

## **An Investigation into the Determinant of Service Quality among Management Students (Empirical Study of Iranian Students)**

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**Abstract:** This study explores the Iranian education to generate a curriculum that should be comprehensive of the rich inheritance of different variables like knowledge, skill and attitude. For that purpose, Service Quality (SERVQUAL) is a standard instrument to evaluation the level of quality provided. The present study is an attempt to measure the level of Service Quality provided by Zenithal in the field of technical education among management students. The results of the questionnaire survey are analyzed in relation to the five Service Quality (SERVQUAL) dimensions (tangibles; reliability; responsiveness; assurance; empathy) and revealed that various aspects of quality differ significantly based on some demographic variables.

**Keywords:** Iranian education system, reliability, service quality, technical education

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### **INTRODUCTION**

Service is defined as an act or performance offered by one party to another. The performance is essentially intangible and has been cited by several authors as the fundamental factor differentiating services from goods. Intangibility means that a consumer's perception of quality is often based on tangible evidence and price rather than the core service. Services are distributed regionally, nationally and globally and are increasingly becoming a larger portion of many organizations' revenue streams; knowledge intensive business services aimed at enhancing performance require reliable methods of measurement, assessment and improvement Spohrer and Maglio (2008).

Quality is the satisfaction level obtained by the recipient on the work performed. Careful consideration is desired during the services, since the human beings exhibit a wide spectrum of needs and likes, all stemming from differences in status, personal taste etc., (Harris and Harrington, 2000) Quality is also a baseline for institutions to seek internationalization by promoting diversity, global participation and accreditation. Sustainability of service quality can be translated into competitive advantage through the ability to adapt, complement and grow in intellectual capital increasing in institutional uniqueness. Combined with academic rigor and a transferability of enhanced opportunities, institutions can offer students greater

choice and exposure in terms of their learning pathways Altbach and Knight (2007).

Service Quality (SERVQUAL) has become increasingly important to allow competitors with similar services to provide greater value, growth opportunities in services and increases the customer satisfaction. Service quality is expressed as customer's long-term cognitive evaluations of a firm's service delivery whereas customer satisfaction is expressed as short-term emotional reaction to a specific service performance. Satisfaction, service and the perception of value are all relative factors that are based on experiences, expectations, life styles and information. Service quality is defined as the company/customer interface and relationships and focusing on the customer's experience during the process of service transaction. Service quality can be a bit of an elusive illusion depending on your perspective. It depends on variables that include moods, experiences, situations and often a considerable degree anecdote that may or may not be true (Harris and Harrington, 2000). Service quality is a major influence on customer satisfaction as customers buy products or services and on whether they continue to do so. As a result, accurate and reliable instruments that assess service quality are of interest to companies whose revenues come in whole or part from service delivery. Currently the most popular and ubiquitous service quality instrument is SERVQUAL.

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SERVQUAL is based on the proposition that service quality can be measured as the gap between the service that customers expect and the performance they perceive to have received. Respondents rate their expectations of service from an excellent organization and then rate the performance they perceive they received from a specific organization. Service quality is calculated as the difference in the two scores where better service quality results in a smaller gap (Landrum *et al.* (2008a). Education services do have predetermined or universal standards exist for the evaluation of the quality of a service. Services need specific practices based on the three defining features of services: intangibility, concurrent learning and student participation in the service. In services, strategies to improve internal efficiency are directly related to students because students are frequently present and participating in the production of the service Beth (2001).

Iranian education system is one of the largest in the world. Today we have about 1500 universities and colleges and about 42,000 teachers that are eligible to receive development grants from University Grants Commission. The rest do not even meet minimum academic quality requirement. Government of Iran is making many efforts towards higher education in the country and had a plan to have a good ranking in the world. Universities have realized that service is having an important contribution to educational system and students' satisfaction. In recent years, Studies in other sectors suggest that student's satisfaction and service quality judgments involve consumers comparing their prior expectations to actual service performance. The factors responsible for contributing to the service quality have identified and reported that there is a need to measure the critical success factors of technical education relationships to improve the service operations. In this study, the researchers try to determinants important factors in service quality of students in universities.

## **LITERATURE REVIEW**

The Service Quality (SERVQUAL) scale developed in an attempt to measure the perception of quality of service Parasuraman *et al.* (1985, 1988, 1991, 1993, 1994) has been gaining momentum in application among various service sectors. Still that scale has undergone several revisions, extensions and modifications to suit different sector's needs. Recent studies have tested the validity of the SERVQUAL scale in different industries including gas utilities Babakus and Boller (1992). The credit for seminar work on service quality research goes to Parasuraman

*et al.* (1985, 1988), Zeithaml *et al.* (1990, 1991, 1992, 1993, 2001), Berry (1980) and Bolton and Drew (1991) stated that assessments of overall service quality are affected only by perceptions of performance levels. They suggested that direct measures of disconfirmation are more important than expectations. Sudharhar *et al.* (2006) note that Service Quality (SERVQUAL) holds that SERVQUAL primarily determines the customer value, which in turn contributes to the customer retention and loyalty.

Furthermore, other studies suggested that SERVQUAL has unstable dimensions. For example, Jiang *et al.* (2002) used four dimensions in their study, while Landrum and Prybutok (2004) used five. Nitecki (1996) proposed a three-dimensional SERVQUAL model, as opposed the five dimensions proposed by Zeithaml *et al.* (1990). The performance only approach to service quality utilizes the five of the seven SERVQUAL dimensions the five performance dimensions. Other studies show that performance scores alone exhibit better reliability and validity than difference scores Babakus and Boller (1992), Brady *et al.* (2002), Landrum and Prybutok (2004), Landrum *et al.* (2008b) and Cook and Thompson (2000) investigated the reliability and validity of SERVQUAL instrument in the context of library service. They found that SERVQUAL displayed three responsive dimensions, rather than the 5 dimensions originally proposed by Parasuraman *et al.* (1988). As a result, they concluded that responsive, empathy and assurance dimensions overlapped in this particular service domain. Nitecki and Hernon (2000) used SERVQUAL to assess library services at Yale University and found that among the five dimensions of SERVQUAL, respondents considered reliability the most important and empathy least important among the five quality dimensions (Landrum *et al.*, 2008a; Roland, 2009), explores the success factors of service quality in higher education by integrating the characteristics of SERVQUAL in Engineering School of Singapore. The study reinforces the emerging educational paradigms that seek to challenge norms and assumptions, gearing educators to do the right things rather than doing things right. Simon and Ruijters (2008), refer to customers' interaction requires that participants enjoy the mutual trust in the process of discussion through which ideas and thoughts are clarified and sharpened. In turn, feedback in the form of genuine interpretations and reactions can be encouraged to arrive at a shared meaning. Wen-Bao (2007) discusses the major factors for the establishment of service quality models from the viewpoint of management. The result indicates improvement in service quality has a positive effect on the attitude of consumers toward the perceived value in

the future. Yukselturk and Yildirim (2008) emphasized that satisfaction levels are defined by the experiences of students with respect to their interactions with instructors and institutional support. Rovai and Downey (2010) argued that the issues of quality management, faculty development, online course design and pedagogy were a few important factors that determine the success or failure of online programs in this competitive global environment. Jung-Wan (2010) examines potential differences between Korean and American students in terms of their perception levels regarding online service quality, online learning acceptance and satisfaction. The study results show a majority of the students in the two countries, irrespective of the differences in their perceptions of online support service quality, believe that the acceptance of online classes would benefit them.

Rajdeep and Dinesh (2010) show that there are a number of things that should be done to confirm the demonstrated methodologies as well as to expand the use of SERVQUAL in design and improvement of quality services and outcomes of the study outlined the major gaps of expectations and perceptions of the faculty of higher education. Randheer *et al.* (2011) examine the commuters' perception on service quality offered by the public transport services of twin cities of Hyderabad and Secunderabad, India. The SERVQUAL scale is administered to measure the commuter's perception on service quality. The study concludes that the service quality delivery meets the perception of commuters. Jen-Chia *et al.* (2011) examines the influences of task autonomy, organizational learning and group cohesiveness on innovation of professional development by technical education teachers and their relationships. The results show that factors of technical education teachers revealed significant positive relationships with the degree of innovation of professional development. Ahangar (2011) investigates the customers' preferences and satisfaction of Internet Banking with five various service quality dimensions which affect the customers' satisfaction and indicates the relationship between the various demographic variables and satisfaction level of customers. The results of the analysis of the factors reveals that the five factors influenced on satisfaction level of customers are Responsiveness, Reliability, Efficiency and Privacy of Information & Ease to use that have a strong impact on customer satisfaction.

The authors, based on qualitative research, formulated a measure of service quality derived from data on a number of services, instead of counting on early dimension of goods quality in the manufacturing sector. The initial results, based on some focus group findings, yielded 10 dimensions of service quality that

included tangibles, reliability, responsiveness, competence, courtesy, credibility, security, access, communication and understanding the customer.

Further empirical security resulted in a 22 item scale called SERVQUAL, which measures service quality based on five dimensions, viz. tangibles, reliability, responsiveness, assurance and empathy. The entire approach was formulated on the tenet that the customers entertain expectations of performance perceptions. The authors defined service quality as the degree of discrepancy between customer's normative expectations for the service and their perceptions of the service performance. Parasuraman revamped SERVQUAL's structure to embody not only the discordance between perceived service and desired service, but also the discrepancy between perceived and adequate service. Several other works have also criticized the operationalization and applications of SERVQUAL across different industrial settings. From the foregoing discussions, it is palpable that the SERVQUAL instrument has in fact generated bounteous interest in service quality measurement.

Antithetically, critics of SERVQUAL, have also disputed the logic and requirement behind the measurement of expectations, the decipherment and operationalization of expectations, the reliability and validity SERVQUAL's difference-score formulation and SERVQUAL's dimensionality across various service scenes. The point worth debating here is that the comprehensiveness of the 22-item scale proposed by the Parasuraman in addressing the critical dimensions of service quality is in question, for the simple reason that a careful examination of the scale items divulges that the items at large focus on the human aspects of service. The notability of the element of human interaction in the service delivery has been, without an iota of skepticism, acclaimed and reiterated by various other researchers as well as Allred and Addams (2001) did a notable work incorporating this vital aspect through his study on service quality at institutes. The present study considers the work of Allred as a valuable contribution to service quality literature and utilizes the instrument developed by him as a base for conducting the survey.

**Objectives:** This research attempts to undertake the following objectives:

- Find out the key dimensions of service quality among management students.
- Access the impact of demographic characteristics of students (such as; age, monthly family income level, background and gender.) on these dimensions.
- Examined the gap between perceived service quality and experienced service quality.

## METHODOLOGY

Since the purpose of the present study was to analyze the gap between perception and expectations of students, thus the students from The Management Department of Mazandaran University (MDMU) were taken as the sample unit. For achieving the aims, a descriptive study was performed at spring 2011. The sample size was taken as 325. The 28 questionnaires were useless because the students failed to complete them properly. Thus, the effective sample size was 297. Both primary and secondary data has been gathered in this research. Secondary data has been collected from papers, websites and research articles from magazines while the primary data has been collected through the well-structured comprehensive questionnaire. The primary objective of the data collection instrument was to measure the gap between the perception and expectation of students about institute. Five dimensions were added to develop the questionnaire: tangibility, reliability, assurance, empathy and responsiveness.

The procedure that a researcher adopts in selecting the unit for the sample is known as sampling technique. In the present study, Non-probability sampling has been used. In this research, the students were taken from third year and fourth year. However, the students were selected using judgmental sampling and utmost care has been taken to take respondents from various demographic profiles.

**Dimensions of SERVQUAL:** The dimensions of SERVQUAL (Service Quality) refer to process quality as judged by consumers during a service delivery and output quality judged after a service is performed. Berry Parasuraman and Zenithal has performed widespread research in service quality and recognized the following criteria in evaluating service quality:

**Tangibility:** Appearance of physical facilities, equipment, personnel and other materials.

**Reliability:** It is the ability to perform the promised service dedicatedly and accurately.

**Assurance:** It is the knowledge, competence, courtesy and credibility of faculty members.

**Empathy:** It is the easy access to faculties, good communication and better understanding of student's requirement.

**Responsiveness:** It is the willingness to help students and provide prompt service.

## RESULTS AND DISCUSSION

In response to first objective, determine the key dimension of service quality in technical education (Table 1), we found that:

Respondents have given diverse significance to five dimensions of service quality and details of dimensions related to the research in the mentioned institute are given below in order of decreasing importance allocated by respondents:

Assurance the knowledge and civility of the Institution's faculty and their credibility to convey reliance and confidence is accorded first priority. Reliability Institution's ability to present the promised service dedicatedly and precisely is accorded second priority. Responsiveness the Institution willingness to help students and provide on time service is accorded third priority. Empathy the caring and individual attention, the Institution provides its students is accorded fourth priority.

Tangibility the appearance of the Institution physical facilities, equipment, personnel is accorded fifth priority.

Therefore, assurance (0.357) is allocated maximum weight. Respondents so accorded more importance to assurance of institutions services. Reliability (0.333) ranked second followed by responsiveness (0.328), empathy (0.313) and tangibility (0.291) in quality dimensions. Thereby, meaning that the study group was ready to compromise on appearance of physical facilities, equipments over awareness and politeness of employees, institutions willingness to help and caring individual attention. The inherent intangibility of institutions services led the respondents to look for surrogate parameters of quality in reliability, which they correctly ranked higher than other quality dimensions.

In relation to second purpose, to access the impact of demographic characteristics of students (Table 2), we analyzed bellow:

**Year analysis:** From the above ANOVA table it can be inferred that year has considerable impact on two

Table 1: Key dimensions of service quality

Dimensions	Mean
The knowledge and civility of the faculty and their ability to inculcate reliance and confidence. (assurance)	0.357
Institute ability to perform the promised service dedicatedly and precisely. (reliability)	0.333
The institution's willingness to help students. (responsiveness)	0.328
'Willingness to assist and' individual attention' that you get from your faculty (empathy)	0.313
The appearance of physical facilities, equipment, and other facilities. (tangibility)	0.291

Table 2: Yearly analysis of variance between groups

Dimensions	S.S.	df	M.S.	F-value	Sig.
Tangibility	4.134	1	4.134	4.204	0.027
Reliability	1.523	1	1.523	1.526	0.301
Responsiveness	0.042	1	0.042	0.042	0.958
Assurance	5.627	1	5.627	5.764	0.006
Empathy	0.763	1	0.763	0.763	0.225

Table 3: Gender analysis of variance between groups

Dimensions	S.S.	df	M.S.	F-value	Sig.
Tangibility	3.234	1	3.234	3.236	0.106
Reliability	9.327	1	9.327	9.714	0.011
Responsiveness	1.642	1	1.642	1.668	0.121
Assurance	0.031	1	0.031	0.031	0.757
Empathy	2.651	1	2.651	2.708	0.071

Table 4: Income analysis of variance between groups

Dimensions	S.S.	df	M.S.	F-value	Sig.
Tangibility	4.328	3	0.777	1.802	0.151
Reliability	1.652	3	0.603	0.611	0.517
Responsiveness	4.418	3	0.796	0.812	0.161
Assurance	6.215	3	1.434	1.468	0.069
Empathy	4.296	3	0.819	0.832	0.167

factors i.e., Tangibility and Assurance. Results of Tangibility shows, 4<sup>th</sup> year students give more effect to tangibility than the 3<sup>rd</sup> year students. The cause behind this could be that 4<sup>th</sup> year students might feel that if the institute has good appearance and infrastructure facilities, this can help in better placement through good companies. Results of Assurance reveals that 3<sup>rd</sup> year students offer more effect to assurance i.e., knowledge and politeness of faculty and their ability to instill confidence in them than 4<sup>th</sup> year students. This is for the reason that 3<sup>rd</sup> year students are still dependent on faculty for knowledge and answers to their questions, but as they pass to higher standard they are relatively less dependent on faculty for knowledge as they develop other means to retrieve data, such as, library, internet etc.)

**Gender analysis:** The Table 3 illustrates that gender of the respondents has considerable impact on Reliability factor i.e., institution's ability to execute the guaranteed service dedicatedly and accurately. Result of reliability demonstrates that males give more effect to reliability factor as compared to females (Table 3). It is for the reason that, males persist more on performance of promises made by institution dedicatedly precisely and on time as compared to females.

**Income analysis:** Table 4 shows that income has no significant effect on all the 5 dimensions i.e., students from all income groups rank the 5 dimensions in the same way.

**Background analysis:** As the Table 5 shows, background of students has significant impact on Assurance factor i.e., Knowledge and politeness of

faculty and their ability to instill trust and confidence in them. And also, students from urban background give more effect to assurance than those from rural background. This is probable as students from urban background generally pass out from public schools where teacher's shows their extreme concern for students and where knowledge and courtesy of teachers is a focused factor that the schools in rural areas.

In the third purpose of research we analyze the gap between perceived service quality and experienced service quality.

Table 6 demonstrates that gap between perceptions and expectations of respondents on 5 service quality dimensions is negative in (MDMU) and also, is poor and require improvement. It is revealed from the Table 6 that maximum negative difference is by reliability (-3.09) i.e., ability to perform the promised service dependably and accurately; Further it is followed tangibility (-3.06); meaning that (MDMU) need to do better on the tangibility/infrastructure front (Appearance of physical facilities, equipment, personnel and other materials). Empathy (-2.95) i.e., is easy access to facilities, good communication and better understanding of student's requirement. Responsiveness (-2.83) i.e., willingness to help students and provide prompt service; and the least difference is of assurance dimension (-2.51) i.e., competence, courtesy, credibility and security of faculty members. Since service quality for all the five dimensions is poor but the least negative score of Assurance dimension reveals that competence, good manners, reliability and safety of faculty members are better than quality of other dimension; but still quality of tangible services also needs the improvement.

Table 5: Background analysis of variance between groups

Dimensions	S.S.	d.f	M.S.	F	Sig.
Tangibility	3.4150	1	3.4150	3.4480	0.059
Reliability	0.3110	1	0.3110	0.3070	0.518
Responsiveness	0.2950	1	0.2950	0.2930	0.602
Assurance	12.394	1	12.394	12.723	0.000
Empathy	3.1240	1	3.1240	3.2570	0.086

Table 6: Gap between perceptions and expectations of respondents

Statements	Expectation	Perception	Difference
<b>Responsiveness</b>			
Teaching pedagogy associated with the service are visually appealing	5.78	2.68	-3.10
Faculty gives on time response to students.	5.49	3.07	-2.42
Faculty is constantly willing to assist students.	5.67	2.89	-2.78
Faculty will never too busy to respond to students requests.	5.96	2.98	-2.98
Faculty helps you to set and get purposes.	5.63	2.74	-2.89
Average score	5.70	2.87	-2.83
<b>Reliability</b>			
Fulfils the promise to do something at a specific time	5.87	2.72	-3.15
Faculty maintains error-free records.	5.85	2.89	-2.96
Faculty shows the frank and sincere interest in solving student's problem.	5.82	2.66	-3.16
Average score	5.84	2.75	-3.09
<b>Tangibility</b>			
Institute has state-of-the-art infrastructure.	5.83	2.72	-3.11
Institute is equipped with first-rate library facility.	5.85	3.75	-2.10
Institute provides excellent facilities for enhancing sports.	5.69	2.38	-3.31
Staff & lab members, peons have pleasing personalities.	5.72	2.49	-3.23
Recreational area facility provided in the institute.	5.90	2.31	-3.59
Average score	5.79	2.73	-3.06
<b>Assurance</b>			
Institute takes pleasure in a good brand name in industry.	5.64	3.45	-2.19
Institute provides campus environment at par or better than others.	5.70	2.79	-2.91
Institute maintains good alumni relationship.	5.61	3.51	-2.10
Faculty has commendable knowledge to answer student's questions.	5.76	3.21	-2.55
Extracurricular actions for all round development of students are accepted	5.67	2.68	-2.99
Frequent personality development program are performed.	5.81	3.14	-2.67
Rewards and scholarship for deserving students are given.	5.63	3.42	-2.21
Average score	5.68	3.17	-2.51
<b>Empathy</b>			
Faculty always has the best attention to students.	5.57	2.98	-2.59
Faculty of the institution is thoughtful about students.	5.83	2.90	-2.93
Faculty realizes particular needs of students.	5.95	2.76	-3.19
The behavior of faculty instills self-reliance in students.	5.92	2.87	-3.05
Average score	5.81	2.86	-2.95

In fact, when the expected quality is more than the perceived quality, the students are dissatisfied. Therefore, negative weighted score values of five dimension shows that expected quality of (MDMU) on each of the dimension is more than the experienced quality. Thus it can be said that the as consider to service provided by (MDMU) is concerned, still a room for improvement is thereon all five dimensions of quality.

### CONCLUSION

Respondents have agreement that assurance is the most important dimension (mean score 0.357). Reliability (Mean score 0.333) ranked second followed by responsiveness (Mean score 0.328), empathy (Mean score 0.313) and tangibility (Mean score 0.291).

The investigation of impact of demographic factors on service quality dimensions show that: Year has significant impact on two factors i.e., tangibility and

assurance. Gender has impact on reliability only. Background has impact on assurance only. Income does not affect any of the dimensions of service quality significantly. Third purpose of the study was to analyze the gap between perceived and experienced service quality. Based on the research, it was found that maximum difference was of reliability (-3.09), followed by tangibility (-3.06), empathy (-2.95), responsiveness (-2.83) and the smallest amount difference is of assurance dimension (-2.51).

In the era of Globalization and fast technical changes, it is necessary for the institute under study to offer excellent quality education. Certainly, the gap between expectations and perceptions has to be minimized while providing better services to the students. In this way, managers of institute must have considerable attention to quality of services in universities. Main dimensions as quality policy, quality system, scheming curriculum, process of recruiting and selecting personnel, training and development of

personnel, research and development, training and final placement of students may be considered to demonstrate worth in the society.

#### **LIMITATIONS AND SCOPE FOR FURTHER RESEARCH**

Although the study focused on five key aspects of service quality management in the Management School, views generated from the interviews were somewhat limited. This was due to a lack of cross-sectional sample, which should involve a greater number of faculty, staff and students. Further, it would have been ideal if data could be collected on a longitudinal basis over several years to explore and evaluate the different facets of service quality that could have changed with time and expectations Athiyaman (1997) and Babakus *et al.* (2003). Finally, the study only concentrated on the Management School and the results explored might not be representative of the institution as a whole. A cross-comparison of the strategies adopted by the different academic schools would have contributed to a better understanding of service quality. Still, the study has shed some light on the interpretations of service quality and how the different perceptions can be integrated to provide a practical framework for the continual achievement of service excellence. An explanatory dimension could complement the study where key relationships could be investigated through quantitative means. The use of questionnaire surveys would serve to capture a much wider data set to evaluate both perception and performance in terms of the specific aspects of service quality (Cronin and Taylor, 1992; Lawson, 1992; Widrick *et al.*, 2002). In addition, the conceptual framework developed for this study could be further tested through the development of scale items pertaining to each construct. One the conceptual front, it was discovered that appropriate systems should be implemented to facilitate a community of practice across all levels. Future work could explore the relationship between systems development and teaching effectiveness to determine how personal mastery can be integrated into team learning to enhance individual competence (Senge, 1990).

Although such individual attributes as attitude and motivation may be difficult to modify over a short period, given the right stimulus through, for instance, an appropriate reward and compensation system, mental models can be changed for the benefit of the institution. Further work could focus on a strategic stimulus-response system to encourage positive mental models, developed through an integrated human resource management.

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