

Factors Influencing Student Satisfaction with the Academic Environment in Higher Education

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ABSTRACT

Student satisfaction has become a key indicator of quality and competitiveness in higher education institutions, particularly in rapidly developing educational contexts such as Cambodia. This study investigates the factors affecting student satisfaction with the academic environment at ACLEDA University of Business (AUB). A quantitative research design was employed using a cross-sectional survey administered to 406 undergraduate students. Data were collected through a structured questionnaire measuring four key dimensions of the academic environment: Teaching Quality, Learning Resources and Facilities, Administrative and Support Services, and Campus Environment. Statistical analyses, including reliability testing, correlation analysis, and multiple regression analysis, were conducted using SPSS. The results indicated that all four factors had a positive and statistically significant effect on student satisfaction ($p < 0.001$). The overall regression model was statistically significant ($F = 197.543$, $p < 0.001$) and explained strong explanatory power, accounting for 66.3% of the variance in student satisfaction ($R^2 = 0.663$). Among the four factors, Administrative and Support Services emerged as the most influential predictor of student satisfaction, followed by Campus Environment, Teaching Quality, and Learning Resources and Facilities. These findings highlight the critical role of efficient administrative services and a supportive campus environment in enhancing students' overall academic experience. The study provides valuable insights for university management to prioritize resource allocation and improving service quality in order to enhance student satisfaction, retention, and institutional reputation within Cambodia's higher education sector.

Keywords: Student Satisfaction, Academic Environment, Teaching Quality, Administrative Support Services, Campus Environment

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1. Introduction

Background of the study

Modern higher education has increasingly shifted toward a student-centered and service-oriented model, where student satisfaction serves as a primary benchmark for institutional quality and sustainability (Al-Sheeb et al., 2018). In Cambodia's rapidly evolving digital economy, the demand for high-quality, professional business education has expanded significantly to meet the requirements of a modernized labor market (World Bank, 2024). Within this competitive landscape, ACLEDA University of Business (AUB) occupies a distinct niche in the private higher education sector due to its strong corporate linkage and specialized professional orientation (MoEYS, 2023). Because of its unique integration with ACLEDA Bank Plc., students enter the institution with distinctively high expectations for professional efficiency, digital readiness, and a corporate-standard learning environment (Nguyen & Le, 2022). The higher education experience is multi-dimensional and shaped by various institutional components. It encompasses teaching quality defined by faculty expertise, pedagogical skills, and student engagement (Tight, 2020) as well as academic and learning resources, which include digital platforms, library access, and technological infrastructures that support academic performance (Bond et al., 2020). Furthermore, administrative services reflect the institutional responsiveness and efficiency in student-centered operations (Elshami et al., 2021), while the physical infrastructure and campus atmosphere provide the foundational environment for learning (Raza et al., 2020). As the academic landscape integrates deeper into the digital era, traditional teaching methods alone cannot fulfill student expectations; instead, safe physical learning spaces and seamless digital environments are simultaneously required to sustain student satisfaction and long-term institutional loyalty (Tight, 2020).

Problem statement

Despite AUB's positioning as one of the leading private universities in Cambodia, backed by a well-established corporate brand corporate brand, challenges persist in consistently aligning the delivery of academic and support services with the rapidly evolving expectations of modern students. Contemporary higher education students demand a seamless blend of rigorous academic standards, responsive administrative services, and modern facilities (PwC, 2024). The fundamental problem lies in the lack of empirical evidence on how students perceive different dimensions of AUB's academic environment and which dimensions most strongly influence their overall satisfaction. Specifically, while AUB benefits from its reputation with ACLEDA Bank Plc., ensuring that faculty expertise and pedagogical engagement consistently meet the evolving demands of the digital and financial sectors remains an ongoing challenge. Operational bottlenecks in administrative responses or limitations in student support services can lead to friction, lowered engagement, and potential attrition. Furthermore, while the university has invested considerably in infrastructure, including its "Green Campus" initiative, university management lacks clear, localized empirical data on whether the campus environment, learning resources and facilities, teaching quality, or administrative and support services contribute most significantly to student satisfaction and retention. Without a systematic evaluation of these interconnected factors within the specific context of AUB, resource allocation may be directed toward initiatives that have limited impact on improving the student experience, thereby threatening the institution's competitive positioning in Cambodia's expanding private education market.

Research objective

The primary objective of this study is to investigate the factors affecting student satisfaction regarding the academic environment at ACLEDA University of Business (AUB) (Elliott & Shin, 2002). Specifically, the study aims:

1. To evaluate students' perceptions of four key dimensions of the academic environment: Teaching Quality, Learning Resources and Facilities, Administrative and Support Services, and Campus Environment (Abdullah, 2006).
2. To identify the most significant factors within the academic environment that influence overall student satisfaction at AUB (Sultan & Wong, 2013).

3. To examine the relationship between physical and digital infrastructure and students' academic experience (OECD, 2023).
4. To assess how administrative efficiency and student services contribute to student retention and institutional reputation (Tinto, 1993).
5. To provide strategic recommendations for AUB management to improve resource allocation and enhance the academic environment in line with modern higher education standards (Kaplan & Norton, 2001).

Research question

1. How does faculty expertise and engagement impact the level of student satisfaction?
2. To what extent do physical infrastructure and digital learning resources influence the student academic experience?
3. How do the efficiency of administrative support and the responsiveness of student services affect student perceptions?
4. What is the impact of the "Green Campus" and physical atmosphere on overall student satisfaction?
5. Which of these four factors is the greatest influence on student satisfaction at ACLEDA University of Business?

Significance of the study

This study provides valuable empirical insights into educational service quality management within a corporate-linked higher education setting in an emerging economy. For AUB university leadership, the findings establish an evidence-based framework for strategic resource allocation, prioritizing investments that directly improve student retention and safeguard institutional reputation. For academic staff, it underscores specific dimensions of pedagogical excellence that align with contemporary student demands. For policymakers, including the Ministry of Education, Youth and Sport (MoEYS), this research serves as a contemporary case study of corporate-aligned educational quality assurance. Finally, for the broader academic community, it enriches the literature regarding student satisfaction frameworks within developing educational markets. The remainder of this paper is organized as follows: Following this introduction, Section 2 reviews the relevant literature, conceptual framework, and hypotheses formulation. Section 3 delineates the research methodology,

including data collection instruments and analytical procedures. Section 4 presents the empirical results and discussion. Finally, Section 5 concludes the paper with theoretical implications, practical recommendations for AUB management, and directions for future research.

2. Literature Review

Introduction of Student Satisfaction

The literature review explores existing theories and empirical studies regarding student satisfaction in higher education (Heng et al., 2020; Almazroui, 2023). This chapter examines the conceptual foundations and the key dimensions of the academic environment, including teaching quality, learning resources and facilities, administrative and support services, and campus environment, that influence student satisfaction (Parasuraman et al., 1988; Shirokova et al., 2017). In today's competitive higher education environment, understanding student satisfaction is essential for institutional growth, student retention, and long-term reputation (Tinto, 1993; Reth, 2024). By reviewing relevant theories and empirical evidence on student satisfaction and the academic environment, this chapter provides the theoretical foundation for the conceptual framework and hypotheses of the study (Oliver, 1980; Lee & Hong, 2021). In the contemporary landscape of higher education, institutions increasingly operate under a service-oriented model where student satisfaction is recognized as an important indicator for institutional quality, competitive advantage, and long-term sustainability. Within this educational paradigm, student satisfaction is conceptualized as a multi-dimensional psychological state. It represents a short-term attitude resulting from an ongoing, subjective evaluation of the student's total educational experience. It reflects the cognitive and emotional alignment or discrepancy between the student's pre-enrollment expectations and the actual performance delivered by the institution. To explain the determinants of student satisfaction, this study adopts Herzberg's Motivation-Hygiene Factor Theory (De-Juan-Vigaray et al., 2024). When applied to the academic environment, Herzberg's framework divides institutional attributes into two distinct categories:

- Motivation Factors (Satisfiers): These elements are intrinsic to the primary academic process. They include aspects such as teaching quality, faculty engagement, and intellectual development, which actively promote student motivation, deep learning engagement, and true satisfaction (Wisenthige et al., 2026).
- Hygiene Factors (Dissatisfiers): These elements represent the extrinsic environment or support structure surrounding the student experience. They encompass learning

resources, physical facilities, administrative services, and campus conditions. Under Herzberg's framework, the presence of optimal hygiene factors does not inherently generate high levels of cognitive motivation, but their absence, malfunction, or low quality is likely to result in student dissatisfaction (De-Juan-Vigaray et al., 2024)

Teaching Quality and Student Satisfaction

Teaching quality serves as a core motivational factor within higher education quality management. It is defined as a multi-dimensional construct that integrates pedagogical expertise, comprehensive subject knowledge, and instructor responsiveness. Academic staff who deliver structured, engaging lectures and provide constructive feedback systematically elevate students' critical thinking and academic performance. Empirical studies indicate that the perceived quality of the academic staff functions as a cornerstone in shaping institutional value and overall student satisfaction (Wisenthige et al., 2026).

H1: Teaching quality has a positive effect on student satisfaction at AUB.

Learning resources and Facilities and Student Satisfaction

The technical, physical, and virtual infrastructures provided by an institution form the foundational baseline of the academic environment. Learning resources include university libraries, digital research databases, modern computer laboratories, and high-speed internet connectivity. These tangible assets directly influence how seamlessly students complete independent research, coursework assignments, and group collaborations. When higher education institutions invest heavily in well-maintained physical and virtual infrastructure, they fulfill core hygiene expectations, thereby mitigating institutional friction and thereby enhancing the overall student learning experience.

H2: Learning resources and facilities have a positive influence on student satisfaction at AUB.

Administrative and Support Services and Student Satisfaction

Within the service-dominant logic of higher education, administrative services operate as critical facilitators across the entire student lifecycle—ranging from initial enrollment and academic transcript management to career counseling and financial aid processing. Administrative support service quality is defined by the responsiveness, accuracy, empathy, and efficiency of non-academic personnel. In line with Herzberg's theory, seamless administrative operations significantly minimize institutional frustration. When processes

are student-centered and handled transparently, they create a supportive environment that enhances student satisfaction and organizational loyalty.

H3: Administrative and support services have a positive impact on student satisfaction at AUB.

Campus Environment and Student Satisfaction

The campus environment is a complex construct incorporating the physical landscape (such as cleanliness and safety) alongside the socio-emotional climate of the university. Grounded in Environmental Psychology Theory, the physical surroundings of an institution significantly influence the behavior, mood, and cognitive focus of its students. A modern, professional, safe, and welcoming campus fosters an institution-wide "sense of belonging," which bridges promotes a sense of belonging, student well-being, and academic engagement. For corporate-linked institutions like ACLEDA University of Business, maintaining high standards within the physical campus environment is essential for enhancing students' learning experiences and reinforcing the university's reputation.

H4: The campus environment has a positive effect on student satisfaction at AUB.

Conceptual framework

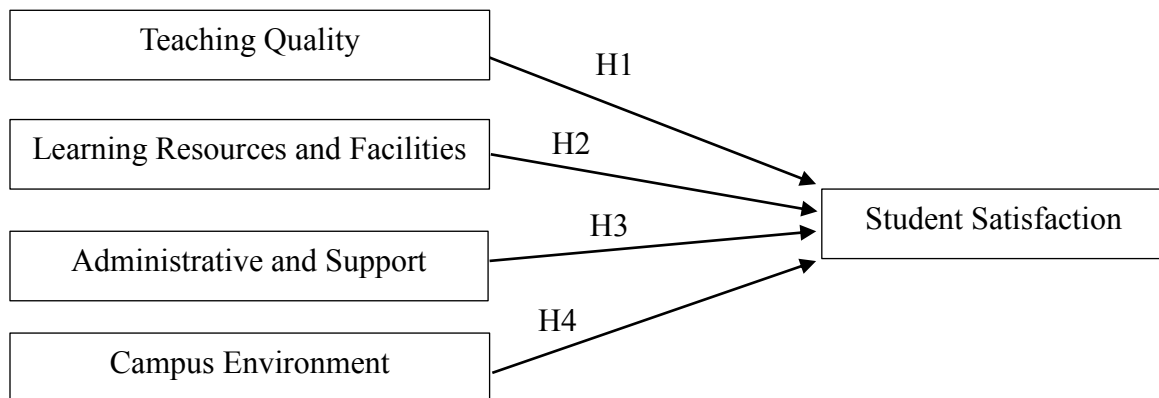


Figure 1: Conceptual Framework

3. Research Methodology

Population and sampling design

This study employed a quantitative research approach to examine the factors influencing student satisfaction with the academic environment at ACLEDA University of Business (AUB). A cross-sectional survey was conducted to collect data from undergraduate students at a single point in time, providing a snapshot of their perceptions regarding teaching quality, learning resources and facilities, administrative and support services, and campus environment (Stockemer et al., 2019). This study took place at ACLEDA University of Business (AUB) in Phnom Penh Capital. The study examined Year 4 undergraduate students' perceptions of teaching quality, learning resources and facilities, administrative and support services, campus environment, and overall student satisfaction.

Research participants

The target population of this study consists of undergraduate students currently enrolled at ACLEDA University of Business. A total of 406 students participated in the study. The study employed a combination of stratified and convenience sampling techniques. Stratified sampling ensures representation across different faculties and academic years, while Convenience sampling was used to recruit students who were available and willing to participate. This approach ensures diversity in the sample while maintaining practicality and efficiency in data collection (Sekaran & Bougie, 2016).

Research tool and measurement of constructs

The primary research instrument was a structuestionnaire, designed in two languages, English and Khmer, to ensure clarity and understanding among respondents. The questionnaire consists of sections corresponding to the variables identified in Chapter 2, including teaching quality, learning resources and facilities, administrative and support services, campus environment, and student satisfaction. All measurement items were adapted from previous validated studies (Marsh & Hocevar, 1990; Heng et al., 2020; Parasuraman et al., 1988) and measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This tool is suitable for collecting quantitative data and allows for statistical analysis to examine the relationships between independent and dependent variables.

Table 1: Variables, Items and Sources

Variable	Types of Variables	Example Items	Sources
Teaching Quality	Independent Variables	Lecturer explains concepts clearly; provides constructive feedback; demonstrates strong subject knowledge.	Marsh & Hocevar (1990); Heng et al. (2020)
Learning Resources & Facilities	Independent Variables	Quality of library services; availability of Wi-Fi; adequacy of classrooms and laboratories.	Parasuraman et al. (1988); Shirokova et al. (2017)
Administrative & Support Services	Independent Variables	Staff responsiveness; accuracy of academic records; effectiveness of student support services.	Gao (2020); Tinto (1993)
Campus Environment	Independent Variables	Campus safety; cleanliness of facilities; comfort and learning atmosphere.	Temple (2008); Strange & Banning (2015)
Student Satisfaction	Dependent Variables	Overall satisfaction with the university; willingness to recommend the institution.	Oliver (1980); Lee & Hong (2021)

Data collection methods

Data for this study were collected through an online questionnaire using Google Forms. The target population consists of students from different faculties and majors at ACLEDA University of Business. To ensure that students from all faculties and majors are appropriately represented, stratified sampling will be employed as the sampling technique. The sample size for this study will be determined using the Yamane Taro formula to ensure that the number of respondents is sufficient and representative of the population. Prior to the main data collection, permission was obtained from the administration of ACLEDA University of Business. A pilot test was conducted with 50 students to evaluate the clarity, reliability, and validity of the questionnaire items. The pilot test sample size will be consistently reported throughout the study to maintain accuracy and clarity. Based on the pilot test results, minor revisions were made to improve the questionnaire before the final distribution. After revision, The questionnaire link was distributed to the selected participants through official email lists and social media platforms. Data collection took approximately two weeks. Upon completion of data collection, the collected responses will be compiled, coded, and analysed using Microsoft Excel and SPSS for further statistical analysis. The online survey method is selected because it is cost-effective, time-efficient, and capable of

reaching a large number of students conveniently while ensuring accessibility for respondents.

Data analysis

The collected data were analysed using IBM SPSS 26. Descriptive statistics such as frequency, percentage, mean, and standard deviation were used to summarize demographic data and students' responses. Reliability analysis was conducted using Cronbach's Alpha to ensure internal consistency of each construct. Correlation analysis examined the strength and direction of relationships among variables, while multiple regression analysis tested the influence of teaching quality, learning resources and facilities, administrative and support services, and campus environment on student satisfaction. The following regression model was used:

$$SSSi = \beta_0 + \beta_1 TQ_i + \beta_2 LRF_i + \beta_3 AS_i + \beta_4 CE_i + \epsilon_i$$

Where:

SS = Student Satisfaction

TQ = Teaching Quality

LR = Learning Resources and Facilities

AS = Administrative and Support Services

CE = Campus Environment

β = Regression Coefficients

ϵ = Error Term

A significance level of 0.05 was used to test hypotheses.

Ethical considerations

Ethical approval was obtained from the relevant authority at ACLEDA University of Business before data collection commenced.. Informed consent was obtained from all participants, who were informed about the study's purpose and their right to withdraw at any time. Confidentiality and anonymity were maintained by not collecting personal identifiers, and data were securely stored with limited access. The researcher ensured academic integrity,

acknowledging all sources, reporting findings transparently, and disclosing potential conflicts of interest.

4. Results and Discussion

Demographic information

Table 4 show the demographic information of 406 respondents. Regarding gender, 48 respondents (11.82%) were male and 358 respondents (88.18%) were female. In terms of age, 59 respondents (14.53%) were aged 18 to 20 years, 321 respondents (79.06%) were aged 21 to 23 years, 22 respondents (5.42%) were aged 24 to 26 years, and 4 respondents (0.99%) were aged over 26 years. With respect to major, 300 respondents (73.89%) were majoring in Accounting, followed by 102 respondents (25.12%) in Finance and Banking. Business IT and English each had 1 respondent (0.25%), while International Business had 2 respondents (0.49%). Regarding shift of study, 46 respondents (11.33%) studied in the morning shift, 2 respondents (0.49%) in the morning afternoon shift, 9 respondents (2.22%) in the afternoon shift, 243 respondents (59.85%) in the evening shift, and 106 respondents (26.11%) in the weekend shift.

Table 2: Demographic Information of Respondents

Item	Category (n=406)	Frequency	Percentage
Gender	Male	48	11.82
	Female	358	88.18
Age	18 to 20 years old	59	14.53
	21 to 23 years old	321	79.06
	24 to 26 years old	22	5.42
	Over 26 years old	4	0.99
Major	Finance and Banking	102	25.12
	Accounting	300	73.89
	Business IT	1	0.25
	English	1	0.25
	International Business	2	0.49
Study Shift	Morning	46	11.33
	Morning Afternoon	2	0.49
	Afternoon	9	2.22
	Evening	243	59.85
	Weekend	106	26.11

Reliability test

As shown in Table 3, Cronbach's Alpha value of all variable scored more than 0.7 in both the pilot test (n=50) and the actual result (n=406), which indicates that the measurement items demonstrated satisfactory internal consistency and reliability. Therefore, the constructs are good to be used to study on Affecting Student Satisfaction with Academic Environment: A Case Study ACLEDA University of Business.

Table 3: Reliability test of Cronbach's Alpha on Each Variable

No	Variable	n=50	n=406
1	Teaching Quality	0.898	0.917
2	Learning Resources and Facilities	0.812	0.803
3	Administrative and Support Services	0.871	0.894
4	Campus Environment	0.908	0.888
5	Student Satisfaction	0.931	0.898

Level of agreement

Table 4 shows the level of agreement for all study variables. The findings indicate that respondents generally agreed with all aspects measured, as all mean scores fall within the "Agree" range. Campus Environment (M = 4.0954) and Teaching Quality (M = 4.0910) recorded the highest mean values, reflecting positive perceptions of the learning atmosphere and instructional quality. Student Satisfaction, Learning Resources and Facilities, and Administrative and Support Services also received favorable ratings. The relatively low standard deviations suggest consistent responses among participants.

Table 4: Level of Agreement

Variables	Min	Max	Mean	SD	Level of Agreement
1. Teaching Quality	1.0	5	4.091	0.4622	Agree
2. Learning Resources and Facilities	1.60	5	3.8921	0.51129	Agree
3. Administrative and Support Services	1.25	5	3.8565	0.56864	Agree
4. Campus Environment	1.00	5	4.0954	0.52467	Agree
5. Student Satisfaction	1.50	5	3.9421	0.52767	Agree

*Note: Strongly Disagree: 1.00-1.79, Disagree: 1.80-2.59, Neutral: 2.60-3.39, Agree: 3.40-4.19, Strongly Agree: 4.20-5.00

Correlation analysis

The A correlation analysis as a key component of its quantitative approach, aiming to identify a strength of relationship among the seven proposed constructs (Siegel & Wagner, 2016). According to Table 5, all the test variables are significantly correlated at 0.01 level of significance. Teaching Quality (TQ) and Administrative and Support Services (ASS) had the lowest correlation of 0.527, whereas Learning Resources and Facilities (LRF) and Administrative and Support Services (ASS) had the highest correlation of 0.730.

Table 5: Pearson Correlation Matrix

	TQ	LRF	ASS	CE	SS
TQ	1				
LRF	.584**	1			
ASS	.527**	.730**	1		
CE	.668**	.659**	.576**	1	
SS	.639**	.703**	.712**	.696**	1

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

ANOVA

Since the F-value is 197.543 and the significance value ($p = 0.000$) is less than 0.05, the null hypothesis is rejected. Therefore, the regression model is statistically significant. This indicates that Teaching Quality (TQ), Learning Resources and Facilities (LRF), Administrative and Support Service (ASS), and Campus Environment (CE) jointly have a significant effect on Student Satisfaction (SS).

Table 6: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	74.803	4	18.701	197.543	.000 ^b
Residual	37.962	401	0.095		
Total	112.765	405			

a. Dependent Variable: SS

b. Predictors: (Constant), CE, ASS, TQ, LRF

Model summary

The model summary shows $R = 0.814$, indicating a strong positive relationship between the predictors and Student Satisfaction. The R^2 value is 0.663, meaning that 66.3% of the variance in Student Satisfaction is explained by CE, ASS, TQ, and LRF. The Adjusted R^2 is 0.660, confirming the model's strong explanatory power.

Table 7: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.814 ^a	0.663	0.660	0.30768

Linear regression analysis

The coefficient results reveal that all four variables have a positive and significant effect on Student Satisfaction ($p < 0.001$). Among them, Academic Support Services ($\beta = 0.333$) has the strongest influence, followed by Campus Environment ($\beta = 0.263$), Teaching Quality ($\beta = 0.184$), and Learning Resources and Facilities ($\beta = 0.179$).

Table 8: Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.090	0.146		0.616	0.538
1 TQ	0.210	0.046	0.184	4.528	0.000
LRF	0.185	0.049	0.179	3.778	0.000
ASS	0.309	0.040	0.333	7.669	0.000
CE	0.265	0.044	0.263	6.011	0.000

a. Dependent Variable: SS

Result of hypotheses testing

The results indicate that all four factors Teaching Quality (TQ), Learning Resources and Facilities (LRF), Administrative and Support Services (ASS), and Campus Environment (CE) have significant positive effects on Student Satisfaction at AUB. These findings suggest

that improving these areas can enhance students' overall satisfaction. However, the results should be interpreted with caution because the analysis did not control for student characteristics such as major, academic level, family income, gender, or age. Future research should include these control variables to provide more practical and targeted recommendations for universities.

Table 9: Result of Hypotheses Testing

Hypotheses	Level of significance	Results
H1: Teaching Quality has a positive effect on Students satisfaction at AUB.	0.000	Supported
H2: Learning resources and facilities have a positive influence on student satisfaction at AUB.	0.000	Supported
H3: Administrative and support services have a positive impact on student satisfaction at AUB.	0.000	Supported
H4: The campus environment has a positive effect on student satisfaction at AUB.	0.000	Supported

5. Conclusion and Recommendations

Conclusion

This study examined the factors affecting student satisfaction with the academic environment at ACLEDA University of Business. The research focused on four key dimensions: Teaching Quality (TQ), Learning Resources and Facilities (LRF), Administrative and Support Services (ASS), and Campus Environment (CE). The findings from multiple regression analysis revealed that all four independent variables have a positive and statistically significant effect on student satisfaction ($p < 0.001$). The model demonstrated strong explanatory power ($R^2 = 0.663$), indicating that 66.3% of the variation in student satisfaction is explained by these four factors. Among the variables, Administrative and Support Services ($\beta = 0.333$) had the strongest influence on student satisfaction, followed by Campus Environment ($\beta = 0.263$), Teaching Quality ($\beta = 0.184$), and Learning Resources and Facilities ($\beta = 0.179$). These findings indicate that efficient and responsive administrative services, together with a supportive campus environment, play a critical role in shaping students' overall satisfaction at AUB. The study confirms that Teaching Quality, Learning Resources and Facilities, Administrative and Support Services, and Campus Environment significantly contribute to student satisfaction. Therefore, continuous improvement in these areas can enhance students'

educational experiences and strengthen the university's competitiveness in Cambodia's higher education sector.

Research recommendations

Based on the findings of this study, all four factors significantly influence student satisfaction at ACLEDA University of Business. Since Administrative and Support Services demonstrated the strongest effect, the university should prioritize improving the quality and efficiency of student services.

- Establish a digital request and tracking system for student documents, requests, and complaints to improve service efficiency and transparency.
- Provide clear, timely, and accurate information regarding academic procedures, schedules, and university policies.
- Regularly monitor students' academic progress and provide support for students who need to retake courses or examinations.
- Improve and maintain learning facilities, including computers, projectors, classrooms, and Wi-Fi services.
- Maintain a clean, safe, and comfortable campus environment that supports learning activities.
- Provide continuous professional development opportunities for lecturers to further enhance teaching quality and student learning experiences.

Research limitations

This study has several limitations. First, the research employed summated scale multiple regression analysis and did not assess construct validity, convergent validity, or discriminant validity of the measurement model. Second, the study examined only four independent variables and did not include moderating or mediating variables that may influence student satisfaction. Therefore, the findings should be interpreted within the scope of the variables investigated in this study.

Suggestions for future research

Future studies are encouraged to apply Partial Least Squares Structural Equation Modeling (PLS-SEM) to evaluate both the measurement model and structural relationships among variables. Researchers may also incorporate moderating and mediating variables as well as

additional determinants of student satisfaction, such as student engagement, university image, academic performance, and demographic characteristics. These approaches may provide a more comprehensive understanding of the factors influencing student satisfaction in higher education institutions.

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