The Influence of Service Quality of an Academic Promotion and Registration Office on Student Satisfaction at a Thai University

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Abstract

The research had two aims: 1) to study the service quality of the Academic Promotion and Registration Office (APRO) and student satisfaction levels at a Thai university and 2) to study the influence of personal traits and APRO service quality that affected the happiness of university students. The population was 15,519 Ubon Ratchathani University students in Thailand, and the sample was a total of 400 students from the Business School, Liberal Arts Faculty, Science Faculty and Engineering Faculty. The research instrument was a questionnaire with a confidence coefficient of 0.95. The statistics used in the research were frequency, percentage, mean, standard deviation and multiple regression analysis. The results demonstrated that the service quality level was high. The top-ranked service qualities were assurance, reliability, responsiveness, empathy, and tangible. Student satisfaction was at an high level, with the top-ranked characteristics of service being administration, registration and technology. The age, faculty, and service quality had a statistically significant effect on student satisfaction. Moreover, the top-ranked effect sizes were responsiveness to student needs, student faculty, tangibility, reliability, age, assurance and empathy. Furthermore, student traits and service quality accounted for 63% of the variance in student satisfaction. Therefore, it was recommended that the Ubon Ratchathani University should continuously improve the quality of the APRO services in all aspects, especially in the areas of responsiveness and tangibility. Furthermore, it needs to reduce the differences between faculty and age to increase student satisfaction in its services, especially its convenience, speed, accuracy and use of modern technology.

Keywords: Service Quality, Student Satisfaction, Higher Education, Academic Promotion and Registration Office

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Introduction

Higher education institutions have focused more recently on student satisfaction because measuring a school's effectiveness to the set of students' expectations is essential in this highly competitive market. The ability to determine the factors affecting it can enhance competitive advantage in the education business market. Over the past decade, higher education institutions increasingly realize that they are part of the educational service industry. Educational quality is an essential factor that attracts and reminds students who want to achieve higher education. The educational institution's system is effective, and the administration and Academic Promotion and Registration Office (APRO) in the University is willing to provide support in teaching and learning. This office promotes and supports academic operations, serves process learning quality services, and encourages more incoming vivid and talented students. To make services advanced and effective, the knowledge of students' expectations, academic preferences, and service quality about the educational environment should be constantly updated by leaders of the institution (Palacio, Meneses, & Perez, 2002). They are improving the quality and effectiveness of investment in education. Evaluation of the work of higher education institutions plays an essential role by quality assurance mechanisms in helping education and training institutions and policymakers meet today's challenges and develop a quality higher education system (European Commission, 2015).

Due to the increased pressure of the competition in the education service industry, student satisfaction has gained increasing focus in higher education institutions. It is an essential measure of school effectiveness in the set of students' expectations. (Sahin, 2014) Student satisfaction has been considered a core factor in literature or success (Sahin, 2014; Ravindran *et al*., 2012; Sumaedi *et al*., 2012), because it can affect students' trust in the institution. Furthermore, the satisfied student can persuade new students by engaging in an affirmative word–of–mouth connection to inform their friends, and this positive word-of-mouth transmission may return the previous students to take some further programs or courses in their university. Sumaedi *et al.* (2012) assessed management education students' expectations, perception, and satisfaction with services experienced across categories of institutions and six dimensions of quality factors, namely location, academics, infrastructure, image, cost and personnel, and overall satisfaction. Student perception significantly differed across four institution categories. All five factors, excluding cost, significantly influenced student satisfaction. The ASEAN University Network (AUN) (2020) recognizes the importance of quality in higher education and the need to develop a full quality assurance system in ASEAN to raise academic standards and enhance teaching, research, and service among its member universities. Eight criteria of quality factors have been identified, namely Expected Learning Outcomes, Program Structure and Content, Teaching and Learning Approach, Student Assessment, Academic Staff, Student Support Services, Facilities and Infrastructure, and Output and Outcomes, and they emphasize the need to obtain feedback and make improvements for embarking on educational quality assurance activities. So, student support services such as the APRO at all universities is vital to make university and programs succeed in meeting the expectation of the AUN quality in higher education.

Ubon Ratchathani University (UBU) in the Mekong Sub-Region of Thailand (close to Laos and Cambodia) aims to provide educational opportunities for the people of North-East Thailand, specifically the provinces of Amnat Charoen, Mukdahan, Nakhon Phanom, Sakon Nakhon, Si Sa Ket, Yasothon, and Ubon Ratchathani. Moreover, UBU's educational administration is to create graduates who demonstrate moral consciousness and

responsibility. Therefore, they will be able to work and find the good jobs with student proficiency, continuously self-develop, and keep pace with changes in the labor world, adhering to being a good human in society. So, UBU should have good facilities such as the library, student center, canteen, sports courts, swimming pool, public transportation, and especially the APRO to support its students.

The APRO at universities is an important agency that supports teaching and learning. It is responsible for promoting and supporting academic operations following the university's direction: under the strategic policy outlined during the COVID-19 pandemic. In the past, there has been a multidimensional change in the Bureau of Academic Promotion, so APRO has reshaped the work process in the past year that focuses on providing online services by applying technological innovations to meet the needs of students. The roles and responsibilities of the Registry include: 1. Promote and support academics to ensure that the university's educational management meets the benchmarks; 2. It provides information on education, academic work, as well as University registration and processing work aimed at increasing student satisfaction; 3. Apply information technology and develop innovation for management and service excellence; 4. Curriculum management and teaching and learning arrangements; 5. Promote the drive for academic services and nurture arts and culture integrated with teaching and learning; 6. Personnel quality development; 7. Develop a modern student registration system; and 8. Development of academic service systems and registration work.

According to an interview conducted with fourth-year students and staff of Ubon Ratchathani Business School, Ubon Ratchathani University in 2021 found that its APRO worked in the past under the restrictions of the current COVID-19 pandemic. As a result, there were frequent problems and complaints from students, such as problems with the registration system, unstable systems, and persistent website crashes. In addition, the enrollment system was delayed because students scrambled to register—these forced students to sleep late to start registering at midnight and there was a limited staff. The problem of document drop-offs was common. When staff communicated with students, some words could be more easily understood. The system of access to it was too complicated. Some steps required access to 2 layers, not 4-5 layers, which is not necessary. The teaching assessment system for some professors was so prone to result in personal exposure. How much security is in place for students? The location of the Academic Promotion Office and the registration office on campus is not convenient for students and there should be a sign indicating their location. The Learning Management System (LMS) is unstable and difficult to access, critical to teaching and learning quality. Hence, the author was interested in studying the quality of service provided by the APRO at UBU. What are the current student satisfaction and service quality levels and what service quality factors affect student satisfaction? The rationale for this research was to guide the improvement of the learning system of UBU to be effective and to work effectively to help support higher education to progress and be successful in the future.

Objectives of the Study

The two objectives of this research were: 1) to study the service quality of the APRO and the level of student satisfaction; and 2) to study the influence of personal traits and service quality of the APRO that affect the happiness of UBU students.

Literature Review

Conceptualization of Service Quality and Satisfaction in higher education

Student satisfaction is an essential qualitative indicator for higher educational institutes. Measures of student satisfaction demonstrate what are the critical factors for meeting students' needs. This research focuses on the service quality of the APRO affecting student Satisfaction at UBU. Because the world has changed rapidly in the past three years, especially with the COVID-19 pandemic, people have had to use technology instead of face-to-face, economics changed, and people's behaviors have changed. Higher education has to adapt itself to service students more efficiently, because schools' income comes from students and higher education has customer-oriented students. In addition, the positive relationship between student satisfaction and service quality, student retention, and the student graduation rate are significant (Khosravi, *et al.*, 2013). Many universities have incorporated some measure of satisfaction in their marketing, campaigns, planning process, and enrolment initiative (Elliott & Shin, 2002). As a measure of the student experiences such as service quality of program, teaching approach, service office, and student satisfaction is an essential indicator for colleges, and universities (Khosravi, *et al.*, 2013). The assessment of student views and satisfaction is necessity as institutions of higher education are challenged by a climate of decreased funding, demand organization accountability, and increased competition for students' selection of their school.

Satisfaction plays a significant role in determining the originality and accuracy of a system, especially the educational system, as the higher the level of happiness, the higher will be the level of students' grooming there, skill development, course knowledge, and mentality. The best factor that affects student satisfaction university is service quality. Service quality is vital for universities to remain competitive and developing. Higher educational institutions place a more excellent value on creating activities to meet learners' perceptions and expectations and ensure satisfaction. Student satisfaction is significant in determining service quality at universities. Higher institutions must build a stronger bond with students to have a competitive edge by providing value for service delivery. Universities are responsible for the graduates and dissemination of knowledge for the socioeconomic benefit of society. In addition, higher education can contribute to the development and growth of every economy.

Different researchers and different fields have given service quality different meanings. Parasuraman, *et al.* (1994) define service quality as a gap between customers' expectations and perceptions of performance. Juran (1988) stated that it is fitness for the intended use; it could still be seen as conforming to requirements or one that satisfies the customer. Quality in business organizations refers to an administrative attitude that addresses policy formation or a comprehensive organizational system based on positive essential organizational changes. Perceived quality is defined as one's explanation for the value of a product or service (Zammuto, *et al.*, 1996).

The first and most accepted conceptualization of service quality was based on the earlier work of Parasuraman, Zeithaml & Berry (1994). This group of authors was the first to devise a measurement scale for service quality, known as the SERVQUAL L scale. This scale was developed based on their conceptualization of service quality as the gap between expectation (E) and perception (P). The theory argued that in trying to determine service quality, customers compare their prior expectations to the actual perception of the service they receive. If the perception is equal to or more than expectation, then service quality is set to be

satisfactory. If not, then it is unsatisfactory. The SERVQUAL scale contains 22 items captured from 5 dimensions: reliability, assurance, tangibility, empathy, and responsiveness (RATER). This scale is still widely used in the field of service quality.

Abdullah and Kasmi (2021) studied the effect of quality of service on customer satisfaction. The research objectives were: (1) Knowing how much influence the dimension of service quality generates, including tangible, reliable, responsiveness, assurance, and empathy on customer satisfaction in PT. Bosowa Berlian Motor (Mitsubishi) Makassar; and (2) Knowing the most dominant factors affects the dimension of service quality to customer satisfaction. The descriptive analysis tested the truth of a hypothesis that collects data on the ground to predict and explain the relationship or influence of one variable on other variables. One hundred respondents were customers at PT. Bosowa Berlian Motor (Mitsubishi). The results showed that the variables of physical evidence, reliability, responsiveness, assurance, and empathy simultaneously positively affect customer satisfaction in PT. Bosowa Berlian Motor (Mitsubishi) Makassar.

Twum & Peprah (2020) studied the impact of service quality on students' satisfaction at the School of Business, Valley View University, Ghana. The key objective of the research is to assess students' satisfaction with the services provided. A cross-sectional and questionnaire survey involving 100 students was conducted using the SERVQUAL Model of five Service Quality dimensions, including tangibles, reliability, responsiveness, empathy, and assurance. The statistics employed were mean, standard deviation, and regression analyses. The study's results stated that the service quality of warranty, tangible, and responsiveness provided at the School of Business was very satisfactory. However, empathy was only at a moderate level. The data indicated that students had high expectations of services provided at the School of Business. It has also been confirmed that students' satisfaction can be 100% accounted for by service quality dimensions: Assurance, Tangible, Responsiveness, Reliability, and Empathy. The study suggests that the School of Business attends to students' expectations by providing for individual needs to solve students' unique challenges.

Malik, Danish & Usman (2010) studied the impact of service quality on students' satisfaction in higher education institutes in the Punjab, Pakistan. The research objective is to analyze the effect of different quality services on student satisfaction in higher educational institutes of a significant division of Punjab province, Pakistan. Both public and private sector institutes are included in this study. Data were collected from 240 students of business courses either enrolled in a master's program or graduate program in provincially chartered universities of the Gujranwala region. The sample comprised both male and female students in equal ratios. The results show that students are overall satisfied with services of Tangibility, Assurance, Reliability, and Empathy but need more confidence with parking facilities, computer labs, cafeteria services, and complaint handling system. So, five service quality dimensions are studied to be included in the analysis model.

Hishamuddin Fitri Abu Hasan, *et al*. (2008) studied service quality and student Satisfaction in a case study of private higher education institutions. This study investigates the association between service quality dimensions, tangibility, responsiveness, reliability, assurance, empathy, and student satisfaction. In addition, this study also examines critical factors in service quality dimensions that contribute most to student satisfaction. The study was conducted using a set of questionnaires to 200 Bachelor's students from two private higher education institutions. The results show that $R^2=0.475$ (adjusted $R^2=0.46$), meaning that 47.5% of the variance in students' satisfaction is explained by the five dimensions provided

in the output. The F statistics produced (F=29.102) are significant at 0.000. From this result, tangibility (unstandardized coefficients B is 0.175 at the sign. T = 0.104), responsiveness (unstandardized coefficients B is -0.004 at the sign. T= 0.972), and reliability (unstandardized coefficients B is -0.151 at the sign. T= 0.244) are not significantly related with satisfaction. The results show that two dimensions (empathy and assurance) are consistently more significant than the other dimensions (age, tangibility, responsiveness, and reliability). Compassion and commitment are the two critical factors that contribute most to students' satisfaction. Assurance (unstandardized coefficient B is 0.406 at the sign. T= 0.001) and empathy (unstandardized coefficient B is 0.498 at the sign. T= 0.000) are significantly related to satisfaction.

This paper's author (2019) undertook a factor analysis of students' perceived service quality in higher education. A questionnaire collected data from 499 senior bachelor's degree students studying business in the Faculty of Management Science at UBU. The reliability of the questionnaire was 0.94. Descriptive statistics and the CFA second-order model from MPLUS were in this study. The results showed that the observed set of data or the student satisfaction with service quality in FMS fit the factor theory model. The most significant factor was the service quality of instruction. All correlations among the six main factors for student satisfaction with service quality were statistically significant. The items of the six factors had validity values ranging from high to very high. The highest factor loading to the smallest factor loading values for the student satisfaction of service quality were for instruction, measurement, and assessment, qualitative aspects of the lecturers, preparation for professional practice, program content, and supervision, respectively.

So, an exploratory research study of the service quality office in the university, such as the APRO at UBU demonstrated that this office is an essential agency that supports teaching and learning. Especially during the COVID-19 pandemic, it is responsible for announcing, promoting, and supporting academic operations following the university's direction under the strategic policy outlined. This paper focuses on the UBU's APRO service quality which affects student satisfaction, using five factors: (1) Student Characteristics, (2) Tangible, (3) Reliability, (4) Responsibility, and (5) Empathy. It relates service quality to Assurance and Student Satisfaction, including such features as: 1) Process Satisfaction, 2) Service Features, 3) Technology and 4) Administration System. Students view academic recommendations as an important needed service of the APRO in the university. Figure 1 illustrates the research conceptual framework of this study.
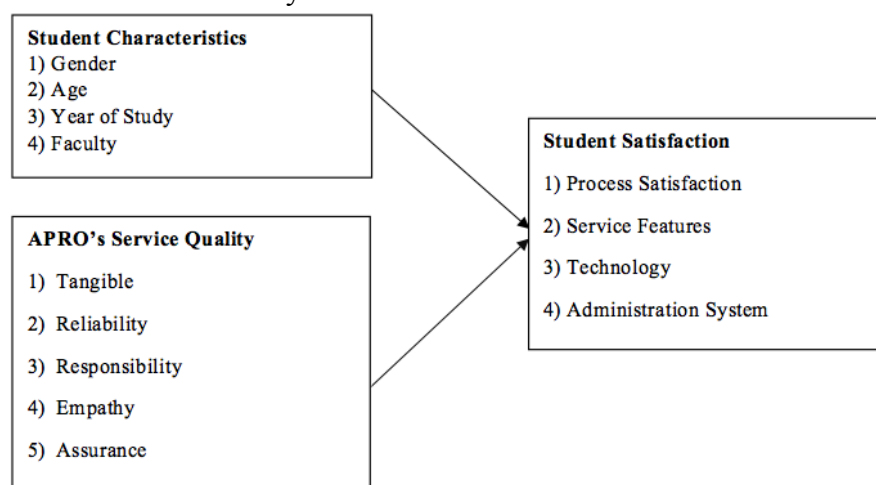

Figure 1: Model of the effect of APRO's service quality on student satisfaction of students at UBU

Research Methodology

This research aimed to identify the service quality affecting student satisfaction at the APRO at UBU, using multiple regression analysis. The university has ten faculties, including the faculty of science, faculty of agriculture, faculty of engineering, faculty of liberal arts, faculty of pharmaceutical science, Ubon Ratchathani Business School, faculty of nursing, college of medicine and public health, applied art and architecture, law faculty, and faculty of political science. In this research, the population was 15,519 students of UBU selected through cluster random sampling separated into two fields, the science field and the social science field and then a simple random sampling method selected two faculties from each area, including UBU Business School, Liberal Arts Faculty, Science Faculty, and Engineering Faculty, and 100 students of each faculty responded. Four hundred students completed and returned the questionnaires in the second semester of 2021. This research was conducted with a survey questionnaire as the research instrument. Students perceived service quality of the UBU APRO factors include tangible, reliable, responsible, empathy, and assurance and student satisfaction of the APRO at UBU included: 1) Process Satisfaction 2) Service Features 3) Technology and 4) Administration System. A total of 40 items were constructed to form the questionnaire. The statements requested the students to measure their satisfaction with each faculty and university education program with perceived service quality through five-point Likert scales ranging from very dissatisfied to very satisfied. The scoring system and the scaled response for verbal explanation in and correlation interpretation are illustrated in Tables 1 and 2 below:

Table 1: Scoring System Table criterion from Twum & Peprah (2020)

Numeric Scale	Numerical Likert Scale Average Weight	Scaled Response
5	4.6 – 5.0	Extremely Satisfied
4	3.6 – 4.5	Very Satisfied
3	2.6 – 3.5	Moderately Satisfied
2	1.6 – 2.5	Slightly Satisfied
1	0.00 – 1.5	Not at all or Little Satisfied

Table 2: Absolute Magnitude of the Observed Correlation Coefficient and Interpretation

Absolute Magnitude of Correlation Coefficient	Interpretation
0.80 – 1.00	Very Strong Correlation
0.60 – 0.80	Strong Correlation
0.40 – 0.60	Moderate Correlation
0.20 – 0.40	Slightly Correlation
0.00 – 0.20	Not at all or tiny Correlation

Table 3 contains the descriptive statistics of UBU students' demographic characteristics. Two thirds of the respondents were female and one third were male. The age of students ranged from 18 – 23 years old. Regarding the study year, most were fourth-year students (35.5%), and later, they were second-year students (28.5%). The remaining respondents had been studying for more than 4 years (21.8%). They came from 4 faculties, including the Business School, Liberal Arts Faculty, Science Faculty, and Engineering Faculty, and 100 students were from each faculty.

Table 3: The Descriptive Statistics of Students' Demographic Characteristics

Gender	Number	Percentage (%)
Female	267	66.8
Male	133	33.3
Total	**400**	**100**
Age		
18 years old	16	4.0
19 years old	55	13.8
20 years old	107	26.8
21 years old	92	23.0
22 years old	111	27.8
23 years old	19	4.8
Total	**400**	**100**
Year		
1	39	9.8
2	114	28.5
3	98	24.5
4	142	35.5
5	7	1.8
Total	**400**	**100.0**
Faculty		
Business School	100	25.0
Engineering	100	25.0
Science	100	25.0
Liberal Art	100	25.0
Total	**400**	**100.0**

Table 4: Student's Perceptions of Service Quality of Each Dimension

Service Quality	Mean	SD	Level
Tangible	3.54	0.89	Moderate
Reliability	3.85	0.71	Very Satisfied
Responsiveness	3.69	0.75	Very Satisfied
Assurance	3.74	0.86	Very Satisfied
Empathy	3.64	0.78	Very Satisfied
Total	**3.70**	**0.52**	Very Satisfied

Table 4 indicates the levels of service quality satisfaction. The mean of students' perceptions of service quality and standard deviation shows that the five dimensions of the SERVQUAL model of the APRO of UBU were tangible, reliability, responsiveness, assurance, and empathy. Among the dimension of service quality, reliability ranked highest (M = 3.85, SD = 0.71), followed by assurance (M = 3.74, SD = 0.86), responsiveness (M = 3.69, SD = 0.75), empathy (M = 3.64, SD = 0.78), with tangible averaging the lowest (M = 3.54, SD = 0.89. In the totality of service quality, the students of UBU were very satisfied with in-service quality of the academic promotion and registration office (M = 3.70, SD = 0.52). And each service quality dimension was at the intermediate level. For example, the results of Empathy infer that the students were delighted and felt as the staff of APRO was willing to solve the student's problems, the staff provided compassionate service, and the team used proper, polite speech, with the lowest score when compared with other dimensions. The details of each component item are shown in Tables 5 – 8.

Table 5: Students' Perceptions of Service Quality of Tangible

Tangible	Mean	SD	Level
1. APRO has a property and adequate seating capacity.	3.51	0.838	Moderate
2. APRO has prepared supplies for service (e.g., pens, pencils, etc.).	3.47	0.898	Moderate
3. APRO staff have good human relations beaming and have a good personality.	3.62	0.882	Very Satisfied
4. APRO staff Providing services/solving problems to students immediately who come in contact.	3.57	0.929	Moderate
Total	**3.54**	**0.89**	**Moderate**

Table 5 includes the answers to the Tangible service quality questions. The mean of students' perception and standard deviation shows the four items of the Tangible of the APRO of UBU. APRO staff had good human relations beaming, and a good personality ranked highest (M = 3.62, SD = 0.88) with a very satisfied, followed by APRO staff providing services/solving problems to students immediately when students come in contact (M = 3.57, SD = 0.93), APRO has a property and adequate seating capacity (M = 3.69, SD = 0.75), and APRO has prepared supplies for service (e.g., pens, pencils) averaging the lowest (M = 3.47, SD = 0.90). In the totality of Tangible, the students of UBU were moderately intangible of the academic promotion and registration office (M = 3.54, SD = 0.89).

Table 6: Student's Perception of Service Quality of Reliability

Reliability	Mean	SD	Level
1. APRO Staff informs a notification when an error is founded.	3.72	0.91	Very Satisfied
2. The APRO system has a step-by-step approval process.	3.81	0.98	Very Satisfied
3. The service recipient's information is not disclosed to personal information.	3.90	0.88	Very Satisfied
4. APRO staff use polite gestures and expressions.	3.86	0.85	Very Satisfied
5. When you ask questions or problems with APRO, you get information that meets your needs and can use the information.	3.96	0.82	Very Satisfied
Total	**3.85**	**0.71**	Very Satisfied

Table 6 indicates the answers to the Reliability service quality questions. The mean of students' perception and standard deviation shows the five items of the Reliability of the APRO of UBU University. When you ask questions or problems with APRO, you get information that meets your needs and can use the information ranked highest (M = 3.96, SD = 0.82) with a very satisfied, followed by The service recipient's data is not disclosed to personal details (M = 3.90, SD = 0.88), APRO staff use polite gestures and expressions (M = 3.86, SD = 0.85), the APRO system has a step-by-step approval process (M = 3.81, SD = 0.98) and APRO Staff informs a notification when an error is founded averaging the lowest (M = 3.72, SD = 0.91). In the totality of Reliability, the students of UBU University were delighted with the reliability of the APRO (M = 3.85, SD = 0.71).

Table 7: Student's Perception of Service Quality of Responsiveness

Responsiveness	Mean	SD	Level
1. APRO is convenient and easy to access.	3.82	0.92	Very Satisfied
2. APRO staff is always ready to serve.	3.65	0.95	Very Satisfied
3. APRO staff provide fast and timely service.	3.53	0.89	Moderate
4. APRO staff provide equal service without discrimination.	3.77	0.91	Very Satisfied
Total	**3.69**	**0.75**	Very Satisfied

Table 7 contains the answers to the Responsiveness service quality questions. The mean of students' perception and standard deviation includes the four items of the APRO's Responsiveness to UBU's students. APRO was found to be convenient and easy to access, which was ranked highest (M = 3.82, SD = 0.92) with a very satisfied, followed by APRO staff providing equal service without discrimination (M = 3.77, SD = 0.91), APRO staff is always ready to serve (M = 3.65, SD = 0.95). APRO staff provide fast and timely service averaging the lowest (M = 3.53, SD = 0.89) with a moderate level. In the totality of Responsiveness, the students of UBU were very satisfied with the Responsiveness of the academic promotion and registration office (M = 3.69, SD = 0.75).

Table 8: Student's Perception of Service Quality of Assurance

Assurance	Mean	SD	Level
1. APRO staff complete their work on time and following requirements.	3.73	0.97	Very Satisfied
2. APRO staff can help or guide students properly.	3.69	0.99	Very Satisfied
3. APRO staff provides services, methods, and procedures that are clear and able to work.	3.78	1.00	Very Satisfied
4. APRO staff can build confidence in the information and recommendations to help you use it for its intended purpose.	3.76	0.97	Very Satisfied
Total	**3.74**	**0.86**	Very Satisfied

Table 8 contains the answers to the Assurance service quality questions. The mean of students' perception and standard deviation showed that the four items of the APRO Assurance. APRO staff provided services, methods, and procedures that were clear and able to work, ranked highest (M = 3.78, SD = 1.00) with a very satisfied, followed by APRO staff can build confidence in the information and recommendations to help you use it for its intended purpose (M = 3.76, SD = 0.97), APRO staff complete their work on time and following requirements (M = 3.73, SD = 0.97). APRO staff can help or guide students properly, averaging the lowest (M = 3.69, SD = 0.99) with a very satisfying level. In the totality of Assurance, the UBU students were delighted with the Assurance of the academic promotion and registration office (M = 3.74, SD = 0.86).

Table 9: Student's Perception of Service Quality of Empathy

Empathy	Mean	SD	Level
1. APRO staff provide compassionate service and understand the feelings of students.	3.56	0.93	Moderate
2. APRO staff willingly listen to students' problems or inquiries.	3.58	0.86	Moderate
3. APRO staff use proper, polite speech.	3.72	0.93	Very Satisfied
4. APRO staff Service is committed to consulting.	3.70	0.91	Very Satisfied
Total	**3.64**	**0.78**	Very Satisfied

Table 9 includes the answers to the Empathy service quality questions. The mean of students' perception and standard deviation shows the four items of the APRO Empathy items. APRO staff used proper, polite speech, ranked highest (M = 3.72, SD = 0.93) with a very satisfied rating, followed by APRO staff Service is committed to consulting (M = 3.70, SD = 0.91), APRO staff willingly listen to students' problems or inquiries (M = 3.58, SD = 0.86). APRO staff provide compassionate service and understand the feelings of students averaging the lowest (M = 3.56, SD = 0.93) with a moderate level. In the totality of Assurance, the students were delighted with the Assurance of the APRO (M = 3.64, SD = 0.78).

Table 10: Student's Perception of Student Satisfaction

Student Satisfaction	Mean	SD	Level
Process	3.67	0.71	Very Satisfied
Officer	3.72	0.68	Very Satisfied
Technology	3.62	0.71	Very Satisfied
Administration System	3.69	0.68	Very Satisfied
Total	**3.67**	**0.52**	Very Satisfied

Table 10 illustrates the answers of the student satisfaction questions. The mean of students' perception of student satisfaction with the APRO of UBU and the standard deviation show the four dimensions: Process, Officer, Technology, and Administration System. Among the dimension of student satisfaction, officer ranked highest (M = 3.72, SD = 0.68), followed by Process (M = 3.67, SD = 0.71), Administration System (M = 3.69, SD = 0.68), and Technology averaging the lowest (M = 3.62, SD = 0.71). In totality, the students were delighted with the service process, officer, technology, and administration system of the academic promotion and registration office (M = 3.67, SD = 0.52).

Analysis and Findings

The data analysis was done with the help of SPSS version 23. The overall reliability of the data, using Cronbach's Alpha coefficient, was recorded at 0.95, and the number of items was 40. Internally inconsistent items were sequentially deleted, maximizing the scales' reliability at 0.70 (Sekaran and Bougie, 2010). Table 11: illustrates that Cronbach's coefficient alphas were acceptable (i.e., exceeding 0.7); this indicates that the measurement instruments were excellent and reliable.

Table 11: Cronbach's Alpha Coefficient Reliability

indicators	Alpha	N of Items
Service Quality	0.95	20
Student Satisfaction	0.95	20
Total	0.95	40

The descriptive analysis shows the demographic characteristics of the UBU students Only 5% of the data contained missing responses.

Table 12: Correlation Results between Service Quality of Academic Promotion and Registration Office and Student Satisfaction

Correlations					
Variables	**Tangible**	**Reliability**	**Responsiveness**	**Assurance**	**Empathy**
Reliability	.590**				
Responsiveness	.421**	.421**			
Assurance	.307**	.307**	.271**		
Empathy	.309**	.309**	.365**	.235**	
Student Satisfaction	**.617****	**.617****	**.599****	**.545****	**.722****

Table 12 contains the results of the correlation analysis between service quality and student satisfaction, and found that all indicators of service quality were related to student satisfaction at the statistically significant level of 0.01. By descending relationship size order, student satisfaction was associated with a high and moderate level of empathy of the APRO (r = .722), reliability (r = .617) and tangible (r = .617), responsiveness (r = .599) and assurance (r = .545), all correlations significant at the .01 level. In addition, the correlation values between indicators of service quality ranged from 0.271 - 0.59 < 0.80, being low and moderate levels. Therefore, there was no problem with the independent variables correlated with other's predictors at a very high level. They did not have a multicollinearity problem; all service quality indicators and student satisfaction were suitable for further analysis in multiple linear regression equations.

Multiple Linear Regression Analysis Results

The results of multiple linear regression analysis by entering method from Table 13 showed that the test of variance analysis of the combined model found that the values of F = 221.549, p < 0.01 that the predictive variables can explain the variance of student satisfaction with the UBU APRO with statistical significance at the level of 0.01.

Table 13: Results of Variance Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	87.721	8	10.965	221.549	<.001[b]
Residual	19.352	391	0.049		
Total	107.073	399			

Table 14 shows the results of the multiple linear regression analysis (MRA) summary model found that the value of R = 0.808. The correlations between the independent variables and students' satisfaction with the UBU APRO were very high. The adjusted prediction coefficient R^2 was equal to 0.634, indicating that the independent variables can jointly explain the variance of student satisfaction by 63.4 % and the other 36.6 % as an influence from other variables that were not included in the model.

Table 14: The Multiple Regression Analysis (MRA) Summary Model

Model	R	R²	Adjusted R²
1	.808	0.653	0.634

Both primary variables had a tolerance higher than 0.19 and a VIF value of less than 5.3 (Wiratchai, 2012), which passed the criteria that the independent variable must not be related to one another at a very high level. Interpret the regression coefficient from strongest to smallest impact as follows:

Responsiveness with the regression coefficient (Beta) equaled 0.23, meaning that the APRO's responsiveness increased by one standard unit.   Students' satisfaction with the educational advancement and registration office increased by 0.23 standard units, whereas other independent variables were constant values.

Faculty had a regression coefficient (Beta) equal to - 0.19, meaning that faculty students changed from other faculties to business schools. Student satisfaction with the academic promotion and registration office decreased by 0.19 standard units, where other independent variables were constant values.

Tangible had a regression coefficient (Beta) equal to 0.15, meaning that the APRO had a tangible increase by one standard unit. Therefore, student satisfaction with the academic promotion and registration office increased by 0.15 standard units, where other independent variables were constant values.

Assurance had a regression coefficient (Beta) equal to 0.145, meaning that the APRO had an assurance increase by one standard unit. Therefore, student satisfaction with the APRO increased by 0.145 standard units, where other independent variables were constant values.

Age had a regression coefficient (Beta) equal to 0.143, meaning that if the age of a student increased by one standard unit, student satisfaction with the academic promotion and registration office increased by 0.143 standard units, where other independent variables were constant values.

Reliability had a regression coefficient (Beta) equal to 0.128, meaning that the APRO increased its reliability by one standard unit. Therefore, student satisfaction with the educational advancement and registration office increased by 0.128 standard units, where other independent variables were constant values.

Empathy had a regression coefficient (Beta) equal to 0.112, meaning that the APRO increased empathy by one standard unit. Therefore, student satisfaction with the academic promotion and registration office increased by 0.112 standard units, where other independent variables were constant values.

Other independent variables did not affect student satisfaction with the UBU educational advancement and registration office.

Table 15: The Multiple Regression Analysis (MRA) Results

Variables		B	S. E.	Beta	t	Sig.	Toler.	VIF
Coefficients								
Student Characteristics	(Constant)	**1.041**	0.205		5.08	**0.000****		
	Gender	-0.014	0.043	-0.013	-0.34	0.738	0.919	1.089
	Age	**0.097**	0.037	0.143	2.60	**0.010****	0.487	2.055
	Year	-0.049	0.027	-0.078	-1.85	0.066	0.828	1.207
	Faculty	**-0.130**	0.028	-0.192	-4.57	**0.000****	0.828	1.208
Services Quality	Tangible	**0.170**	0.058	0.150	2.65	**0.008****	0.490	2.042
	Reliability	**0.125**	0.053	0.128	2.37	**0.018***	0.506	1.976
	Respon-siveness	**0.211**	0.051	0.231	4.14	**0.000****	0.473	2.116
	Assurance	**0.127**	0.048	0.145	2.64	**0.009****	0.490	2.042
	Empathy	**0.073**	0.035	0.112	2.12	**0.035***	0.521	1.919
R=0.808, R²=0.653, R²(Adjusted) = 0.634, SEE=0.316, F=,34.151, Sig=0.000								
* Significance at 0.05 level, **Significance at 0.01 level								

The equations to predict customer satisfaction can show as follow:

Raw Score Equation (B):

Student Satisfaction = 1.04**+ 0.21**(Responsiveness) -0.13**(Faculty) +0.17**(Tangible) + 0.13**(Assurance) + 0.13** (Reliability) + 0.09** (Age) + 0.7*(Empathy)

Standardized Score Equations (β or Beta):

Student Satisfaction = 0.23**(Responsiveness) -0.19**(Faculty) +0.15**(Tangible) + 0.145**(Assurance) + 0.14**(Age) + 0.12**(Reliability) + 0.11*(Empathy)

The summary of the research hypothesis testing is shown in Table 16.

Table 16: Summary of Research Hypothesis Testing

Hypothesis	Test Results
H$_1$: Student Characteristics (faculty, age) influenced student satisfaction with Academic Promotion and Registration Office at Ubon Ratchathani University.	Accepted
H$_2$: Service quality (tangible, responsiveness, assurance, reliability, empathy) influenced student satisfaction to Academic Promotion and Registration Office at Ubon Ratchathani University.	Accepted

Discussion and Conclusions

The multiple linear regression analyses found that predictive variables explained a significant amount of the variance of student satisfaction of the APRO at UBU with a statistical significance level of 0.01. The value of R = 0.808 meant that the various correlations of two main group predictors, including student characteristics and APRO service quality, were related to student satisfaction at a very high level. The adjusted prediction coefficient R^2 was equal to 0.634. This indicated that the two group predictor variables accounted for 63.4% of the variance in UBU student satisfaction, while other variables not included in the model influenced 36.6% of the variance in student satisfaction.

These results were considered to be the main findings which confirmed the research objectives of the study. The results of the present study indicate that factors affecting student satisfaction were APRO service quality, whose five dimensions of significance influenced student satisfaction, and student characteristics also influenced student satisfaction. These factors were, from the highest level of satisfaction to the lowest influence level of satisfaction, responsiveness, faculty, tangible, assurance, age, reliability, and empathy, respectively. Evidence from this study demonstrated that the most satisfied students viewed responsiveness, tangible, assurance, reliability, and empathy as essential services. Items that had the highest scores relating directly to five dimensions were:

> "APRO is convenient and easy to access";
> "APRO staff have good human relations beaming, and have a good personality";
> "APRO staff provide services, methods, and procedures that are clear and able to work";
> "When you ask questions or problems with APRO, you get information that meets your needs and can use the information"; and
> "APRO staff use proper, polite speech".

Twum & Peprah, 2020); Abdullah and Kasmi (2021) and the National Research report of Noel-Levitz (2009) confirmed that service quality is an essential need of students. The UBU APRO should be serious about enhancing APRO service quality in these aspects. These results also identified areas where students expressed relative dissatisfaction with their experience at APRO. A particular concern was that APRO should convenient and easy to access. UBU's support services need to be improved to meet students' needs. University officers should have good human relations beaming and a good personality that provides precise services, methods, and procedures and can work on service quality to increase student satisfaction.

As for the Faculty factor, Ubon Ratchathani Business School students were more satisfied with the APRO service quality minor than other faculties. Moreover, first-year students need more attention from the APRO. So, APRO staff should provide equal service without discrimination between faculty and more taking care of first-year students because they need to gain the experience to process APRO services. They must teach students how to use the APRO application and the process or step by step to ask for APRO help or support. In addition, the University's staff should improve in order to provide a superior technology registration system, easy to process, and deal with enrollment, withdrawal, consulting, and WIFI access experiences for students.

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