



# Service quality satisfaction as experienced by dentistry students

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## Abstract

In today's highly competitive global arena, service quality in the context of higher education is a growing concern among educational institutions. The service quality satisfaction of students is an important factor for the growth, success, and sustainability of an educational institution. It was the major purpose of this study to explore the service quality satisfaction of the students of the School of Dentistry, University of Baguio. This descriptive survey study made use of a validated, reliability-tested Student Satisfaction Questionnaire that focused on Gronroos' five dimensions of service quality satisfaction, namely: Reliability, Assurance, Tangibles, Empathy, and Responsiveness. Thirteen frontline service sectors of the University of Baguio were the target areas of the survey. A total enumeration of 528 students participated voluntarily in the study. Student satisfaction is a result of service quality. The respondents experienced very good service quality from all the 13 service sectors. Consequently, the students are very satisfied with the service quality rendered by the frontline service sectors of UB. The reliability dimension stood out as the main cause of high service quality satisfaction.



Assurance and empathy need to be enhanced further because these are critical factors that contribute to student satisfaction.

**Keywords:** service quality, customer satisfaction, reliability, assurance, tangibles, empathy

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## Introduction

In today's highly competitive global arena, service quality in the context of higher education is a growing concern among educational institutions. As pointed out by Voigt and Hundrieser (2008), keen attention is crucial in creating and maintaining a culture built on quality service initiatives that focus on meeting the needs and demands of a diverse student population.

The quality and availability of support services positively impact on students' choices of educational institutions (Ackerman & Schibrousky, 2007). Service quality issues also influence students' decisions to stay in an institution until they finish their degree programs. Educational institutions are fully aware that quality of service is an important factor for the growth, success, and sustainability of an institution. As such, paying attention to the quality of services is of great importance. Since students are considered as main customers in educational institutions, the students' views about educational services are important considerations in maintaining customers' satisfaction. The students' satisfaction with the quality of services should be maintained as they are the most important customers of a university. Higher education institutions should ensure that all service sectors in the institution should be managed to enhance service quality and customer satisfaction.

The Institutional Research and Effectiveness Department of Sul Ross State University (2005) conducted a Cashier Satisfaction Survey which gathered information about administration, faculty, staff, and student satisfaction. The respondents were very satisfied with the helpfulness of cashiers. They were



satisfied with the knowledge and availability of cashiers at the office and via phone, the timeliness of refund checks, the timeliness of call or email returns, the communication between cashiers and Financial Aid Office, and the communication between the cashiers and registrar's Office. In sum, the respondents expressed satisfaction with the service provided by the Cashier's Office of the Sul Ross State University.

The Institutional Research and Planning department of the Community College of Denver (2014) conducted a student satisfaction survey. Of the 94 percent of respondents, 58% were satisfied and 36% were very satisfied with the CCD. In their study, the top-ranking indicators were the adequate registration and cashier hours, efficient transactions at the cashier's office, friendly cashiers, testing/assessment process, and environment.

Several studies focused on the key dimensions of service quality satisfaction. Sultan and Wong (2012) found that the reliability dimension influenced students' satisfaction more than the other dimensions. Hasan, Ilias, Rahman, and Razak (2008) found that service quality had a significantly positive relationship with student satisfaction. Of the five dimensions of service quality, empathy and assurance are the most critical factors in explaining students' satisfaction. Kara, Tanul and Kalai (2016) revealed that the quality of teaching and teaching facilities were the most significant dimensions of customer satisfaction. According to Khalifa and Mahmoud (2016), non-academic staff helpfulness and academic staff individualized attention were positively associated with the students' satisfaction. Saravanan (2018) stated that the factors that can increase the satisfaction level of customers are knowledgeable, friendly, and helpful employees, as well as better service quality and quick service. Muhammad, Kakakhel, Baloch and Ali (2018) conducted a study to investigate the relationship between service quality and students' satisfaction using the Higher Education Performance Model (HedPERF). Among others, the study revealed that among the five dimensions of HedPERF, academic aspects ranked as the most important dimension of service quality. The study bared that there is a significant



relationship between service quality dimensions and students' satisfaction. In its totality, customer satisfaction is a standard of how the offered "total" service fulfills customer expectations (Grigoroudis & Siskas, 2010). Felix (2017), in his study on the relationship between service quality and customer satisfaction in selected banks in Rwanda, revealed a significant and positive relationship between service quality and customer satisfaction. Customer loyalty was related to the dimensions of reliability, responsiveness, and assurance.

In the Philippine setting, Llanda and Trinidad (2015) conducted a study aimed at developing and evaluating the Student Cashiering and Account Management System (SCAMS) for the Abra State Institute of Sciences and Technology. The study comprised two phases, namely, the development phase and evaluation phase. The development phase included the design of the SCAMS, which used the Incremental Model and the Unified Modeling Language or UML. The evaluation phase utilized two methods, including technical evaluation with system testing and humanistic evaluation to test the acceptability of the system. The respondents in the evaluation were highly satisfied and highly accepted the accuracy, efficiency, reliability, and security features of the SCAMS. Across all features, the SCAMS was consistently rated as "highly acceptable." The study confirmed the need to automate the process used to perform transactions in the Cashiering and Accounting Offices as well as keeping students' account information updated.

This study is anchored on selected theories and concepts governing service quality and customer satisfaction. The expectation theory states that expectations provide a standard or frame of reference against which satisfaction judgments are made — satisfaction results from meeting the expectations of the customers. Expectation theory helps predict satisfaction (Hoy & Miskel, 2005). The equity theory focuses on perceived fairness or the individual's beliefs about whether they are treated fairly or not. The fundamental idea behind the equity theory is that in a social exchange situation consisting of two persons or parties, each is presumed to compare



his relative gains to the perceived relative gains of others.

According to Wang and Wang (2006), service quality is a form of attitude related but not equivalent to the satisfaction that results from the comparison of expectation with performance. As such, the expectancy theory is the overriding theory pertaining to service quality and satisfaction. Wang and Wang further stated that customers generally use certain criteria to evaluate service quality. The most common dimensions of service quality are reliability, responsiveness, assurance, empathy and physical or tangible aspects. The American perspective states that service quality may be evaluated based on five components, namely, tangibles, reliability, responsibility, assurance, and empathy (Kang & James, 2004).

This study was guided mainly by one of the most comprehensive service quality models advanced by Gronroos (2013). The Gronroos model contends that service quality is determined by the differences between the customers' expectations of the service provider's performance and their evaluation of the service they received. Gronroos (2013) service quality model depicts service quality as being judged on the basis of the user's or consumer's assessment. Consequently, service quality is defined in the Gronroos model as a measure of how well the delivered service matches the customer's expectations. The concept of perceived service quality pertains to the evaluation process wherein the consumer compares what he or she expected to receive with what he or she actually received. In the analysis of Gronroos' service quality model, Kang and James (2004) listed five generic dimensions of service quality, including (1) Tangibles, which pertain to physical facilities, equipment, appearance of personnel; (2) Reliability, pertaining to the ability to perform the promised service dependably and accurately; (3) Responsiveness, which is the willingness to help customers and provide prompt service; (4) Assurance, or the knowledge and courtesy of employees and their ability to convey trust and confidence; and (5) Empathy, referring to a caring and personalized attention. In this study, the researchers adopted the five generic dimensions of service quality as



the research framework for investigating the quality service satisfaction of UB's dentistry students.

Gronroos' model is popularly known as SERVQUAL, the most widely used model for measuring service quality in the business world and the educational setting. There is a consensus on the importance of service quality in higher education. In this regard, educational practitioners need to gain a better understanding of the quality service issues that students experience as they engage in educational endeavors.

Assessing the students' satisfaction with their service quality experience is beneficial in planning and implementing higher education programs. Such programs can then be designed to enhance the growth, success, sustainability and competitive edge of higher education institutions. Service is one of the core values in the vision-mission statement of the University of Baguio. It is, therefore, essential to assess the students' level of satisfaction with the service quality demonstrated by the frontline and support sectors of the University of Baguio.

The findings of the study can serve as a guide to service providers that render support in the University of Baguio to identify the dimensions that impact the students' satisfaction. The findings of the study can help service providers to understand better how to satisfy the needs and expectations of the students. The conclusions of this study can be a reference to decide on additional research in the area of service quality satisfaction.

The primary purpose of this study was to explore the service quality satisfaction as experienced by the students of the University of Baguio School of Dentistry. Specifically, the researchers determined the following: (1) the level of service quality satisfaction experienced by the Dentistry students in consideration of the dimensions of service quality of the following frontline service sectors of the University of Baguio: (a) Accounting Services, (b) Administrative Services (Dean's Office), (c) Cashiering Office Services,



(d) Community Outreach Services, (e) General Services/Campus Planning/Maintenance Services, (f) Guidance and Counseling Services, (g) Library and Instructional Media Services, (h) Media Affairs Services, (i) Medical-Dental Services, (j) Registrar Services, (k) Research and Development Center Services, (l) Security Services, and (m) Student Services (Office of Student Affairs); (1.1) if there are significant differences in the level of service quality satisfaction experienced by Dentistry students according to gender and year level; and (2) the strengths/high-level areas and the low-level areas that need improvement with respect to the dimensions of service quality satisfaction as experienced by the Dentistry students.

### Methodology

This study utilized a descriptive survey research design. It sought to describe the current status of service quality satisfaction of the Dentistry students through a satisfaction survey questionnaire. The population of the study was composed of 528 students of the School of Dentistry enrolled during the Second Semester of School Year 2018 to 2019. Only those who were willing to participate in the survey were included in the final sample population. The questionnaire was constructed in consideration of the five generic dimensions of service quality based on the Gronroos Model (2013). The five dimensions are summarized in the acronym RATER or Reliability, Assurance, Tangibles, Empathy, and Responsiveness. Each dimension had five assessment items. As such, the questionnaire is composed of a total of 65 items. The questionnaire items were based on the literature review on service quality satisfaction. The questionnaire was presented to a tool validator to ascertain its validity. It was pre-tested among the students enrolled in dentistry research. The pre-test group was not included in the research population. To determine the reliability of the questionnaire, the internal consistency reliability through Cronbach's Alpha was applied. A Cronbach Reliability Coefficient of 0.96 was obtained.



Thirteen frontline service sectors were assessed in terms of the level of the students' satisfaction with service quality. Permission to conduct the survey was secured from the Dean of the School of Dentistry. After determining the validity and reliability of the questionnaire, the researchers administered the questionnaire among the Dentistry students from first-year to fourth-year. A four-point Likert-type scale was used to determine the students' level of service quality satisfaction. To test the null hypothesis with respect to the variable of gender, the t-test for independent samples was applied. To test the null hypothesis considering the variable of year level, the F-test (Analysis of Variance) was applied. The purpose of the study was included in the cover letter of the questionnaire. All students enrolled in the School of Dentistry at the time of the study were targeted as respondents. However, only the students who were willing to participate were included in the study. The names of the respondents were not placed in the questionnaire to provide anonymity and confidentiality. The students were not forced or compelled to accomplish the questionnaire. As such, the criteria of anonymity, confidentiality, and voluntary participation were observed. There was no perceived negative impact of the study on the students as the identity of each respondent was protected. Also, the items or indicators in the questionnaire were written to avoid causing any emotional or mental harm to the respondents.

## Results and Discussion

### Level of Service Quality Satisfaction of the Students

**Accounting services.** The students were very satisfied with all the dimensions of service quality of the accounting service sector. The dimension of service quality that contributed most to the students' satisfaction is assurance. The dimension that contributed least is tangibles. These findings imply that the accounting services sector makes the students feel safe in their transactions and that the staff has the knowledge to answer the students' questions regarding accounts. On the other hand, although the students indicated that





they were very satisfied with tangibles, there is further room for improvement in this dimension because it ranked lowest among the dimensions. Tangibles relate to modern equipment, visually appealing facilities, employees who have a neat and professional appearance, and visually appealing materials associated with the service (Wang & Wang, 2006). In their study, Llanda & Trinidad (2015) highlighted the need to automate the process used to perform transactions in the cashiering and accounting offices as well as keeping the students' account information updated. Felix's (2017) study revealed that the highest-rated dimension of service quality as perceived by the bank customers in Rwanda is the dimension of tangibles followed by the dimension of assurance. In Felix's study, the lowest-ranked dimensions were empathy and responsiveness.

**Administrative services (Dean's Office).** Reliability ranked first among the dimensions of service quality of administrative services (Dean's Office). This dimension pertains to consistency and dependability in handling the customer's service problems, performing services correctly, and maintaining an error-free record. This shows that the Dean's office staff render reliable service, which was rated very good. The lowest-ranked dimension was empathy, which is related to giving customers individual attention, dealing with customers in a caring fashion, having the customers' best interests at heart, and understanding the needs of the customers (Wang and Wang, 2006). In their study, Hasan, Ilias, Rahman, and Razak (2008) found that service quality had a significantly positive relationship with student satisfaction. Of the five dimensions of service quality, empathy and assurance were the most critical factors contributing to students' satisfaction.

**Cashiering services.** The top-ranking dimension of service quality of cashiering services that contributed to students' satisfaction is reliability. The students experienced dependable, accurate, error-free students' records rendered by the cashier's office staff. This sector was rated as very good. The lowest-ranked dimension is assurance, which could mean that the students expected a more courteous, friendly, and caring attitude from the cashier's



office staff. The student satisfaction survey of the cashier's office of the Community College of Denver conducted by its Institutional Research and Planning Department (2014) revealed a high rating on efficient transactions from the cashier's office, payment system, cashier's staff, and cashiering time. In the student satisfaction survey of cashiering services conducted by the Institutional Research and Effectiveness Department of Sul Ross State University (2005), the student respondents expressed satisfaction with the services provided by the Cashier's office. In another related study on the University of Baguio, Balderas, Suyan, Tulanan, and Villar (2018) found that the SBAA students were moderately satisfied with the service quality rendered by UB's Cashier's Office.

**Community outreach services.** The top-ranking dimension, rated very good, that contributed to the students' satisfaction of community outreach services is assurance. This result implies that the community outreach staff made the students feel safe in their transactions and that they were courteous in their dealings with them. The lowest-ranked dimension of service quality is tangibles, which relate to equipment, materials and facilities.

**General services, campus planning, and maintenance services.** Assurance ranked as the number one service quality dimension that contributed to student satisfaction with the general services, campus planning, and maintenance services. This result means that the sector made the students feel safe in their transactions and the staff demonstrated a courteous, friendly, and caring attitude. Lowest in rank are tangibles, which relate to cleanliness, orderliness and sanitary appeal of the campus environment for the convenience and comfort of the students. Although this item was also rated very good, the students may have expected more from this sector. In Hasan, Ilias, Rahman, and Razak's (2008) study, the lowest satisfaction toward the services they surveyed was related to tangibles and the highest was related to assurance. The finding confirms that assurance is one of the dimensions that significantly relate to student satisfaction. Students in higher education institutions are concerned with their service providers'



knowledge, courtesy, and ability to inspire trust and confidence. Khalifa and Mahmoud (2016) found that the helpfulness of the non-academic staff and the attention provided by the academic staff were positively associated with the students' satisfaction.

**Guidance and counseling services.** The top-ranking dimension contributing to student satisfaction with guidance and counseling services is empathy. This dimension relates to giving customers individual attention, dealing with customers in a caring fashion, and understanding the needs of the customers (Wang & Wang, 2006). In the study of Hasan, Ilias, Rahman and Razak (2008), empathy had the strongest relationship with student satisfaction. This current study confirmed that empathy plays a crucial and influential role toward satisfaction because. Empathy is necessary to communicate care and understanding through the interpersonal skills of the staff and student-friendly policies and procedures (Kang & James, 2004). O'Neill and Palmer (2004) said that empathy is a dimension that significantly correlated with satisfaction. Manshart (2003) found that when students show high satisfaction with their college experience, it is due to the interpersonal contact between service providers and students. In the survey on student satisfaction conducted by the Institutional Research and Planning of the Community College of Denver (2014), students who had experience with the testing process reported a positive experience from the procedure, staff, environment, tests, and advising process.

**Library and instructional media services.** Tangibles topped the list of service quality dimensions for the library and instructional media services. The students were very much satisfied with the appeal of facilities, materials, and equipment arranged for their convenience. The visually appealing library materials, equipment, and facilities and the orderliness of the library shelves made the students very much satisfied. Second in rank is the dimension of reliability. The students were very satisfied with the technical expertise of the library personnel or staff and up-to-date and accurate information. As Carlson and Kneale (2011) pointed out, in this age of information, librarians



work with information resources and design workflows and systems to organize, manage, and deliver up-to-date information, documentation, and other needed materials. Sultan and Wong (2012) also found that reliability influenced students' satisfaction more than the other dimensions of service quality.

**Media affairs services.** In the media affairs services sector, two service quality dimensions tied at rank 1.5. These are reliability and responsiveness, which were rated very good. The dimensions correspond to a very satisfied level of service quality satisfaction. The students experienced a very good, dependable, and prompt service rendered by the media affairs service sector. Further, it implies that the media affairs service sector expressed readiness and willingness to respond to the students' request.

**Medical-Dental services.** The tangibles ranked first among the dimensions of service quality. This was rated very good which implies that the students were very satisfied with the cleanliness, orderliness, and sanitary appeal of the facilities, materials, and equipment for the convenience and comfort of the students. In addition, the students expressed that they were very satisfied with visually appealing facilities, neat and professional appearance of the medical-dental staff and over-all appealing atmosphere of the medical-dental clinic. Following closely at rank no. 2 is the dimension of empathy. The students were very satisfied with the individual attention given to them by the service providers of the medical-dental clinic. In addition, the students were very satisfied with the attitude of caring manifested by the medical-dental staff. In their study, Khalifa and Mahmoud (2016) found out that individualized attention, caring, helpfulness and understanding the needs of customers were positively associated with students' satisfaction. The studies of Ham and Hayduk (2003) and Bigne, Maliner, and Sanchez (2003) revealed that empathy had the strongest relationship to student satisfaction.

**Registrar services.** Tangibles ranked number one among the dimensions of service quality with respect to registrar services. The students were very satisfied with the orderliness and appeal of facilities, materials and



equipment, visually appealing facilities and the neat and professional appearance of the staff. This finding is corroborated by the findings of Yusoff, McLeay, and Burts (2015) that physical appearance (tangibles) are the main determinants of students' satisfaction. In Felix's (2017) study, tangibles were rated very high and ranked number one among the dimensions of service quality satisfaction. This result is on account of modern equipment, fast ICT facilities, visually appealing and spacious waiting queue chairs, neat and professional appearance of staff. Following close at second rank is the dimension of empathy. The students were very satisfied with the caring and understanding attitude of the registrar staff. In the study conducted by the Institutional Research and Planning Department of the Community College of Denver (2014), the top-ranking indicators under registrar services sector were adequate registration hour, the staff adequately answered questions, online registration went smoothly, in-person registration went smoothly, staff responded to student needs, and the staff were friendly and knowledgeable. These findings relate to the dimensions of reliability, responsiveness, and assurance. In this study, the students were very satisfied with the service quality rendered by registrar services sector. This finding supports the idea that customer satisfaction is a result of service quality. This means that service quality influences customer satisfaction (Saravanan, 2018).

**Research and Development Center services.** The tangibles ranked number one among the dimensions of service quality that contributed to student satisfaction with respect to RDC services. The students were very satisfied with the orderliness and appeal of facilities, materials and equipment of the RDC. This result coincides with the findings of Felix (2017) where tangibles topped the list of service quality dimensions that contributed to customer satisfaction. Following close are the dimensions of responsiveness and empathy which tied at rank 2.5. The students were very satisfied with the promptness, willingness, and readiness of the RDC to respond to students' requests, as well as the attention, caring, and understanding attitude of the RDC staff. In their study, Mwiya, et al. (2017) also revealed that responsiveness and empathy increased the level of the



customers' satisfaction. The experiences of the students with the RDC are closely aligned with the academic requirements pertaining to research. In the study of Muhammad, Kakahel, Baloch, and Ali (2018) that used the Higher Education Performance (HEdPERF) model, one of the dimensions of service quality is the academic aspect, which refers to the duties and responsibilities of the service provider (Abdullah, 2005). According to the European Commission's Eurydice Report (2017), the main duty of academic staff is producing and transmitting knowledge through research. Muhammad, Kakakhel, Baloch and Ali (2018) found that academics are the most important and influential dimension of service quality that can bring a big difference in the satisfaction level of the customers. Similarly, Liben, Daniel, and Adugna (2017) found that the academic aspect dimension is the most influential variable of students' satisfaction. Research is an academic function hence, the students' research experiences contribute to their level of satisfaction.

**Security services.** Responsiveness was ranked as the number one service quality dimension of security services. The students were very satisfied with the promptness, readiness, and willingness of the security service staff to respond to the students' needs and requests. In addition, the security service instilled a sense of safety for the students. The lowest in rank among the dimensions of service quality of the security services was assurance. It relates to the consistently courteous attitude of the security staff as well as their knowledge in answering the customer's questions. Since this dimension ranked last, there is a need to improve on it. In Hasan, Ilias, Rahman, and Razak's (2008) study on service quality and student satisfaction, they recommended focusing on critical factors in service quality, especially assurance and empathy. Elliot and Shin (2002) also found that the variable of a safe and secure campus directly impacts the overall customer satisfaction with the university's performance.

**Student affairs services (Office of student affairs).** Topping the list of service quality dimensions contributing to the students' satisfaction is responsiveness. The students were very satisfied with the service quality



rendered by the student affairs services sector along the dimension of responsiveness. The students were very satisfied with the promptness, readiness, and willingness of the student affairs sector to respond to the students' requests. In their study, Ham and Hayduk (2003), the dimensions of reliability, responsiveness, and empathy had strong relationships with student satisfaction. In the case of the student affairs service sector, the lowest in rank was empathy. Thus, there is a need to improve the service quality of the student affairs sector in so far as the dimension of empathy is concerned. As pointed out by O'Neil and Palmer (2004), empathy is a dimension that is significantly correlated with satisfaction.

### **Overall level of service quality satisfaction**

Table 1 presents the overall level of service quality satisfaction experienced by Dentistry students along five dimensions of service quality, in 13 services areas. The service quality dimensions are ranked as follows: (1) reliability, (2) tangibles, (3) responsiveness, (4) empathy, and (5) assurance.



Table 1  
*Overall level of service quality satisfaction experienced by dentistry students*

Service Areas	Service Quality Dimensions										Overall Mean	QI	Rank
	Reliability		Assurance		Tangibles		Empathy		Response-ness				
	Mean	QI	Mean	QI	Mean	QI	Mean	QI	Mean	QI			
1. Accounting	2.84	VS	2.85	VS	2.73	VS	2.79	VS	2.82	VS	2.81	VS	12
2. Administrative (Dean's Office)	2.94	VS	2.87	VS	2.87	VS	2.85	VS	2.88	VS	2.88	VS	10
3. Cashiering Office	3.14	VS	2.88	VS	3.00	VS	2.93	VS	3.02	VS	3.00	VS	5
4. Community Outreach	2.76	VS	2.84	VS	2.68	VS	2.75	VS	2.77	VS	2.76	VS	13
5. General Services / Campus Planning / Maintenance	2.89	VS	2.91	VS	2.83	VS	2.88	VS	2.85	VS	2.87	VS	11
6. Guidance and Counseling	2.97	VS	2.95	VS	2.98	VS	3.04	VS	2.91	VS	2.97	VS	7
7. Library and Instructional Media	3.10	VS	2.83	VS	3.29		2.95	VS	2.97	VS	3.03	VS	3
8. Media Affairs	2.96	VS	2.96	VS	2.90	VS	2.98	VS	2.96	VS	2.94	VS	8
9. Medical-Dental	3.10	VS	3.09	VS	3.14	VS	3.12	VS	3.05	VS	3.10	VS	1
10. Registrar	3.03	VS	2.97	VS	3.07	VS	3.05	VS	3.00	VS	3.03	VS	4
11. Research and Development Center	3.04	VS	2.96	VS	3.08	VS	3.06	VS	3.06	VS	3.04	VS	2
12. Security	2.86	VS	2.85	VS	2.91	VS	2.89	VS	2.93	VS	2.89	VS	9
13. Student Services (Office of Student Affairs)	2.99	VS	2.99	VS	2.99	VS	2.96	VS	3.00	VS	2.99	VS	6
Over-all Mean	2.97	VS	2.92	VS	2.96	VS	2.94	VS	2.94	VS	2.95	VS	
Rank	1		5		2		4		3				

Notes: QI stands for Qualitative Interpretation, VS for Very Satisfied, and VMS for Very Much Satisfied.





The dimension of reliability most influenced the students' service quality satisfaction. Reliability relates to knowledge, accuracy, and dependability. Reliability also topped the list in the studies of Sultan and Wong (2012) and Saravanan (2018). The top six service areas according to the obtained means are (1) Medical-Dental Services, (2) Research and Development Center Services, (3) Library and Instructional Media Services, (4) Registrar Services, (5) Cashier Services, and (6) Student Affairs Services. The three lowest-ranked sectors of service quality are (11) General Services, Campus Planning, and Maintenance Services, (12) Accounting Services, and (13) Community Outreach Services. All the mean scores in the 13 service areas were interpreted as very good and very satisfied. The overall mean was 2.9459, interpreted as very satisfied. In general, the level of service quality satisfaction is at 3.00 (very good/very satisfied level). In the overall analysis, the very good rating for service quality indicates an excellent level of service quality satisfaction. Bigne, Moliner, and Sanchez (2003) stated that the overall service quality had a significant relationship with satisfaction. This is confirmed by Ham and Hayduk (2003); Hasan, Ilias, Rahman, and Razak (2008); Felix (2017); and Muhammad, Kakakhel, Buloch, and Ali (2018).

### **Areas of strength and areas needing improvement in the dimensions of service quality satisfaction**

The service quality dimensions that had the highest mean per service area can be regarded as the strengths of UB's service quality, while the dimensions with lowest means can be regarded as dimensions of service quality that need to be further improved or strengthened. The dimension of assurance ranked first in the service areas of accounting, community outreach, and general services. The reliability dimension ranked first from the service areas of the administrative (Dean's office), cashiering, and media affairs. Empathy was first in the guidance and counseling services. Tangibles ranked first in the library and instructional media, medical-dental services, registrar services, and Research and Development Center. Responsiveness was first in the security services and student affairs services.



Further improvement or enhancement of the tangibles of the accounting service, community outreach, general services, and media affairs is needed. Empathy needs enhancement among the administrative (Dean's office), media affairs, and student affairs' services. The cashiering, library, registrar, research and development center, and security services need to work on assurance. Reliability is the only dimension that did not occupy the lowest-ranked position. This implies that students' satisfaction with service quality was most influenced by reliability. In the study of Zeithaml, Berry, and Parasuraman (1996), reliability was the most critical dimension of quality assurance. Tangibles dimension was both a source of high and low service quality satisfaction. Reliability stood out as a source of high satisfaction.

On the other hand, three service quality dimensions are dimensions that need to be strengthened/enhanced. These are assurance, empathy, and responsiveness. As pointed out by Hasan, Ilias, Rahman, and Razak (2008), assurance and empathy are critical factors that contribute most to student satisfaction. As such, by improving assurance and empathy, the students' satisfaction will be improved.

### **Comparison of the level of service quality satisfaction of dentistry students according to gender and year level**

Slight differences were noted in the means of the male and female respondents. Both the overall means of the male and female groups were interpreted as very satisfied. The t-test revealed that the computed t-ratio of 0.841 is less than the t-value of 1.465 at 0.05 level of significance. As such, the null hypothesis that there are no significant differences in the perceived level of service quality satisfaction considering gender is accepted. The males and females did not significantly differ in their satisfaction levels. Both male and female Dentistry students were very satisfied with the service quality rendered by the 13 service sectors covered.



There were also slight differences noted in the means per year level, but all fell within the category of very satisfied. The analysis of variance showed that the computed *F*-ratio of 2.41 was less than the *F*-value of 2.80 at 0.05 level of significance. Therefore, the null hypothesis that there are no significant differences in the level of service quality satisfaction and the year level was accepted. Thus, the dentistry students in all the year levels were very satisfied with the service quality rendered by the 13 service sectors covered in the study.

### **Conclusion and Recommendations**

Student satisfaction is a result of service quality. The dentistry students experienced very good service quality in all the service sectors. Consequently, they are very satisfied with the service quality rendered by the frontline service sectors of the University of Baguio.

The reliability dimension stands out as the number one source of the students' high-level satisfaction. The students perceived the dependability and accuracy of services from the frontline sectors of the university. Assurance and empathy are service quality dimensions that need to be enhanced since these are critical factors that contribute to student satisfaction.

In its totality, customer or student satisfaction is a measure of how the total services rendered in each service area fulfill the students' expectations. The very satisfied level of student satisfaction with the overall service quality of the frontline support sectors of the University augurs well for higher student loyalty and, consequently, better student retention.

Based on the findings of the study, the researchers recommend that the frontline service sectors of the University should focus on critical service quality dimensions especially assurance and empathy to increase the level of student satisfaction. Each service sector should conduct sensitivity training programs for its personnel, focusing on the service quality dimensions



particularly the dimensions needing improvement per sector. Future studies should be conducted to investigate service quality satisfaction as experienced by students from other departments or schools of the University of Baguio. Such studies can help make a complete picture of service quality satisfaction involving all student groups.



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