

**DETERMINING STUDENT PERCEPTIONS REGARDING THE
MOST IMPORTANT SERVICE FEATURES AND OVERALL
SATISFACTION WITH THE SERVICE QUALITY OF A
HIGHER EDUCATION INSTITUTION***

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Today, there is a greater focus on worldwide academic excellence and quality of tuition. The industry can be more selective nowadays, because there is a wide range of graduates due to a variety of institutions offering many qualifications of different standards and quality. In order for a higher education institution to be successful and profitable, quality products and services need to be ensured and delivered. It becomes evident that many higher education institutions are ignorant towards the level of service they provide, which implicates the students' attitudes towards the institution. It is, therefore, important that higher education institutions know what level of service students expect from them. The study aimed to identify the most important service feature of student administration, according to students. A quantitative study was conducted among 200 students at a South African university. The results indicated that students' perceptions regarding service quality, as well as the overall level of satisfaction of the service are only slightly above average.

* This study is a follow up on a similar study conducted by the authors entitled: "SERVQUAL: Students' perception and satisfaction with regards to quality of service provided by Student Administration departments within tertiary institutions", to be published in the *Corporate Ownership and Control* journal (volume 11, July 2014). As the general theme is very similar to this article some overlap in the research methodology discussion will occur.

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1. INTRODUCTION

Customers are seen as the lifeblood of the existence of an organisation, this is the case for all organisations (Lauer, 2012:1). The same applies to higher education institutions as students are the customers and therefore also regarded as the lifeblood of its existence. All types of customers, including students, have certain expectations about the type of service they receive or buy. Darlaston-Jones et al. (2003:1-19) indicated in their study that the majority of students knew exactly what to expect from the Student Administration department, and they were also aware of whether they were receiving good service or not. Students worldwide today are informed and they know what the least is they can expect from Student Administration - and they will not accept anything less. Due to this fact, students are regarded as a vital and valuable asset to any higher education institution (Wright and O'Neill, 2002:23-39).

It should be noted that not only do higher education institutions compete with each other, but that there is also competition among internal faculties within each higher education institution. All higher education institutions have different schools, colleges and departments in different disciplines, which are all in competition with one another. Each faculty is striving to get more students to register with them – by trying to differentiate themselves from the other faculties in various ways – including services. In many instances, the level of service quality provided by one school, college or department can lead to a prospective student to register at that school, college or department. This fact, namely a high level of quality service, may be the differentiating factor that provides a competitive advantage for the specific school, college or department. Darlaston-Jones et al. (2003:1-19) indicated that students arrive at higher education institutions with pre-formed perceptions about the school, college or department, as well as the service they would like to receive (Tan and Kek, 2004:17-25). The perceived level of service may be the catalyst in their eventual selection or decision.

According to Tan and Kek (2004:17-25), the SERVQUAL model is used in order to measure students' satisfaction towards the quality of the service received in terms of empathy and assurance. The SERVQUAL model determines the relationship between the expected service and the actual service that is received in a particular situation (Tan and Kek, 2004:17-25).

It was found that previous research done on the service quality delivered by higher education institutions only focused on higher education in general. Various concepts such as service delivery, student needs, wants and

expectations from the Student Administration departments as well as the possible benefits a faculty could receive when delivering outstanding services, were not covered. This left a major gap in the body of knowledge, and is one of the issues being addressed in this study.

The focus of this study is therefore placed on the perception of the services delivered by Student Administration departments at a higher education institution. Consequently, this research study attempts to identify the most important service feature according to the students, as well as their overall satisfaction with the quality of services provided by Student Administration departments within the higher education institution. This study's investigation is based on the five SERVQUAL elements of empathy, reliability, responsiveness, tangibility, and assurance.

This study aims to provide all higher education institutions with sound information and guidelines in order to improve their level of service through the development and implementation of new and better strategies to increase student satisfaction. The following research objectives were set:

- Objective 1: To determine which of the five service features of the SERVQUAL model are the most important ones to students in relation to the quality of the service they receive.
- Objective 2: To determine the perception of the overall satisfaction level of both genders based on the service quality of the Student Administration of the Faculty of Economic and Management Sciences.

The following section gives an overview of service quality, the SERVQUAL elements and students' perception regarding the quality of service experienced at Student Administration departments. The empirical findings and the discussion of the findings appear in the latter part of the paper.

2. SERVICE QUALITY

Brochado (2009:174-190) indicated that services can be described as one's actions and performances, as it is a more behavioural activity and less a physical one – that is, services are also intangible and not always the same in terms of their quality and type. A service can also be described as being perishable, as it cannot be put away, therefore, it is crucial that higher education institution ensure that they provide excellent services at all times in order to achieve satisfied students. This will result in spreading positive word of mouth about the Student Administration department at the institution.

Kattara, Weheba and El-Said (2008:309-323) further indicated that the quality of the service provided is based on the customers' perception of how well a service is being met or whether it exceeds their expectations- something that will further contribute to a students' satisfaction level (Fisk, Grove and John, 2004:153). Service quality can also be regarded as the perceived quality by students, due to the fact that it indicates how well a service has been delivered and if it has met the students' expectations (Abdullah, 2006:31-47). Therefore, in order for a higher education institution to achieve high levels of service quality, it is critical that they know their students' perceptions (Narangajavana and Hu, 2008:34-56).

For any organisation, especially a higher education institution, to be successful it is critical that they need to provide an outstanding quality of services on a continuous basis, in order to assure that their customers are satisfied (Abdullah, 2006:31-47).

3. SERVQUAL DEFINED

The SERVQUAL model is used as an analytic methodology for disclosing broad areas of a company's weaknesses and strengths in terms of their service quality. According to Parasuraman, Berry and Zeithaml (1991:420-450), the SERVQUAL dimensions and items represents the core evaluation criteria for organisations when measuring the quality of their services, as it is an instrument that is used to measure the perceptions of customers on service quality. These instruments are: tangibility, reliability, responsiveness, assurance and empathy (Parasuraman et al., 1991:420-450).

Jordaan and Prinsloo (2004:65) stated that the SERVQUAL measurement instrument places emphasis on quality as it indicates the difference among customers' expectations about a particular service and their perceptions of the service received. According to Brochado (2009:174-190) the SERVQUAL measurement instrument is the most commonly used scale to measure the quality of services provided. For this research study there will only be focussed on the students' perception of service quality and not on their expectations. The reason for this is the fact that students form their own perceptions of the experienced service and it might be important for higher education institutions to know exactly what these perceptions of the students are, because this might lead to potential students in the future. Every individual student has specific expectations about a service. However, this is before the actual service takes place. Therefore, the perceptions they have formed after the actual service delivery, is very important.

It is critical for organisations that want to deliver exceptional quality services to place emphasis on the measurement of their services. This can be accomplished by focusing on the SERVQUAL measurement instrument, which includes five dimensions, namely: reliability, responsiveness, empathy, tangibility and assurance (Machado and Diggines, 2012:124). These dimensions are defined as follows:

- **Reliability:** Refers to the ability of an organisation to provide the promised service quality reliably and consistently.
- **Responsiveness:** Refers to the organisation and its staff's ability to show willingness to assist the customers.
- **Empathy:** Refers to the perceived attention and care given by the organisation to the customers to ensure that their needs are met.
- **Tangibility:** Refers to the tangible component of a business that has an important impact on the customer and serves as a physical indicator of the intended service quality.
- **Assurance:** Refers to the customers' perceptions on the ability of the organisation's employees to provide the service with the needed skills, knowledge and communication techniques.

According to Parasuraman et al., (1991:420-450) the most important dimension of the five dimensions that customers value the most is reliability. Reliability refers to the service outcome and whether the customer received the promised service. The remaining four dimensions refer to the development of the service. The second most important dimension of the SERVQUAL model is assurance, and thereafter responsiveness. These are followed by empathy and tangibility which are regarded as the least important dimensions (Parasuraman et al., 1991:420-450).

Although reliability is observed as being the core of a service, the overall satisfaction can only be determined through the general observation of all five the dimensions (Jordaan and Prinsloo, 2004:64). This study also aims to determine which of the five SERVQUAL elements are more important to students.

All the questions, used for empirical research, including the nine questions associated with assurance and empathy are presented in Table 1 (Jordaan and Prinsloo, 2004:66).

Table 1. Questions in the SERVQUAL measurement instrument

Tangibility	
1	Technical equipment is up-to-date.
2	Physical facilities are visually appealing.
3	Employees are well-dressed and appear neat.
4	Tools and instruments used to provide the service are attractive.
Reliability	
5	Promises to perform the service within a certain time are kept.
6	Complaints and problems are solved with great concern and sympathy.
7	The service is delivered correctly the first time.
8	The service is delivered at the time agreed upon.
9	Orders and accounts are accurate and recorded.
Responsiveness	
10	One cannot expect employees to inform customers as to the exact time of delivery.
11	It is not realistic to expect prompt service from the employees.
12	Employees are not always willing to help customers.
13	It is acceptable that employees are too busy to help customers immediately.
Assurance	
14	You can trust the employees.
15	You feel safe in your transactions with the employees.
16	The employees are friendly and polite.
17	The employees have the needed knowledge to answer customer queries.
Empathy	
18	The employees give individual attention to each customer.
19	The employees give personal attention to each customer.
20	The employees understand the specific needs of customers.
21	The employees have the customer's best interests at heart.
22	The organisation has operating hours convenient to all their customers.

Source: Parasuraman, Zeithaml and Berry (1988:38)

Jordaan and Prinsloo (2004:65) stated that the main purpose for using SERVQUAL to test the quality of the service offered, is to firstly determine the level of service the customer will expect from the service provider, and secondly to assess the actual service the customer receives from the specific organisation. Furthermore, Tan and Kek (2004:17-25) indicated that service quality equals perception minus expectation. Therefore, it can be inferred that service quality can be defined as "... a customer's evaluative judgement about the degree of superiority of service performance", this meaning that service quality is the degree and direction of discrepancy between customers' service perceptions and expectations (Boshoff, 2014:40).

The SERVQUAL measuring instrument is based on the five dimensions of service quality - tangibility, reliability, responsiveness, assurance and empathy. In effect, customers are generally presented with a questionnaire that contains 22 questions that measures expectations and perceptions on the five quality dimensions. The students were asked to answer the questions twice, the first time the students had to answer in terms of the tangible service received from the service provider, and the second time in terms of the level of service the customer expects from the specific service provider.

By taking the elements of SERVQUAL into consideration, the following hypotheses were formulated:

- H_{2 (alt)}: *There is a positive correlation between the perceived tangibility of the service provided and the overall level of student satisfaction.*
- H_{3 (alt)}: *There is a positive correlation between the perceived reliability of the service provided and the overall level of student satisfaction.*
- H_{4 (alt)}: *There is a positive correlation between the perceived assurance of the service provided and the overall level of student satisfaction.*
- H_{5 (alt)}: *There is a positive correlation between the perceived responsiveness of the service provided and the overall level of student satisfaction.*
- H_{6 (alt)}: *There is a positive correlation between the perceived empathy of the service provided and the overall level of student satisfaction.*

4. STUDENT PERCEPTION OF SERVICE QUALITY

According to Brochado (2009:174-190), the awareness of service quality in higher education institution has increased over the past ten years. Tan and Kek (2004:17-25) indicated that the degree in which students' perceptions and expectations are met is described as quality in education, and therefore the quality of service is viewed as a gagging factor which describes the students' perception of their satisfaction (Abdullah, 2006:31-47). Kara and DeShields (2004:1-24) point out that higher education institution that understand the perceptions of their students, will most probably contribute to the overall students' satisfaction.

4.1. Perception defined

According to Oxford Dictionaries (2014), perception can be defined as the "...ability to see, hear, or become aware of something through the senses, as well as the way in which something is regarded, understood, or interpreted." According to Brochado (2009:174-190), perceptions are described as influential

verdicts of the specific services experienced through contact with the administrative personnel in higher education institution.

Voss, Gruber and Szmigin (2007:949-959) furthermore stated that the quality of services in higher education institution can be pronounced as the variance between students' expectation of a particular service and their perception of the received service.

In a higher education institution, the students are regarded as the primary customers, and according to Darlaston-Jones et al. (2003:1-19), they are nowadays more aware of their "student rights", which enables them to determine whether their perceptions of a service provided and the reality of that service are in-line.

Voss et al. (2007:949-959) stated that it is critical for higher education institution to know and understand students' perceptions, as this will enable them to be in an enhanced position in order to handle their perceptions. Students who have a positive experience with these administrative departments may be more satisfied, which can further result in spreading positive word of mouth, creating loyalty among current students and attracting potential students, which may ultimately lead to students enrolling for more additional courses.

4.2. Overall student satisfaction

Dictionary.com (2014) defines satisfaction as the gratification or happiness that one feels when a desire, perception or expectation has been fulfilled. In the case of higher education institution it is the feeling a student will experience as soon as his or her expectations have been met. Satisfaction can therefore be regarded as students' emotional response that has resulted from a cognitive process of evaluating the service received against their perceptions (Rust and Olivier, 1994:4).

Eakuru and Matt (2008:129-139) further described satisfaction as a process where aspects such as expectations, perceptions and emotions are a part of the satisfaction process. When students' perceptions meet their expectations, satisfaction will be the result; however, the opposite will occur when their expectations are not met (Rust and Olivier, 1994:4).

Kattar et al., (2008:309-323) indicated that perceived quality is an indication for customer satisfaction; but others see satisfaction as a direct indication for perceived quality. Several studies indicated that satisfaction is

proved as the result of both service quality and perceived value; therefore, service quality and perceived value are indications for customer satisfaction (Ali, 2007:79; Hutchinson, Fujun and Wang, 2009:298-308). Therefore the following hypothesis is stated:

- $H_{1(alt)}$: *There is a positive correlation between the students' perception of the quality of customer service received and the overall level of student satisfaction.*

The next section deals with the research methodology and the findings of the research.

5. METHODOLOGY

A questionnaire was developed and distributed to first and third year undergraduate students with the aim of determining their perceptions and satisfaction with the quality of services provided by Student Administration departments within a higher education institution. The questionnaire incorporated questions that are of quantitative nature and a total of 200 usable responses were received.

The demographic profile of the respondent groups is presented in Table 2 and Table 3. There were a number of ways to select the respondents, however, the researchers decided to group the respondents into gender and year of study, because students can be grouped according to a variety of sub-groups. Therefore, gender and year of study were the two groups that could easily divide the students. Out of the 200 respondents, 100 respondents were male and 100 were female, as shown in Table 2. This was done in order to interpret both genders' opinions.

Table 2. Respondents' gender

		Frequency	Valid Percent
Valid	Male	100	50.0
	Female	100	50.0
	Total	200	100.0

Source: Research results.

To get a representative sample out of the two years of study, 100 respondents were chosen out of the first year group and 100 respondents were chosen out of the third year group, as shown in Table 3.

Table 3. Respondents' year of study

		Frequency	Valid Percent
Valid	1st year	100	50.0
	3rd year	100	50.0
	Total	200	100.0

Source: Research results.

5.1. Reliability

In order to determine the reliability of the questionnaire, Cronbach's Alpha Coefficient was used. Cronbach's Alpha Coefficient is the most applicable method due to the fact that the questionnaire consists of 5-point Likert scales. As indicated by Table 4, the Cronbach's Alpha values for the five dimensions (tangibility, assurance, empathy, responsiveness and reliability) used in the SERVQUAL model are both of acceptable nature.

Table 4. Cronbach's Alpha for the SERVQUAL model used (n = 200)

Dimension	α	M	SD
Tangibility	0.52	3.66	0.55
Assurance	0.83	3.81	0.64
Empathy	0.68	3.27	0.66
Responsiveness	0.82	3.55	0.65
Reliability	0.78	3.49	0.62

Source: Research results.

6. RESEARCH RESULTS

The outcomes of the questions asked in the questionnaire are examined in terms of descriptive techniques and hypotheses testing.

6.1. Students' perception of the service quality provided by the Student Administration departments

The students' perception of the overall service quality is above average, with an average of 3.56 on the 5-point Likert scale. Therefore, it is suggested that the students' perception of the service quality lies between "neither agree nor disagree" and "agree". One can imply that the average of 3.56 on the 5-point Likert scale falls more towards "agree" instead of "neither agree nor

disagree”. As a result, the students are on average, satisfied with the perceived service quality.

6.2. The five service quality features relating to the SERVQUAL model

Table 5 indicates the importance of the two service quality features (appearance, ability, willingness, knowledge and politeness, caring and individualised attention) related to the SERVQUAL. The results suggest that the ability of the Student Administration department to perform the service dependably, accurately and on time is the most important feature when it comes to service quality. The appearance of the Student Administration department’s physical facilities, equipment, staff and communication materials were found to be the least important. Therefore, the Student Administration of the Economic and Management Sciences Faculty should focus their attention to deliver the services dependably, accurately and on time.

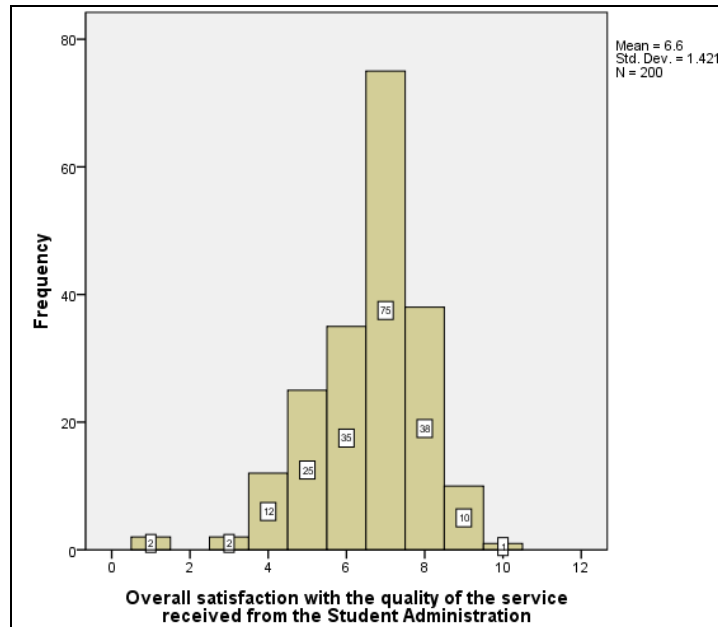
Table 5. The perceived service quality features (n = 200)

Features	Sum	Ranking
The appearance of the Student Administration's physical facilities, equipment, staff and communication materials	736	5
The ability of the Student Administration to perform the service dependably, accurately and on time	514	1
The willingness of the Student Administration to help customers and provide prompt service	556	3
The knowledge and politeness of the staff of the Student Administration and their ability to convey trust and confidence	539	2
The caring, individualised attention that the Student Administration provides its customers	654	4

Source: Research results.

6.3. Student’s overall satisfaction with the quality of the service received

Students’ overall satisfaction with the service, received from the Student Administration department, was measured at a mean of 6.60. This suggests that the average leans towards the excellent label (between 6 and 7 on the 10 point semantic scale). Figure 1 illustrates the percentages of each of the responses from one to ten. The majority of the respondents (75%) represent a scale of seven on the semantic scale from one to ten.



Source: Research results.

Figure 1. Overall student satisfaction

6.4. Hypothesis testing

The results for each hypothesis are indicated and discussed below. The first hypotheses (H_1) focus on the relationship between the students' perception of the quality of customer service received and their overall level of satisfaction. The null and the alternative hypotheses (H_1) are stated as follows:

- $H_{1 (null)}$: There is no correlation between the students' perception of the quality of customer service received and their overall level of satisfaction.
- $H_{1 (alt)}$: There is a positive correlation between the students' perception of the quality of customer service received and the overall level of satisfaction.

This one-tailed hypotheses was tested at a 5% level of significance ($\alpha = 0.05$). Table 6 describes the descriptive statistics for the students' perception of the quality of the service received and their overall level of satisfaction.

Table 6. Descriptive statistics for the students' perception of the quality of the service received and their overall level of satisfaction

	<i>N</i>	<i>M</i>	<i>SD</i>
Overall satisfaction	195	6.60 (10 point scale)	1.42
Total quality	195	3.56 (5 point scale)	0.52

Source: Research results.

The expectation of H_1 suggests that there should be a positive correlation between the students' perception of the quality of the customer service received and their overall level of satisfaction. The results above imply that there is in fact a positive correlation due to the fact that the students' overall satisfaction rating ($M = 6.60$) is above average, leaning towards the "excellent" label, although the ideal would be a higher rating. The total quality ($M = 3.56$) suggests that the students' perception about the quality of the customer service received is above average leaning towards the "strongly agree" label, although the ideal would be an average rating of four or five.

The students' perception of the quality of the customer service received and their overall level of satisfaction was measured at an interval level of measurement. The appropriate parametric significant test is Pearson's product moment correlation. The correlation matrix in Table 7 shows the correlation of the two variables with each other and with themselves.

Table 7. Nonparametric correlation of H_1

Spearman's rho		Overall satisfaction	Total quality
Overall satisfaction	Correlation Coefficient	1.00	0.52
	Sig. (1-tailed)	.	0.00
	N	195	195
Total quality	Correlation Coefficient	0.52	1.00
	Sig. (1-tailed)	0.00	.
	N	195	195

Source: Research results.

The table indicates the values of the correlation coefficients and their p-value. One has to determine if the correlation between the overall satisfaction and the total quality is statistically significant or not. The p-value is given in the

row labelled “Sig. (1-tailed)” as 0.00. This suggests that the p-value is smaller than 0.05 and that the null hypotheses can be rejected and the alternative hypotheses can be accepted. It can therefore be concluded that there is a significant correlation between these two variables.

The correlation coefficient indicates that the direction is positive and that the strength (0.52) of the correlation between the two variables is weak according to the “rules of thumb” proposed by Burns and Bush (2006:542). A weak positive correlation was found between the two variables (total quality and overall satisfaction), $r(193) = 0.52, p \leq 0.0005$.

The second hypotheses (H_2) focus on the relationship between the perceived tangibility of the service provided and the students’ overall level of satisfaction. The null and the alternative hypotheses (H_2) are stated below:

- $H_{2 (null)}$: There is no correlation between the perceived tangibility of the service provided and the overall level of student satisfaction.
- $H_{2 (alt)}$: There is a positive correlation between the perceived tangibility of the service provided and the overall level of student satisfaction.

This one-tailed hypotheses was tested at a 5% level of significance ($\alpha = 0.05$). Table 8 describes the descriptive statistics for the students’ perception of the tangibility of the service provided and their overall level of satisfaction.

Table 8. Descriptive statistics for the students' perception of the tangibility of the service provided and their overall level of satisfaction

	<i>N</i>	<i>M</i>	<i>SD</i>
Overall satisfaction	195	6.60 (10 point scale)	1.42
Total tangibility	195	3.67 (5 point scale)	0.55

Source: Research results.

The expectation of H_2 suggests that there should be a positive correlation between the student’s perception of the tangibility of the service provided and their overall level of satisfaction. The results imply that there is in fact a positive correlation due to the fact that the students’ overall satisfaction rating ($M = 6.60$) is above average, leaning towards the “excellent” label, although the ideal would be a higher rating. The total tangibility ($M = 3.67$) suggests that the students’ perception about the tangibility of the service provided is above

average leaning towards the “strongly agree” label, although the ideal would be an average rating of four or five.

The students’ perception of the tangibility of the service provided and their overall level of satisfaction was measured at an interval level of measurement. The appropriate parametric significant test is Pearson’s product moment correlation.

The correlation matrix in Table 9 shows the correlation of the two variables with each other and with themselves. The table indicates that the p-value is smaller than 0.05 and that the null hypotheses can be rejected (i.e. the alternative hypotheses can be accepted). Therefore, it can be concluded that there is a significant correlation between these two variables. The correlation coefficient indicates that the direction is positive and that the strength (0.38) of the correlation between the two variables is weak, according to the “rules of thumb”, proposed by Burns and Bush (2006:542).

Table 9. Non-parametric correlation for H₂

Spearman's rho		Overall satisfaction	Total tangibility
Overall satisfaction	Correlation Coefficient	1.00	0.34
	Sig. (1-tailed)	.	0.00
	N	195	195
Total tangibility	Correlation Coefficient	0.34	1.00
	Sig. (1-tailed)	0.00	.
	N	195	195

Source: Research results.

A very weak strength, positive correlation was found between the two variables (total tangibility and overall satisfaction), $r(193) = 0.34, p \leq 0.0005$.

The third hypotheses (H₃) focus on the relationship between the perceived reliability of the service provided and the students’ overall level of satisfaction. The null and the alternative hypotheses (H₃) are stated below:

- H_{3 (null)}: There is no correlation between the perceived reliability of the service provided and the overall level of student satisfaction.
- H_{3 (alt)}: There is a positive correlation between the perceived reliability of the service provided and the overall level of student satisfaction.

This one-tailed hypotheses was tested at a 5% level of significance ($\alpha = 0.05$). Table 10 describes the descriptive statistics for the students' perception of the reliability of the service provided and their overall level of satisfaction. The expectation of H₃ suggests that there should be a positive correlation between the student's perception of the reliability of the service provided and their overall level of satisfaction.

Table 4. Descriptive statistics for the students' perception of the reliability of the service provided and their overall level of satisfaction

	<i>n</i>	<i>M</i>	<i>SD</i>
Overall satisfaction	195	6.60 (10 point scale)	1.42
Total reliability	195	3.49 (5 point scale)	0.62

Source: Research results.

The results imply that there is, in fact, a positive correlation due to the fact that the students' overall satisfaction rating ($M = 6.60$) is above average, leaning towards the "excellent" label, although the ideal would be a higher rating. The total reliability ($M = 3.49$) suggests that the students' perception about the reliability of the service provided is above average leaning towards the "strongly agree" label, although the ideal would be an average rating of four or five.

The students' perception of the reliability of the service provided and their overall level of satisfaction was measured at an interval level of measurement. The appropriate parametric significant test is Pearson's product moment correlation.

The correlation matrix in Table 16 shows the correlation of the two variables with each other and with themselves. The table indicates that the p-value is smaller than 0.05 and that the null hypotheses can be rejected (i.e. the alternative hypotheses is to be accepted).

Therefore, it can be concluded that there is a significant correlation between these two variables. The correlation coefficient indicates that the direction is positive and that the strength (0.44) of the correlation between the two variables is weak, according to the "rules of thumb", proposed by Burns and Bush (2006:542).

Table 5. Non-parametric correlation for H₃

Spearman's rho		Overall satisfaction	Total reliability
Overall satisfaction	Correlation Coefficient	1.00	0.44
	Sig. (1-tailed)	.	0.00
	N	195	195
Total reliability	Correlation Coefficient	0.44	1.00
	Sig. (1-tailed)	0.00	.
	N	195	195

Source: Research results.

The fourth hypotheses (H₄) focused on the relationship between the perceived assurance of the service provided and the students' overall level of satisfaction. The following null and alternative hypotheses (H₄) are stated below:

- H_{4 (null)}: There is no correlation between the perceived assurance of the service provided and the overall level of student satisfaction.
- H_{4 (alt)}: There is a positive correlation between the perceived assurance of the service provided and the overall level of student satisfaction.

This one-tailed hypothesis was tested at a 5% level of significance ($\alpha = 0.05$). Table 12 presents the descriptive statistics for students' perception of the assurance of the service provided and their overall level of satisfaction.

Table 12. Descriptive statistics for students' perception of the assurance of the service provided and their overall level of satisfaction

	N	M	SD
Overall satisfaction	195	6.60 (10 point scale)	1.42
Total assurance	195	3.81 (5 point scale)	0.64

Source: Research results.

The expectation of H₄ suggests that there should be a positive correlation between the students' perception of the assurance of the service provided and their overall level of satisfaction. The results imply that there is in fact a positive correlation due to the fact that the students' overall satisfaction rating (M = 6.60) is above average, leaning towards the "excellent" label, although the

ideal would be a higher rating. The total assurance ($M = 3.81$) suggests that the students' perception about the assurance of the service provided is above average leaning towards the "strongly agree" label, although the ideal would be an average rating of four or five.

The students' perception of the assurance of the service provided and their overall level of satisfaction were measured at an interval level. The appropriate parametric significant test to be used is Pearson's product moment correlation. The correlation matrix in Table 13 shows the correlation of the two variables with each other and with themselves. The table indicates that the p-value is smaller than 0.05 meaning that the null hypotheses can be rejected (i.e. the alternative hypothesis can be accepted). Therefore, it can be concluded that there is a significant correlation between these two variables.

The correlation coefficient indicates that the direction is positive and the strength (0.47) of the correlation between the two variables is weak, according to the "rules of thumb", proposed by Burns and Bush (2006:542).

Table 13. Non-parametric correlation for H_4

Spearman's rho		Overall satisfaction	Total assurance
Overall satisfaction	Correlation Coefficient	1.00	0.47
	Sig. (1-tailed)	.	0.00
	N	195	195
Total assurance	Correlation Coefficient	0.47	1.00
	Sig. (1-tailed)	0.00	.
	N	195	195

Source: Research results.

A weak positive correlation was found between the two variables (total assurance and overall satisfaction), $r(193) = 0.47$, $p \leq 0.0005$.

The fifth hypotheses (H_5) focus on the relationship between the perceived responsiveness of the service provided and the students' overall level of satisfaction. The null and the alternative hypotheses (H_5) are stated below:

- $H_{5 (null)}$: There is no correlation between the perceived responsiveness of the service provided and the overall level of student satisfaction.
- $H_{5 (alt)}$: There is a positive correlation between the perceived responsiveness of the service provided and the overall level of student satisfaction.

This one-tailed hypotheses was tested at a 5% level of significance ($\alpha = 0.05$). Table 14 describes the descriptive statistics for the students' perception of the responsiveness of the service provided and their overall level of satisfaction. The expectation of H_5 suggests that there should be a positive correlation between the students' perception of the responsiveness of the service provided and their overall level of satisfaction.

The results imply that there is, in fact, a positive correlation due to the fact that the students' overall satisfaction rating ($M = 6.60$) is above average, leaning towards the "excellent" label, although the ideal would be a higher rating. The total responsiveness ($M = 3.55$) suggests that the students' perception about the responsiveness of the service provided is above average, leaning towards the "strongly agree" label, although the ideal would be an average rating of four or five.

Table 14. Descriptive statistics for the students' perception of the responsiveness of the service provided and their overall level of satisfaction

	<i>N</i>	<i>M</i>	<i>SD</i>
Overall satisfaction	195	6.60 (10 point scale)	1.42
Total responsiveness	195	3.55 (5 point scale)	0.64

Source: Research results.

The students' perception of the responsiveness of the service provided and their overall level of satisfaction was measured at an interval level of measurement. The appropriate parametric significant test is Pearson's product moment correlation.

The correlation matrix in Table 15 shows the correlation of the two variables with each other and with themselves. The table indicates that the p-value is smaller than 0.05 and that the null hypotheses can be rejected and the alternative hypotheses can be accepted.

Therefore, it can be concluded that there is a significant correlation between these two variables. The correlation coefficient indicates that the direction is positive and that the strength (0.47) of the correlation between the two variables is weak, according to the "rules of thumb", proposed by Burns and Bush (2006:542).

Table 15. Non-parametric correlation for H₅

Spearman's rho		Overall satisfaction	Total responsiveness
Overall satisfaction	Correlation Coefficient	1.00	0.47
	Sig. (1-tailed)	.	0.00
	N	195	195
Total responsiveness	Correlation Coefficient	0.47	1.00
	Sig. (1-tailed)	0.00	.
	N	195	195

Source: Research results.

A weak positive correlation was found between the two variables (total responsiveness and overall satisfaction), $r(193) = 0.47, p \leq 0.0005$.

The sixth hypothesis (H₆) focused on the relationship between the perceived empathy of the service provided and the students' overall level of satisfaction. The following null and alternative hypotheses (H₆) are stated below:

- H_{6 (null)}: There is no correlation between the perceived empathy of the service provided and the overall satisfaction level of service quality received.
- H_{6 (alt)}: There is a positive correlation between the perceived empathy of the service provided and the overall satisfaction level of service quality received.

This one-tailed hypothesis was tested at a 5% level of significance ($\alpha = 0.05$). Table 16 describes the descriptive statistics for the students' perception of the empathy of the service provided and their overall level of satisfaction.

Table 16. Descriptive statistics for the students' perception of the empathy of the service provided and their overall level of satisfaction

	n	M	SD
Overall satisfaction	195	6.60 (10 point scale)	1.42
Total empathy	195	3.27 (5 point scale)	0.66

Source: Research results.

The expectation of H_6 suggests that there should be a positive correlation between the students' perception of the empathy of the service provided and their overall level of satisfaction. The results imply that there is, in fact, a positive correlation, due to the fact that the students' overall satisfaction rating ($M = 6.60$) is above average, leaning towards the "excellent" label, although the ideal would be a higher rating. The total empathy ($M = 3.27$) suggests that the students' perception about the empathy of the service provided is above average leaning towards the "strongly agree" label, although the ideal would be an average rating of four or five.

The level of measurement that was used to measure the students' perception of the empathy of the service provided and their overall level of satisfaction was measured by an interval measure. The appropriate parametric significant test used is Pearson's product moment correlation.

The correlation matrix in Table 17 shows the correlation of the two variables with each other and with themselves. The table indicates that the p-value is smaller than 0.05 and that the null hypotheses can be rejected (i.e. the alternative hypotheses can be accepted). Therefore, it can be concluded that there is a significant correlation between these two variables.

The correlation coefficient indicates that the direction is positive and that the strength (0.35) of the correlation between the two variables is very weak, according to the "rules of thumb", proposed by Burns and Bush (2006:542).

Table 17. Non-parametric correlation for H_6

Spearman's rho		Overall satisfaction	Total empathy
Overall satisfaction	Correlation Coefficient	1.00	0.35
	Sig. (1-tailed)	.	0.00
	N	195	195
Total empathy	Correlation Coefficient	0.35	1.00
	Sig. (1-tailed)	0.00	.
	N	195	195

Source: Research results.

A very weak strength, positive correlation was found between the two variables (total empathy and overall satisfaction), $r(193) = 0.35$, $p \leq 0.0005$.

7. DISCUSSION

Student satisfaction towards the quality of the service, provided by the Student Administration departments of the higher education institution, was measured in terms of tangibility, reliability, empathy, responsiveness and assurance by using the SERVQUAL model. This was done in order to determine how the students perceive the above mentioned dimensions and to determine the students' overall satisfaction with the service they receive.

7.1. Conclusions and recommendations

The results indicated that students' perception about the quality of the service, as well as the overall level of satisfaction of the service received was slightly above average. Even though this suggests that the students are not unsatisfied, there is still a lot of room for improvement in order to completely satisfy the students.

According to the students' perceptions, the highest agreed upon dimension in the SERVQUAL model was assurance ($M = 3.81$). Therefore, one can suggest that the students are the most satisfied with the assurance dimension. In relation to the results obtained, empathy was the lowest agreed upon ($M = 3.26$). The statements regarding the empathy dimension suggested that the students did not agree that the staff understood their needs, gave them individual attention or that they had the students' best interests at heart. Therefore, the Student Administration departments should focus their efforts on improving their empathy towards the students in order to increase the students' overall satisfaction.

The results further suggested that the ability of the Student Administrative departments to perform the service dependably, accurately and on time was the most important feature relating to service for the students. In contrast to this, the least important feature to the students was the appearance of the Student Administration department's physical facilities, equipment, staff and communication materials.

It was further found that the male students together with the first year students were more satisfied regarding their overall perceptions about the quality of the service received from the Student Administration departments. It is important that students' perception, in terms of service quality, should be understood, as to assure a high level of their satisfaction. Therefore, higher education institutions should use the results of this study and the SERVQUAL

model to improve on their service offering, in the areas where the students are not completely satisfied.

The study provides strong support for the potential development of an effective service quality model, which will aim to assist Student Administration departments in higher education institutions to increase the overall level of student satisfaction. To conclude, higher education institution can benefit from and obtain a competitive advantage above other institutions by having excellent Student Administration departments, focusing on exceptional service quality and high levels of overall student satisfaction.

Limitation of the study that need to be addressed and kept in consideration for future studies, is related to the fact that the sample consisted mainly of students from the Gauteng province of South Africa, thereby restricting generalisation to the mere population subgroups of South Africa. Finally, the sampling methodology utilised to select the population of interest was that of simple random sampling. This sampling methodology limits the study, as all not students have a chance of being selected into the sample as it is based on random selection within a known sample population.

Apart from the stated limitations, it is recommended that future research studies should expand the study to incorporate all South African higher education institutions, so as to do a comparative analysis among the institutions in the different provinces of South Africa. Furthermore, researchers could focus on the benefits an institution could receive when delivering exceptional service to their students. Lastly, they could also study the needs and expectations of students among the different faculties in a specific higher education institution in order to determine the importance of service quality.

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**UTVRĐIVANJE STUDENTSKE PERCEPCIJE O NAJVAŽNIJIM
OBILJEŽJIMA USLUGE I UKUPNOG ZADOVOLJSTVA SA
ZADOVOLJSTVOM KVALITETE INSTITUCIJE VISOKOG OBRAZOVANJA**

Sažetak

Danas se sve više izražava usmjerenost na postizanje svjetske akademske izvrsnosti i kvalitete podučavanja. Industrija, kao korisnik obrazovanja, može biti sve selektivnija u svom izboru kandidata, jer postoji i veliki broj različitih diplomiranih studenata, a što je posljedica različitosti institucija i kvalifikacija, koje variraju po standardu i kvaliteti. Kako bi visokoškolska institucija bila uspješna i profitabilna, treba osigurati i isporučiti kvalitetne proizvode i usluge. Stoga postaje jasno da brojne visokoškolske institucije ne obraćaju pozornost na razinu usluge koju nude, što djeluje i na stavove studenata prema instituciji. Zbog tog je i potrebno da visokoškolske institucije znaju koja se razina usluge od njih očekuje. U ovoj se studiji identificiraju najvažnije karakteristike usluga studentske administracije, definirane u skladu sa studentskom percepcijom. Kvantitativno istraživanje je provedeno među 200 studenata u južnoafričkom sveučilištu, a njegovi rezultati ukazuju da je studentska percepcija kvalitete usluge, kao i ukupna razina zadovoljstva uslugom, u maloj mjeri veća od prosjeka.

