THE IMPORTANCE-PERFORMANCE ANALYSIS OF SERVICE QUALITY IN ADMINISTRATIVE DEPARTMENTS OF PRIVATE UNIVERSITIES IN THAILAND**

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Abstract

A modified IPA model was used for a sample of students and staff of ten randomly selected Thai universities to investigate the importance of service attributes for service providers' and student's evaluation of services. The gap between importance and performance from both perspectives were also evaluated. The findings of this study will be applied to improve service quality in administrative departments of private universities in Thailand.

INTRODUCTION

The popular "SERVQUAL" model (Parasuraman, Zeithaml, and Berry, 1990) has been used to measure five dimensions of service quality in many contexts, including service industries such as hospitality (Saleh and Ryan, 1992), car servicing (Bouman and Van Der Wiele, 1992), banking (Kwon and Lee, 1994; Wong and Perry, 1991), including retail banking (Newman, 2001), and hospitals (Youssef, 1996). In education, the model has been applied to business schools (Rogotti and Pitt, 1992) and institutions of higher education (Ford et al., 1993 and McElwee and Redman, 1993). The five dimensions of SERVQUAL model include: "tangibles" (the hardware infrastructure), "reliability" (the consistency of service as promised), "responsiveness" (the ability to update, adjust or customize the contents & delivery of the service), "assurance" (the capability of the service provider) and "empathy" (a caring and

customer centered soft environment). This prior work encouraged the research to apply the model to Thai private universities.

This study differs from previous research through the adoption of the "Importance-Performance Analysis," a technique introduced into the field of marketing in the late 1970s that identifies strengths and weaknesses of brands, products, and services (Martilla and James, 1977; Keyt, Yavas, and Riecken, 1994). The IPA technique identifies strengths and weaknesses by comparing the two criteria that consumers use in making a choice: the relative importance of attributes and consumers' evaluation of the offering in terms of those attributes. Unlike SERVQUAL model, which is best described as an absolute performance measure of consumer perceptions of service quality, the Importance-Performance paradigm also seeks to identify the underlying importance attributed by consumers to the various quality criteria being assessed (Sampson and Showalter 1999).

The study investigated the importance and performance of service attributes in Thai administrative departments as perceived by both students and the university staff members and to compare the perceptions of each group. The study also sought to determine the relationship between the perceived service quality and student satisfaction and pride in the university. Along with extending the previous literature to a new context, and to provide useful information to college managers, the modified IPA model is a methodological advance over the previous literature.

THE LITERATURE

Slack (1991) presented an IPA model that considered a relationship between importance and performance and theorized that target levels of performance for particular product attributes should be proportional to the importance of those attributes. In other words, importance is seen as viewed as a reflection of the relative value of the various quality attributes to consumers. According to Barsky (1995), lower importance ratings are likely to play a lesser role in affecting overall perceptions, while higher importance ratings are likely to play a more critical role in determining customer satisfaction. The objective is to identify which attributes, or combinations of the attributes are more influential in repeat purchase behavior and which have less impact. The information is valuable for the development of marketing strategies in organizations (Ford et al., 1991). This view is confirmed by Lovelock et al. (1998), who stated that importance-performance analysis is an especially useful management tool to "direct scarce resources to areas where performance improvement is likely to have the most effect on overall customer satisfaction". It also has the benefit of pinpointing which service attributes should be maintained at present levels and "those on which significant improvement will have little impact".

The Importance-Performance Analysis conceptually rests on multi-attribute models. This technique identifies strengths and weaknesses of a market offering in terms of two criteria that consumers use in making a choice. One criterion is the relative importance of attributes. The other is consumers'

evaluation of the offering in terms of those attributes. A particular application of the technique starts with an identification of the attributes that are relevant to the choice situation investigated. The list of attributes can be developed after canvassing the relevant literature, conducting focus group interviews, and using managerial judgment. Otherwise, a set of attributes pertaining to a particular service (or goods) are evaluated on the basis of how important each is to the customer, and how the service or goods is perceived to be performing relative to each attribute. This evaluation is typically accomplished by surveying a sample of customers. After determining those attributes that are worthy of subsequent examination, consumers are asked two questions. One relates to the salience of the attributes and the other to the company's own performance in terms of delivery of these attributes.

By using a central tendency e.g. mean, median or a rank-order measure, the attribute importance and performance scores are ordered and classified into high or low categories; then by pairing these two sets of rankings, each attribute is placed into one of the four quadrants of the importance performance grid (Crompton and Duray, 1985). Mean performance and importance scores are used as coordinates for plotting individual attributes on a two-dimensional matrix as shown in Figure 1. This matrix is used to prescribe prioritization of attributes for improvement (Slack, 1991) and can provide guidance for strategy formulation (Burns, 1986).

The Importance-Performance Analysis (IPA) has been applied in a number of settings with relatively little modification in form. For example; Chon, Weaver, and Kim (1988) applied IPA for the Visitors Bureau of Norfolk, Virginia and Nitse and Bush (1993) used IPA to compare preconceptions of dental practices.

The traditional importance-performance analysis, however, has two inherent

Figure 1: The Original IPA Framework
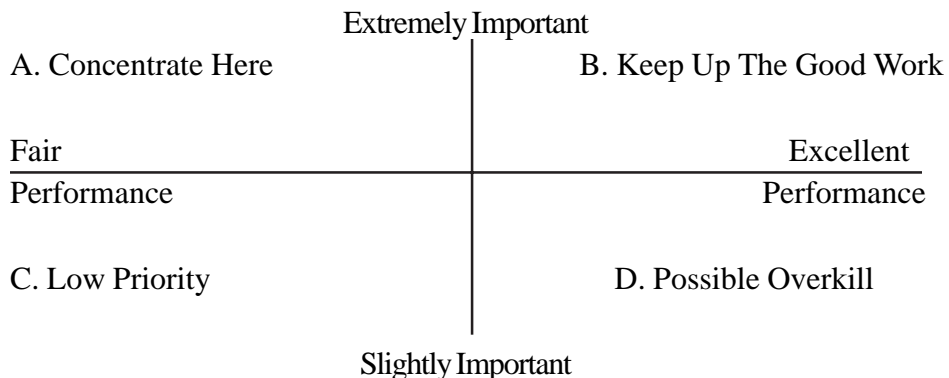
Source: Martilla, J. and James J. (1977), 'Importance- Performance Analysis', *Journal of Marketing*, 14 (January): pp. 77-79.

weaknesses. First, while the technique considers an object's own performance in terms of a particular attribute, it ignores its performance relative to competitors (Burns, 1986). Yet consumer evaluations of an object do not occur in a competitive vacuum. On the contrary, the ultimate degree of a differential advantage a product enjoys is determined by its performance relative to competitors. In other words, the absolute own performance measure of the traditional importance-performance analysis needs to be augmented with a relative performance measure. Therefore, Burns (1986) added "performance" of "competitors" as a third dimension. Dolinsky and Cuputo (1991) apply what appears to be Burns extension in a study of health care.

The measurements of the Importance – Performance Analysis (IPA) and the SERVQUAL model are quite similar. The IPA technique identifies strengths and weaknesses by comparing of two criteria that consumers use in making a choice. One criterion is the relative importance of attributes. The other is consumers' evaluation of the offering in terms of those attributes while the SERVQUAL technique identifies the customer satisfaction of service attributes by comparing of two criteria that are customer's expectation and customer's perception in the five dimensions.There numerous studies on SERVQUAL and IPA model but few study the integration of the models.

Service Quality in Educational Institutions

Earlier research on service quality in higher education emphasized academic rather then administrative areas, concentrating on effective course delivery mechanisms, and the quality of courses and teaching (Athiyaman, 1997; Bourner, 1998; Cheng and Tam, 1997; McElwee and Redman, 1993; Palihawadana, 1996; Soutar and McNeil, 1996; Varey, 1993; Yorke, 1992). The mechanisms for measuring service quality of courses and programmes often rely on research instruments (e.g. student feedback questionnaires) devised by representatives of the higher education institutions. Abouchedid and Nasser (2002), however, attempted to measure student perception of registration and academic advising across different faculties and other administrative services to assure positive quality service complementing that of the academic.

There are many reasons for focusing the service quality in a university on the administrative units (Anderson 1995): The first exposure of the student to the university is through the admission and registrar's services. Providing high quality service to students contributes to the positive assessment of the university. Comparing with the academic units, the administrative departments of the university, such as the registration office, financial office or library, are more likely to be a replication of the bureaucratic units of governmental or public institutions (Salem, 1969). While registration in the Western universities has rapidly adopted the banking touch-tone telephone systems, universities in developing countries attempt to struggle with bureaucracies and inefficient infrastructure; hence registration remains a traditional and manual process (Spencer, 1991).

It was found that administrative services such as registration processes often were perceived as rude and intolerant because registrar offices are overburdened by the manual registrations process. The cumbersome process of adding and dropping a course tend to strain the registrar to work around the process by discouraging students to use its services (Morris, 1986).

There are 26 private universities, which serve more than 207,136 students in Thailand (Ministry of University Affairs, Annual Report, 2002). Some private universities have been established for more than 25 years ago and now are full fledged universities with undergraduate, master and Ph.D programs. Other institutions were formed more recently. Both are more student-oriented than public institutions.

This study asked of these colleges: What is the expectation of the students? What is their perception of the service quality? Is there a gap between the expectation and perception? How to provide the students with a reliable, responsive, assured and friendly service in an enjoyable environment?

RESEARCH FRAMEWORK

The extended conceptual framework of variables for this study is included in the Figure 2.

Operationalization of Variables

Tangibles In this study, tangibles include the appearance of the staff (Clean & Neat), and the suitability and cleanliness and safety of buildings, places and facilities.

Reliability: This variable is used to measure the consistency, accuracy and dependability of service. It is related to the ability of administrative departments to provide accurate transaction service such as mistake free in registration process, preparing information, and the like.

Another aspect of reliability is the dependability and consistency of service, which can be translated into the frequency of system breakdown or performing service as promised. This is an important aspect as administrative departments may lose customers if the customers need to perform an urgent transaction when there is frequent computer system failure. Performing service not as promised would result in the same dissatisfaction.

Responsiveness: This variable is used to measure the administrative departments' commitment in providing its service promptly. For the purpose of this study, responsiveness for the administrative units refers to the readiness or willingness of staff members of the administrative departments. In addition to the willingness of the staff members to provide services in a timely manner it also included ease of contact with staff members and their ability to provide services in a timely manner.

Assurance: This variable is used to measure the administrative departments' competence, creditability, security and courtesy of service provided to customers. These elements of measurement are directly related to the professionalism of the management team in instilling confidence from the students in the offices.

Figure 2: Extended Conceputal Framework
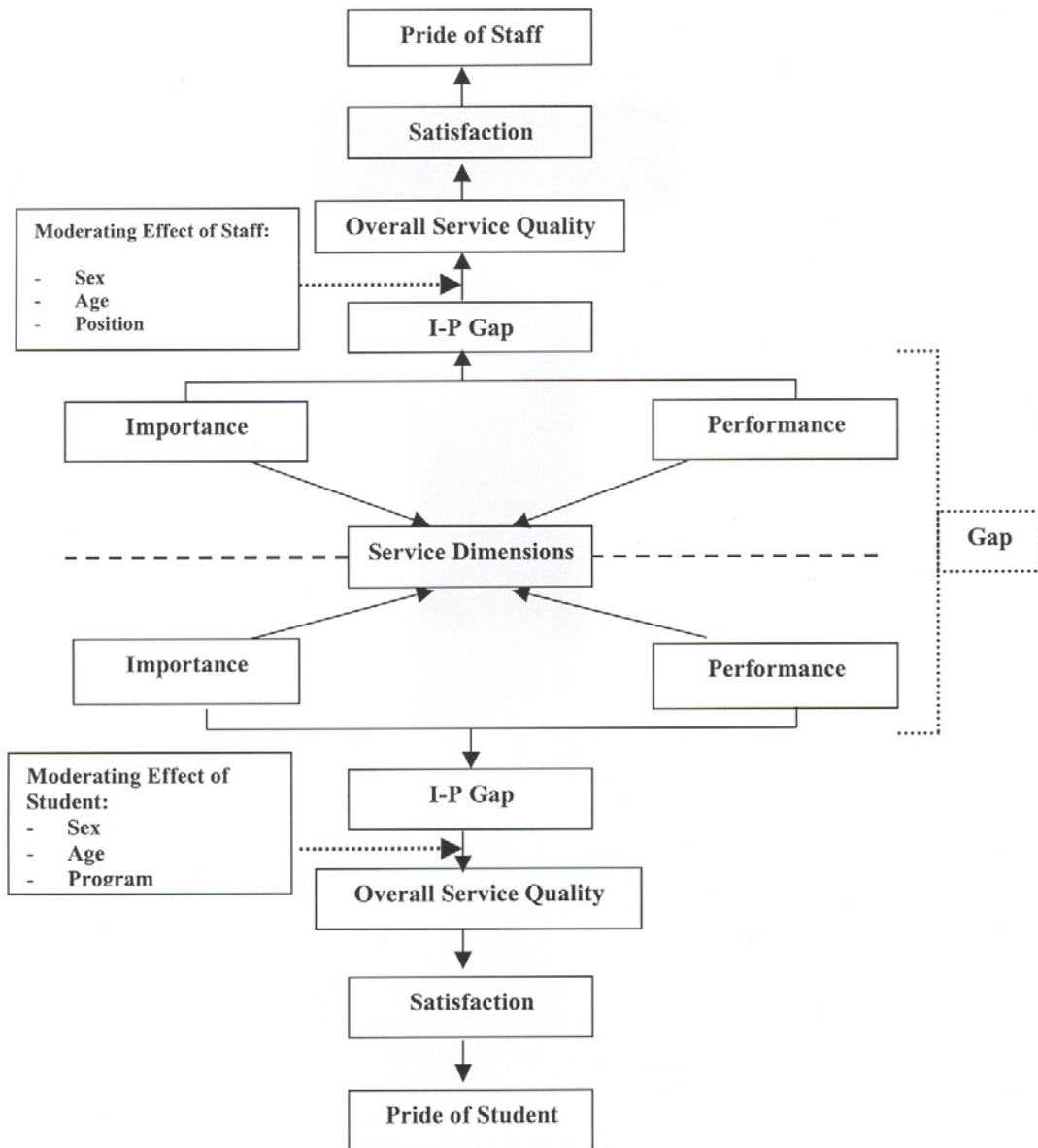
Competence refers to the service personnel knowledge about the services of the administrative departments. This element is of vital importance as the employee of the offices should be the best person to know about the services of the offices. Creditability and courtesy is mainly related to how the service personnel interact with the customers and customers' interest.

Empathy: This variable is used to measure the administrative departments in terms of caring, understanding and individual attention service provided to the students. Being an empathetic office that understands student's needs and wants could provide the

administrative departments a good relationship with the students, which would ensure the excellent service quality of the offices. Otherwise, the administrative departments would lose their customers.

Moderating Variable:

Demographic Characteristics: This variable includes gender, age for both students and staff members, program status (day program or evening program) for students and position status (ordinary staff or directors) for staff members.

Based on the above conceptual framework it was hypothesized that there would be a difference between student and staff perceptions about the importance and performance of service attributes; both staff and students rate the importance and performance of service attributes differently; student perception of service quality correlates with satisfaction; both among students and staff there is a relationship between perception and satisfaction and pride in the university.

METHODOLOGY

A cross sectional survey of 405 students and 390 staff members was conducted for measuring and comparing the perception of these two groups about university service attributes. A self-administered questionnaire via a mail survey was applied for staff members and selected students were asked to complete a questionnaire in person.

Both qualitative and quantitative methods were used for achieving the research objectives. A nationwide cross-sectional survey was conducted for measuring the perception of university students and staff members about the service quality of private universities in Thailand. The statistical analysis was conducted based on the quantitative data from the survey. The qualitative method was used to search related documentary data, from governmental and non-governmental information centers and academic research papers, to the study and conduct a focus group interview. Eight students and eight administrators were interviewed in a focus group discussion.

A sample of 384 students (N=207,136) and 357 university staff members (N=5,600) was determined using Krejcie and Morgan's sampling table. The five attributes of service quality in the SERVQUAL model were operationalized by 22 items in the part I of the questionnaire (see table 1). These items were developed based on the focus group interview with students and university staff members.

The instrument was applied for measuring the key variables in the framework (see figure 2) including the perception of service quality, overall satisfaction, and pride in the university. The students and staff members were asked about their perceptions with a 5-point rating scale ranging from "Very Low" to "Very High" on six questions in the questionnaire (see table 2).

The part II of the questionnaire consists of respondents' demographic data (e.g., gender, age, and social status). Students were classified into day program and evening program students. Meanwhile, staff members

Table 1: Operationalization of Service Attributes

Variables	Operationalization Items	Question Number in Questionnaire
Tangibles	Visually appealing external appearance of the staff (clean & neat).	1
	Having suitable buildings, places and facilities for effective services	2
	Cleanliness & safety of buildings, places and facilities.	3
Reliability	Reliability and dependability (the degree of trust in service delivery) of the staff members.	4
	Consistency of service by staff members. (The level of service delivery is maintained)	5
	Attention to details of the service delivery by the staff members.	6
Responsiveness	Willingness of the staff members to provide services in a timely manner	7
	Ease of contact (accessible at any time) of the staff members.	8
	Ability of the staff members to provide services in a timely manner (within a certain time as promised).	9
Assurance	Competence (knowledge and skill) of the staff members.	10
	Levels of courtesy, politeness, and respect I received.	11
	Believability and honesty of the staff members.	12
	Knowledge of the information that I need from the staff members.	13
	Assurance that the staff members keep the academic and personal information in the service delivery confidential.	14
	Assurance that information communicated is correct and Up-to-date in the service delivery.	15
	Staff members have knowledge and necessary service skills.	16
Empathy	Staff members can communicate with me in a language that I could understand easily.	17
	Approachability (friendliness and warmth) of staff members.	18
	Effort of the staff members to understand my needs.	19
	Sincere interest in servicing the students by staff members.	20
	Sincere interest in solving the problems of the students by the staff members.	21
	Staff members pay attention to individual needs of student.	22

Table 2: Operationalization of Dependent Variables

Variables	Operationalization Items	Question Number in Questionnaire
Service Quality	Overall service quality provided by administrative departments in your university is_____	23
	Overall service quality provided by administrative departments in your university meeting the degree of satisfaction is _____	24
	In your opinion, the overall service quality of private universities when compared with public universities is _____.	25
	The perceived value of overall service quality in your university has effect on your feeling of the university.	26
Overall Satisfaction	Your satisfaction with the services provided to students	27
Pride in University	Your pride in your university	28

Table 3: General Characteristics of Sampled Students

Sample/Variable	Percentage
Students	
Gender	
Male	46.7
Female	53.1
Total	**100.0**
Age	
<20 years old	7.9
20 – 25 years old	89.9
26 – 30 years old	1.5
31 – 35 years old	0.7
Total	**100.0**
Program	
Day Program	81.3
Evening Program	18.7
Total	**100.0**

were classified into ordinary staff and directors. After receiving the returned questionnaires, the researcher processed all responses and applied descriptive analyses (e.g., percentages, t-test) and ultiple regression analysis.

RESULTS

This section considers 1) baseline characteristics of study respondents, 2) descriptive statistics, 3) test of difference, and 4) test of relationship between a dependent variable and independent variables.

Table 3 and 4 show the baseline characteristics of respondents and Table 5 shows the descriptive statistics of studied universities' service quality.

Using the SERVQUAL framework showed that students had the highest mean of the indicated importance of services' assurance ($\bar{x}$ = 4.47, se= 0.028), followed by the importance of responsiveness (= 4.45, se= 0.032), the importance of reliability (= 4.41, se= 0.030), the importance of empathy (= 4.40, se= 0.030), and the importance of tangibles (= 4.33, se= 0.029), respectively. However, when students were asked to evaluate the performance of service attributes, the results showed that the mean of tangibles was the highest (= 3.68, se= 0.034), followed by services' assurance (= 3.30, se= 0.039), reliability (= 3.05, se= 0.043), responsiveness (= 3.04, se= 0.044), and empathy (= 3.00, se= 0.044),

Table 4: General Characteristics of Sampled University Staff Members

Sample/Variable $\bar{x}$	Percentage
University Staff Members	
Gender	
Male	35.9
Female	63.8
N/A	0.3
Total	**100.0**
Age	
<25 years old	7.4
25 – 30 years old	45.6
31 – 35 years old	25.1
36 – 40 years old	11.0
>40 years old	10.5
N/A	0.3
Total	**100.0**
Position	
Staff Member	89.5
Director	10.5
Total	**100.0**

respectively. When using the Importance-Performance Model in this study, the results demonstrated that the service attributes of SERVQUAL fell in the Quadrant B (i.e., Keep up with the good work). This finding showed that the service quality was perceived by students as good.

University staff members had the highest mean of the indicated importance of service assurance (= 4.47, se= 0.024), followed by responsiveness (= 4.42, se= 0.029), reliability (= 4.39, se= 0.030), tangibles (= 4.35, se= 0.029), and empathy (= 4.30, se= 0.026), respectively. With regard to performance, the study showed that the mean of services' assurance was highest (= 3.85, se= 0.028), followed by services' tangibles (= 3.77, se=0.029), responsiveness (= 3.75, se= 0.034), empathy (= 3.73, se= 0.031), and reliability (= 3.68, se= 0.034). The service attributes

fell in the Quadrant B (i.e., Keep up with the good work) which showed that the service quality was good in the university staffs' perception.

Figures 3 and 4 present the gap between the importance and performance of service quality in Quadrant areas. After the means of SERVQUAL's service attributes were plotted in the areas, the results showed that both students and university staff members presented the good service quality for all attributes of SERVQUAL. However, the gap between the importance and performance of service quality might occur in the group of students because the means of evaluated performance of service quality's attributes (e.g., Empathy, Responsiveness, Reliability) were close to the boundary of Quadrant A (i.e., concentrate here) and Quadrant B (i.e., keep up with the good work).

$\bar{x}$

Table 5: Key Statistics of the Importance-Performance of the SERVQUAL's Attributes

SERVQUAL's Attributes	Students					University Staff Members				
	Importance mean	Std. Error	Performance mean	Std. Error	Quadrant	Importance mean	Std. Error	Performance mean	Std. Error	Quadrant
Tangibles	4.33	0.029	3.68	0.034	B	4.35	0.029	3.77	0.029	B
Reliability	4.41	0.030	3.05	0.043	B	4.39	0.030	3.68	0.034	B
Respon-siveness	4.45	0.032	3.04	0.044	B	4.42	0.029	3.75	0.034	B
Assurance	4.47	0.028	3.30	0.039	B	4.47	0.024	3.85	0.028	B
Empathy	4.40	0.030	3.00	0.044	B	4.30	0.026	3.73	0.031	B

Figure 3: **Data Plotting of Students' Importance and Performance Scores of Service Attributes with Horizontal and Vertical Gridline**
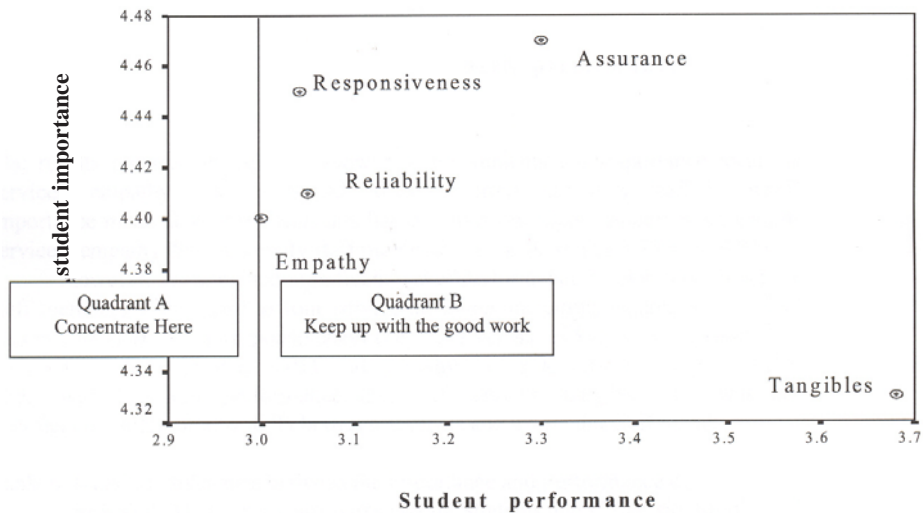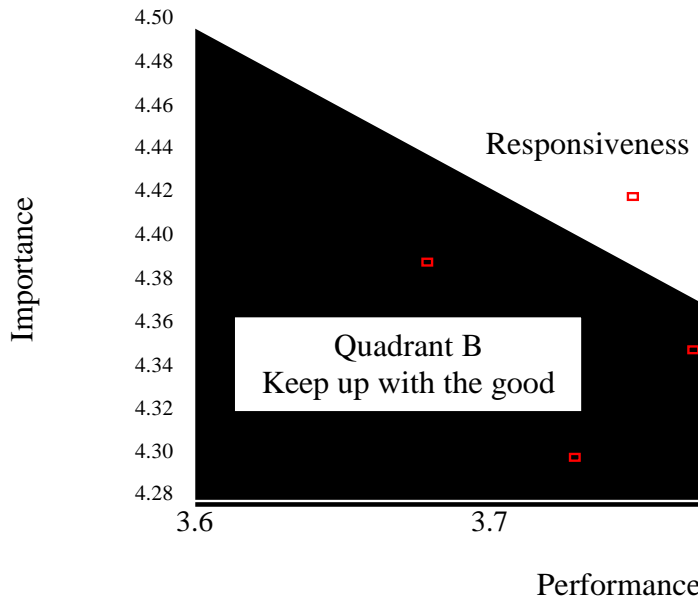

Figure 4: **Data Plotting of University Staff Members' Importance and Performance Scores of Service Attributes with Horizontal and Vertical Gridlines**

The results reported in Table 6 show that for students the importance mean of services' empathy was significantly different from university staff members' importance mean at

0.05. Students had a significant higher importance mean of services' empathy than university staff members (i.e., 4.40 versus 4.30 at α 0.01).

However, students had significant lower performance means than university staff members with regard to four service attributes including reliability (i.e., 3.05 versus 3.68 at α 0.01), responsiveness (i.e., 3.04 versus 3.75 at α 0.01), assurance (i.e., 3.30 versus 3.85 at α 0.01), and empathy (i.e., 3.00 versus 3.73 at α 0.01). There was only one performance mean of services' tangibles that was not significantly different at α 0.05 between students and university staff members.

Table 7: shows the elements of findings with regard to the gap between the importance and performance of services' attributes among students. The results showed that all students' importance means of services' attributes were significantly different from the performance means at α 0.01. All students' importance means of services' attributes were significantly higher than their performance means.

Moreover, there were some more significant elements of findings, which the students' importance means of services' attributes were high but their performance means of services' attributes were very low i.e., less than 3.

α

Table 6: t-Test of Difference between the Importance and Performance of SERVQUAL's service attributes among Students and University Staff Members

SERVQUAL's Service Attributes	Importance mean (Students)	Importance mean (Staffs)	t-value	Sig. (2 tailed)	Performance mean (Students)	Performance mean (Staffs)	t-value	Sig. (2 tailed)
Tangibles	4.33	4.35	0.49	0.627	3.68	3.77	1.901	0.058
Reliability	4.41	4.39	-0.61	0.545	3.05	3.68	11.394	0.000**
Responsiveness	4.45	4.42	-0.85	0.395	3.04	3.75	12.507	0.000**
Assurance	4.47	4.47	-0.08	0.936	3.30	3.85	11.331	0.000**
Empathy	4.40	4.30	-2.55	0.011**	3.00	3.73	13.243	0.000**

** =   0.01

Table 7: Mean Difference between the Importance-Performance of SERVQUAL's Service Attributes among Students.

Elements of Services' Attributes	Importance mean	Performance mean	Quad-rant	I-P	t-value	Sig. (2 tailed)
1. Visually appealing external appearance of the staff (clean & neat)	4.11	3.62	B	0.49	10.130	0.000**
2. Having suitable buildings, places and facilities for effective services	4.40	3.62	B	0.78	15.422	0.000**
3. Cleanliness & safety of buildings, places and facilities	4.50	3.81	B	0.69	14.398	0.000**
4. Reliability and dependability (the degree of trust in service delivery) of the staff members	4.38	3.17	B	1.21	21.014	0.000**
5. Consistency of service by staff members. (The level of service delivery is maintained)	4.42	3.00	B	1.42	22.692	0.000**
6. Attention to details of the service delivery by the staff members	4.43	2.98	A	1.45	22.635	0.000**
7. Willingness of the staff members to provide services in a timely manner	4.48	2.94	A	1.54	23.485	0.000**
8. Ease of contact (accessible at any time) of the staff members	4.44	2.97	A	1.47	21.867	0.000**
9. Ability of the staff members to provide services in a timely manner (within a certain time as promised)	4.44	3.20	B	1.24	19.334	0.000**
10. Competence (knowledge and skill) of the staff members	4.39	3.25	B	1.14	19.391	0.000**
11. Levels of courtesy, politeness, and respect received by students	4.56	2.76	A	1.80	24.115	0.000**
12. Believability and honesty of the staff members	4.46	3.45	B	1.01	18.130	0.000**
13. Knowledge of the information that students need from the staff members	4.48	3.23	B	1.25	19.458	0.000**
14. Assurance that the academic and personal information in the service delivery is kept confidential by the staff members	4.53	3.71	B	0.82	14.728	0.000**
15. Assurance that information communicated is correct and Up-to-date in the service delivery	4.53	3.43	B	1.10	18.339	0.000**
16. Staff members have knowledge and necessary service skills	4.39	3.28	B	1.11	19.111	0.000**
17. Staff members can communicate with students in a language that they could understand student's needs	4.46	3.27	B	1.19	19.529	0.000**
18. Approachability (friendliness and warmth) of staff members	4.26	2.88	A	1.38	19.106	0.000**
19. Effort of the staff members to understand student's needs	4.42	3.04	B	1.38	20.895	0.000**
20. Sincere interest in servicing the students by staff members	4.45	3.01	B	1.44	22.427	0.000**

21 Sincere interest in solving the problems of the students by the staff members	4.50	2.89	A	1.61	23.687	0.000**
22.Staff members pay attention to individual needs of student	4.31	2.91	A	1.40	19.281	0.000**

**=   0.01

Figure 5 demonstrates the mean data plotting of the Importance and Performance Scores in the group of students with horizontal and vertical gridlines. After the means of the Importance and Performance of services' quality were plotted in Quadrant areas, the results showed that most of mean data fell in the Quadrant B (i.e., good service quality). However, some elements (e.g., elements 6, 7, 8, 11, 18, 21, and 22) fell in the Quadrant A (i.e., not good enough and concentrate here).

In addition, the element 5 (i.e., Consistency of service by university staff members (the level of service delivery is maintained)), element 19 (i.e., effort of the university staff members to understand students' needs), and element 20 (i.e., sincere interest in serving the students by university staff members) were close to the boundary between the Quadrant A and Quadrant B.

Figure 5:   Mean Data Plotting of the Importance and Performance Scores with Horizontal and Vertical Gridlines for the Students
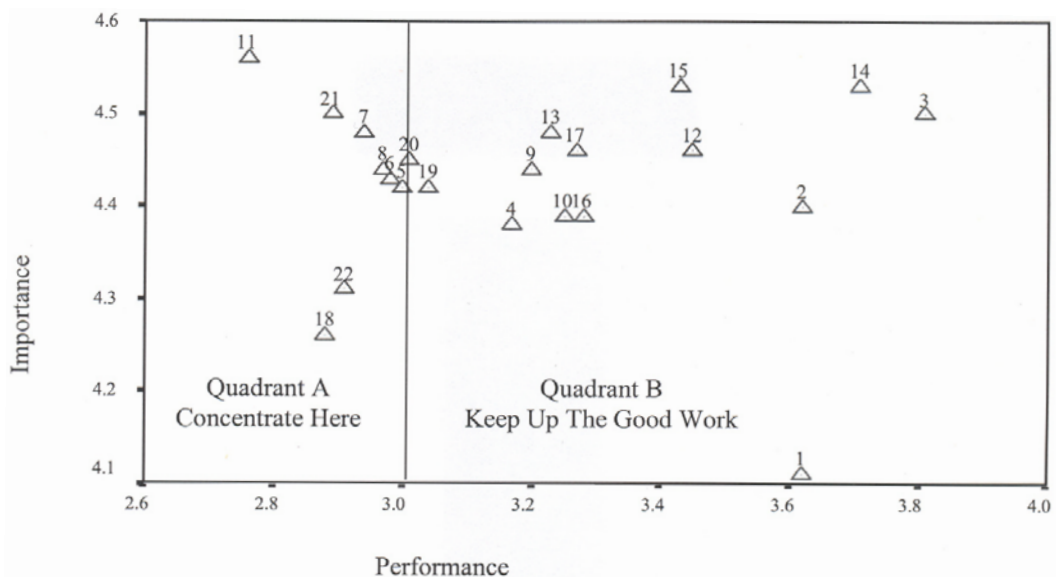
Table 8 shows the elements of findings with regard to the gap between the importance and performance of services' attributes among university staff members. The results showed that all staff members' importance means of services' attributes were significantly different from their performance means at α 0.01. All staff members' importance means of services' attributes were significantly higher than their performance means. However, there were no any elements of findings, which staff members' performance means were, less than 3.00.

Table 8: **Mean Difference between the Importance-Performance of SERVQUAL's Service Attributes among University Staff Members**

Elements of Services' Attributes	Impor-tance mean	Perfor-mance mean	Quadrant	I-P	t-value	Sig. (2 tailed)
1. Visually appealing external appearance of the staff (clean & neat)	4.33	3.86	B	0.47	12.004	0.000**
2. Having suitable buildings, places and facilities for effective services	4.36	3.70	B	0.66	14.535	0.000**
3. Cleanliness & safety of buildings, places and facilities	4.37	3.74	B	0.63	13.668	0.000**
4. Reliability and dependability (the degree of trust in service delivery) of the staff members	4.35	3.71	B	0.64	15.340	0.000**
5. Consistency of service by staff members. (The level of service delivery is maintained)	4.33	3.57	B	0.76	15.728	0.000**
6. Attention to details of the service delivery by the staff members	4.47	3.75	B	0.72	15.243	0.000**
7. Willingness of the staff members to provide services in a timely manner	4.43	3.77	B	0.66	15.119	0.000**
8. Ease of contact (accessible at any time) of the staff members	4.37	3.73	B	0.64	13.645	0.000**
9. Ability of the staff members to provide services in a timely manner (within a certain time as promised)	4.45	3.73	B	0.72	15.816	0.000**
10. Competence (knowledge and skill) of the staff members	4.44	3.79	B	0.65	15.574	0.000**
11. Levels of courtesy, politeness, and respect received by students	4.45	3.72	B	0.73	15.162	0.000**
12. Believability and honesty of the staff members	4.58	4.06	B	0.52	13.660	0.000**
13. Knowledge of the information that students need from the staff members	4.42	3.70	B	0.72	16.494	0.000**
14. Assurance that the academic and personal information in the service delivery is kept confidential by the staff members	4.56	4.18	B	0.38	10.214	0.000**

15. Assurance that information communicated is correct and Up-to-date in the service delivery	4.47	3.78	B	0.69	16.054	0.000**
16. Staff members have knowledge and necessary service skills	4.38	3.76	B	0.62	14.751	0.000**
17. Staff members can communicate with students in a language that they could understand easily	4.36	3.68	B	0.68	16.753	0.000**
18. Approachability (friendliness and warmth) of staff members	4.28	3.81	B	0.47	10.518	0.000**
19. Effort of the staff members to understand student's needs	4.32	3.71	B	0.61	14.684	0.000**
20. Sincere interest in servicing the students by staff members	4.43	3.83	B	0.60	13.535	0.000**
21. Sincere interest in solving the problems of the students by the staff members	4.41	3.77	B	0.64	13.748	0.000**
22. Staff members pay attention to individual needs of student	3.97	3.55	B	0.42	9.575	0.000**

Figure 6 demonstrates the mean data plotting of the Importance and Performance Scores of service attributes in the group of staff members with horizontal and vertical gridlines. After the means of the Importance and Performance of services' quality were plotted in Quadrant areas, the results showed that most of mean data fell in the Quadrant B (i.e., good service quality) and they were quite similar to each other. Nonetheless, the results released that element 12 (i.e., Believability and honesty of the staff members) and element 14 (i.e., assurance that the academic and personal information in the service delivery is kept confidential by the staff members) had very high means of both the Importance and Performance of service attributes.

Table 9 shows the respondents' evaluation on the service quality of administrative departments in the studied universities. The results released that 49% of total studied students stated that the overall service quality of university administrative departments was neither high nor low, followed by 23.9% stated that it was high, 20.6% stated that it was low, 4.2% stated that it was very low, however, 2.3% stated that it was very high, respectively. The overall mean of students' evaluation on the service quality of support offices was 2.99 out of 5.

Meanwhile, the majority of university staff members or 62.5% stated that overall service quality was high, followed by 27.1% stated that it was neither high nor low, 5.7% stated that it was very high, 4.7% stated that it was low. The overall mean of university staff members' evaluation on the service quality of support offices was 3.69 out of 5.

After examining a mean difference by t-test, the results showed that the mean evaluation on the overall service quality was significantly different at the 0.05 alpha level for students and university staff members. The university staff members had significantly higher mean evaluation on the overall service quality than the students.

Figure 6: **Mean Data Plotting of the Importance and Performance Scores of Service Attributes with Horizontal and Vertical Gridlines among University Staff Members**
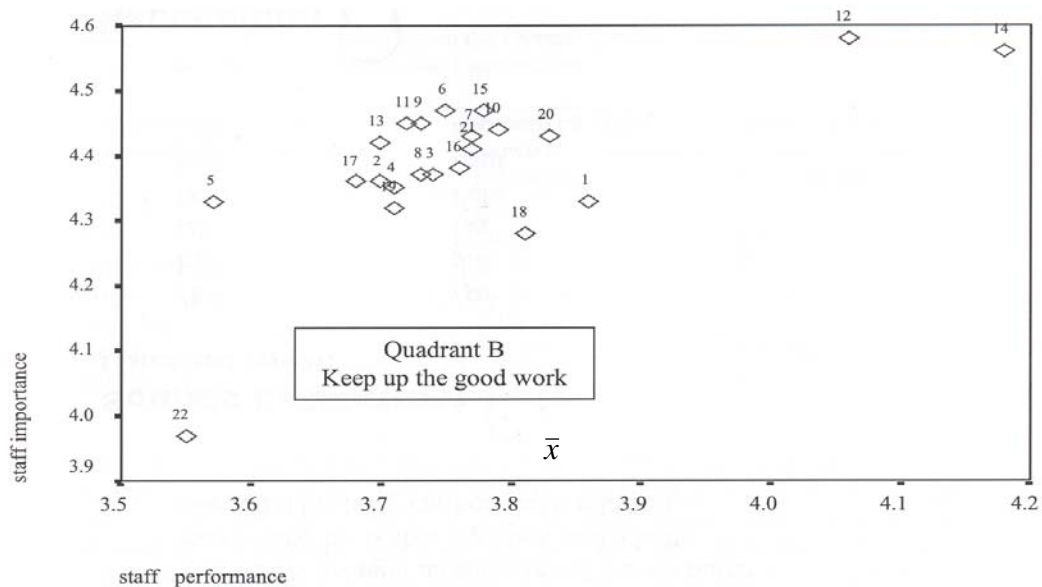
Table 9: **Respondents' Evaluation on the Overall Service Quality of Administrative Departments in the Studied Universities**

Evaluation Levels of Overall Service Quality	Perceived Quality of Service Provided (Students)	Perceived Quality of Service Provided (Staff Members)
Very low	4.2%	-
Low	20.6%	4.7%
Neither low nor high	49.0%	27.1%
High	23.9%	62.5%
Very high	2.3%	5.7%
Total	**100.0%**	**100.0%**
Mean ( )	2.99	3.69

Table 10 shows respondents' satisfaction with the service quality of administrative departments in the studied universities. The results released that 42.3% of total students stated that their satisfaction with the overall service quality of university administrative departments was neither high nor low, followed by 26.9% stated that it was low, 21.9% stated that it was high, 6.7% stated that it was very low, however, 2.2% stated that it was very high, respectively. The overall mean of students' satisfaction with the overall service quality of administrative departments was 2.86 out of 5.

The majority of university staff members stated that their satisfaction with the overall service quality provided was high, followed by 19.1% stated that it was neither high nor low, 14.0% stated that it was very high, 1.6% stated that it was low. The overall mean of university staff members' satisfaction with the overall service quality of support offices was 3.92 out of 5.

After examining a mean difference by t-test, the results showed that the mean satisfaction with the overall service quality was significantly different at the 0.05 alpha level for students and university staff members. The university staff members had significantly higher mean satisfaction with the overall service quality than students.

Table 10: **Respondents' Satisfaction with the Overall Service Quality of Administrative Departments in the Studied Universities**

Satisfaction With Level Overall Service Quality	Satisfaction With Provided of Service Provided (Students)	Satisfaction With Level of Service (Staff Members)
Very low	6.7%	-
Low	26.9%	1.6%
Neither low nor high	42.3%	19.1%
High	21.9%	65.3%
Very high	2.2%	14.0%
Total	**100.0%**	**100.0%**
Mean ( )	2.86	3.92

In table 11, the results showed that both students and university staff members had high and very high pride in their universities (i.e., 41.7% high and 19.3% very high among students versus 50.8% high and 35.4% very high among university staff members). The overall mean of students' pride in their universities was 3.70 out of 5. However, the overall mean of staff members' pride was 4.21. The results of t-test showed that the mean pride was significantly different at 0.05 for students and university staff members. The university staff members had significantly higher mean pride in their universities than students.

Table 11: Respondents' Pride in the University

Pride in the University	Students	Staff Members
Very low	2.0%	-
Low	6.5%	0.5%
Neither low nor high	30.5%	13.3%
High	41.7%	50.8%
Very high	19.3%	35.4%
Total	**100.0%**	**100.0%**
Mean ( )	3.70	4.21

In tables 12 and 13, the results showed that the correlation between an overall service quality and students' satisfaction was significantly high at .771. However, the correlation between an overall service quality and staff members' satisfaction was significantly moderate at .457.

Table 12: Correlations between an Overall Service Quality and Students' Satisfaction

		Overall Service Quality	Students' Satisfaction
Overall Service Quality	Pearson Correlation $\bar{x}$	1.000	0.771**
	Sig. (2-tailed)	-	0.000
	N	402	401
Students' Satisfaction	Pearson Correlation	0.771**	1.000
	Sig. (2-tailed)	0.000	-
	N	401	402

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

Table 13: Correlations between an Overall Service Quality and Staff Members' Satisfaction

		Overall Service Quality	Staff Members' Satisfaction
Overall Service Quality	Pearson Correlation	1.000	0.457**
	Sig. (2-tailed)	-	0.000
	N	387	387
Staff Members' Satisfaction	Pearson Correlation	0.457**	1.000
	Sig. (2-tailed)	0.000	-
	N	387	387

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

Table 14 shows the correlations between respondents' satisfaction and pride in their universities. The results suggested that the relation between students' satisfaction and pride in their universities was significantly high at .650. However, in table 14, the correlation between staff members' satisfaction and pride in their universities was significantly moderate at .428.

Table 14: Correlations between Students' Satisfaction and Pride in Their Universities

		Students' Satisfaction	Pride in Their University
Students' Satisfaction	Pearson Correlation	1.000	0.650**
	Sig. (2-tailed)	-	0.000
	N	402	401
Pride in Their University	Pearson Correlation	0.650**	1.000
	Sig. (2-tailed)	0.000	-
	N	401	402

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

Table 15: Correlations between Staff Members' Satisfaction and Pride in Their Universities

		Staff Members' Satisfaction	Pride in Their University
Staff Members' Satisfaction	Pearson Correlation	1.000	0.428**
	Sig. (2-tailed)	-	0.000
	N	387	384
Pride in Their University	Pearson Correlation	0.428**	1.000
	Sig. (2-tailed)	0.000	-
	N	384	387

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

Factors Affecting Respondents' Satisfaction on Service Quality

Table 16 shows the relationship between independent variables (e.g., gender, age, program, Importance of Service Attributes, Performance of Service Attributes) and dependent variable (i.e., students' satisfaction). The results showed a significant relationship 0.05 between independent and dependent variables as follows:

- Students' satisfaction with a service quality could be explained by age, which is a one-year increase in students' age yielded a 0.437 unit decrease in their satisfaction with a service quality

- Students' satisfaction with a service quality could be explained by a tangible importance, which is a one-unit increase in the tangible importance of a service quality yielded a 0.210 unit increase in students' satisfaction with a service quality

- Students' satisfaction with a service quality could be explained by an empathy importance, which is a one-unit increase in the empathy importance of a service quality yielded a 0.258 unit decrease in students' satisfaction with a service quality

- Students' satisfaction with a service quality could be explained by a reliability performance, which is a one-unit increase in the reliability performance of a service quality yield a 0.143 unit increase in students' satisfaction with a service quality

- Students' satisfaction with a service quality could be explained by an empathy performance, which is a one-unit increase in the empathy performance of a service quality yielded a 0.260 unit increase in students' satisfaction with a service quality

Table 16: Regression Analysis of Importance-Performance Attributes and Demographic Variables among Students (α)

Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
Sex	0.04099	0.075	0.022	0.544	0.587
Age	-0.437	0.110	-0.164	-3.957	0.000**
Program	0.173	0.162	0.074	1.067	0.287
Tangible Importance	0.210	0.087	0.134	2.429	0.016**
Reliability Importance	-0.09817	0.107	-0.067	-0.914	0.361
Responsiveness Importance	0.138	0.105	0.099	1.318	0.188
Assurance Importance	-0.03030	0.142	-0.019	-0.214	0.831
Empathy Importance	-0.258	0.119	-0.173	-2.158	0.032**
Tangible Performance	0.102	0.070	0.077	1.452	0.147
Reliability Performance	0.143	0.072	0.137	1.994	0.047**
Responsiveness Performance	0.119	0.072	0.117	1.643	0.101
Assurance Performance	0.01945	0.093	0.017	0.209	0.835
Empathy Performance	0.260	0.079	0.258	3.279	0.001**

Table 17 shows the relationship between independent variables (e.g., gender, age, education, Importance of Service Attributes, Performance of Service Attributes) and dependent variable (i.e., staff members' satisfaction). The results showed a significant relationship at α 0.05 between independent and dependent variables as follows:

-    Staff members' satisfaction with a service quality could be explained by a tangible importance, which is a one-unit increase in the tangible importance of a service quality yielded a 0.0.160 unit increase in their satisfaction with a service quality

-    Staff members' satisfaction with a service quality could be explained by a reliability importance, which is a one-unit increase in the reliability importance of a service quality yielded a 0.235 unit decrease in staff members' satisfaction with a service quality

-    Staff members' satisfaction with a service quality could be explained by an assurance importance, which is a one-unit increase in the assurance importance of a service quality yielded a 0.326 unit increase in staff members' satisfaction with a service quality

-    Staff members' satisfaction with a service quality could be explained by a reliability performance, which is a one-unit increase in the reliability performance of a service quality yield a 0.436 unit increaseinstaff members' satisfaction with a service quality

Table 17: Regression Analysis of Importance-Performance Attributes and Demographic Variables among Staff Members

Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std Error	Beta		
Sex	-0.02064	0.060	-0.016	-0.342	0.732
Age	0.04161	0.027	0.074	1.555	0.121
Position	0.228	0.255	0.042	0.893	0.373
Tangible Importance	0.160	0.060	0.151	2.664	0.008**
Reliability Importance	-0.235	0.088	-0.229	-2.672	0.008**
Responsiveness Importance	-0.181	0.097	-0.168	-1.871	0.062
Assurance Importance	0.326	0.118	0.247	2.775	0.006**
Empathy Importance	0.137	0.088	0.118	1.564	0.119
Tangible Performance	-0.0881	0.059	-0.082	-1.489	0.137
Reliability Performance	0.436	0.068	0.436	6.400	0.000**
Responsiveness Performance	-0.05983	0.078	-0.065	-0.766	0.444
Assurance Performance	0.06875	0.104	0.061	0.663	0.508
Empathy Performance	0.03648	0.081	0.037	0.449	0.653

Table 18 showed the relationship between students' satisfaction with a service quality and pride in their universities. The results showed the significant relationship at α 0.05 that one-unit increase in students' satisfaction with a service quality yielded 0.681-unit increase in their pride in the universities.

Table 18: Regression Analysis of Students' Satisfaction with a Service Quality and Pride in their Universities

Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
Satisfaction	0.681	0.040	-0.650	17.077	0.000

Table 19 showed the relationship between staff members' satisfaction with a service quality and pride in their universities. The results showed the significant relationship at 0.05 that one-unit increase in staff members' satisfaction with a service quality yielded 0.664-unit increase in their pride in the universities.

Table 19: Regression Analysis of Staff Members' Satisfaction with a Service Quality And Pride in their Universities

Factors	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std.Error	Beta		
Satisfaction	0.664	0.046	0.593	14.493	0.000

CONCLUSION AND DISCUSSION

In this study, the Importance-Performance attributes of a service quality were examined among students and university staff members. The key results were that students had lower mean data of all Performance attributes (i.e., tangibles, reliability, responsiveness, assurance, empathy) than university staff members. However, regarding to the Importance attributes, students had higher mean data of some attributes (i.e., reliability, responsiveness, empathy) than staff members.

These findings may be concluded that students had higher perception about the Importance attributes of a service quality than staff members but lower perception about the Performance attributes than staff members. Moreover, students suggested that some service attributes would be improved including reliability (e.g., attention to details of the service delivery by staff members), responsiveness (e.g., willingness of staff members to provide services in a timely manner, ease of contact (accessible at any time) of staff members), assurance (e.g., levels of courtesy, politeness, and respect received

by students), and empathy (e.g., approachability of staff members, sincere interest in solving the problems of students by staff members, staff members pay attention to individual needs of students).

This study also was focused on significant factors affecting respondents' satisfaction with a service quality and pride in their universities. The results showed that students' satisfaction with a service quality was significantly explained by age, tangible importance, empathy importance, reliability performance, and empathy performance. Meanwhile, staff members' satisfaction with a service quality was significantly explained by tangible importance, reliability importance, assurance importance, and reliability performance. In addition, the study released that students' satisfaction with a service quality positively affected their pride in the universities. Likewise, staff members' pride in their universities was positively related to their satisfaction with a service quality. However, respondents' pride in their universities may be affected by other independent variables (e.g., socio-economic status, improvement of service, quality of professors, image of a university, social roles of alumni). Therefore, future research may be needed to examine these proposed variables. From the findings, solving service problems and improving service quality of administrative departments in private universities are urgently tasks. The interviews with the senior university administrators especially presidents and vice presidents of the universities will be conducted to find out the valuable opinions and strategic recommendations from the top management in the last research paper about "Service Quality in Administrative Departments of Private Universities in Thailand."

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