Service quality and student satisfaction in one Chinese university

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Abstract

Nowadays, Chinese higher education is in a critical period of transitioning from elitism to popularization. Guided by the concepts of "student-centered" and "quality-oriented development", service quality and student satisfaction have become the important indicators for measuring the level of a university's education. Therefore, school administrators should adjust management strategies and service measures in a timely manner based on students' and social needs, improve student satisfaction and loyalty, and thereby enhance the competitiveness of the school. This is of great significance for promoting the reform and development of higher education in China. This research aimed to assess the service quality and student satisfaction in Guangdong University of Petrochemical Technology (GDUPT). In this study, the SERVQUAL scale was used to measure the service quality which comprised five dimensions in terms of Tangibility, Trust, Responsibility, Security, and Empathy. Moreover, the student satisfaction in the areas of Collegiality, Program Schedule, Curriculum Content, Advising and Instruction was considered in the measurement. The quantitative research method was applied to gather data from 350 GDUPT students. Results provided an in-depth analysis of nine aspects of the service quality and student satisfaction. Specifically, in terms of service quality, the respondents generally agreed with the service quality in Tangibility, Trust, Responsibility, Security, and Empathy. Among those five indicators, five items got the weighted mean score between 3.50 – 4.00 with strongly agree. Secondly, the respondents were all satisfied with Program Design/Schedule, Curriculum, Content, Advising and Instruction, while highly satisfied with Collegiality. Among those four indicators, two items got the weighted mean score lie in 3.50 – 4.00 with highly satisfied. Moreover, there was a significant difference on service quality in terms of Security and a highly significant difference when students were grouped according to their grade level. As to student satisfaction, there was no significant difference when students were grouped according to their sex or grade level. In addition, there are highly significant positive correlations between service quality and student satisfaction across all areas studied. Finally, the researcher proposed a plan of action to improve the service quality and student satisfaction in Guangdong University of Petrochemical Technology.

Keywords: service quality, student satisfaction, SERVQUAL, higher education

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1. Introduction

Since the 21st century, higher education in many countries has shifted from a seller's market to a buyer's market, and people are increasingly paying attention to the quality of higher education services and related research (Fahurozi, 2022). Higher education researchers generally believe that educational services are one of the basic products of schools (Hadikoemoro, 2002), while from an economic perspective, educational services are products provided by schools to their customers, i.e., the students (Liu, 2011). Student satisfaction can be defined as the short-term attitude generated by evaluating students' experience with education, services, and facilities (Weerasinghe & Fernando, 2017). College students are the "customers" of higher education, and the service quality of higher education directly affects the satisfaction of college students, which is related to the survival and development of schools. Therefore, school administrators should evaluate student satisfaction level with service quality, adjust measures and strategies for educational management and services in a timely manner, improve student satisfaction and loyalty to the school, and thus enhance the school's competitiveness. How to incorporate student satisfaction into the evaluation system of higher education service quality has become a hot topic in current academic research on higher education quality.

To improve the quality of talent cultivation and enhance the reputation of universities, universities and educational leaders should attach importance to the evaluation of student satisfaction and use it as one of the important standards for measuring the quality of university education (Yang, et al., 2011; Mastoi et al., 2019). The schools need to understand students' feedback on the services they provide to improve these services. Kasper et al. (2006) argue that service quality is one of the factors affecting customer satisfaction, and universities must meet the needs of students. Hence, universities should take students as the center, provide them with characteristic and high-quality educational services, and improve their satisfaction. This is the foundation of the future survival and development of universities and the realization of the purpose of cultivating talents (Nazarian et al., 2012).

From the perspective of management, the university is an "institution" that provides educational services for students, and students are the "customers" who purchase educational services. The school needs to provide educational products according to the needs of the market and the wishes of the students. Its goal is to strive for students to better grow and develop, prepare students for future work and life. The educational products and services of the university should adapt to the future development of the students and obtain the recognition and satisfaction of the students. Therefore, universities need to carry out research on student satisfaction, analyze the factors that affect student satisfaction, understand the mechanism of student satisfaction, and establish a more complete satisfaction model (Weerasinghe & Fernando, 2017).

As the direct customers of educational products, student satisfaction reflects the quality of school services. Ham and Hayduk (2003) revealed that there is a positive correlation between perceived service quality and student satisfaction in universities. Students are the most direct objects of educational products, and their feelings and experiences are important indicators for evaluating the quality of education and services in schools. If schools want to improve their own education and teaching, they must understand the real feelings of students studying and living on campus, and obtain the advantages and disadvantages of educational services based on students' evaluations, so as to provide useful reference for teaching and service providers (Wong & Chapman, 2023). Especially for ordinary universities, they must start from the needs of students, form their own school-running characteristics, improve their reputation, and then relieve the pressure of students' employment.

However, the evaluation of student satisfaction with the quality of educational services should be obtained through scientific evaluation and argumentation rather than verbal inquiries. Research should be carried out from

the perspective of students to understand their concerns and real experiences. Therefore, through the evaluation of student satisfaction, the real information about the evaluation of school teaching and management services can be obtained from students. Since this information comes from frontline practitioners (students), it can effectively ensure the credibility, accuracy, and scientificity of this information. At the same time, students' hidden needs can be explored through satisfaction assessment, so that targeted measures can be taken to make higher education relatively closer to students' expectations, thereby improving student satisfaction, thereby promoting students' loyalty to their school, this would lead to promote the sustainable development of the school (Weerasinghe & Fernando, 2017).

In recent years, the Chinese government and universities have attached great importance to the quality of higher education services. On the one hand, since 1999, China has implemented a policy of "expanding enrollment in universities", and since then, Chinese higher education has gradually transitioned from "elite" to "mass" education. With the increase in the number of universities and the expansion of enrollment scale, many universities have encountered serious problems in the quality of education. On the other hand, the internationalization of education is the trend of the world's higher education development, and it is also the institutional arrangement and policy measure for Chinese higher education to comply with the trend of economic globalization. Currently, more than 180 countries and regions have established educational cooperation relationships with China, and 47 countries and regions have signed mutual recognition agreements for academic qualifications and degrees with China. Only by continuously improving the quality of services can Chinese higher education institutions better face the opportunities and challenges brought by the internationalization of education.

Nowadays, Chinese higher education is in a critical period of transitioning from elitism to popularization. Guided by the concepts of "student-centered" and "quality-oriented development", service quality has become an important indicator for measuring the level of a university's education. Since 2009, Chinese government has carried out different forms of education evaluation, such as qualification evaluation (starting in 2009), professional certificate (starting in 2012), audit evaluation (starting in 2013), these government actions have made Chinese higher education as a whole "quality consideration". Except for the government behavior, schools have also introduced the research method of student satisfaction into education evaluation The satisfaction method can not only understand the needs of stakeholders, but also objectively reflect the quality of services received by stakeholders in China, researchers generally believe that conducting surveys on college student satisfaction is an important method of university management. Through satisfaction analysis, students' concerns can be identified in a timely manner, problems in school management can be identified, and direct information can be provided to improve school management, thereby quickly solving problems and enhancing the core competitiveness of the school (Pan, et al., 2020).

Objective of the study - The general objective of the study was to assess how service quality affects student satisfaction of college students in China. More specifically, this described the profile of the respondents in terms of sex and grade level, assess the service quality in terms of tangibility, trust, responsibility, security and empathy; determined the student satisfaction in terms of Collegiality, Program Schedule, Curriculum Content, Advising and Instruction; tested the significant on the service quality and student satisfaction when grouped according to profile; tested the significant relationship between service quality and student satisfaction and proposed plan to enhance service quality and student satisfaction.

2. Methods

Research Design - The research method employed in this study was a descriptive study. The descriptive study, also referred to as descriptive research, aims to accurately depict the characteristics or overall landscape of specific populations or phenomena. This type of research primarily focuses on describing interesting events or phenomena and does not typically involve exploring relationships between variables. The main objective of descriptive research is to collect data, identify situations, provide information, and describe the primary patterns

and characteristics of the observed phenomena. As it is known to us that the descriptive research is centered around explaining the essence of things, providing descriptions of universal and representative phenomena rather than focusing on one-sided, unique, or non-representative occurrences. The goal is to achieve a true, objective, and accurate depiction of the overall characteristics of the subject under investigation. Therefore, this study aimed to systematically describe, summarize, and explain the level of educational service quality and student satisfaction in the areas of Collegiality, Program Schedule, Curriculum Content, Advising and Instruction on our college in China. In this study, quantitative data were collected through the distribution of survey questionnaires, and then summarized and described through statistical analysis, charts, and other methods.

Participants of the Study - The respondents included 350 GDUPT students. In order to meet the research needs of this paper and ensure the validity and availability of data, the following principles were followed when selecting the respondents of the volume survey: First, this research studies the quality of education services and student satisfaction, difference of majors was not considered; Secondly, the respondents to this study were students from the university where the researcher works, including four grades of GDUPT students: 2022, 2021, 2020, and 2019. The researcher applied both purposive and convenience sampling. The respondents were categorized in terms of sex and grade level, evaluated the service quality which comprised with Tangibility, Trust, Responsibility, Security and Empathy; and student satisfaction on Collegiality, Program Schedule, Curriculum Content, Advising and Instruction.

Instrument of the Study - The questionnaire utilized in this study was adapted from the SERVQUAL model and the research conducted by Sumner (2008). The educational service quality and student satisfaction questionnaire consisted of three parts. In the first part of the questionnaire, respondents were asked to provide demographic information, including the gender and the grade. The second part contains five dimensions with 19 items which are to be rated by participants through a four-point Likert scale (with 4 representing "Strongly Agree" through 1 representing "Strongly Disagree"). The purpose of these items is to determine the quality of services offered to students. The following five dimensions were derived from SERVQUAL instrument (Alhabeeb, 2015). The third part of the questionnaire focuses on measuring student satisfaction with different dimensions of the education program. This part contains 19 items which are to be rated by participants through a four-point Likert scale (with 4 representing "Highly Satisfied, 3 representing "Satisfied", 2 representing "Less Satisfied" and 1 representing "Not Satisfied"). The following four dimensions were developed based on Sumner (2008).

Collegiality. Collegiality represents a widely accepted value within institutions of higher education. Basically, it encompasses actions within cooperative environments reflecting prosocial values as well as individual and group-related rights and responsibilities (Haviland et al., 2017). *Program design/Schedule.* Curriculum design is a way for teachers to plan teaching, which is use to describe the purposeful, thoughtful, and systematic organization of courses (teaching blocks) in a class or curriculum. When teachers design courses, they will determine what will be done, who will do it, and what schedule to follow. The courses and activities are in line with the schedule, providing an overall structure for the plan. The schedule provides the sequence of events for the day and the duration of various components (Schweitzer, 2019). *Curriculum Content.* It refers to the medium through which the objectives are accomplished. *Advising and Instruction.* Advising is a form of teaching, so it is the main way for educators to encourage and build academic exploration, support students' development, and encourage students to make their learning meaningful when engaging with their world (Bandy, 2021). Instruction in education is the act of teaching in the classroom. Curriculum and other materials can support teachers' teaching, including recommended standards to be met, activities to be carried out, themes to be focused on, and so on. But the delivery of the content itself is accomplished through instructions (Conklin, 2022).

In the study, the researcher assessed the reliability of the questionnaire by calculating Cronbach's alpha. Before the questionnaire is officially implemented, the researcher conducted small-scale tests to assess the feasibility of the questionnaire and the need for improvement. The researcher randomly selected 30 participants

as a sample, introduced the purpose of the study, and provided the necessary explanations to ensure that the participants correctly understand and answer the questions. Since each dimension of service quality (Tangibility, Trust, Responsibility, Security, and Empathy) and student satisfaction (Collegiality, Program Schedules, Curriculum Content, Advising, and Instruction) is measured through more than one survey item, it is necessary to calculate the internal consistency reliability of each subcategory. This can be achieved by calculating the Cronbach's alpha for items in the same set using SPSS. Cronbach's alpha is a method to measure the reliability of a scale or test, which reflects the degree of correlation between items in a set. Cronbach's alpha ranges from 0 to 1. The high values suggest that all items are highly correlated. This provides evidence for the internal consistency reliability of the scale. After the internal consistency reliability for all items of 9 variables were passed, the scores for these scales were computed by averaging the items within each scale.

Data Gathering Procedure - After the reliability test of the small sample data was passed, the questionnaire with a rating scale was uploaded to the WenJuanXing website https://www.wjx.cn/ and distributed to participants through WeChat class groups of GDUPT. All participants completed the questionnaire online. Each participant was required to fill out a three-part questionnaire (see Appendix A). The instrument consists of three parts: the first part-personal information of the respondents, the second part-service quality, and the third part-student satisfaction. Not any identifying information of participants was collected through the survey instrument, so participants' responses remain anonymous. The survey link expired after participants reached 400. At the end of each survey, the WenJuanXing website labeled each submitted survey with a unique numerical identifier, Internet Protocol (IP) address, and time and date stamp. This helped prevent single participants from submitting duplicate surveys.

Data Analysis - To perform data analysis, the following statistical tools were used. Frequency and percentage distribution were used to describe the profile of the respondents in terms of sex and grade level; Weighted means and ranking were used to assessed the service quality in terms of tangibility, trust, responsibility, security and empathy; determined the student satisfaction in terms of Collegiality, Program Schedule, Curriculum Content, Advising and Instruction; tested the significant on the service quality and student satisfaction when grouped according to profile; tested the significant relationship between service quality and student satisfaction and proposed plan to enhance service quality and student satisfaction. The result of Shapiro-Wilk Test revealed that p-values of the main variable was less than 0.05 which means that the data set is not normally distributed. Therefore, Spearman rho was used to test the significant relationship of the treated variables. In addition, post hoc test was also conducted. In addition, all data were treated using a statistical software known as PASW version 26 to further interpret the result of the study using an alpha level of 0.05 and 0.01.

Ethical Considerations - Research participants have the right to know the purpose of the study, their privacy is protected, and the full confidentiality of the research data is ensured. The statistical data collected from the questionnaire will be all original data and will not be modified. In addition, ethical practices were followed throughout the entire research process.

3. Results and discussion

Table 1

Percentage Distribution of the Respondents Profile

Sex	Frequency	Percentage %
Male	161	46.0
Female	189	54.0
Grade Level		
freshman	82	23.4
sophomore	85	24.3
junior	111	31.7
senior	72	20.6

The profile of respondents is in terms of the respondents' sex, it was found out that among 350 respondents 189 were female students, which is equivalent to 54%, comprising slightly over half of the respondents, compared with the percentage of male students, which is equivalent to 46%. Based on the database, data shows that there were more female students enrolled in the study, which indicated the same result of (Becker, 2021) that female students were more willing to participate in this survey. In terms of the grade level, the results presented those 82 respondents or 23.4% are freshman, 85 respondents or 24.3% are sophomore, 111 respondents or 31.7% are junior, while 72 or 20.6% are senior. The data showed that the highest number of third junior students participated in this survey. The number of freshmen and sophomores is very close. The number of senior students participating in the questionnaire is the lowest, mainly because they graduated in June. Although they have already graduated, recalling their experiences during their school years may still be relatively fresh, which can support the effectiveness of the results.

Table 2

Summary Table Service Quality

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Tangibility	3.34	Agree	5
2. Trust	3.48	Agree	3
3. Responsibility	3.45	Agree	4
4. Security	3.49	Agree	1.5
5. Empathy	3.49	Agree	1.5
Composite Mean	3.45	Agree	

Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree

Table 2 presented above, illustrates the evaluation of service quality concerning the aspect of responsibility, comprising five key indicators. The composite mean score of 3.45 suggests that, overall, the respondents generally agreed with the service quality in those five dimensions, which primarily pertains to the responsibilities of the school administrators. The variance in weighted mean scores among the five indicators is not significant. Upon analyzing the ranking of scores, it is evident that the items receiving the highest score is "Security" and "Empathy" (3.49), followed closely by "Trust" (3.48), and "Responsibility" (3.45). Conversely, the lowest scoring item is the item 1 ranked the fifth, which is "Tangibility," received a score of 3.34. These findings suggest that the overall performance of administrative personnel in terms of responsibility is relatively consistent; however, none of the indicators reached a "strongly agree" level.

Table 3

Summary Table on Student Satisfaction

Indicators	Weighted Mean	Verbal Interpretation	Rank
Collegiality	3.51	Highly Satisfied	1
Program Design/Schedule	3.41	Satisfied	2
Curriculum Content	3.37	Satisfied	3.5
Advising and Instruction	3.37	Satisfied	3.5
Composite Mean	3.42	Satisfied	

Legend: 3.50 – 4.00 = Highly Satisfied; 2.50 – 3.49 = Satisfied; 1.50 – 2.49 = Less Satisfied; 1.00 - 1.49 = Not Satisfied

Table 3 presents the evaluation concerning the student satisfaction, comprising of four key indicators. The composite mean score was 3.42 indicating that students on average, are content with their overall educational experience. The table also showcases students' high satisfaction with "Collegiality," with weighted average of (3.51), indicating the significance of a supportive academic environment. Additionally, students' express satisfaction with "Program Design/Schedule" (3.41), "Curriculum Content," (3.37) and "Advising and Instruction" (3.37), emphasizing the importance of well-structured programs, relevant curriculum, and interaction between students-instructors, among others. The composite mean score reflects an overall satisfactory level of student satisfaction, demonstrating a positive overall educational experience for the students involved.

Table 4 explored the difference in responses on service quality when grouped according to two different profiles: "Sex" and "Grade Level," and employed statistical test to evaluate the significance of differences

between the groups. Regarding the variable "Sex," the study found that there were no statistically significant differences in service quality responses based on sex, which implies that they have the same assessment across profile. This was evident in the results in the Table 13 where the p-values were greater than the chosen significance level of 0.05. A study on university satisfaction by Wong and Chapman (2023) reveals how students' age and gender are related to their participation in different forms of interpersonal interaction, thereby indicating how these variables make different contributions to student satisfaction. Conversely, when examining the variable "Grade Level," the responses related to tangibility, trust, and responsibility did not show statistically significant difference across different grade levels. However, concerning the variable "Security," the study found a significant difference in service quality perceptions among various grade levels, with a p-value of 0.026. The responses related to "Empathy" exhibited highly significant difference across different grade levels, with a p-value less than 0.001. Thus, the results highlighted that service quality responses are not significantly influenced by sex, but grade level does play a role in shaping perceptions of service quality, particularly in terms of security and empathy.

Table 4

Difference of Responses on Service Quality When Grouped According to Profile

Sex	χ^2_c / U	p-value	Interpretation
Tangibility	6.429	0.093	Not Significant
Trust	1.626	0.653	Not Significant
Responsibility	2.217	0.529	Not Significant
Security	2.226	0.527	Not Significant
Empathy	3.164	0.367	Not Significant
Grade Level			
Tangibility	7930.5	0.398	Not Significant
Trust	7441.5	0.101	Not Significant
Responsibility	7764	0.265	Not Significant
Security	7101	0.026	Significant
Empathy	6385	<.001	Highly Significant

Legend: Significant at p-value < 0.05

Table 5

Difference of Responses on Student Satisfaction When Grouped According to Profile

Sex	χ^2_c / U	p-value	Interpretation
Collegiality	14633	0.514	Not Significant
Program Design/Schedule	13711.5	0.101	Not Significant
Curriculum Content	13828.5	0.129	Not Significant
Advising and Instruction	14540	0.462	Not Significant
Grade Level			
Collegiality	4.248	0.236	Not Significant
Program Design/Schedule	2.422	0.49	Not Significant
Curriculum Content	2.42	0.49	Not Significant
Advising and Instruction	1.99	0.574	Not Significant

Legend: Significant at p-value < 0.05

Based on the results of the statistical analysis displayed in Table 5, there was no significant difference in student satisfaction responses when students were grouped according to their sex or grade level. This suggests that these demographic factors did not have a substantial impact on student satisfaction with aspects such as collegiality, program design/schedule, curriculum content, and advising and instruction.

When analyzing student satisfaction based on these profiles, it's essential to conduct surveys or research studies that capture their perspectives and experiences. By doing so, institutions can identify specific areas that need improvement for each group. Moreover, it's crucial to avoid making generalizations based on profiles, as individual experiences can still vary significantly within each group. The insights gained from such analyses can help educational institutions tailor their services and support systems to meet the unique needs and expectations of different student profiles, ultimately leading to improved overall student satisfaction. According to Kanwar and Sanjeeva (2022), the degree of student satisfaction is one of the key markers of a college's development,

along with student progression and placements. In addition, students prefer higher education that provides better service quality and student satisfaction (Tahir & Saleem, 2021). In India, students who are enrolled in higher education institutions seek more quality education and perfection of the system, in terms of good infrastructure, quality education system, accessibility of the location, additional inputs in the form of value addition, services provided by the institution and employability enhancement courses (Enilo & Ortega, 2022). Furthermore, the UK emphasized the importance of evaluating students' satisfaction in their universities and colleges to guarantee that every student receives a superior education that enriches their lives and careers, including courses that improve employability (Collier, et al. 2019).

Table 6

Relationship between Service Quality and Student Satisfaction

Student Readiness	rho	p-value	Interpretation
Collegiality	.611**	<.001	Highly Significant
Program Design/Schedule	.678**	<.001	Highly Significant
Curriculum Content	.720**	<.001	Highly Significant
Advising and Instruction	.693**	<.001	Highly Significant
Institution support			
Collegiality	.699**	<.001	Highly Significant
Program Design/Schedule	.763**	<.001	Highly Significant
Curriculum Content	.738**	<.001	Highly Significant
Advising and Instruction	.714**	<.001	Highly Significant
Instructor's Role			
Collegiality	.716**	<.001	Highly Significant
Program Design/Schedule	.780**	<.001	Highly Significant
Curriculum Content	.763**	<.001	Highly Significant
Advising and Instruction	.709**	<.001	Highly Significant
Content			
Collegiality	.744**	<.001	Highly Significant
Program Design/Schedule	.797**	<.001	Highly Significant
Curriculum Content	.796**	<.001	Highly Significant
Advising and Instruction	.758**	<.001	Highly Significant
Technological Factors			
Collegiality	.786**	<.001	Highly Significant
Program Design/Schedule	.846**	<.001	Highly Significant
Curriculum Content	.818**	<.001	Highly Significant
Advising and Instruction	.796**	<.001	Highly Significant

Legend: Significant at p-value < 0.01

Table 6 explored the investigation regarding the association between service quality and student satisfaction in various areas. The corresponding p-values were used to assess the significance of the relationships. The findings revealed highly significant positive correlations between service quality and student satisfaction across all areas studied, denoted by ** (significant at p-value < 0.01). Specifically, service quality in terms of collegiality, program design/schedule, curriculum content, advising and instruction, institution support, instructor's role, content, and technological factors all demonstrated highly significant positive relationships with student satisfaction. It's important to note that individual student preferences and expectations can vary, and factors contributing to satisfaction may differ from one student to another. Moreover, each educational institution's unique culture and practices can also influence the impact of service quality on student satisfaction. Therefore, a comprehensive understanding of students' needs and continuous efforts to improve service quality are essential for enhancing overall student satisfaction.

These results underscore the crucial role of service quality in enhancing student satisfaction, suggesting that focusing on improving various aspects of service provision can lead to increased overall satisfaction among students. This information can be valuable for educational institutions and policymakers in prioritizing and enhancing service quality to better meet the needs and expectations of students, ultimately contributing to improved educational experiences and outcomes. In addition, Wong and Chapman (2023) provided some analysis of eight aspects of student satisfaction (i.e. satisfaction with the program, teaching of lecturers,

institution, campus facilities, student support provided, own learning, overall university experience and life as a university student in general) and suggested that the significant differences in the aspects of student satisfaction were associated with student–student formal interactions, student–student informal interactions and student-instructor interactions.

4. Conclusions and recommendations

The following conclusions are hereby drawn: There were more female respondents enrolled in the study. In terms of the grade level, the highest proportion comes from junior students. In terms of service quality, the respondents generally agreed with the service quality in Tangibility, Trust, Responsibility, Security, and Empathy. In those five indicators, there are 5 items: Teachers and administrators are willing to help students solve problems; Teachers and administrators behave appropriately and politely when interacting with students; Administrators have good knowledge and are able to respond well to student inquiries; Teachers and administrators would pay attention to the special students and be able to maintain confidentiality for them; Teachers and administrators respect the rights and interests of students and focuses on providing good services, got the weighted mean score lie in 3.50 – 4.00 with strongly agree. The students were satisfied with Program Design/Schedule, Curriculum, Content, Advising and Instruction, while highly satisfied with Collegiality. In those four indicators, there are only two items: My collaboration and communication with other classmates are a valuable component of my learning experience; I am willing to maintain the friendly relationships developed in the study which were highly satisfied. There was a significant difference on service quality in terms of Security and a highly significant difference when students were grouped according to their grade level. As to student satisfaction, there was no significant difference when students were grouped according to their sex or grade level. In addition, there are highly significant positive correlations between service quality and student satisfaction across all areas studied.

Based on the conclusions, the following recommendations are forwarded: The school may conduct regular surveys and focus groups to understand what students expect from your institution's services. The management may recognize that students have diverse needs and preferences which means they need to tailor services to meet these individual differences. The school may provide a variety of learning resources, including digital tools and libraries, to support student success. The students may provide with timely and constructive feedback on their academic performance. Future researchers may conduct similar study but focusing on the creation of new framework for service quality.

5. References

Alhabeeb, A. M. (2015). The Quality Assessment of the Services Offered to the Students of the College of Education at King Saud University Using (SERVQUAL) Method. *Journal of Education and Practice, 6*(30), 82-93.

Bandy, J. (2021). Academic Advising. Vanderbilt University Center for Teaching. https://cft.vanderbilt.edu/academic-advising/

Collier-Meek, M. A., Johnson, A. H., Sanetti, L. H., & Minami, T. (2019). Identifying critical components of classroom management implementation. *School Psychology Review, 48*(4), 348-361.

Conklin, A. (2022). Comparing Curriculum and Instruction. https://study.com/learn/lesson/curriculum-vs-instruction.html

Enilo, M. J. U., & Ortega, J. D. (2022). Satisfaction of Basic Education Students on School Services. *International Journal of Multidisciplinary Studies, 1*(1).

Fahrurrozi, M. (2022). Evaluation of educational service quality of vocational high school (VHS) based on importance performance analysis (IPA) quadrant. *Eurasian Journal of Educational Research, 97*(97), 27-42.

Hadikoemoro, S. (2002). *A comparison of public and private university students' expectations and perceptions of service quality in Jakarta, Indonesia*. Nova Southeastern University.

Ham, L., & Hayduk, S. (2003). Gaining competitive advantages in higher education: analyzing the gap between expectations and perceptions of service quality. *International Journal of Value-Based Management*, 16(3).

Haviland, D., Alleman, N. F., & Cliburn Allen, C. (2017). 'Separate but not quite equal': Collegiality experiences of full-time non-tenure-track faculty members. *The Journal of Higher Education, 88*(4), 505–528.

Kanwar, A., & Sanjeeva, M. (2022). Student satisfaction survey: a key for quality improvement in the higher education institution. *Journal of Innovation and Entrepreneurship*, *11*(1), 1-10.

Kasper, H., Helsdingen, P. van, & Gabbott, M. (2006). Services marketing management (2nd ed.). Chichester, England: John Wiley and sons ltd.

Liu, H. (2011). *A research of China higher education student satisfaction based on PLS-SEM model* (Doctoral dissertation, Doctoral dissertation, Jiangsu University, Jiangsu, China).

Mastoi, A. G., & Saengkrod, L. X. W. (2019). Higher education service quality based on students' satisfaction in People's Republic of China. *Higher Education*, *10*(6), 109-121.

Nazarian, R., Saber-Mahani, M., & Beheshtifar, M. (2012). Role of service quality in universities. *Innova Ciencia*, *4*(6), 3-9.

Pan, W., Chen, L., & Zhan, W. (2020). Implications of construction vocational education and training for regional competitiveness: Case study of Singapore and Hong Kong. *Journal of Management in Engineering*, *36*(2), 05019010.

Schweitzer, K. (2019). Curriculum Design: Definition, Purpose and Types. https://www.thoughtco.com/curriculum-design-definition-4154176

Sumner, D. A. (2008). A Measurement of Student Satisfaction Levels as a Means of Program Evaluation: An Examination of Baker University's Educational Leadership Doctoral Program (Doctoral dissertation, Baker University).

Tahir, A., & Saleem, I. (2021) Impact of service quality on student satisfaction in higher education: a comparative study of public and private universities in Pakistan. *Governance and Management Review, 6(1)*. http://pu.edu.pk/images/journal/IAS/PDF/3-v6_1_21.pdf

Weerasinghe, I. S., & Fernando, R. L. (2017). Students' satisfaction in higher education. *American journal of educational research*, *5*(5), 533-539.

Wong, W. H., & Chapman, E. (2023). Student satisfaction and interaction in higher education. *Higher Education*, *85*(5), 957-978.

Yang L., Chen W., & Wu Q. (2011). Study on the status of students' satisfaction for the quality of higher education Service and its influencing factors: based on a survey analysis of undergraduates in eight colleges of Jiangsu. *Value Engineering, 30*(34), 1-4.

Appendix. Questionnaire

Service Quality of Undergraduate Education Based on Student Satisfaction Survey Questionnaire

II-1. Tangibility   **4 3 2 1**

1.   The school has modern devices and can meet daily teaching needs.

2.   The public facilities of the school can be properly maintained and easily used.

3.   The teaching facilities provided by the school are convenient to use and attractive.

4.   Teachers and administrators dress appropriately and speak appropriately in the workplace.

II-2. Trust   **4 3 2 1**

1.   Teachers and administrators can fulfill their promised actions within the specified time.

2.   Teachers and administrators are willing to help students solve problems.

3.   Administrators are trustworthy, and the services they provide are correct and effective.

II-3. Responsibility   **4 3 2 1**

1.   Administrators can serve students at a reasonable time.

2.   Administrators are competent in their own work.

3.   Administrators have good service awareness and attitude.

4.   Administrators can provide personalized services and assistance to students.

II-4. Security   **4 3 2 1**

1.   Teachers and administrators often provide support and encouragement to students.

2.   Teachers and administrators are approachable, and students will not feel uncomfortable when facing with them.

3.   Teachers and administrators behave appropriately and politely when interacting with students.

4.   Administrators have good knowledge and are able to respond well to student inquiries.

II-5. Empathy   **4 3 2 1**

1.   The school provides channels for all students to reflect on issues, such as principal reception days, principal mailbox, homeroom teachers, counselors, etc.

2.   Teachers and administrators would pay attention to the special students and be able to maintain confidentiality for them.

3.   The school concerns students' personalized development and provide them with many programs, such as elective courses, second classrooms, university clubs, etc.

4.   Teachers and administrators respect the rights and interests of students and focuses on providing good services.

Student Satisfaction

III-1. Collegiality

1. My collaboration and communication with other classmates are a valuable component of my learning experience.

2. I can gain support and encouragement from other students in the course learning.

3. Positive relationships with other classmates have increased my classroom participation.

4. I am willing to maintain the friendly relationships developed in the study.

III-2. Program Design/Schedule

1. The courses arrangement follows a logical order (early courses are the foundation of subsequent courses).

2. When planning curriculum and classroom activities, the school will fully consider academic year events and work arrangements.

3. The break times between courses are well scheduled.

4. In addition to theoretical learning in the classroom, the school has also arranged corresponding practical teaching for us.

5. The assessment of the courses is reasonable and appropriate.

III-3. Curriculum Content

1. The courses in this major consider common issues and challenges faced by current and future employment.

2. The teacher has strict but reasonable requirements for weekly assignments.

3. Course assignments and practical activities provide opportunities for the practical application of professional skills.

4. I believe that schools and even regional education departments are involved in students' development.

5. The courses arranged by the school have significantly improved my professional ability.

6. Professional cultivation goals, expectations, and deadlines of the courses are reasonable.

7. In general, the courses arranged by the school meet my professional needs.

III-4. Advising and Instruction

1. The course teacher has a good understanding of the students.

2. Teachers are willing to help me and have played an important role throughout my entire education period.

3. Teachers give me more support rather than criticism.

4. The homework submitted to the teachers can be carefully corrected and returned in a timely manner.

5. I have always maintained a healthy and productive relationship with my teachers.

6. Teachers show their mastery of the teaching content of the course they are responsible for.

7. Teachers always respect and appreciate the positive performance of each student.

8. Direct teaching (or lectures) is the main teaching form of the entire course.

9. The teaching activities and strategies have stimulated my thinking and enabled me to achieve short-term or long-term professional growth.