EXECUTIVE SUMMARY

"A Study of Service Quality Dimensions Vis-a-Vis Satisfaction of Stakeholders of selected Universities of Gujarat"

A Summary of the Thesis Submitted to

The Maharaja Sayajirao University of Baroda, Vadodara.

For the Degree of

Doctor of Philosophy (Ph.D.)

[Commerce and Business Management]

[Under UGC (Minimum Standard and procedure

for Awards of M.Phil/Ph.D. Degree) Regulation, 2009]

Submitted By

Mr. Dignesh Shaileshbhai Panchasara

Under the Guidance of

Dr. Umesh R. Dangarwala

M.Com (Busi. Admn.), M.Com (Acct.),
FCA, AICWA, M.Phil., Ph.D.
Associate Professor,
Department of Commerce and Business Management
Faculty of Commerce
The Maharaja Sayajirao University of Baroda, Vadodara.

18th February, 2022

List of Content of Executive Summary

List of Content of Thesis

Summary of the Thesis

1.0   Introduction

Education is essential for better lives of human. Education provides perfect social life, meaningful guidance, a valuable person to society as well as happiness and well being for society. Educational organizations are answerable for the creation and production of knowledgeable and proficient specialists, which requires the moral understanding that all undertakings should concentrate on giving only the best to the society.[1]

Products are mainly divided into two general classes, produced or manufactured products (goods) and services. Goods are tangible in nature while services are intangible products.[2] The main objective of services is to meet the needs of customers. Services, for example banking, education, clinical or medical treatment and transportation make up most of the economies of the rich countries. They additionally speak to the majority of the rising countries' economies.

Quality refers the basic standards of something which is helpful to measure the satisfaction of the person. The standard of anything which is measures other things of the similar kinds. Dictionary of Cambridge University defines quality as how good or bad something is. Quality means a degree of excellence of something, a features or characteristics of something that makes it different from others.[3] Quality is much more complex term than it appears. Every quality experts have their different meaning of quality. Ultimately quality refers some characteristics of something that makes the things different.

Service quality has been differently characterized as concentrating on addressing needs and requirements and how well the service delivered matches customers' expectations. Perceived service quality is a worldwide shopper or consumer judgment or attitude, identifying with service and results from comparisons by buyers of expectations of service with their perception of actual service performance.[4]

1.1 Service Quality Dimensions

Now a day, almost all the nations are majority depending on service sector. If we take an example of the India, 61.5% of total GDP is contributed by service sector.[5] So, it is obvious to take a care of this sector. As discussed earlier, services are intangible, so it is difficult to check the quality of services as compared to physical products. Hence, to check the quality of services, authors have developed various dimensions. It is known as service quality dimensions. Some popular dimensions are discussed below:

- Sasser *et al* (1978) characterized the elements that raise the degree of service quality such as *security, consistency, attitude, completeness, condition, availability, and training of service providers*. Other than this, *physical quality, intuitive quality, and corporate quality* additionally influenced the service quality level.[6]

- Grönroos (1984) built up the first service quality model and measured perceived service quality dependent on the test of qualitative techniques. *Specialized quality, practical quality, and corporate picture* were utilized in the model as the elements of service quality.[7]

- To measure the quality of the services, Parasuraman, Zeithaml and Berry developed the SERVQUAL Model in 1988. This model contains five dimensions to study the service quality; (i) Reliability, (ii) Responsiveness, (iii) Tangibility, (iv) security and (v) empathy.[8]

- The SERVPERF process was developed in 1992 by Cronin and Taylor due to criticism of the satisfaction-oriented SERVQUAL model. This SERVPERF approach assumes that, after using the services, subjects automatically make a comparison between perceived service quality and expected service quality.[9]

- Another model for service quality was developed by Dabholkar *et al* in 1996. They also identified five dimensions to measure the service quality called (i) Physical aspects, (ii) Reliability, (iii) Personal interactions, (iv) Problem solving and (v) policy.[10]

- Another model in study of service quality dimensions is HEdPERF model. This model is very useful in specially higher education. The aim of this model is to capture a context-specific view of service quality in higher

education, enabling the whole student experience to be measured. Research findings confirm those students' perceptions of service quality can determine by evaluating six dimensions specifically; (i) Non-academic aspects, (ii) Academic aspects, (iii) Reputation, (iv) Access (v) Program issue and (vi) Understanding. Evaluating service quality and understanding how these dimensions impact service quality can enable higher institutions to design efficiently the service delivery process.[11]

1.2   SERVQUAL Model

Parasuraman *et al* (1985) embraced a Qualitative Research to explore the idea of Service Quality. They organised an in-depth interview with the executives and Focus Group interviews with customers to build up a model of Service Quality. They distinguished ten key determinants of Service Quality. They are Communication, Courtesy, Responsiveness, Reliability, Security, Access, Competence, Credibility, Understanding, Tangibles.[12]

In 1988, Parasuraman *et al* organised a quantitative Research. They uncovered an instrument for estimating buyers' view of Service Quality, after that it got known as SERVQUAL. They crumbled their dimensions from ten to five.[22]

These dimensions are:[13]

1. **Tangibles** – It includes the physical facilities and appearance of personnel and equipments.
2. **Reliability** – It includes the ability of employee to perform the service dependably and accurately as promised.
3. **Responsiveness** – It is the willingness of employees to provide prompt service and help customers.
4. **Assurance** – This is the combination of items designed originally to assess Competence, Courtesy, Credibility, and Security. It is the ability of the employees to inspire trust and confidence in the organization through their knowledge and courtesy.
5. **Empathy** – This is the combination of items designed originally to assess Access, Communication, and Understanding the customer. It is the personalized attention given to customer.

Organizations can utilize SERVQUAL in different manners. Parasuraman *et al* (1988) referenced that SERVQUAL can support the Service and Retailing Organizations in surveying the expectations of the customers and Service Quality perceptions. It can concentrate on the core zones where directors of the organizations need to make consideration and move to improve Service Quality.[13]

2.0   Review of Literature

A researcher surveys the related literatures in order to review the current status of the research topic. The important benefits of the literature reviews are helps the researcher to adopting methodologies used for the research study, suggest new approaches and methods related to study and improve theoretical knowledge and implications of the related topic.

This chapter of the thesis discusses and give the idea about latest literatures in the field of higher education that supports frame for this research work and provide conceptual theory and model. It is also helpful to understand the theoretical background and aspects of the study and discusses various viewpoints offered by different authors and different research studies.

This chapter of the thesis also attempts to critically review the literature on service quality dimensions as well as satisfaction of the stakeholders specially students and staffs of the Educational Institutes. Research papers published in various international and national journals, peer reviewed, referred and reputed journals, various published and unpublished Ph.D. thesis on service quality dimensions and satisfaction of stakeholder of the education institutes have been thoroughly analysed and an effort has been made to gain key insights on impact of service quality dimensions on satisfaction of stakeholders.

3.0   Research Methodology

This chapter of the thesis describes the details about research methodology applied by the researcher. This chapter provides the research design used for the study, benefits and scope of the study, the nature and source of data collected for the study and details about the research instrument used for the research purpose. Further, this chapter of the thesis also provides a brief about the independent and dependent variables under study.

Further, this chapter of the thesis gives details about the hypotheses framed and developed from the critical literature review. Statistical packages and its tools and techniques such as SPSS and Excel have been used for analyzing the data and to test the hypotheses developed by the researcher.

3.1   Rationale of the Study

Stakeholders (particularly students and employees) are the backbone of any educational institute, play a vital role to make any Institute superior, renowned and eminent by achieving good position in Corporate World as well as in the society. It is the duty of every educational institute to provide good educational and allied services. Hence, it is necessary to study the services provided by the Educational Institutes to the students. This research study focuses on various dimensions of the service quality to measure the services vis-à-vis satisfaction of various stakeholders (particularly students, teaching staffs and parents) of Educational Institutes.

3.2   Statement of the Problem

One of the most researched topics in marketing management is satisfaction of customers. In today's times of global competition, almost all organization seeks the opportunity to increase the level of satisfaction of their customers. Here, customers in higher education institutions are students, parents, teaching as well as non teaching staff, society at large and government bodies associated with HEIs.

Thus it becomes important to know the level of satisfaction among the students and other stakeholders in the HEIs. One of the popular model is to know the level of expectations and satisfaction is SERVQUAL.

Hence, the study was undertaken to identify the factors that affecting to satisfy the stakeholders of the HEIs and Universities. The statement of problem is as under:

"A Study of Service Quality Dimensions vis-a-vis Satisfaction of Stakeholders of selected Universities of Gujarat"

3.3   Research Objectives

⇒ To identify the relationship between Demographic variables and satisfaction of Stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

⇒ To measure the gap between expectation of stakeholders (particularly students, parents and teaching staffs) and performance of services provided by the universities.

⇒ To determine and compare the level of satisfaction of stakeholders (particularly students, parents and teaching staffs) among selected universities.

⇒ To examine the relationship between service quality dimensions (Reliability, Responsiveness, Empathy, Assurance and Tangibility) and satisfaction of stakeholders (particularly students, parents and teaching staffs).

⇒ To determine critical factors in service quality that contributes most to satisfaction of stakeholders (particularly students, parents and teaching staffs).

⇒ To know the impact of SERVQUAL dimensions on satisfaction of stakeholders (particularly students, parents and teaching staffs).

⇒ To suggest appropriate measures for improving the quality and efficiency of service quality in selected universities of Gujarat to enhance level of satisfaction of stake holders (particularly students, parents and teaching staffs).

3.4   Hypotheses of the Study

H01:   There is no significant relationship between Demographic variables and satisfaction of Stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

H02: There is no significant relationship between Reliability variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

H03: There is no significant relationship between Responsiveness variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

H04: There is no significant relationship between Assurance variable and satisfaction of stake holders (particularly students, parents and teaching staff) of selected universities of Gujarat.

H05: There is no significant relationship between Empathy variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

H06: There is no significant relationship between Tangibility variable and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

H07: There is no significant relationship between University Performance and satisfaction of stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

3.5 Research Design

Research design for this study is combination of Descriptive and Analytical in nature. Descriptive is due to the fact finding characteristics of stakeholders and their satisfaction level. The study is Analytical due to the characteristic of its Analysis. It involves a sound and scientific analysis of data with the help of measure of central tendency, measures of variation, hypothesis testing, correlation and the regression analysis.

3.6 Data Collection Technique

The *primary data* have been collected from selected stakeholders of selected universities through structured non-disguised questionnaire. The questionnaire was framed on the base of objectives of the study. The *secondary data* have been collected from reliable and authentic sources like, published research papers, various authentic websites,

published and non-published Ph.D. thesis, annual report of the Universities and other authentic sources. The relevant data which have used for the purpose of the study has taken from books, journals and electronic media.

3.7   Sample Size

Calculation of sample size for this study is quite difficult, reason being the large number of target population (in numerically). But still in consultation with experts in this area and with the help of research guide, researcher has just tried to find out the reasonable number which is considered as true representative of that particular university.

To find out the appropriate number of sample, researcher has used the Sample Size formula for the standard error of the proportion as below:

$$\textbf{Sample Size (n)} = \frac{\pi\,(1-\pi)\,z^2}{D^2}$$

This formula is taken from the book *"Marketing Research – An Applied Orientation"* by Naresh K. Malhotra (Sixth Edition) Pearson Publication, pp. 377-379

Using the above formula, sample size is finalised. The table below shows distribution of sample size for this study:

Table-3.1: Selected Sample Size

Name of University	Students	Parents	Teachers	Total
State Universities				
M. S. University	194	98	66	358
S. P. University	192	97	65	354
Total	386	195	131	712
Private Universities				
Parul University	192	96	64	352
GLS University	193	96	65	354
Total	385	192	129	706

3.8   Reliability of the Data

Cronbach's Alpha Reliability Index was used to evaluate the consistency of each variable. Hair et al. (1998) suggests that the acceptable level of reliability index should be maintained at a minimum of 0.50 in order to satisfy for the early stages of research; and over 0.7 is considered to be a good level, 0.9 is considered to be excellent level. Below table shows the Cronbach's Alpha values:

Table-3.2: Reliability Alpha Score

Sr. No.	Data Collected from	MSU	SPU	PU	GLSU	Overall
1	Students	0.961	0.963	0.971	0.956	0.965
2	Parents	0.956	0.963	0.958	0.947	0.955
3	Teachers	0.908	0.964	0.951	0.970	0.957

3.9 Limitations of the Research Study

⇒ The data is collected from the respondents through the structured non-disguised questionnaire, there may be possibility that respondents might be in hurried and given incorrect answers, even they may not be fully loyal in answering the questions might be distorted the analysis and findings.

⇒ The researcher had collected the primary data from selected four universities in Gujarat. Hence, it would not be appropriate to generalise the results as representation of all the universities in Gujarat and fit for the entire population.

⇒ The time factor in collecting the responses might be limiting factor. The COVID-19 Pandemic is one of the limitations in collecting the data from respondents.

⇒ The research design and sample size used in the research may limit the findings of the study.

⇒ Statistical software and tools used by the researcher may limit the findings of the study.

3.10 Directions for the future Research Study

⇒ This research has focused on four selected universities; similar research can be carried out in other universities of the country.

⇒ This researcher has consider only three major stakeholder i.e. students, parents and teaching staff. Future research may conduct by taking other stakeholders.

⇒ This research covered state and private universities. Similar research can be carried out on colleges and other educational institutions.

⇒ Future research studies can be incorporating other service quality models and variables.

4.1 Findings of the Research Study

After the data collection and analysis the researcher has found following findings:

4.1.1 Findings from Demographic Profile of the respondents:

⇒ Data were collected from 771 students, 387 parents and 260 teachers. 51% students were male and 49% students were female. While 65% parents were male and 35% parents were female. In the case of teachers, 58% teachers were male and 42% teachers were female. Thus, percentage of male was higher than female in all three categories.

⇒ 43% of students were of age group between 21 to 23 years. Only 4% students were of age above 27 years. While the same 43% of parents were of age group between 41 to 50 years. Only 5% parents were of age above 61 years. 35% teachers were of age group between 31 to 40 years. While, 17% teachers were of age above 51 years.

⇒ 73% students and parents both were residing in urban area while 77% teachers were residing in urban area. Thus, percentage of urban was higher than rural in all three categories.

⇒ 96% students were unmarried. While 18% parents were Divorced / Widow. 62% teachers are married and only 6% teachers were divorced.

⇒ 46% parents of students (Data collected from students) were doing services. Only 10% of parents were engaged with agricultural activity. Out of total parents, 45% of parents were doing services. While 12% parents were engaged in professional activity.

⇒ Out of total data collected from teachers, 66% of teachers were "Assistant Professor". Only 2% teachers were "Senior Professor".

⇒ 73% of teachers were permanent and 27% were temporary.

⇒ 39% of students were having the family income less than Rs. 30,000. While 36% of parents were having their family income less than Rs. 30,000. 34% of teachers were having the family income more than Rs. 90,000.

⇒ 53% of students and parents both were living in nuclear family and 47% were living in joint family. While 58% of teachers were living in joint family and 42% were living in nuclear family.

$\Rightarrow$ 49% of students, 39% of parents and 44% of teachers were having 3 to 5 family members. Only 10% of students and teachers and only 14% of parents were having more than 7 family members.

$\Rightarrow$ 44% of students, 31% of parents and 26% of teachers were having only one earning person in the family. 44% of teachers were having two earning members in the family.

$\Rightarrow$ 48% of students, 40% of parents and 55% of teachers were found in "General" caste. Only 7% of students, 8% of parents and 6% of teachers were found in "Minority" caste. Thus, percentage of general caste was higher than other castes in all three categories.

$\Rightarrow$ Out of total students, 33% of students were selected from commerce stream. 31% of parents were selected from science and commerce stream. While 31% of teachers were selected from science stream. Thus, majority of respondents were selected from commerce and science stream.

$\Rightarrow$ 27% of total students were studying in third semester. Only 6% of students were studying in fourth semester. 41% of parents were selected from third semester. Only 4% of parents were selected from forth semester. Majority of teachers i.e. 36% were teaching in sixth semester. Only 3%of teachers were teaching in first semester.

$\Rightarrow$ 55% of students were selected from undergraduate course. Only 1% of students were selected from Ph.D. course. 65% of parents were selected from undergraduate course, while, 40% of teachers were selected from undergraduate course and only 2% were selected from M.Phil. Course.

$\Rightarrow$ Out of total students, 41% of students were selected the program because of "Job Prospects" while, only 5% of students were selected the program because of "Friend's Advice". 48% of parents were suggested that the selection of program is due to "Job Prospects". According to 41% of teachers' opinion, students were selected the program due to "Job Prospects".

$\Rightarrow$ 34% of students were selected the university due to "Parent's Advice". Only 10% of students were selected the university due to "Scholarship". Out of total parents, 25% of parents were selected the university due to

"Friend's Advice". Only 17% of parents were selected the university due to "University Ranking (NAAC)".

⇒ 39% of students were selected "To be a Govt. Employee" as career ambition. While, only 14% of students were selected "To be a Scientist / Researcher" as career ambition. 28% of parents were selected "to be an Entrepreneur" as career ambition of their child. While, 24% of parents were selected "to be an Executive" as career ambition of their child. From the overall teachers, 40% were selected "To be a Govt. Employee" as well as "To be an Entrepreneur".

⇒ 46% of students were selected "Job" as future plan. While only 3% were selected "Marriage". 38% of parents were selected "Further Study" as future plan. From the point of view of teacher, 41% of students may select "Job" as a future plan.

⇒ Out of total students, 28% students were selected "Normal" effect of government policies on higher education. Only 9% students were selected "Very Poor" effect. 36% of parents were selected "Good" effect of government policies on higher education. While, 44% of teachers were selected "Good" effect of government policies on higher education.

4.1.2 Objective wise Findings:

Objective-1: To identify the relationship between Demographic variables and satisfaction of Stakeholders (particularly students, parents and teaching staff) of selected universities of Gujarat.

⇒ To identify the relationship between Demographic variables and satisfaction of Stakeholders, hypotheses were tested with chi-square test. The summary of hypotheses are as follow:

Table-4.1: Summary of Chi-Square Test of Demographic Profile

Hypotheses		Results
$H0_1$:	There is no significant association between university type and overall satisfaction of students.	Reject
$H0_2$:	There is no significant association between gender and overall satisfaction of students.	Fail to Reject
$H0_3$:	There is no significant association between age group and overall satisfaction of students.	Reject
$H0_4$:	There is no significant association between Residential	Reject

	Location and overall satisfaction of students.	
$H0_5$:	There is no significant association between occupation of parents and overall satisfaction of students.	Reject
$H0_6$:	There is no significant association between family monthly income and overall satisfaction of students.	Reject
$H0_7$:	There is no significant association between type of family and overall satisfaction of students.	Fail to Reject
$H0_8$:	There is no significant association between Number of earning person in family and overall satisfaction of students.	Reject
$H0_9$:	There is no significant association between Caste and overall satisfaction of students.	Reject
$H0_{10}$:	There is no significant association between study program and overall satisfaction of students.	Reject
$H0_{11}$:	There is no significant association between semester and overall satisfaction of students.	Reject
$H0_{12}$:	There is no significant association between academic qualification and overall satisfaction of students.	Fail to Reject
$H0_{13}$:	There is no significant association between caste and effect of government policies on higher education.	Reject
$H0_{20}$:	There is no significant association between university type and overall satisfaction of parents.	Reject
$H0_{21}$:	There is no significant association between gender and overall satisfaction of parents.	Fail to Reject
$H0_{22}$:	There is no significant association between age group and overall satisfaction of parents.	Fail to Reject
$H0_{23}$:	There is no significant association between Residential Location and overall satisfaction of parents.	Fail to Reject
$H0_{24}$:	There is no significant association between occupation and overall satisfaction of parents.	Fail to Reject
$H0_{25}$:	There is no significant association between family monthly income and overall satisfaction of parents.	Reject
$H0_{26}$:	There is no significant association between type of family and overall satisfaction of parents.	Fail to Reject
$H0_{27}$:	There is no significant association between Number of earning person and overall satisfaction of parents.	Reject
$H0_{28}$:	There is no significant association between Caste and overall satisfaction of parents.	Reject
$H0_{29}$:	There is no significant association between study program and overall satisfaction of parents.	Reject
$H0_{30}$:	There is no significant association between semester and overall satisfaction of parents.	Reject

H0$_{31}$:	There is no significant association between academic qualification and overall satisfaction of parents.	Reject
H0$_{32}$:	There is no significant association between caste and effect of government policies on higher education.	Reject
H0$_{39}$:	There is no significant association between university type and overall satisfaction of teachers.	Reject
H0$_{40}$:	There is no significant association between gender and overall satisfaction of teachers.	Fail to Reject
H0$_{41}$:	There is no significant association between age group and overall satisfaction of teachers.	Reject
H0$_{42}$:	There is no significant association between Residential Location and overall satisfaction of teachers.	Reject
H0$_{43}$:	There is no significant association between designation and overall satisfaction of teachers.	Reject
H0$_{44}$:	There is no significant association between nature of appointment and overall satisfaction of teachers.	Fail to Reject
H0$_{45}$:	There is no significant association between type of family and overall satisfaction of teachers.	Fail to Reject
H0$_{46}$:	There is no significant association between Number of earning person and overall satisfaction of teachers.	Fail to Reject
H0$_{47}$:	There is no significant association between Caste and overall satisfaction of teachers.	Reject
H0$_{48}$:	There is no significant association between program and overall satisfaction of teachers.	Fail to Reject
H0$_{49}$:	There is no significant association between semester of teaching and overall satisfaction of teachers.	Reject
H0$_{50}$:	There is no significant association between academic qualification and overall satisfaction of teachers.	Reject
H0$_{51}$:	There is no significant association between caste and effect of government policies on higher education.	Reject

$\Rightarrow$ From the above table, it can be concluded that there is a significant relationship between Demographic variables and satisfaction of Stakeholders.

Objective-2: To measure the gap between expectation and performance of services provided by the universities among the stakeholders (particularly students, parents and teaching staffs).

$\Rightarrow$ To measure the gap between expectations of stakeholders and performance of selected universities, mean score has been used. Table no. 5.19 compares the mean score and gap score of students from MSU and SPU.

While, 5.20 compares the mean score and gap score of students from PU and GLSU. Table no. 5.104 compares the mean score and gap score of parents from MSU and SPU. While, 5.105 compares the mean score and gap score of parents from PU and GLSU. Table no. 5.190 compares the mean score and gap score of teachers from MSU and SPU. While, 5.191 compares the mean score and gap score of parents from PU and GLSU.

$\Rightarrow$ The gap between mean scores of expectation of stakeholders and performance of services are positive in all the cases. It states that the expectation is higher than the actual performance of services.

$\Rightarrow$ The gap between mean scores of expectation of stakeholders and performance of services compared with paired sample t-test analysis as shown from table no. 5.21 to 5.24 for students, from table no. 5.106 to 5.109 for parents and from table no. 5.192 to 5.195 for teachers.

$\Rightarrow$ The result of paired sample t-test shows significant difference in the expectation of stakeholders and performance of universities.

Objective-3: To determine and compare the level of satisfaction of stakeholders (particularly students, parents and teaching staffs) among selected universities.

$\Rightarrow$ To identify the level of satisfaction, mean score and standard deviation have used. Table no. 5.25 shows the mean score and standard deviation of students of selected universities. While, table no. 5.110 shows the mean score and standard deviation of parents of selected universities. Table no. 5.196 shows the mean score and standard deviation of teaching staff from selected universities.

$\Rightarrow$ The average of mean score of selected universities for students indicates high satisfaction in MSU, SPU and PU, while average satisfaction in GLSU.

$\Rightarrow$ The average of mean score of selected universities for parents indicates high satisfaction in all four selected universities.

$\Rightarrow$ The average of mean score of selected universities for teaching staff indicates high satisfaction in MSU and GLSU, while average satisfaction in SPU and PU.

Objective-4: To examine the relationship between service quality dimensions (Reliability, Responsiveness, Empathy, Assurance and Tangibility) and satisfaction of stakeholders (particularly students, parents and teaching staffs).

$\Rightarrow$ To identify the relationship between service quality dimensions and satisfaction of Stakeholders, hypotheses were tested with regression model. The summary of hypotheses are as follow:

Table-4.2: Summary of Regression Analysis

	Hypotheses	Results
$H0_{15}$:	There is no significant association between Reliability Dimension and Satisfaction of Students.	Reject
$H0_{16}$:	There is no significant association between Responsiveness Dimension and Satisfaction of Students.	Reject
$H0_{17}$:	There is no significant association between Empathy Dimension and Satisfaction of Students.	Reject
$H0_{18}$:	There is no significant association between Assurance Dimension and Satisfaction of Students.	Reject
$H0_{19}$:	There is no significant association between Tangibility Dimension and Satisfaction of Students.	Reject
$H0_{34}$:	There is no significant association between Reliability Dimension and Satisfaction of parents.	Reject
$H0_{35}$:	There is no significant association between Responsiveness Dimension and Satisfaction of parents.	Reject
$H0_{36}$:	There is no significant association between Empathy Dimension and Satisfaction of parents.	Reject
$H0_{37}$:	There is no significant association between Assurance Dimension and Satisfaction of parents.	Reject
$H0_{38}$:	There is no significant association between Tangibility Dimension and Satisfaction of parents.	Reject
$H0_{39}$:	There is no significant association between Tangibility Dimension and Satisfaction of Students.	Reject
$H0_{53}$:	There is no significant association between Reliability Dimension and Satisfaction of Teachers.	Reject
$H0_{54}$:	There is no significant association between Responsiveness Dimension and Satisfaction of Teachers.	Reject
$H0_{55}$:	There is no significant association between Empathy Dimension and Satisfaction of Teachers.	Reject
$H0_{56}$:	There is no significant association between Assurance Dimension and Satisfaction of Teachers.	Reject
$H0_{57}$:	There is no significant association between Tangibility Dimension and Satisfaction of Teachers.	Reject

Table-4.3: Correlation between Service Quality dimension and overall Satisfaction of Stakeholders

Dimensions	Satisfaction of Students	Satisfaction of Parents	Satisfaction of Teachers
Reliability	**0.628**	**0.708**	**0.487**
Sig. (2-tailed)	(0.000)	(0.000)	(0.000)
Responsiveness	**0.628**	**0.729**	**0.520**
Sig. (2-tailed)	(0.000)	(0.000)	(0.000)
Empathy	**0.645**	**0.719**	**0.485**
Sig. (2-tailed)	(0.000)	(0.000)	(0.000)
Assurance	**0.631**	**0.711**	**0.580**
Sig. (2-tailed)	(0.000)	(0.000)	(0.000)
Tangibility	**0.606**	**0.663**	**0.529**
Sig. (2-tailed)	(0.000)	(0.000)	(0.000)

$\Rightarrow$ As stated in table no. 6.2, all null hypotheses were rejected. While, table no. 6.3 shows the value of correlation between service quality dimensions (Reliability, Responsiveness, Empathy, Assurance and Tangibility) and satisfaction of stakeholders (particularly students, parents and teaching staffs). Therefore, it is concluded that there is a positive relationship between service quality dimensions (Reliability, Responsiveness, Empathy, Assurance and Tangibility) and satisfaction of stakeholders (particularly students, parents and teaching staffs).

Objective-5: To determine critical factors in service quality that contributes most to satisfaction of stakeholders (particularly students, parents and teaching staffs).

$\Rightarrow$ Exploratory Factor analysis was used to determine these critical factors. Table no. 5.66 (for students), 5.151 (for parents) and 5.237 (for teachers) shows the Range Communalities. 5.68 (for students), 5.153 (for parents) and 5.239 (for teachers) indicates factor loading values.

$\Rightarrow$ For students, "Contribution of Staff in Satisfaction", "Contribution of Sports in Satisfaction" and "Contribution of Infrastructure in Satisfaction" have been identified. While, for parents "Contribution of Staff in Satisfaction", "Contribution of Infrastructure in Satisfaction" and "Contribution of Safety & Solution in Satisfaction" have been identified. In the case of teachers, there are four factors have been identified namely, "Contribution of Non-Teaching Staff & Infrastructure in Satisfaction", "Contribution of Management Relationship in Satisfaction", "Contribution

of Faith on University in Satisfaction" and "Contribution of Perk in Satisfaction"

Objective-6: To know the impact of SERVQUAL dimensions on satisfaction of stakeholders (particularly students, parents and teaching staffs).

$\Rightarrow$ Regression analysis was used to know the impact of SERVQUAL dimensions on satisfaction of stakeholders.

Table-4.4: Regression analysis between Service Quality dimension and overall Satisfaction of Stakeholders

Variables	Stakeholders	R	R^2	Adjusted R^2	P-Value
Reliability	Students	.646	.417	.409	.000
	Parents	.071	.505	.499	.000
	Teachers	.495	.245	.231	.000
Responsiveness	Students	.657	.432	.424	.000
	Parents	.742	.551	.545	.000
	Teachers	.480	.231	.216	.000
Empathy	Students	.662	.438	.431	.000
	Parents	.730	.533	.527	.000
	Teachers	.485	.235	.220	.000
Assurance	Students	.644	.415	.407	.000
	Parents	.772	.596	.590	.000
	Teachers	.543	.295	.281	.000
Tangibility	Students	.647	.419	.411	.000
	Parents	.719	.517	.511	.000
	Teachers	.551	.304	.290	.000

$\Rightarrow$ The above table shows the value of adjusted R^2. This is the impact of SERVQUAL dimensions (Reliability, Responsiveness, Empathy, Assurance and Tangibility) on satisfaction of stakeholders.

5.0   Suggestions & Recommendations of the Research Study

The researcher has undertaken the study and with the help of data collection and data analysis, important findings have been drawn. The researcher has identified some important area wherein improvement is required to enhance the satisfaction of stakeholders. Such improvements in form of suggestions have been featured as follows:

For Students:

⇒ As the high mean gap found in "University addresses student grievances" for MSU and SPU, both the universities need to improve and implement such policies to fulfill this gap.

⇒ MSU and SPU both universities have more positive gap in "University provides a regular and a reliable forum of parent-teacher interaction". Both the universities should implement regular interaction between parents and teacher.

⇒ MSU and SPU both universities should provide good Wi-Fi facility in the campus area. While PU and GLSU are providing such facilities to the students.

⇒ MSU, SPU and GLSU universities should provide the transportation facility for students. PU is found to be good in transportation facility.

⇒ MSU and GLSU universities should provide good canteen facility for students.

⇒ All the selected universities should declare the result on time as the students are found dissatisfied in this.

⇒ All the selected universities should train their non-teaching staff to improve the service quality.

For Parents:

⇒ All the selected universities should collect the feedback from parents regarding the quality of education and allied services as majority of parents found dissatisfied.

⇒ All the selected universities should provide the parents-teacher interaction forum to improve the academic quality.

⇒ Parents are dissatisfied when they seek any information from universities. All the selected universities should train their teaching and non-teaching staff to provide the information to parents.

⇒ All the selected universities should make an arrangement to provide the information regarding scholarship and fellowships schemes to parents.

For Teachers:

⇒ All the selected universities should provide the reliable information regarding Promotion and Increments as the level of satisfaction is low in all the selected universities.

⇒ All the selected universities should collect feedbacks from employees for the quality of its services.

⇒ In the both PU and GLSU universities, training to teachers should be provided.

⇒ Transportation facilities to employees should be provided. However, PU is providing transportation facility satisfactory.

⇒ Behavior of management should be improved as the discrimination between staffs found more gap between expectation and performance.

6.0 Conclusion of the Research Study

The competition is increasing day by day due to globalization and privatization. It is essential to understand the satisfaction level of various stakeholders, to retain the customer in this era. In the Higher Education, the most important stakeholders are students and teachers as external and internal stakeholders respectively. The role of parents is also significant as the cost of education is bare by them. Hence, it is mandatory to understand the satisfaction level of various stakeholders such as students, parents and teachers.

This study provides a gap between expectations of stakeholders (particularly students, parents and teachers) and actual performance of selected universities. This study identifies various factors that affecting the satisfaction. Survival of any educational institutes is depending upon students. Hence, the positive word of mouth of students can be a good strategy to attract more number of students.

The data analysis has reveals that there is a positive gap between expectations of stakeholders and performance of selected universities. That means, the expectation is greater than the actual performance. The study also found that all the stakeholders are satisfied with service quality provided by the universities. The data analysis also shows positive correlation between all the dimensions of SERVQUAL model and satisfaction of selected stakeholders.

The demographic profile (such as age group, occupation, family type, caste, family income, academic qualification and semester) of the stakeholders is positively affecting the satisfaction. The study findings lead us to the conclusion that private university is providing more satisfaction as compared to state universities. To remain competitive, state universities should work on improving the services. Parul University provides high satisfaction to students; M. S. University provides high satisfaction to parents and GLS University provides high satisfaction to teachers.

References:

1. Mandaliya, N. M. (2017). *Role of Quality Management Practice in Higher education in Gujarat.* Ph.D. Thesis: Gujarat University.

2. Jonsson, N. (2004). *Quality Assurance of Higher Educational Services: Case Study of California State University.* Sweden: Lulea University of Technology.

3. Cambridge Dictionary. (n.d.). *Quality*. Retrieved June 21, 2020, from https://dictionary.cambridge.org:
   https://dictionary.cambridge.org/dictionary/english/quality

4. Adil, M., Mohammad Al Ghaswyneh, O. F., & Albkour, A. M. (2013). SERVQUAL and SERVPERF: A Review of Measures in Service Marketing Research. *Global Journal of Management and Business Research , 13* (6), 64-76.

5. Factbook, T. W. (2018, Nov 20). *List of Countries by GDP Sector Composition*. Retrieved April 4, 2021, from https://statisticstimes.com:
   https://statisticstimes.com/economy/countries-by-gdp-sector-composition.php#:~:text=Services%20Sector%20%3A%20Services%20sector%20is,with%20around%2015.53%20trillion%20USD.

6. Lehtinen, U., & Lehtinen, J. (1982). A Study of Quality Dimensions. *Service Management Institute , 5*, 25-32.

7. Grönroos, C. (1984). A Service Quality Model and its Marketing Implications. *European Journal of Marketing , 18* (4), 36-44.

8. Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A Multiple-Item Scale for Measuring Consumer Perceptions of Service Quality. *Journal of Retailing , 64* (1), 12-40.

9. Cronin, J. J., & Taylor, S. A. (1992). Measuring Service Quality: A Reexamination and Extension. *Journal of Marketing , 56* (3), 55-68.

10. Dabholkar, P. A., Thorpe, D. I., & Rentz, J. O. (1996). A measure of service quality for retail stores: Scale development and validation. *Journal of the Academy of Marketing Science , 24* (3), 3-16.

11. Abdullah, F. (2006). Measuring service quality in higher education: HEdPERF versus SERVPERF. *Marketing Intelligence & Planning , 24* (1), 31-47.

12. Parasuraman, Zeithaml, V. A., & Berry, L. L. (1985). A Conceptual Model of Service Quality and Its Implications for Future Research. *The Journal of Marketing , 49* (4), 41-50.

13. Alam, M. (2012). *Customers satisfaction measurement of internet banking an analytical study based on selected customers and banks in western india.* Ph.D. Thesis: The Maharaja Sayajirao University of Baroda.

Bibliography and Webliography

⇒ Adrian Palmer, (1994), "Principles of Services Marketing", TATA McGrawHill Companies, New Delhi.

⇒ Baines, N. K. and Malhotra, D. F. (2003) Marketing Research: An applied approach, 2nd European edition, Financial Times Prentice Hall.

⇒ Baker, M. J. (2002) 'Sampling', The Marketing Review, (3), p. 103-120.

⇒ Bhatta Charjee, C. (2006), "Services Marketing", Excel Books Publications, New Delhi.

⇒ Black, T. R. (1999), Doing quantitative research in the social sciences: An integrated approach to research design, measurement and statistics, Sage, London.

⇒ Campbell, L. (1997) 'Sampling with added sparkle', Marketing, 14 August 1997, p. 25.

⇒ Chawla, D. & Sondhi, N. (2011), Research Methodology: Concepts and Cases, New Delhi, Vikas Publishing House Private Ltd.

⇒ Cramer, D. (1994) Introducing statistics for social research: step-by-step calculations and computer techniques using SPSS, Routledge, London. Chapters 5-10, pp. 75-216.

⇒ Czaja, R. and Blair, J. (1996) Designing surveys: a guide to decisions and procedures, Thousand Oaks, London. Chapters 4-6, pp. 51-106.

⇒ De Vaus, D. A. (1996) Surveys in social research, UCL Press, London. Chapter 6, pp. 80-106.

⇒ De Vaus, D. A. (1996) Surveys in social research, UCL Press, London. Chapter 7, pp. 106-129.

⇒ Etzel, M.J, Walker, B.J. Stanton, W. J. Pandit, A. (2006), "Service Marketing", 3rd edition, Tata McGraw Hill Companies, New Delhi.

⇒ Fink, A. (1995) How to analyze survey data, Sage, London (Thousand Oaks).

⇒ Fink, A. (1995) How to design surveys, Sage, London (Thousand Oaks).

⇒ Fink, A. (2003) How to ask survey questions, 2nd edition, Sage, London (Thousand Oaks).

⇒ Foster, J. J. (2001) Data analysis using SPSS for Windows versions 8 to 10: a beginner's guide, 2nd edition, Sage, London. Chapters 4-6, pp. 39-64.

$\Rightarrow$ Frankel, M. R. (1989) 'Current Research Practices: General Population Sampling Including Geodemographics', 31 (4), 447.

$\Rightarrow$ Gronroos, Christian (1990), "Services Management and Marketing", Lexington Books Publications, New Delhi.

$\Rightarrow$ Gupta, S. L. & Gupta, H. (2011), SPSS 17.0 for Researchers, New Delhi, International Book House Private Ltd.

$\Rightarrow$ Harvey, L., & Knight, P.T. (1 996), "Transforming Higher Education", SRHE and Open University Press, Buckingham.

$\Rightarrow$ Imms, M. and Ereaut, G. (2002) Introduction to qualitative market research, Sage, London.

$\Rightarrow$ Joseph, T. M. (2002), "Management of Services", Himalaya Publishing House, New Delhi.

$\Rightarrow$ Kamnakaran, K. (2007), "Marketing Management", Himalaya Publishing House, Mumbai.

$\Rightarrow$ Kotler, P. Armstrong, G., Saunders, J. & Wong, V. (1996), "Principles of Marketing", European Edition, Prentice-Hall International. Heme1 Hempstead.

$\Rightarrow$ Kumar, V., Aaker, D. A. and Day, G. S. (2002) Essentials of marketing research, 2nd edition, Wiley, New York. Chapters 2 and 3, pp. 29-66.

$\Rightarrow$ Lovelock, C. Wirtz, J. and Charterjee, J. (2010), "Services Marketing", Pearson Education, New Delhi.

$\Rightarrow$ Nagundkar, R. (2007), "Services Marketing", THM Publishing Company Ltd., New Delhi.

$\Rightarrow$ Oberoi P. (2012), Research Methodology (1st ed.), New Delhi, Global Vision Publishing house

$\Rightarrow$ Pawan Aganval (201 I), "Indian Higher Education: Envisioning the Future", Sage Publications, New Delhi.

$\Rightarrow$ Philip Kotler (2002), "Marketing Management", 1 3Ih edition, Prentice-Hall of India, New Delhi.

$\Rightarrow$ Proctor, T. (2003) Essentials of marketing research, 3rd edition, Financial Times Prentice Hall, Harlow. Chapter 1, pp. 17-21.

$\Rightarrow$ Ram Ahuja (2001), Research Methods, New Delhi, Rawat Publications.

$\Rightarrow$ Sankar, R. (2002), "Services Marketing", Excel Books, Ncw Delhi.

⇒ Sarangi, P. (2010), Research Methodology, New Delhi, Taxmann Publications (P.) Ltd.

⇒ Saunders, M., Lewis, P. and Thornhill, A. (2003) Research methods for business students, 3rd edition, Financial Times Prentice Hall, Harlow. Chapter 7, pp. 188-220.

⇒ Sekaran, U. (2003), Research Methods for Business: A Skill building Approach, New York, John Wiley & Sons.

⇒ Thomas, A. B. (2004) Research skills for management studies, Routledge, London. Chapter 2, pp. 34-53 and chapter 5, pp. 70-88.Wyndham, J. and Goosey, R. (1997), „It is time we started using statistics!" Journal of the Market Research Society, 25 (4), p. 244.

⇒ Zeithaml, V.A. Parasuraman, A, & Berry, L.L. (1990), "Delivering Quality Service: Balancing Customer Perceptions and Expectations", New York.

⇒ Department of Higher Education. (2017). *All India Survey on Higher Education 2016-2017*. New Delhi: Ministry of Human Resource Development, Government of India.

⇒ https://www.msubaroda.ac.in/aboutmsu/objective

⇒ https://www.msubaroda.ac.in/aboutmsu/foundermsu

⇒ https://en.wikipedia.org/wiki/Maharaja_Sayajirao_University_of_Baroda

⇒ Annual Quality Assurance Report of The Maharaja Sayajirao University of Baroda for Academic year 2018-19

⇒ https://www.spuvvn.edu/about/genesis/

⇒ https://en.wikipedia.org/wiki/Sardar_Patel_University

⇒ Annual Quality Assurance Report of Sardar Patel University Academic year 2018-19

⇒ https://www.paruluniversity.ac.in/who-we-are

⇒ https://paruluniversity.ac.in/AccreditationApprovals/PU/The%20Goverment%20Gazette.pdf

⇒ https://en.wikipedia.org/wiki/Parul_University

⇒ https://www.glsuniversity.ac.in/recognition.html

⇒ https://www.glsuniversity.ac.in/docs/gazette.pdf

⇒ https://en.wikipedia.org/wiki/GLS_University