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Examining Key Drivers of International Student Satisfaction in a Chinese University

Wang Haoli*

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Abstract

Purpose: The study explores the impact of five independent variables (Access, Academic Services, Administrative Services, Quality of Instructor, and Perceived Usefulness) on the dependent variable (International Student Satisfaction). Additionally, it seeks to determine significant differences between these variables before and after implementing a Strategic Plan (SP). **Research design, data, and methodology:** The study utilized the Index of Item-Objective Congruence (IOC) for validity and Cronbach's Alpha for reliability through a pilot test with 30 students. Data was collected from 80 valid responses from international students at a University in China, which were analyzed using multiple linear regression to verify the significant relationships between variables. Following this, a Strategic Plan was implemented, and the quantitative results from post-SP and pre-SP phases were compared using a paired-sample t-test. **Results:** The multiple linear regression analysis revealed that access, academic services, administrative services, and instructor quality significantly impacted international student satisfaction, while perceived usefulness did not significantly impact it. Additionally, the results from the paired-sample t-test showed a significant difference in international student satisfaction between the post-SP and pre-SP stages. **Conclusions:** This study aims to enhance international student satisfaction by improving key educational and administrative services at a university and advancing higher education for international students in China.

Keywords: Student Satisfaction, Higher Education; Service Quality, Academic Services, Strategic Plan Implementation

JEL Classification Code: I23, J28, L2

1. Introduction

This study examines the internationalization of higher education in China, focusing on the quality of educational services provided to international students and how these services impact their satisfaction.

The internationalization of higher education, defined as “the process of integrating an international, intercultural, or global dimension into the purpose, function, or delivery of higher education” (Knight, 2004), has become a critical factor for universities worldwide (Iljins et al., 2014). In response, China’s “Double First-Class” Construction Plan (2015) aims to enhance the international teaching environment and attract top-tier foreign students and educators, thus promoting the international development of

the country’s higher education system (Ghasemipoor et al., 2011).

As defined by UNESCO, international students are foreign nationals enrolled in academic or non-academic education in a country other than their own (Zhang, 2018). China’s policies have progressively evolved to improve the education and services offered to these students, aiming to create a supportive environment that attracts and retains high-quality international students.

The quality of administrative services, including teaching conditions and tutor quality, is pivotal in determining international students’ satisfaction and loyalty (Ali et al., 2016). Universities that provide superior administrative support are more likely to retain international students, which is crucial in enhancing the institution’s reputation

*Wang Haoli, Ph.D. Candidate in Educational Administration and Leadership, Graduate School of Human Sciences, Assumption University of Thailand. Email: 512917450@qq.com

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(Wan, 2016).

The quality of teaching, including the rationality of the curriculum and teacher qualifications, significantly influences international students' academic performance and satisfaction (Liao, 2020). During the COVID-19 pandemic, the perceived usefulness of online teaching became a critical factor in maintaining teaching quality (Telford & Masson, 2005).

Higher education satisfaction encompasses multiple aspects, including teaching, administration, and facilities (Abdullah, 2006). As higher education increasingly operates in a competitive, market-driven environment, universities must focus on student satisfaction to ensure long-term success (Garbarino & Johnson, 1999).

Research on student satisfaction in higher education, particularly among international students, highlights the importance of language, cultural environment, and personalized educational services (Liu, 2018). Addressing these factors is essential for improving the educational experience and satisfaction of international students in China.

2. Literature Review

2.1 Access

Access refers to the degree to which university services are easily accessible to students in terms of time and location (Arambewela et al., 2005). This includes factors such as the availability of library hours, ease of accessing academic buildings, and the use of electronic resources like computer labs (Petruzzellis et al., 2006). Access also reflects the overall convenience provided to students, which impacts their academic experience and satisfaction with the institution (Telford & Masson, 2005).

Research shows that easy and convenient access to university resources significantly influences student satisfaction. Studies by Abdullah (2006) and Telford and Masson (2005) highlight that access directly affects students' evaluation of their educational experience. University leadership should enhance accessibility and related services to improve student content (Alves & Raposo, 2010). Providing convenient access to resources like campus visits can significantly boost students' confidence in their choice of university and overall satisfaction (Mulyono et al., 2020).

H1: Access has a significant impact on student satisfaction.

2.2 Academic Services

As defined by Telford and Masson (2005), academic service is the provision of instructional methods, learning materials, and the contact between lecturers and students by a university. According to Sesanga and Garrett (2005),

academics have a crucial role in determining the quality of service in university education. It is strategically imperative for customers in tertiary education to understand the students' perspectives on service quality. Satisfied students play a crucial role in promoting their schools effectively by disseminating favorable comments, which helps attract potential customers (Arambewela et al., 2005). The caliber of academic services is determined through an assessment procedure and serves as a measure of how effectively the given services satisfy the expected value of customers (La Rotta et al., 2020).

The factors influencing students' increased satisfaction can be categorized into institutional and personal considerations. Institutional elements encompass various aspects, such as academic quality services, as mentioned by Appleton-Knapp and Krentler (2006). Academic quality is also an important factor affecting satisfaction. The academic components of teaching methods, project issues, and course quality show a significant positive link with student satisfaction (Ngamkamollert & Ruangkanjanases, 2015). Deshields et al. (2005) pointed out that factors affecting student satisfaction with institutions of higher learning include academic services, teacher performance, classroom environment, learning facilities, and institutional reputation. Multiple studies (Arambewela et al., 2006) have shown the significant impact of academic service on student satisfaction. Academic services are key reasons for a university's good image and satisfaction (Gamage et al., 2008). Factors affecting student satisfaction can be divided into academic service factors and related to other services (Mavondo et al., 2000). Tertiary educational institutions offered her. One perspective posits that the two groups of characteristics determining desirability are interconnected and warrant examination in tandem (Scaife et al., 2019).

H2: Academic services have a significant impact on student satisfaction.

2.3 Administrative Services

Administrative services refer to the non-academic support provided to students, which includes the efficiency, responsiveness, and attitude of administrative staff towards students (Abdullah, 2006; Price et al., 2003). The quality of these services is critical, as it encompasses timely resolution of student issues, effective communication, and positive interaction, all of which contribute to the overall student experience (Gamage et al., 2008; Teerapat & Athapol, 2015). The treatment of students from diverse backgrounds also plays a significant role in determining the effectiveness of administrative services (Petruzzellis et al., 2006).

Effective administrative services are vital for enhancing student satisfaction. Studies suggest that fostering positive interactions between students and administrators is key to

improving the overall quality of educational services (Butt & Rehman, 2010). The quality of administrative support has been shown to directly influence international student satisfaction, making it an essential component of the broader educational experience (Ngamkamollert & Ruangkanjanases, 2015). Additionally, the competency and responsiveness of administrative personnel are highlighted as crucial factors in ensuring high levels of student satisfaction (Scaife et al., 2019).

H3: Administrative services have a significant impact on student satisfaction.

2.4 Quality of Instructor

The quality of an instructor is a significant factor influencing student satisfaction. It is defined by the instructor's ability to understand educational requirements, apply effective pedagogical methods, and address students' learning needs (Luekens et al., 2004). Key aspects of instructor quality include effective communication, enthusiasm for teaching, and genuine concern for student learning (Ram et al., 2021). High-quality instructors actively engage with students and demonstrate responsiveness to their educational needs (Sheridan & Kelly, 2010).

Research indicates that instructors who effectively use educational technology and innovative teaching methods positively impact student satisfaction (Raymond et al., 2018). The overall quality of instructors, including their teaching competence and student interaction, plays a critical role in student retention and satisfaction (Arambewela & Hall, 2009). Studies have shown that the quality of interaction between faculty and students is a key determinant of satisfaction, with effective feedback and timely problem-solving being particularly important (Eskey, 2010). Additionally, proactive and engaging teaching styles are crucial for fostering active student participation and satisfaction (Lear et al., 2010).

H4: Quality of instructor has a significant impact on student satisfaction.

2.5 Perceived Usefulness

Perceived usefulness is a key concept that influences technology use decisions, learning outcomes, and overall satisfaction in educational settings. It refers to the belief that using a particular system or service will enhance performance and lead to better results (Davis et al., 1989). In learning, perceived usefulness is crucial for achieving effective learning outcomes and is often considered a significant factor in student satisfaction (Arbaugh, 2000).

Perceived usefulness is critical to student satisfaction and

motivation, particularly in online learning environments. Studies have shown that when students perceive educational tools or materials as useful, their engagement and satisfaction increase (Bhattacharjee et al., 2008; Limayem & Cheung, 2008). This perception is also linked to students' self-efficacy and the effectiveness of their learning process, which in turn impacts their overall contentment with the educational experience (Ruaud et al., 2021).

H5: Perceived usefulness has a significant impact on student satisfaction.

2.6 Students' Satisfaction

Students' satisfaction is influenced by various factors, including teaching quality, course content, peer interactions, and institutional support. Research indicates that positive student satisfaction correlates with enhanced academic performance and retention rates (Oliver & Hand, 2008). Additionally, frameworks like the SERVQUAL model are often used to assess service quality in education, highlighting dimensions such as reliability and responsiveness (Parasuraman et al., 1988). Ultimately, fostering a supportive learning environment is crucial for improving students' satisfaction levels (Astin, 1993).

3. Research Methods and Materials

3.1 Research Framework

The researcher integrated four theoretical frameworks to develop the conceptual framework for this study. First, Ali et al. (2016) Service Excellence and Student Contentment Framework examines how various elements of higher education service quality influence student satisfaction, providing a basis for analyzing access, academic services, and administrative services within the university context. Second, Nicoletti (2015) University Environment and Student Satisfaction Framework identifies key factors in the university environment that impact student satisfaction, emphasizing the importance of academic and non-academic services. Third, Ram et al. (2021) Teacher Quality and Student Satisfaction Framework highlights the crucial role of instructor quality in determining student satisfaction, particularly the positive impact of passionate and effective educators on student learning experiences. Finally, Perceived Usefulness and Learning Outcomes Framework suggests that perceived usefulness significantly influences student satisfaction, attitude, and learning outcomes, especially in online and technology-enhanced learning environments. Additionally, the study incorporates the SERVQUAL

Service Quality Evaluation Method, which measures the gap between student expectations and perceptions of service quality, and the Achievement Goal Theory (AGT), which provides insights into how students' goals and motivations, influenced by instructor quality, affect their learning outcomes and satisfaction. These theoretical frameworks were integrated into a conceptual framework that illustrates the relationships between access, academic services, administrative services, quality of instructor, perceived usefulness, and international student satisfaction, serving as a reference for enhancing student satisfaction and supporting the globalization efforts of Chinese universities.

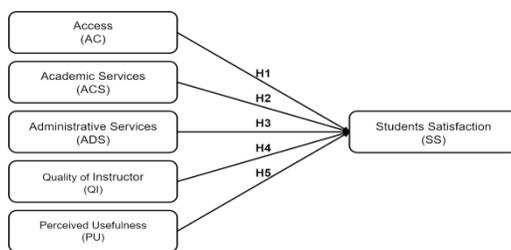


Figure 1: Conceptual Framework

- H1:** Access has a significant impact on student satisfaction.
H2: Academic services have a significant impact on student satisfaction.
H3: Administrative services have a significant impact on student satisfaction.
H4: Quality of instructor has a significant impact on student satisfaction.
H5: Perceived usefulness has a significant impact on student satisfaction.

3.2 Research Methodology

This study employs a mixed-methods action research approach to explore the factors influencing international students' satisfaction at a University, China. The research integrates qualitative and quantitative methods to ensure a comprehensive analysis and reliable results. The mixed-methods approach allows for a deeper understanding by combining qualitative insights with quantitative data, enhancing the study's scientific rigor and transferability (Johnson et al., 2007).

3.3 Research Population, Sample Size, and Sampling Procedures

3.3.1 Research Population

The research population for this study comprises international students at a university who have achieved an HSK level of 3 or higher and have been residing and studying

in China for at least one year. This population was selected to ensure that respondents have substantial experience with the Chinese educational environment. The sample includes students from various academic years and majors, specifically sophomores, juniors, seniors, and fifth-year students. Eighty international students were chosen for this survey's research population, representing a diverse cross-section of the larger student body at a university.

3.3.2 Sample size

According to Hair et al. (2007), a sample size between 30 and 500 is generally adequate for most studies. This research conducted a preliminary diagnosis with a sample size of 30 to test reliability, followed by a sample size of 80 for multiple linear regression analysis. During the SP phase, 30 students were selected to participate in the intervention. These 30 students will also be involved in the post-SP phase to conduct follow-up research consistent with the pre-SP phase.

3.3.3 Sampling Procedures

In the sampling procedure of this study, considerations such as time, cost, and accuracy were considered when selecting the sampling techniques (Clark-Carter, 2010). The study utilized a non-probability sampling method, selecting sample elements based on the researcher's experience, expert judgment, and convenience (Hair et al., 2003). Initially, 30 students were tested for reliability. After validating the reliability and validity, 80 international students at a University were purposefully selected based on their duration of study in China and their Chinese proficiency level. These students received questionnaires via the Questionnaire Star software, and their responses were used for multiple linear regression analysis.

In the SP phase, 30 students with an HSK level of 3 or above who have studied in China for at least two years were selected as the experimental group through purposeful sampling. During the post-SP stage, these students were asked to complete the questionnaire again, and five students were randomly selected from the experimental group for interviews to evaluate the results of the SP intervention. The multiple linear regression analysis results informed the final design and implementation of the intervention model.

3.4 Research Instruments

3.4.1 Design of Questionnaire

The researcher designed the survey questionnaire by following three key steps:

Step 1: Identifying questionnaire sources from established literature, specifically from openly published

articles relevant to international student satisfaction (e.g., Davis et al., 1989; Larcker & Lessig, 1980).

Step 2: Adjusting and tailoring the survey questionnaire to fit the context of international students studying in Chinese universities, ensuring relevance and clarity.

Step 3: Implementing the Index of Item-Objective Congruence (IOC) to validate the questionnaire items and ensure they effectively measure the intended variables.

3.4.2 Components of Questionnaire

The survey questionnaire was composed of three main parts:

Part 1: Screening Questions: These questions were designed to filter out respondents who do not meet the research population criteria, such as students with less than one year of study in China or an HSK level below 3.

Part 2: Basic Information Questions: This section gathered demographic information from the respondents, including gender, HSK level, and duration of study in China.

Part 3: Main Survey Questions: This section included questions aimed at assessing the current levels of independent and dependent variables, such as Access, Academic Services, Administrative Services, Quality of Instructor, Perceived Usefulness, and Student Satisfaction, from 80 international students at a University.

3.4.3 IOC Results

The researcher conducted an Index of Item-Objective Congruence (IOC) to validate the questionnaire items, which is a crucial step in ensuring the validity of the survey instrument. Five independent experts were invited to participate in this process, including one Thai professor and four Chinese professors. Each expert evaluated the questionnaire items by marking +1 for Congruent, 0 for Questionable, and -1 for Incongruent. In this study, all questionnaire items achieved an IOC score greater than 0.67, indicating strong content validity. As a result, the researcher retained all the questionnaire items for the final survey.

3.4.4 Pilot survey and Pilot test results

To ensure the questionnaire's results are consistent, stable, and reliable, a pilot test was conducted using Cronbach's Alpha (CA) to measure the instrument's reliability. Introduced by Cronbach (1951), Cronbach's Alpha is widely regarded as an appropriate method for assessing internal consistency, especially for items measured on Likert scales. The reliability coefficient estimates how well the items within a variable correlate.

The interpretation of reliability coefficients is generally agreed upon by scholars: a value above 0.9 indicates

excellent reliability, above 0.8 is considered good, and above 0.7 suggests the scale needs some revision but still holds value. If the value falls below 0.7, the questionnaire is deemed to have poor reliability and may not be meaningful (Sekaran, 1992). In this study, the CA was used to test the reliability of the questionnaire, and acceptable values were those with an alpha coefficient of 0.60 or greater (Hair et al., 2017).

Table 1: Pilot Test Result

Variables	No. of Items	Sources	Cronbach's Alpha	Strength of Association
Access	6	Arambewela et al. (2006)	0.834	Good
Academic Services	5	Telford and Masson (2005)	0.907	Excellent
Administrative	5	Abdullah (2006)	0.882	Good
Quality of Instructor	7	Luekens et al. (2004)	0.913	Excellent
Perceived Usefulness	5	Lin and Lin (2019)	0.867	Good
Student Satisfaction	5	Ali et al. (2016)	0.854	Good

4. Results and Discussion

4.1 Results

4.1.1 Demographic Profile

The research population consists of international students from a university. They come from at least five countries in the world, have an HSK level of level 3 or above, and have studied and lived in China for more than one year. These research populations come from various majors, including sophomores, juniors, seniors, and fifth-year students. All basic information can be summarized in the table below (n=80), as shown in Table 2.

Table 2: Demographic Profile

Research Population (n=80)		Frequency	Percent
Gender	Male	26	32.5%
	Female	54	67.5%
HSK level	HSK3 or below	4	5%
	HSK4	33	41.25%
	HSK5	24	30%
	HSK6 or higher	19	23.75%
Grade	sophomore	15	18.8%
	junior	36	45.0%
	senior	22	27.5%
	Grade 5	7	8.7%
Total		80	100%

Research Population (n=80)		Frequency	Percent
Strategic plan participants (n=30)		Frequency	Percent
Gender	Male	15	50%
	Female	15	50%
HSK level	HSK3 or below	6	20%
	HSK4	12	40%
	HSK5	8	26.7%
	HSK6 or higher	4	13.3%
Grade	sophomore	3	10%
	junior	13	43.33%
	senior	9	30%
	Grade 5	5	16.67%
Total		30	100%

4.1.2 Results of multiple linear regression

The multiple linear regression (MLR) analysis was conducted to test the impact of independent variables on the dependent variable, student satisfaction, in this study. The independent variables included Access (AC), Academic Services (ACS), Administrative Services (ADS), Quality of Instructor (QI), and Perceived Usefulness (PU).

Table 3 shows the relationship between independent variables and SS at the diagnosis stages. R square value is .857, which illustrates that independent variables account for 85.7% of dependent variables. In addition, the significant value ($P < 0.05$) shows that the ACS and QI significantly impact the SS, and TC has the more influential ability with 66% on SS. However, the P-values of AC, ADS, and PU were 0.306, 0.219, and 0.366, respectively, indicating that AC, ADS, and PU had no significant impact on SS.

The analysis revealed the following results:

Table 3: The multiple linear regression of five independent variables on student's satisfaction

Variables	Coefficients	t - value	P- value	R	R2
Access	0.046	1.030	0.306	0.926	0.857
Academic service	0.662	15.000**	0.000		
Administrative Service	0.056	1.239	0.219		
Quality of Instructor	0.617	13.938**	0.000		
Perceived usefulness	0.041	0.909	0.366		
Dependent variable: Student satisfaction					

Note: p-value < 0.001 **

Access (AC): The regression results indicated that Access does not significantly influence student satisfaction ($\beta = .046$, $p = .306$). This suggests that the ease of accessing university facilities and services does not significantly contribute to international students' satisfaction with their overall university experience.

Academic Services (ACS): Academic Services were found to have a significant positive impact on student

satisfaction ($\beta = .662$, $p < .001$). This highlights that the quality and availability of academic support and services play a crucial role in shaping the satisfaction levels of international students.

Administrative Services (ADS): Similar to Access, Administrative Services also showed no significant impact on student satisfaction ($\beta = .056$, $p = .219$). This indicates that the efficiency and support provided by non-academic staff are not significant factors in determining student satisfaction.

Quality of Instructor (QI): The Quality of Instructor was another variable with a significant positive effect on student satisfaction ($\beta = .617$, $p < .001$). This result emphasizes the importance of competent and supportive instructors in enhancing the educational experience of international students.

Perceived Usefulness (PU): Perceived Usefulness did not show a significant impact on student satisfaction ($\beta = .041$, $p = .366$), suggesting that while students may find their education beneficial, this perception alone does not strongly influence their overall satisfaction with their university experience.

The overall R-squared value for the model was 0.857, indicating that the combined influence of the independent variables can explain 85.7% of the variance in student satisfaction. Among these, Academic Services and Quality of Instructor were the most significant predictors of student satisfaction, while Access, Administrative Services, and Perceived Usefulness did not show a significant impact. Therefore, according to the results, H2 and H4 are supported, while H1, H3 and H5 are not:

H6: There is a significant mean difference in Academic Services between pre- and post-strategic plans.

H7: There is a significant mean difference in Quality of Instructor between pre- and post-strategic plans.

H8: There is a significant mean difference in Students Satisfaction between pre- and post-strategic plans.

4.2 SP Intervention Stage

The 14-week Strategic Plan (SP) is based on quantitative and qualitative data collected in the Pre-SP phase to achieve the purpose of this study, which is to enhance international students' satisfaction at a university by addressing key influencing factors such as Access, Academic Services, Administrative Services, Quality of Instructor, and Perceived Usefulness. The researcher illustrates the SP chronologically, as shown in Figure 2.

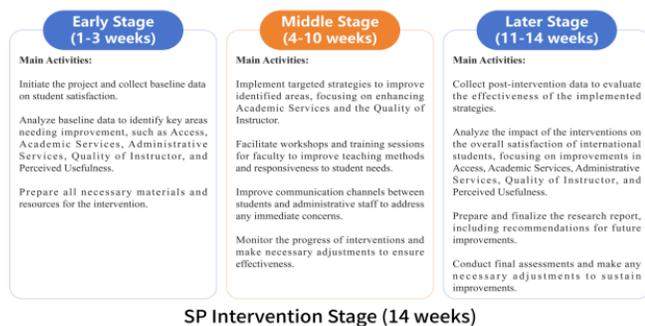


Figure 2: Strategic plan

4.3 Results Comparison between Pre-IDI and Post-IDI

In this study, the researchers performed a paired sample T-test analysis of all five variables to determine whether there were differences in student satisfaction during the pre-SP and post-SP phases. To sum up, the following table analyzes five variables by paired sample T-test:

Table 4: Paired-Sample T-Test Results

Variables	Mean	SD	SE	t-value	P-value
Academic Service (ACS)					
Pre-SP	4.15	0.252	0.0459	-6.25	< .001
Post-SP	4.57	0.266	0.0486		
Quality of Instructor (QI)					
Pre-SP	4.17	0.271	0.0494	-10.09	< .001
Post-SP	4.74	0.193	0.0352		
Students Satisfaction (SS)					
Pre-SP	4.11	0.187	0.0342	-8.65	< .001
Post-SP	4.50	0.164	0.0299		

To improve international students' satisfaction with the university, an in-depth analysis of the two key independent variables of ACS and QI after the implementation of the strategic plan (SP) was conducted. The results of the analysis are shown below.

There was a significant increase in Academic Service (ACS) between post-SP (M=4.57, SD=0.266, SE=0.0486) stage and pre-SP stage (M=4.15, SD=0.252, SE=0.0459), while P<0.001 and mean value difference between post-SP stage and Pre-SP stage was 0.4. Therefore, H6 supported that there is a significant mean difference in behavior focus between pre-SP and post-SP.

There was a significant increase in the Quality of the Instructor (QI) between the post-SP (M=4.74, SD=0.193, SE=0.0352) stage and pre-SP stage (M=4.17, SD=0.2718,

SE=0.0494), while P<0.001 and mean value difference between post-SP stage and pre-SP stage was 0.47. Therefore, H8 supported the idea that there is a significant mean difference in nature reward between pre-SP and post-SP.

There was a significant increase in student satisfaction between post-SP (M=4.50, SD=0.164, SE=0.0299) stage and pre-SP stage (M=4.11, SD=0.187, SE=0.0342), while P<0.001 and mean value difference between post-SP stage and pre-SP stage was 0.39. Therefore, H8 supported that there is a significant mean difference in student satisfaction between pre-SP and post-SP.

According to the paired-sample t-test results demonstrated above, the researcher came up with the following conclusions. First, two variables had a significant mean difference between the post-SP stage and the pre-SP stage. Second, the researcher found that there was a significant increase in Student Satisfaction between the pre-SP and post-SP phases.

Therefore, the effectiveness of SP was experimentally verified. The data demonstrate statistically significant increments of ACS and QI, highlighting their continued significant impact on student satisfaction. The mean difference in the predictive potency of these variables during the pre-and post-SP periods was highly significant, thus supporting the hypothesis that there is significant power in their contribution to student satisfaction.

5. Conclusions, Recommendations and Limitations

5.1 Conclusions & Discussions

This study was conducted in a public comprehensive higher education institution in Jiangxi Province, China, to describe the diversity of factors influencing the satisfaction (SS) of international students studying in China in higher education. The study was based on a strong methodological framework, including a comprehensive questionnaire survey and subsequent strategic plan implementation (SP) implementation. The results of this study provide empirical evidence to support the significant impact of academic services (ACS) and Quality of instructor (QI) on SS. Meanwhile, Access (AC), Administrative Service (ADS), and Perceived Usefulness (PU) were found to have no statistically significant impact.

The study's quantitative analysis, based on an item-goal congruence (IOC) index and multiple linear regression (MLR), showed that ACS and QI are key determinants of SS. The standardized coefficients and t-values of MLR indicate that these two variables have considerable predictive power

on teacher satisfaction levels. Notably, the R-squared value is .857, indicating that the variance of 85.7% in SS can be attributed to the independent variables studied, with ACS and QI having the greatest influence. In addition, a 14-week strategic plan implementation (SP) was conducted on a selected group of 30 students. Post-SP data were collected and compared with pre-SP data using a paired sample t-test. Paired-sample t-test comparisons between the pre-SP and post-SP phases further confirmed the transformative impact of targeted interventions on international student satisfaction. Significant differences in mean ACS and QI scores after SP implementation indicate that the strategic plan effectively enhanced these variables, improving overall SS. This suggests that focusing on the academic service settings, academic atmosphere construction, and improving instructors' Quality can effectively improve student satisfaction.

With the "Belt and Road" initiative and the country's policy support for international students in China, the number of Chinese students in China has increased yearly. However, the scale and Quality of international student education are very limited, and they fail to meet developed countries' standards, even in some developing countries. Chinese universities should improve the level of international student education, improve the strategic vision of internationalization, promote the internationalization of educational concepts, and implement development with a new internationalized school-running concept. At the same time, colleges and universities should expand characteristic majors, promote improving curriculum systems, and improve bilingual teaching and international scientific research. On the one hand, actively respond to the current development strategy of the country, continue to accommodate more international students in China, and first achieve a breakthrough in "quantity"; on the other hand, major universities should actively explore a development path suitable for Chinese students in my country, learn from the excellent research results of foreign countries on the internationalization of higher education, and gradually realize the transformation from "quantity" to "quality" and improve the Quality of education for international students in China.

The impact of these findings is multifaceted. First, international students are concerned about whether a university's academic services are professional and high-quality. Academic services include rich academic resources, modern teaching facilities, and academic consulting services. Therefore, this finding emphasizes the importance of academic services. Improving the Quality of the university's academic services is one key point that can help this university achieve higher satisfaction.

Second, they emphasize the importance of improving tutors' Quality to ensure international students' satisfaction.

Improving the Quality of tutors includes tutors' teaching skills and ability, language communication, after-school teaching assistance, and whether they have personality advantages and personal charm, which are all manifestations of tutor quality.

Finally, the research results advocate optimizing the teaching service environment, the academic service atmosphere, and the tutor's Quality. Reform and development from these aspects that international students are concerned about will help create a more international school with a better reputation and higher satisfaction, which will greatly help the school's future enrollment and upgrading. University academic services and teacher quality have an important impact on international student satisfaction. Colleges and universities should continuously optimize academic services and improve teacher quality to meet the academic needs of international students and improve their satisfaction.

In summary, this study contributes to the existing research on international student education in China by providing a detailed understanding of the factors that affect international student satisfaction. The results of this study provide a theoretical basis and practical guidance for developing effective strategies to improve international student satisfaction and promote the internationalization level and internationalized teaching services of universities. The results of this study are particularly important for improving the international reputation of universities, improving the Quality of comprehensive education, and promoting the internationalization process of universities.

5.2 Recommendations

The empirical evidence of this study effectively proves some academic suggestions aimed at improving the satisfaction of international students in colleges and universities. As for how to improve the satisfaction of international students in China with colleges and universities, through this study, we can know that we should start from a deep understanding of their current status of satisfaction, analyze the factors that affect satisfaction, and put forward specific and feasible suggestions, such as:

Improve teaching quality

Optimize course settings: Adjust and improve course settings according to the academic needs and interests of international students. Add high-quality courses that are in line with international standards, especially those that can improve international students' professional skills and cross-cultural communication capabilities.

Strengthen practical teaching: Increase practical teaching links such as experiments, internships, and project cooperation so that international students have more

opportunities to apply theoretical knowledge to practice and improve their practical and problem-solving abilities.

Improve the learning environment.

Optimize learning facilities: Strengthen the construction and management of learning facilities such as libraries, laboratories, and computer rooms to ensure that international students can easily access the learning resources they need.

Create an academic atmosphere: Focus on creating a cultural atmosphere on campus so international students can feel a strong academic atmosphere and humanistic care.

Strengthen teacher-student interaction

Establish a teacher-student interaction mechanism: encourage teachers to establish close teacher-student relationships with international students and strengthen after-class communication and guidance. Regular activities such as teacher-student exchange meetings and academic salons can be held to enhance understanding and trust between teachers and students.

Develop a mentor system: Provide mentors for international students to provide personalized academic guidance and life care. Mentors can help international students plan their studies, solve learning problems, and understand Chinese culture.

Promote cross-cultural exchanges: Organize colorful cross-cultural exchange activities, such as international cultural festivals, language exchange meetings, etc., to enhance understanding and friendship between international students and Chinese students. At the same time, international students should be encouraged to participate in various school clubs and activities to enrich their extracurricular life.

Enhance the quality of tutors and counselors.

Improve the level of teachers: Strengthen teacher training, improve teachers' teaching level, and enhance cross-cultural communication. Encourage teachers to adopt various teaching methods and means to stimulate international students' learning interest and enthusiasm.

Optimize after-school tutoring services: Provide after-school learning guidance services for international students, reduce learning pressure, enhance trust between tutors, and improve their good impression of the profession.

Pay attention to mental health: Establish a mental health support system for international students and provide psychological counseling and counseling services. Pay attention to international students' mental health and discover and solve psychological problems promptly.

Focus on the cross-cultural adaptation of international students.

Strengthen cultural education: Arrange sufficient and appropriate Chinese courses and China overview courses for international students to help them better understand Chinese

culture and social customs. At the same time, organize various cultural and cultural experience activities, such as celebrations of traditional Chinese festivals, folk art performances, etc.

Promote cultural integration: encourage international and Chinese students to participate in campus cultural and social practice activities together to enhance mutual understanding and friendship. Through cultural exchange and integration, international students' cultural identity and sense of belonging are enhanced.

5.3 Limitations for Future Research

This paper combines the Achievement Goal Theory (AGT) and the Customer Satisfaction Theory to study international students' satisfaction in China. Through questionnaire surveys and multiple linear regression analysis, this paper explores the influence of rules and action mechanisms between the structural variables of international students' management service satisfaction model in China. However, due to a lack of experience and limited learning materials, the current research still has some shortcomings:

Regional differences in samples: International students' satisfaction with colleges and universities may vary significantly due to regional differences. For example, international students from different countries or regions may have different evaluations of the same university due to differences in cultural background, education level, and expectations. Therefore, the results of international student satisfaction surveys in one region or country may not apply to other regions or countries.

Type and level of universities: International students' satisfaction may also vary among universities of different types and levels. For example, the expectations and demands of international students at research universities and teaching universities for teaching quality, research opportunities, and campus life may be completely different. Therefore, caution should be exercised when generalizing the satisfaction results of international students at a certain type of university to other types of universities.

Research sample size limitations: Sample size and representativeness. Research on international student satisfaction is often limited by sample size. If the sample size is too small, it may not fully reflect the true feelings and evaluations of the overall international students. In addition, the representativeness of the sample is also an important issue. For example, suppose the sample mainly concentrates on international students of a certain major or nationality. In that case, the research results may not represent the opinions of all international students using the sampling method. The scientific nature of the sampling method directly affects the sample's representativeness and the research results'

reliability. If the sampling method is inappropriate, it may lead to sample bias, affecting the accuracy of the research conclusions.

Limitation of variable range: Selection of satisfaction dimension. When evaluating international students' satisfaction, it is necessary to select appropriate satisfaction dimensions for examination. If the dimension selection is narrower or one-sided, it may fully reflect international students' real needs and feelings. At the same time, the weight setting of different dimensions may also affect the final evaluation results. Consideration of influencing factors: In addition to the teaching quality and teacher quality of colleges and universities proposed in this study, factors such as the learning motivation and expectations of international students may also affect their satisfaction evaluation. If these variables are not fully considered, it may lead to deviations in research results.

Methodological research limitations: Data collection method. The choice of data collection method directly affects the accuracy and reliability of research results. For example, methods such as questionnaires, interviews, and observations have advantages and disadvantages and must be selected according to the purpose of the research and the actual situation. At the same time, errors and deviations in the data collection process must also be effectively controlled. Data analysis method: The scientificity and rationality of the data analysis method are crucial to revealing the true situation of international students' satisfaction. If the analysis method is inappropriate or too simple, it may lead to the omission or misinterpretation of important information.

Research on interdisciplinary methods: Integration of multidisciplinary perspectives. The study of international student satisfaction involves multiple disciplines, such as education, psychology, and sociology. By integrating theories and methods from different disciplines, the complexity and multidimensionality of international student satisfaction can be more comprehensively revealed. For example, motivation theory in the field of psychology and cultural adaptation theory in the field of sociology can provide useful perspectives and tools for the study of international student satisfaction. Exploration of innovative methods: With the continuous development and innovation of research methods, new methods, and technologies can be applied to studying international student satisfaction. For example, big data and artificial intelligence technology can be used to conduct in-depth data mining and analysis, or methods such as experimental design can be used to explore the impact mechanism of different factors on international student satisfaction.

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