p = 0.041$, with a mean difference of 0.30. Therefore, H_6 was supported, reflecting that students felt a positive improvement in their comprehensive learning experience.

According to the results of the paired sample t-test, the average differences of four of the five variables before and after the implementation of the strategic plan reached a significant level, and student satisfaction increased significantly both before and after the implementation of the strategic plan.

5. Conclusions and Recommendation

5.1 Conclusions

Student satisfaction in international vocational education has been reconceptualized from a narrow focus on academic performance to a more holistic construct that incorporates service responsiveness, institutional reputation, environmental support, and emotional belonging (Elliott & Shin, 2002; Wilkins & Stephens Balakrishnan, 2013). While early research highlighted factors such as curriculum design and instructor competence, recent studies underscore the importance of supportive administrative structures and cultural embedding (Guo et al., 2024; Wilkins et al., 2016). This study advances the literature by empirically examining how five dimensions—Teaching Quality, Facility, University Image, Service Quality, and Organizational Identification—collectively influence Thai students' satisfaction in Chinese vocational colleges.

The study results confirmed that service quality had the most significant impact on overall student satisfaction, confirming existing literature highlighting the importance of administrative responsiveness, faculty and staff availability, and support systems in enhancing the international student experience. Previous research (Ali et al., 2016; Darawong & Sandmaung, 2019) has reported that service quality dimensions—particularly responsiveness and reliability—are effective predictors of international learner satisfaction. Students who perceive institutional services as timely, empathetic, and efficient tend to report higher emotional and academic satisfaction. In vocational colleges, where international students need to adapt to unfamiliar environments, service quality reflects not only the institution's operational capabilities but also its commitment

to student care, fostering trust, a sense of belonging, and engagement.

Organizational identification is another important factor influencing satisfaction, but interestingly, the experimental results showed no statistically significant difference in students' sense of institutional belonging before and after the program intervention. This suggests that while identification with the university plays an important role, it may be less susceptible to short-term changes. This also suggests that international students' identity formation has deeper and more culturally rooted characteristics, highlighting the need for ongoing efforts to promote institutional cultures of inclusiveness and mutual respect.

In addition, university image was found to have a significant positive impact on student satisfaction, aligning with previous findings that associate institutional reputation with student pride and confidence in their academic choices (Soutar & Turner, 2002). Thai students who viewed their college as reputable, internationally oriented, and modern were more likely to develop a stronger emotional connection with their studies and environment. Image, in this context, acts not only as a branding mechanism but also as a psychological anchor that shapes how students perceive the value of their educational experience.

Contrary to conventional expectations, while teaching quality and facilities were statistically significant, they exhibited negative regression coefficients in the model. Multicollinearity was ruled out using the variance inflation factor test ($VIF < 3.03$ for all values), confirming the statistical reliability of this finding. The study suggests that when service quality and organizational recognition are excellent, students unconsciously raise their basic expectations for teaching quality and facilities, forming a dynamic evaluation calibration mechanism that puts otherwise adequate teaching quality and facilities at a relative disadvantage in comparisons.

Improving student satisfaction requires a collaborative effort among institutions, policymakers, and society. Strategies such as improving teaching quality, enhancing facilities, fostering a positive university image, and providing quality services can significantly increase student satisfaction. This study extends existing research by conducting a contextual analysis of Thai international student satisfaction at vocational colleges in China and provides empirically based recommendations for improving student satisfaction.

5.2 Recommendations

Based on the findings of this study, several strategic recommendations can be made to improve student satisfaction among Thai students at Chongqing vocational colleges. Because satisfaction is a multidimensional concept,

improvements must be made to all identified variables, including teaching quality, campus facilities, university image, service quality, and organizational identification.

Teaching quality has become a key determinant of student satisfaction. Institutions should invest in continuing professional development for faculty, particularly in cross-cultural pedagogy and bilingual education. As Khoo and Huo (2022) found, culturally responsive pedagogy significantly increases international students' academic engagement. Furthermore, hiring faculty with international teaching experience and providing instructional support can bridge the expectation gap for Thai students unfamiliar with the Chinese vocational education model.

In terms of campus facilities, institutions must go beyond providing physical infrastructure and prioritize student-centered features. This includes ensuring internet connectivity, student activity centre, and culturally sensitive dining halls that adhere to Southeast Asian culinary standards. Research by Douglas et al. (2006) shows that tangible support plays a significant role in shaping students' perceived value of educational services.

Improving a university's image among international students requires a coordinated branding strategy. Institutions should implement strategic marketing through partnerships with Thai schools, digital platforms, and alumni networks. As Soutar and Turner (2002) noted, brand reputation and peer recommendations significantly influence international students' choice of institution.

Service quality, including academic advising, visa processing, dormitory management, and medical services, must be standardized and culturally integrated. Given the low baseline satisfaction in pre-SP data, institutions should consider establishing Thai- or bilingual help desks and international student support offices with dedicated liaison officers. Parasuraman et al. (1988) suggests that improving service quality will directly enhance students' sense of security and reduce adjustment difficulties.

Service quality, including academic advising, visa processing, dormitory management, and medical services, must be standardized and culturally integrated. Given the low baseline satisfaction levels in pre-SP data, institutions should consider establishing Thai- or bilingual help desks and international student support offices with dedicated liaison officers. Improving service quality will directly enhance students' sense of security and reduce adjustment difficulties (Parasuraman et al., 1988).

The non-significant finding regarding organizational identification reveals a gap in the emotional connection between students and institutions. Institutions must develop programs to foster a sense of belonging, such as cross-cultural exchange activities and peer mentoring between Chinese and Thai students. Greater understanding of institutional values, increased leadership engagement, and

recognition of Thai students' contributions can foster long-term student loyalty and advocacy (Mael & Ashforth, 1992).

Ultimately, implementing these recommendations can address both practical and emotional needs of students and improve student satisfaction in Thailand. Investing in teacher training, facilities development, international branding, personalized service, and cultural inclusiveness will not only improve student satisfaction but also enhance the long-term reputation and international appeal of Chongqing vocational colleges.

5.3 Limitation and Further Study

While this study provides meaningful insights into the factors influencing Thai students' satisfaction with vocational education in Chongqing, it also has several limitations and suggests directions for future research.

First, this study relied primarily on quantitative survey data. While statistically valid, these data may not fully capture the complexity of students' lived experiences. Concepts such as organizational identification and service quality are highly context-dependent and may require qualitative methods, such as in-depth interviews, to fully understand. Second, the sample was limited to Thai students attending selected vocational colleges in Chongqing, which limits the generalizability of the study. Chongqing is a prime example of educational development in inland China under the Belt and Road Initiative, but other regions such as Guangdong, Yunnan, or Zhejiang may offer different student experiences due to factors such as infrastructure, policy support, or distance from Southeast Asia. Future research should adopt multi-site sampling across provinces and institution types to compare and validate the findings. Third, this study focused on five specific variables—teaching quality, facilities, university image, service quality, and organizational identification—while other potentially influencing factors were not examined. For example, social integration, career aspirations, language barriers, and personal motivations may also influence satisfaction. Examining more influencing factors would provide a more comprehensive understanding of international students' experiences in vocational education settings. Furthermore, this study's pre- and post-SP assessments were relatively brief. Satisfaction may change as students' progress through the program or face actual employment after graduation. A longitudinal study design tracking students throughout their educational cycle and post-graduation outcomes would yield more dynamic results.

Ultimately, this study not only provides valuable insights into the factors influencing student satisfaction in Thailand but also opens up important avenues for future research. Expanding research designs, diversifying research subjects,

and incorporating mixed methods will deepen our understanding and help Chinese vocational colleges create truly inclusive and effective educational environments.

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