

Evaluating Research Services Quality in Islamic Azad University Shahr-e-Qods Branch by Using SERVQUALScale

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Quality of research services and assessing it with the goal of improving ability of competition university activities is among subjects that caused evaluating research performance topics considered and entered at this area with faster acceleration. Many models to measure quality of service have been introduced. Among them we can refer to SERVQUAL scale in which it deals with different aspects of qualitative assessment of services. The present paper is the result of related research with topic that was conducted at Islamic Azad University Shahr-e-Qodsbranch based on scientific methodology with descriptive-survey and applied method, its goal is assessing ability of explaining model and qualitative assessment of research activities from dimension main addressees. Results of this hypothesis test indicates gap in all dimensions of SERVQUAL scale. Also findings of research refer to required evidences for ranking dimensions of model.

Field of Research: Quality of Research Services, SERVQUAL scale

1. Introduction

Services are among functionally important characteristics of organizations which have in today's world a very high share in GDP and unmatched role in achieving sustainable development goals. This status in recent years had accelerating and different role. Based on research, Kotler and Armstrong, we have been observed growing increase of services in the present age in which they have different status in the field of competition. Service sector is one of the main major economic sectors in every country that plays role of driving force of economic growth and sustainable development. Universities as the effective and undeniable institutions for achieving to supreme life goals of citizens are active in the field of services that play role in two sections including education and research that its result is production of science but in fact it is production of wealth. Therefore according to importance of research the research services have more priorities. According to research priority, research services and quality of offering them to stakeholders including professors and students and the research institutions is very important. So measure of quality of such services is very necessary. In spite that the field of measuring the quality of production has a long record but this issue in the field of service goes back to less than 25 years ago. Perhaps its main reasons include complexity for identifying characteristics or key parameters that are effective on quality of service processes in comparison with productive processes. Research of Parasuraman, Zeithamel & Berry(1985) is the starting point of scientific studies in

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service quality is considered that the introduction and development of model results as SERVQUAL that in fact it is instrument for assessing quality of services consist of 22 components of 5 dimensions include: Assurance, Empathy, Reliability, Responsiveness and Tangible, that in order to assess quality of services each of the desired components will be offered within a question and then they will be measured. To planning for improving quality of education and research at universities and assessing offered services in this field is very important, the present study intends to assess quality of research services in Iran at Islamic Azad University, Shahr-e-Qods branch with the goal of evaluating ability of explaining SERVQUAL scale for achieving to enough evidences to order to answer main questions of research i.e. what is significant gap among expectations and perceptions of professors from quality of educational services and also expectations of professors and concept of deputy of research affairs from expectations and finally what is rank of them from view point of SERVQUAL scale.

The present paper has been compiled within 5 sections including introduction, theoretical basics and background, methodology, results and findings, conclusion and discussion.

2. Literature Review

2.1 Services and Quality

Services are regarded as a kind of product in which they have objective appearance in functions of organizations. During recent years it has ever growing share and its share is increased due to benefiting from different quality and competition. Kotler & Armstrong(2000) have mentioned that one of the main solutions in which organizations can have different competitive advantage from rival organizations is that they continuously offer high quality in comparison to rivals so that to satisfy customers and addressees. Lovelock & et al. (1999) believe that services are economical activities that within specified time and place they will create value for customers and these activities will result in a desired positive change for receiver of services. Kotler & Armstrong (2000) have mentioned that services are intangible activity in which one side is supplied to another side and they do not seek for ownership of anything. Producing service may be either dependant or independent from physical goods. Services are goods with different characteristics from product in which many researchers have dealt with this issue. Kerin & et al has referred to characteristics of services as 4l including: Intangibility, Inconsistency, Inseparability, and Inventory. In spite that in some researches a fifth characteristic under name of Inability to own services is offered that in fact it is related to Intangibility of services. But in different marketing texts, some marketing professors including Kotler & Armstrong(2000) and Jobber & Faby(2006) are agree with 4 characteristics of services including Intangibility, Inseparability, Variability and Perish Ability. Ashrafi (2008) has mentioned that quality is unique characteristic of services in which by supplying customer needs it will result in productivity and increasing competitive advantage and helps organization offering service for achieving to goals. Rahnama Roudposhti (2008) has mentioned that quality is among 3

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dimensions for survival of organization besides cost and operational efficiency since time of delivery of goods and services. In spite that quality has vast concept and it is offered in different topics with expectations and diverse interpretations, but Roust, Ebrahimi and Venus (1997) regard that serving customer includes all affairs that company fulfill for satisfaction of customer and helping them for receiving highest value from products and services that they have bought. Kotler (2006) has referred to statement of Jack Welch ex-managing director of General Electric Co. in relation to quality in which quality is the best assurance of faithfulness of customers and most powerful defense against foreign rivals and is the only path of permanent growth and income. From view point of Lovelock & Wright (1999) quality is degree for satisfaction of customer from received services in the way of supplying needs, demands and expectations. Kendall (2006) has referred to quality as general picture which shows customer in relation to weakness or priority of organization or service. Cronin & Taylor (1992) and Baggs & Kliner (1996) believe that quality of services is equal with performance of services. American Market Association has defined quality of services as supplying service in which it satisfies expectations of customers or beyond it. Perez & et al (2007) believes that quality is relation among manufacturers and services and its consumers as one of the necessary dimensions of quality of services. Vinagra & Neves (2008) believe that quality of services is one of the main goals in modern organizations. Parasuraman, Zeithamel and Berry (2008) believe that quality of services is a scale for assessing that what is compatibility of offered services with expectations of customers. Offering high quality services means following up expectations of customer based on fixed basics. Evaluating and assessing quality of services is among important issues in this field in which many researchers have dealt with it. These researches within framework of explaining dimensions of quality of services have studied this issue, like Gronross(1994) has suggested 2 kinds of quality of services including Technical Quality and Function Quality in which the first items deals with thing that customer will receive from person offering service and the second issue deals with method that customers receive service and in fact is process of offering service. Lehtinen (1982) has referred to 3 type of quality of services including: Physical Quality that deals with physical aspects of equipment or building, Corporate Quality that deals with fame or mental picture of services in an organization and Interactive Quality that deals with mutual relation among employees of services and customers. Parasuraman, Zeithamel (1999) has referred to 5 dimensions of quality of services including:

- (1) Tangibles (the appearance of physical facilities, equipment, and personnel);
- (2) Reliability (the ability to perform the promised service dependably and accurately);
- (3) Responsiveness (the willingness to help customers and provide prompt service);
- (4) Empathy (the provision of individual care and attention to customers); and
- (5) Assurance (the knowledge and courtesy of employees and their ability to inspire trust and confidence).

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2.2 Models of Assessing Quality of Services

Evaluating and assessing quality of services has got great importance on preparing information and knowledge of judgment for assessing performance of service organizations. Accessible scientific literature in relation to assessing quality of services has offered many methodologies for measuring quality of services. Some of these methodologies are offered as conceptual models that are used for measuring process of quality of services. Serious and disciplined attempt for comparing and classifying different measuring models of quality of services was first performed in the year 1988 by Parasuraman, Zeithamel and Berry. Generally the most widely used models in the field of measuring quality of services based on researches of Seth, Deshmukh & Vart (2005) are offered in the following table.

Table 1: Summary of Models for Measuring Quality of Services

Model Name	Authors	Year	Measurement of Services Quality addressed through
Technical and functional quality model	Gronroos	1984	Functional & Technical Quality
Gap Model	Parasouraman et al.	1985	10 dimensions for Quality of Services
Synthesized Model of Service quality	Brogowicz et al.	1990	functional & Technical Quality Based on Traditional Managerial Activities(Planning, Execution & Control)
Performance Based Model	Cronin and Taylor	1992	Based on 22 Items SERVQUAL But Based on Performance
PCP attribute model	Philip & Hazlett	1997	Pivotal, core and peripheral attributes
Retail service quality and perceived value model	Sweeney et al.	1997	Functional Quality through 5 SERVQUAL items and technical Quality
IT Based Model	Zhu et al.	2002	SERVQUAL items with perceptions only statements
E-Service Quality Model	Santos	2003	Through incubative and active dimensions

2.3 Background of Research

Large number of researches have been conducted in the field of quality of services in classic mode within framework of SERVQUAL scale that in the following section based on research of Landhari (2008), some issues are offered in table 2:

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Table 2: Summary of Researches Based on Research of Ladhari

Study	Year	Country	Service industry	Sample	Scale
Saleh and Ryan	1991	Canada	Hospitality industry	200 hotel guests 17 management staff	32 items Five-point Likert scale
Vandamme and Leunis	1993	Belgium	Health care sector	70 patients	17 items Seven-point Likert scale
Tomes and Ng	1995	England	Service quality in NHS or NHS trust hospital services	132 patients	49 items
Lam and Zhang	1999	Hong Kong	Travel agents	209 users of travel agents	23 items; Seven-point Likert scales
Mentzer et al.	1999	USA	Logistic service quality	5531 defense logistics agency users	25 items Five-point Likert scale
Cook and Thompson	2001	USA	Library service	4407 participants	34 items; Nine-point scale
Gounaris	2005	Greece	Business to business service	515 senior management	22 items Seven-point Likert scale
Jabnoun and Khalifa	2005	United Arab Emirates	Bank	230 customers	29 items
Wilkins et al.	2007	Australia	Hospitality service	664 hotel guests	tems 30

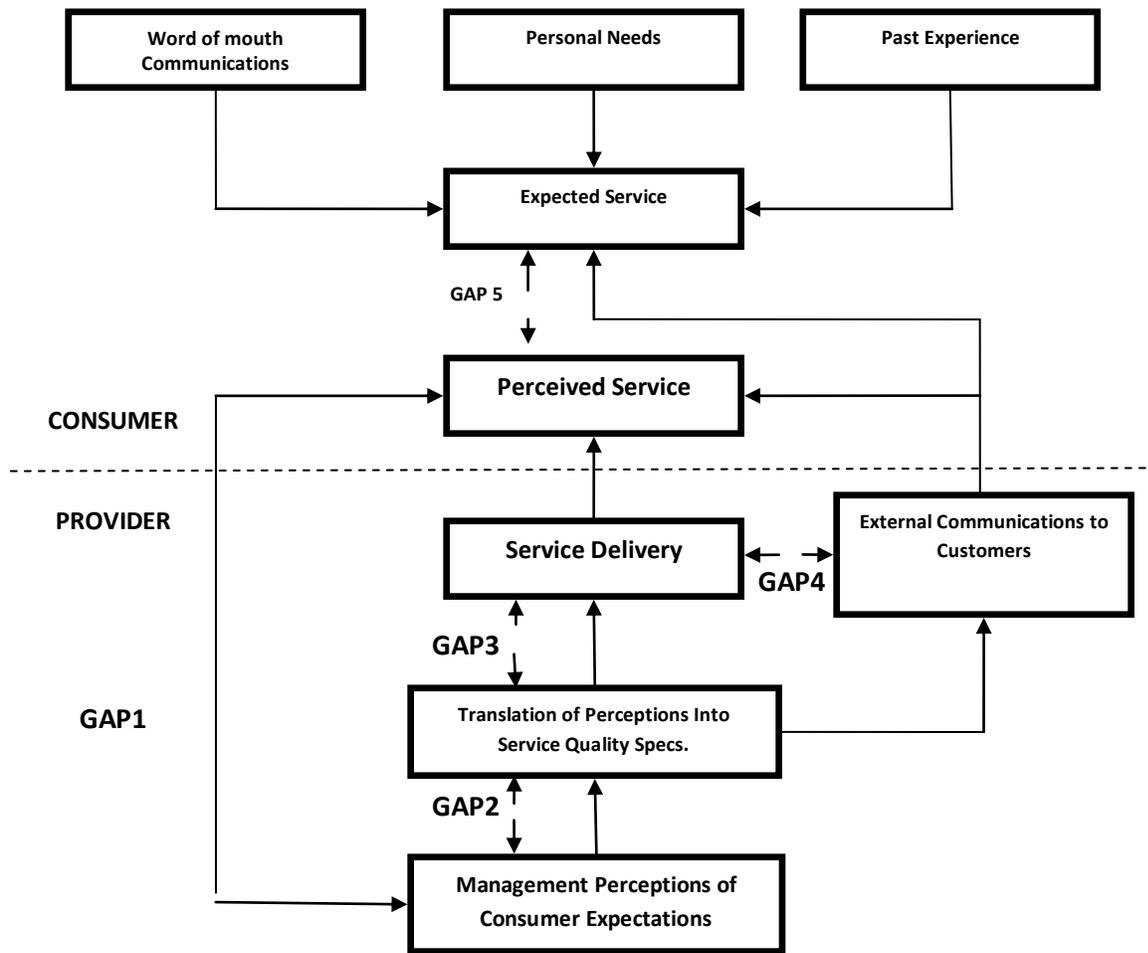
3. Methodology

The present research is descriptive-survey and applied research. It is used from field method for gathering data within framework of 2 standard questionnaire based on SERVQUAL model as tool of research and for gathering scientific basics and background of research it is used from library method. Statistical population of this research is professors of different departments at Islamic Azad University, Shahr-e-Qods branch. Islamic Azad university is the biggest non-governmental university in Iran that was established in the year 1982 and now having 350 active academic branches and centers with different scales including small, medium, large and very large and comprehensive among of which Shahr-e-Qods branch is considered very large branch of Islamic Azad University. Variables of present research are 5 aspects of model for quality of services based on SERVQUAL that through assessing expectations and perceptions of professors present level of performance and expectations attempt to study and analyze gap between evaluating quality of research services. Results of validity of questionnaire were calculated via SPSS software and Cronbach alpha was %73.4 and %87.6 respectively which indicates validity of questionnaire. It was used from Sing Test In order to test hypothesis.

4. Theoretical Framework for Model of Research

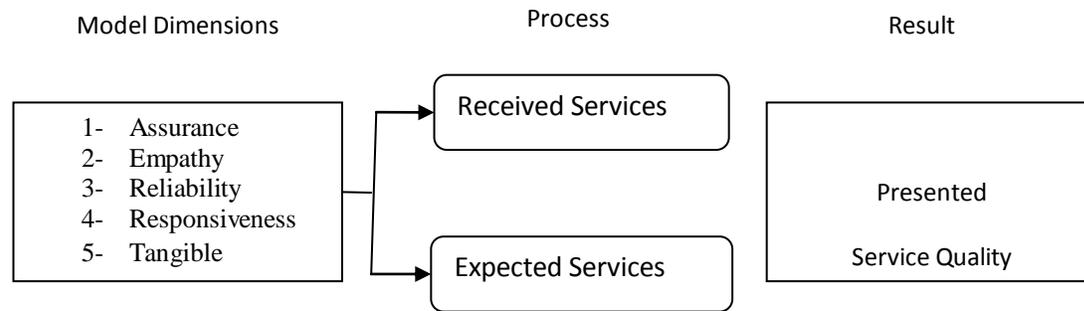
The model of present research is to assess quality of SERVQUAL services that was offered by Parasuraman, Zeithamel and Berry that main framework of model was offered in Figure 1.

Figure 1: Service Quality Model



In fact within framework of aforesaid model items including gathering data, hypothesis of test and analysis for quality of services is offered so that in figure 2 was offered.

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5. Discussion

Scientific basics and background of research as support and reason for explaining hypothesis and offering required evidences for answering to questions of research, main and subsidiary hypothesis of research include:

Main Hypothesis:

There is significant difference among expectations and perceptions of University professors from research service quality of deputy of research affairs in 5 aspects of service quality.

Subsidiary Hypothesis:

1. There is significant difference among expectations and perceptions of University professors from research service quality of deputy of research affairs with respect to empathy.
2. There is significant difference among expectations and perceptions of University professors from research service quality of deputy of research affairs with respect to responsiveness.
3. There is significant difference among expectations and perceptions of University professors from research service quality of deputy of research affairs with respect to tangibles.
4. There is significant difference among expectations and perceptions of University professors from research service quality of deputy of research affairs with respect to assurance.
5. There is significant difference among expectations and perceptions of University professors from research service quality of deputy of research affairs with respect to reliability.

6. Analysis of Hypothesis & Results of Research

In order to analyze data of research and test of hypothesis it is used from two methods including descriptive statistics and inferential statistics (Sign Test and correlation analysis) and in order to rank factors and 5 dimensions of SERVQUAL it is used from Wilcoxon Test.

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6.1 Results of Descriptive Statistics

Results of description as a result of studying questionnaire are offered in tables 3, 4, 5:

Table 3: Expectations dimensions quality percentage

Questions	Dimensions	Frequency					%Expectations
		Very Low	Low	Medium	High	Very High	
1-4	Tangibles	4	0	134	373	447	82.00
5-9	Reliability	7	0	171	459	560	81.84
10-13	Responsiveness	2	2	132	268	462	75.08
14-17	Assurance	1	0	114	380	464	83.00
18-22	Empathy	4	1	203	439	584	83.98

Results of expectations dimensions quality percentage indicates that the highest answers relate Empathy dimension and the least answers relate to Responsiveness dimension. It indicates difference among expectations of professors in 5 dimensions in comparison to quality of expected research services.

Table 4: Perceptions Dimensions Quality Percentage

Questions	Dimensions	Frequency					%Perceptions
		Very Low	Low	Medium	High	Very High	
1-4	Tangibles	223	378	236	91	28	43.47
5-9	Reliability	125	225	344	254	135	52.35
10-13	Responsiveness	131	250	330	137	56	48.59
14-17	Assurance	198	186	247	160	91	47.74
18-22	Empathy	176	184	367	268	153	55.27

Results as perceptions dimensions quality percentage indicates that the highest answers relate aspect Empathy and the least answers relate to aspect Tangibles. It indicates difference among expectations of professors in 5 dimensions in comparison to quality of expected research services.

**Table 5: Gap Dimensions Quality Percentage
(Between Expectations & Perceptions)**

Dimensions	%Expectations	% Perception ions	Service Quality (Gap) (%)
Tangibles	82.00	43.47	-38.53
Reliability	81.84	52.35	-29.49
Responsiveness	75.08	48.59	-26.49
Assurance	83.00	47.74	-35.26
Empathy	83.98	55.27	-28.71

Results of comparing expectations and perceptions indicate that there is significant difference among 5 dimensions and secondly the highest answers relate aspect Tangibles and the least answers relate to aspect Responsiveness.

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6.2 Results of Inferential Statistics

Since the data that is gathered for expectations and perceptions is correlated and test is non-parametric, in order to test hypothesis it is used from Sign Test. Results of analyzing Sign Test for each of the dimensions are offered in tables 6 to 11.

6.2.1 Results of Subsidiary Hypothesis Test (1)

Table 6: Results of Sign Test, gap between expectations and perceptions with respect to empathy

Frequencies

		N
Empathy _ Perceptions – Empathy _ Expectations	Negative Differences(a)	768
	Positive Differences(b)	128
	Ties(c)	226
	Total	1122

- a Empathy _ Perceptions < Empathy _ Expectations
- b Empathy _ Perceptions > Empathy _ Expectations
- c Empathy _ Perceptions = Empathy _ Expectations

Test Statistics^a

	Empathy _ Perceptions - Empathy _ Expectations
Z	-21.347
Asymp. Sig. (2-tailed)	.000

a Sign Test

Results of test indicate that there is gap between expectations and perceptions with respect to empathy. Therefore there was not significant empathy and special attention of organization to customers.

6.2.2 Results of Subsidiary Hypothesis Test (2)

Table 7: Results of Sign Test, gap between expectations and perceptions with respect to responsiveness

Frequencies

		N
Responsiveness _ Perceptions – Responsiveness _ Expectations	Negative Differences(a)	701
	Positive Differences(b)	34
	Ties(c)	132
	Total	867

- a Responsiveness _ Perceptions < Responsiveness _ Expectations
- b Responsiveness _ Perceptions > Responsiveness _ Expectations
- c Responsiveness _ Perceptions = Responsiveness _ Expectations

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Test Statistics^a

	Responsiveness_ Perceptions - Responsiveness _ Expectations
Z	-24.000
Asymp. Sig. (2-tailed)	.000

a Sign Test

Results of test indicate that there is gap between expectations and perceptions with respect to responsiveness. Therefore this significant difference indicates lack of significant interest and enthusiasm of organization for helping to professors and lack of offering prompt service to them

6.2.3 Results of Subsidiary Hypothesis Test (3)

Table 8: Results of Sign Test, gap between expectations and perceptions with respect to tangible

Frequencies

		N
Tangible _ Perceptions – Tangible _ Expectations	Negative Differences(a)	809
	Positive Differences(b)	26
	Ties(c)	75
	Total	910

aTangible _ Perceptions <Tangible _ Expectations

b Tangible _ Perceptions >Tangible _ Expectations

c Tangible _ Perceptions = Tangible _ Expectations

Test Statistics^a

	Tangible _ Perceptions - Tangible _ Expectations
Z	-27.062
Asymp. Sig. (2-tailed)	.000

a Sign Test

Results of test indicate that at 95% assurance level there is significant difference between expectations and perceptions of professors with respect to quality of research services, i.e. the organization under study does not have high improvement in the field of designing equipments, communicational means, employees and suitable layout for increasing quality of research services in comparison to expectation of professors.

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6.2.4 Results of Subsidiary Hypothesis Test (4)

Table 9: Results of Sign Test, gap between expectations and perceptions with respect to assurance

Frequencies

		N
Assurance _ Perceptions – Assurance _ Expectations	Negative Differences(a)	648
	Positive Differences(b)	65
	Ties(c)	127
	Total	840

- a Assurance _ Perceptions < Assurance _ Expectations
- b Assurance _ Perceptions > Assurance _ Expectations
- c Assurance _ Perceptions = Assurance _ Expectations

Test Statistics

	Assurance _ Perceptions - Assurance _ Expectations
Z	-21.796
Asymp. Sig. (2-tailed)	.000

a Sign Test

The organization does not have significant success in the field of creating trust among professors via knowledge and politeness of employees and their abilities for offering quality of research services.

6.2.5 Results of Subsidiary Hypothesis Test (5)

Table 10: Results of Sign Test, gap between expectations and perceptions with respect to validity

Frequencies

		N
Validity _ Perceptions – Validity _ Expectations	Negative Differences(a)	743
	Positive Differences(b)	100
	Ties(c)	190
	Total	1033

- a Validity _ Perceptions < Validity _ Expectations
- b Validity _ Perceptions > Validity _ Expectations
- c Validity _ Perceptions = Validity _ Expectations

Test Statistics^a

	Validity _ Perceptions - Validity _ Expectations
Z	-22.112
Asymp. Sig. (2-tailed)	.000

a Sign Test

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The organization under study does not have significant ability for offering suitable and safe services.

6.2.6 Results of Main Hypothesis Test

Table 11: Results of Sign Test, gap between expectations and perceptions

Frequencies

		N
Perceptions –Expectations	Negative Differences(a)	3669
	Positive Differences(b)	353
	Ties(c)	750
	Total	4772

- a Perceptions < Expectations
- b Perceptions > Expectations
- c Perceptions = Expectations

Test Statistics^a

	Perceptions - Expectations
Z	-52.271
Asymp. Sig. (2-tailed)	.000

a Sign Test

Results of test indicate significant difference between expectations and perceptions of professors. Therefore organization under study does not have enough success for decreasing gap between expectations and perceptions of professors.

6.2.7 Results of Ranking Test in 5 Dimensions

In order to have clear and exact perceptions from improvement planning and quality of research services necessitates ranking 5 factors in which results of test is offered in table 12.

Table 12: Results of Wilcoxon Signed Ranks Test

Dimensions	(-) Mean Rank	(+) Mean Rank	Gap
Tangibles	426.97	138.81	-288.16
Reliability	443.81	259.94	-183.87
Responsiveness	376.66	189.47	-187.19
Assurance	375.53	172.30	-203.23
Empathy	480.13	258.73	-221.4

Results of test indicate that the highest gap relates to tangible dimension and the lowest gap relates to reliability dimension.

7. Conclusion

Universities and scientific and research centers by offering educational and research activities intend to achieve expectation of customers i.e. scholars and students. Quality of offered activities is among most important indices for assessing and achieving of aforesaid goals. Quality of activities is one of the most important issues in the field of activity of organization including university. Therefore it is necessary to assess them in scientific and correct mode. Assessing and evaluating quality of activities needs to use dependable and valid models that SERVQUAL model is among models for assessing quality of activities. The present study deals with evaluating and assessing quality of research activities that is offered at Islamic Azad University, Shahre-e-Ghods branch in Iran, so that in this way it evaluates quality of research activities and besides it will be used as basics for judgment in relation to performance of organization under study and evidences for future planning. Results of this study indicate there is meaningful difference among expectations and understandings of scholars in the field of quality of research activities. Also results of study indicate that the highest gap relates to – and the lowest gap relates to -. Therefore recognizing gap of expectations and understandings create evidences in which management of this university branch by having planning and reengineering processes within framework of components and 5 aspects intends to verify and bridge gap between expectations and understandings of scholars in the field of quality of research activities. Some of the most important activities that can be done include: creating motivation for employees, holding educational courses, suitable layout of equipments, amending administrative processes and using suitable managerial styles. Also to create suitable conditions and grounds to balance expectations or understandings of scholars upon applying efficient research management are qualitative and quantitative necessities of this research.

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