



# Customers and Employees' Attitudes in the Jordanian Telecommunications Company Towards the Perceived Quality of Service

Mousa A. Al- Saudi  
Applied Balqaa University, Jordan  
m.jarrah@ju.edu.jo

## Article Info

Received: 26<sup>th</sup> September 2012  
Accepted: 13<sup>th</sup> November 2012  
Published online: 1<sup>st</sup> December 2012

ISSN: 2231-8275

© 2012 Design for Scientific Renaissance All rights reserved

## ABSTRACT

This study aimed at identifying the attitudes of the customer and employees working in the Jordanian telecommunication companies towards the perceived quality of service, to achieve the goals of the study and test its hypothesis, a questionnaire was developed and distributed to a random sample of workers in the Jordanian Communications Company in Amman region. They were (275) employees in addition to a random simple sample of the customers of Jordanian Communications Company in Amman region. They were (441), including a percentage (0.01%) of all customers of Jordanian Communications Company. A set of statistical measures such mean, standard deviation, Manova, T.test, were used. The study found out certain results, including:

1. The level of workers' awareness in the Jordanian Communications Company in Amman region towards the dimensions of the perceived quality is higher than that of customer perception.
2. There are differences in perception clients Jordanian Communications Company in Amman region about the dimensions of the perceived quality variable, depending on the (Sex, and scientific qualification), although there are some differences in perception workers in Jordanian Communications in Company Amman region about the dimensions of quality due to the changing experience, age, and scientific qualification.

The study recommends that the Jordanian Communications Company considers perceptions and understanding of the role of the client, since the company is aware of the importance of the (customer) (consumer external and internal), that determines the quality. It is urgent to deal with them and satisfy their needs and expectations.

**Keywords:** Customers, employees, telecommunication companies

## 1. Introduction

Quality is of paramount importance in terms of contemporary management philosophy of local and international companies, especially in light of the economic, political and technological developments and the intense competition for markets and resources with their components either physical, financial or human, which, in turn, requires having a holistic vision and philosophy, able to meet the environmental challenges either current or future and

to increase its self-adjustment and alignment with the critical variables in the competitive environment.

## **2. The Problem of the Study**

The Jordan Telecommunication company (JTC) is considered as a leading provider of telecommunications services to the citizens. However, this sector is under pressure as a result of financial difficulties, legislative and economic changes, criticism of the standards and mechanisms used, internal pressure, and the increased desire to improve the quality of service. These factors all affected the company's management and laid down certain burdens and obligations to deliver successful quality services that satisfy customers and employees. Despite the fact that the company adopts initiatives to improve quality of service, it lacks standards certified that can be used to measure the quality of its services, based on the perceptions of customers and employees together towards the quality of service perceived. So, the problem of the study is depicted in the following question: what are customers' and workers' trends in Jordan Telecom for fixed phones in the Greater Amman area towards the perceived service quality?

## **3. Significance of the Study**

Quality and customer service have become of the key issues 1990s of the last century for both public and private organizations. For example, in the private sector, ensuring the satisfaction and loyalty of a consumer is achieved through the high quality products and services. In the public sector, improving quality is a necessary step leading to effective service delivery because of the environmental challenges in which the public services occupy a distinguished position to be reckoned. In addition, the traditional model to deliver similar services to the (negative) consumers who do not have an opinion or influence does no longer exist. Recent years have been undergoing major changes in the management of the public sector and the emergence of service quality through (quality management principles). As a result, some public sector organizations follow different strategies to improve quality without a holistic perspective or an integrated plan. Some began applying quality circles, project teams and quality assurance.

## **4. Objectives of the Study**

The study aims at identifying the customers' and employees' trends in Jordan Telecom towards the perceived service quality. Of this main objective, the following objectives are derived:

- 1 – Taking the advantage of the perceived service quality measures in order to identify the attitudes of respondents (employees and customers) towards the quality of services of JTC.
- 2 – Applying the tests of (SERVPERF) and (SERVQUAL) to measure the quality of services of JTC as a new environment and to find out the extent to which these two scales contribute to determine the dimensions of perceived service quality.
- 3 – Determining if there were statistical differences between the dimensions of perceived quality measurements of the study.

## 5. Hypotheses of the Study

In order to achieve the objectives of the study, the following hypotheses were set forward:  
**The first hypothesis:** There are no significant differences between the dimensions of perceived quality and customers' and employees' point of view.

**The second hypothesis:** There are no statistically significant differences between the dimensions of perceived quality from the point of view of customers due to demographic variables (gender, age, educational qualification, occupation, and marital status).

**The third hypothesis:** There are no significant differences between the dimensions of perceived quality from the point of view of employees due to demographic variables (gender, experience, age, educational qualification, and job).

## 6. The Methodology

The study adopted the methodology of descriptive and field analytical research. At the level of descriptive research, the literature review was carried out in order to frame foundations and premises which underlie the theoretical framework. As for the analytical field research, a comprehensive exploratory survey has been conducted, and all the data collected over the answering questionnaires were analyzed. The study made use of appropriate statistical methods and develop a questionnaire to collect the study data.

## 7. The Study Community

The community of the study consists of all employees with different jobs and management levels senior, middle, or lower, working in Jordan Telecom for fixed line and customers of it. The number of workers in JTC is (3663), whereas that of its customers in the Greater Amman area is (572000) due to the statistics of human resources of Jordan Telecom in the Greater Amman area on 08.17.2007.

## 8. Study Sample

A randomly-selected simple sample of JTC workers in the Greater Amman area was selected, reaching 366 subjects, which constitutes (% 10) of the study community workers. 366 questionnaires were distributed, of which (289) questionnaires were retrieved with (79%). 14 questionnaires have been excluded for their lack of analysis validity of the analysis. Thus, (275) questionnaires comprising (95.16%) of the total number of questionnaires were analyzed with a (75.1%) of the study sample and (7.5%) of the study community. This percentage is by and large acceptable for the purposes of scientific research. A simple random sample of customers of JTC in the Greater Amman area was selected, reaching (572) subjects with (% 0.001) of the total number of customers community. (572) questionnaires were distributed; of them (481) questionnaires were retrieved with (84.09%). 40 questionnaires were excluded for their lack of analysis validity. Thus, (441) questionnaires were analyzed, comprising (91.7%) of the questionnaires recovered, with a rate of (84.09%) of the study sample.

**Description of the characteristics of the employees study sample**

Table (1): Description of the characteristics of employees study sample.

**Description of the characteristics of the customers study sample**

Table (2): Description of the characteristics of customers study sample.

Variable	Variable categories	Number	%
Age	30 years and less	51	%18.55
	31-40	94	%34.18
	41-50	74	%26.91
	51 and more	56	%20.36
Academic qualification	Secondary	49	%17.82
	Diploma	69	%25.09
	Bachelor	126	%45.82
	Graduate studies	31	%11.27
Job title	Manager	9	%3.27
	Manager assistant	16	%5.82
	Dep. Head	39	%14.18
	Section head	76	%27.64
	employee	135	%49.09
Sex	Male	191	%69.45
	Female	84	%30.55
Experience	5 years and less	39	%14.18
	6-10 years	92	%33.45
	11-15 years	193	%70.18
	16 and more	62	%22.55
Variable	Variable categories	Number	%
Age	30 years and less	173	%39.23
	31-40	129	%29.25
	41-50	84	%19.05
	51 and more	55	%12.47
Academic	Secondary	161	%36.51

qualification	Diploma	89	%20.18
	Bachelor	141	%31.97
	Graduate studies	50	%11.34
Job	Public sector	154	%34.92
	Private sector	108	%24.49
	No work	46	%10.43
	Others	133	%30.16
Marital status	Single	189	%42.86
	Married	252	%57.14
sex	Male	289	%65.53
	female	152	%34.47

### The Study Tool

The Study questionnaire was developed based on the theoretical framework and previous studies on the subject. The questionnaire consisted of two main sections: Section I: This section includes information about the characteristics of the study sample, according to demographic variables, namely, (gender, age, educational qualification, occupation, marital status, and experience). Section II: this section includes (31) items. Quality standards of Servperf and Servqual were used to frame the items. Another questionnaire was developed to measure the quality of service in the Jordan Telecom for fixed line, taking advantage of the studies of (Soliman and Al-Zaid, 2002), (Hernon, 1999), and (Wisniewski, 1996). The relies were classified due to scale of (Likert Likert) for multiple options, which calculates the weights of items in a five-column way as follows: the option of (applies always) represents (5 degrees), (apply often) represents (4 degrees), (apply sometimes) represents (3 degrees), (rarely apply) represents two degrees), and (never apply) represents one degree. Table (3) shows the study variables and items that measure each variable.

Table 3: Variables of the study and the items numbers they measure:

Variable	Items
The tangible evidence	6-1
Reliability	12-7
Response strength	16-13
Confidence and security	21-17
Emotionality	25-22
Company characteristics	31-26

### **Validity of the Study Tool**

To verify the validity of tool content, the questionnaire has been reviewed by (10) arbitrators from faculty members and specialists at Jordanian universities to verify the validity of items content and give their opinions about each item and its compatibility with the variables and dimensions of the study. On reviewing the opinions of arbitrators, the content of some items were modified due to observations of the reviewers.

### **Reliability of the Study Tool**

Reliability coefficient (Cronbach's alpha) was calculated to make sure the internal consistency of the items; their values are as follows:

Table 4: Reliability coefficient value s(internal consistency) for each of the study variables

Variable No	Items No	Variable	Reliability coefficient (Cronbach's alpha
1	6-1	The tangible evidence	0.8539
2	12-7	Reliability	0.8041
3	16-13	Response strength	0.8932
4	21-17	Confidence and security	0.8356
5	25-22	Emotionality	0.9111
6	31-26	Company characteristics	0.9076
6-1	31-1	Total	0.9158

As shown in Table (4), the reliability coefficients for all the variables of the study are high. The stability factor for all the items is (0.9158) which is high rate stability that is acceptable for the purposes of conducting the study.

### Statistical Treatment

To answer the study questions and validate it, the following statistical methods were used:

1 - Descriptive statistics to describe the study sample, using percentages and order of the variables of the study according to the relative importance depending on the averages and standard deviations. Averages and standard deviations were used to compare between the dimensions of the study and to get some indicators to compare between measurements of Servperf and Servqual.

2 - Test T. for the differences between the dimensions of perceived quality and customers' and employees' point of view

3 - Multi-way analysis of variance (Manova) in order to measure the impact of demographic variables on the dimensions of quality and to measure each of them separately.

### Review of Related Literature

Ammarin (2007) identifies the impact of application of the concept of total quality management on organizational excellence of the Jordanian Customs Department employees. The study finds out that the overall average of dimensions of TQM in the Jordanian Customs



Department is high. In addition, the dimensions of organizational excellence in the Jordanian Customs Department are also high.

Ahmadi (2006) aims at identifying the determinants of the quality of primary health care from the perspective of those who work in this sector in the city of Riyadh, Kingdom of Saudi Arabia. The study recommends getting rid of the culture of inspection and developing culture of self-assessment, both at the level of the health center and at the level of health team or individuals.

Alzeidanaan (2006) investigates the effect of empowerment in the application of administrative principles of Total Quality Management in the Jordanian financial institutions. The study finds out that the respondents' perceptions towards empowerment management were. In addition, respondents' perspectives towards the dimensions of the overall quality are.

Khawaldeh and Abu Tayeh (2004) examine the relationship between indicators of quality management and financial metrics of performance in industrial companies in Jordan. The results showed a relationship between each indicator of quality management and all of the financial metrics of performance

Shami, et al (2004) measure and analyze the trends of food factories administrations in Jordan about the benefits of the application of quality management systems of ISO 9000. The study found out that more than half of the factories administrations believe that the application of ISO systems achieve positive benefits even though their potential benefits are less than expected.

Magableh (2003) carried out a study on a sample of (398) of non-Jordanian patients in the private hospitals in Amman in addition to the Jordan University Hospital and the Royal Medical City. The results show that there is no statistically significant relationship between the assessment of patients arriving at hospitals to the level of services provided and the variables of sex, nationality, marital status, age, and number of attendants.

Tarawneh (2002) identifies the reality of TQM in pharmaceutical companies in Jordan and competition policy used by these companies. The study showed a significant relationship between the overall quality and most competitive policies used.

Shehadeh (2002) aimed at measuring industrial investors' satisfaction with public services provided by government agencies. The results of the study indicate that satisfaction of industrial investors towards the quality of public services and government efforts exerted are "weak".

Ashamari (2001) determines the dimensions of quality of postal service in the Kingdom of Saudi Arabia from the viewpoints of its users, using quality scale of authorized service (SERVPERF). The results showed the existence of some deficiencies in the performance of the postal service to meet the needs and requirements of its users. The results also confirm the reliability of SERVPERF to determine the dimensions of the postal service.

Of the other Arabic studies that deal with this topic are Al-Allaq (2001), Mousa (2000), Al-Tai (1999), Mohammed (1999), Abu Tayeh (1999), Al-Edwan, (1998), Ma'la (1998), Khatib and Gharaibeh (1998), Al-Edwan and Abdul Halim (1997), Al-Edwan and Taamna (1996), Taamna and Al-Harahsheh (1995), Ahmed and Batarseh (1994) and Al-Jamal (1992).

Karia and Asaari (2006) identifies the impact of the application of the concept of total quality (training and education, team-building, administrative empowerment, improvement

and continuous promotion) on some variables related to work (Job Involvement, job satisfaction, and organizational loyalty) in the organizations of the public and private sectors in Malaysia. The study results indicate that there is a positive impact for the application of the concept of TQM (Job Involvement, job satisfaction, and organizational loyalty).

Henderson, *et al* (2006) aimed at determining how to apply the partnership between universities and the industrial sector, focusing on two keys: the development of universities for new research methodology, better understanding of Multi TQM, development of concerned employees' and managers' flexibility, and development of total quality management in organizations.

The study finds out that there are some difficulties in the partnership between universities and industry. Besides, there are other foreign studies dealing with this subject including: Nguyen (2006), Soltani, *et al* (2005), and Agus (2005).

What distinguishes the current study from other studies is that this study includes other dimensions not covered by other related studies. In addition, it is regarded as the first attempt at the level of Jordan in general and Jordan Telecom in particular.

### Results:

#### Testing hypotheses:

**The first hypothesis:** There are no significant differences between the dimensions of perceived quality and customers' and employees' point of view.

Table 5: Averages (A), standard deviation(SD), and T value of the dimensions of perceived quality and customers' and employee's point of view

Items	Dimensions	Employees		Customers		T value	T significance
		A	SD	A	S D		
6-1	The tangible evidence	3.69	0.53	3.35	0.66	8.57*	0.000
12-7	Reliability	3.54	0.62	3.32	0.68	*6.95	0.000
16-13	Response strength	3.64	0.53	3.37	0.62	*7.89	0.000
21-17	Confidence and security	3.66	0.57	3.23	0.68	*9.87	0.000
25-22	Emotionality	3.76	0.52	3.09	0.69	*12.68	0.000
31-26	Company characteristics	3.68	0.55	3.31	0.64	*8.46	0.000
31-1	Total	3.66	0.51	3.28	0.57	*10.28	0.000

Table (5) indicates that averages of JTC customers' perceptions of perceived quality (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics) are moderate. The overall average of dimensions of perceived quality is (3.28) with a standard deviation of (0.57). Response Strength ranked first with an average of (3.37), followed by tangible evidence with an average of (3.35). Reliability came third with an average of (3.32), whereas the company characteristics came forth with an average of (3.34). Security and confidence ranked fifth with an average of (3.23). Finally, emotionality came sixth with an average of (3.09).

T value calculated is moral and statistically significant at the level of ( $0.05 \geq \alpha$ ) in favor of employees. This means that the perception of employees in JTC towards the dimensions of perceived quality (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics) is higher than the customers'. This, in turn, indicates that the first hypothesis is rejected and the alternative one is accepted. The alternative hypothesis indicates that there are significant differences between the dimensions of perceived quality and customers' and employees' point of view. **The second hypothesis:** there are no statistically significant differences between the dimensions of perceived quality from the point of view of customers due to demographic variables (gender, age, educational qualification, occupation, and marital status).

Table 6: results of MANOVA of the JTC employees' perceptions towards the dimensions of perceived quality due to the variables of (gender, age, educational qualification, occupation, and marital status)

Variable	Value of Wilks' Lambda	Value of Hotelling's Trace	F corresponding value	Significance value level
Sex	-	0.061	5.739	0.000
Marital status	-	0.013	1.598	0.658
Age	-	-	1.791	0.427
Scientific qualification	0.873	-	4.351	0.000
job	0.717	-	1.779	0.496

To test this hypothesis, MANOVA was used because of the dimensions of perceived quality from customers' perceptions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics) are dependent variables, and demographic variables (sex, age, scientific qualification, job, and marital status) are independent variables.

**First: the differences in terms of the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "sex":**

On conducting MANOVA on the differences between sexes towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics), the value of statistical Hotellings was (0.061), and the corresponding value of (F) was 5.739. This suggests that there are differences regarding the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "sex." This, in turn, indicates that the second hypothesis is rejected with respect to sex, and the alternative one is accepted. The alternative hypothesis indicates that there are significant differences between the JTC customers' points of view towards the dimensions of perceived quality due to sex. To determine the dependent variables involved, (Univariate F-test) was used for the differences between sexes in each of the (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics) separately. Table (7) shows the results of these tests.

Table 7: ANOVA results of the JTC customers' perception towards the dimensions of perceived quality depending on the variable "sex"

Dependent variable	Averages sum	Freedom degrees	Averages	F value	Significance level
The tangible evidence	4.746	1	4.746	*5.152	0.024
Dependency	9.917	1	9.917	*8.123	0.005
Response strength	11.722	1	11.722	*13.344	0.000
Emotionality	3.469	1	3.469	*5.597	0.018
Confidence and security	1.837	1	1.837	*4.509	0.034
Company characteristics	0.540	1	0.540	0.941	0.332

\*  $\alpha \leq 0.05$

To determine the differences resources between categories of sex variable in (tangible evidence, reliability, response strength, security and confidence, and Emotionality) to JTC customers and to determine who makes use of the differences, averages and standard deviations were calculated. Table (8) shows these results.

Table 8: Averages and standard deviations of tangible evidence, reliability, response strength, security and confidence, and Emotionality according to the sex variable

Dependent variable	Sex	Average	Standard deviation
The tangible evidence	Male	3.54	0.54
	female	3.40	0.77
Dependency	Male	3.58	0.58
	female	3.39	0.93
Response strength	Male	3.48	0.69
	female	3.36	0.78
Emotionality	Male	3.57	0.71
	female	3.40	0.92
Security and confidence	Male	3.49	0.86
	female	3.39	0.91

Table 8 shows that tangible evidence for Jordan Telecom customers is higher with males other than with females. Average of males was (3.54), while the average of females was (3.40). Reliability for Jordan Telecom customers is higher with males other than with females; Average of males was (3.58), while the average of females was (3.39). Response strength for Jordan Telecom customers is higher with males other than with females; Average of males was (3.48), while the average of females was (3.40). Security and confidence for Jordan Telecom customers is higher with males other than with females; Average of males was (3.49), while the average of females was (3.39).

**Second: the differences in terms of the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "age":**

On conducting MANOVA on the differences between different categories of age towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics), the value of Wilks was (0.981), and the corresponding value of (F) was 1.791, which is insignificance at a  $\leq 0.05$ . This suggests that there are no differences regarding the perception of JTC customers towards the

dimensions of perceived quality, depending on the variable "age". This indicates accepting the hypothesis in terms of age.

**Third: the differences in terms of the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "academic qualification"**

Table 9: Results of MANOVA of the JTC employees' perceptions towards the dimensions of perceived quality due to the variable academic qualification.

Dependent variable	Averages sum	Freedom degrees	Averages	F value	Significance level
The tangible evidence	10.438	3	3.479	*3.777	0.011
Dependency	28.912	3	9.637	*7.894	0.000
Response strength	33.399	3	11.133	*12.674	0.000
Emotionality	3.494	3	1.165	1.879	0.132
Confidence and security	720.	3	0.240	0.589	0.622
Company characteristics	2.833	3	0.994	1.645	0.178

\* $\alpha \leq 0.05$

On conducting MANOVA on the differences in terms of academic qualification towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics), the value of Wilks was (0.873), and the corresponding value of (F) was 4.351, which is significance at  $\alpha \leq 0.05$ . This suggests that there are differences regarding the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "academic qualification". This indicates rejecting the hypothesis in terms of this variable.

To determine the differences resources between categories of sex variable in (tangible evidence, reliability, response strength, security and confidence, and Emotionality) to JTC customers, **Scheffe' Test** for a posteriori comparisons was used.

**1. Tangible Evidence:**

Table (10) indicates that are differences resources between the averages of subjects with graduate level and with general secondary and below). The average of fourth category

(Graduate) is (3.57), and the average of first category (general secondary and below) is (3.38), in favor of the subjects with graduate qualification.

Table 10: Results of **Scheffe 'Test** for posteriori comparisons between the averages of the perceptions of subjects towards tangible evidence due to the variable of academic qualification:

Academic qualification	Average	Secondary	Diploid	Bachelor	Graduate
Secondary and below	3.38	-	-	-	*0.19
Diploma	3.44	-	-	-	-
bachelor	3.48	-	-	-	-
Graduate studies	3.57	-	-	-	-

\* $\alpha \leq 0.05$

## 2. Reliability:

Table (11) indicates that are differences resources between the averages of subjects with graduate level and with general secondary and below)

Table 11: Results of **Scheffe 'Test** for posteriori comparisons between the averages of The perceptions of subjects towards reliability due to the variable of academic qualification

Academic qualification	Average	Secondary	Diploid	Bachelor	Graduate
Secondary and below	3.41	-	-	-	*0.20
Diploma	3.45	-	-	-	-
bachelor	3.50	-	-	-	-
Graduate studies	3.59	-	-	-	-

\* $\alpha \leq 0.05$

### 3. Response Strength:

Table (12) indicates that are differences resources between the averages of subjects with graduate level and with general secondary and below)

Table 12: Results of **Scheffe 'Test** for posteriori comparisons between the averages of the perceptions of subjects towards response Strength due to the variable of academic qualification

Academic qualification	Average	Secondary	Diploid	Bachelor	Graduate
Secondary and below	3.32	-	-	-	*0.24
Diploma	3.38	-	-	-	-
bachelor	3.41	-	-	-	-
Graduate studies	3.56	-	-	-	-

\* $\alpha \leq 0.05$

#### **Fourth: the differences in terms of the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "job"**

On conducting MANOVA on the differences between different categories of job towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics), the value of Wilks was (0.717), and the corresponding value of (F) was 1.779, which is insignificance at a  $\leq 0.05$ . This suggests that there are no differences regarding the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "job". This indicates accepting the hypothesis in terms of job.

#### **Fifth: the differences in terms of the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "marital status"**

On conducting MANOVA on the differences between different categories of marital status towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics), the value of Hotellings was (0.013), and the corresponding value of (F) was 1.598, which is insignificance at a  $\leq 0.05$ . This suggests that there are no differences regarding the perception of JTC customers towards the dimensions of perceived quality, depending on the variable "marital status". This indicates accepting the hypothesis in terms of this variable.



**The third hypothesis:** There are no significant differences between the dimensions of perceived quality from the point of view of employees due to demographic variables (gender, experience, age, educational qualification, and job).

Table 13: Results of MANOVA of the JTC employees' perceptions towards the dimensions of perceived quality due to the variables of (gender, age, educational qualification, occupation, and marital status)

Variable	Value of Wilks' Lambda	Value of Hotelling's Trace	F value	Significance value level
Experience	0.643	-	1.780	0.284
Sex	-	0.011	2.077	0.057
Age	0.930	-	*2.780	0.000
Academic qualification	0.998	-	*4.059	0.000
job	0.709	-	1.014	0.459

\* $\alpha \leq 0.05$

To test this hypothesis, MANOVA was used because of the dimensions of perceived quality from employees' perceptions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics) are dependent variables, and demographic variables (sex, age, scientific qualification, job, and experience) are independent variables.

**First: the differences in terms of the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "experience":**

On conducting MANOVA on the differences between sexes towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics), the value of statistical Wilks was (0.643), and the corresponding value of (F) was 1.780, which is at insignificant  $*\alpha \leq 0.05$ , This suggests that there are no differences regarding the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "experience." This, in turn, indicates the hypothesis is accepted with respect to this variable.

**First: the differences in terms of the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "experience":**

On conducting MANOVA on the differences between sexes towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, Emotionality, company characteristics), the value of statistical Wilks was (0.643), and the corresponding value of (F) was 1.780, which is insignificant at  $\alpha \leq 0.05$ , This suggests that there are no differences regarding the perception of JTC employees towards the dimensions

of perceived quality, depending on the variable "experience." This, in turn, indicates the hypothesis is accepted with respect to this variable.

**Second: the differences in terms of the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "age":**

On conducting MANOVA on the differences between sexes towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics), the value of statistical Wilks was (0.930), and the corresponding value of (F) was 2.780, which is significant at  $\alpha \leq 0.05$ , This suggests that there are differences regarding the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "age." This, in turn, indicates the hypothesis is rejected with respect to this variable.

To determine the dependent variables of age differences, Univariate F- test was used for the differences between categories of age in each of (tangible evidence, reliability, response strength, security and confidence, and Emotionality) separately. Table 14 indicates such differences.

Dependent variable	Averages sum	Freedom degrees	Averages	F value	Significance level
The tangible evidence	10.37	3	3.46	*5.544	0.019
Dependency	12.72	3	4.24	*6.348	0.012
Response strength	0.94	3	0.31	0.057	0.811
Emotionality	15.80	3	5.27	*11.602	0.001
Confidence and security	1.91	3	0.64	1.448	0.229
Company characteristics	0.85	3	0.28	0.563	0.459

\*  $P \leq 0.05$

To determine the differences resources between categories of age variable in (tangible evidence, reliability, and emotionality) to JTC workers. **Scheffe**'Test for a posteriori comparisons was used

## 1. Tangible Evidence

Table 15: Results of **Scheffe Test** for posteriori comparisons between the averages of the perceptions of subjects towards tangible evidence due to the variable of age:

Age category	Average	30 and below	40-31	41-50	51 and more
30 and below	3.58	-	-	-	*0.22
40-31	3.71	-	-	-	-
50-41	3.78	-	-	-	-
51 and more	3.80	-	-	-	-

Table (15) indicates that are differences resources between the averages of subjects with (30 years and below) and with (51 years and more). The average of first category (30 years and less) is (3.58), and the average of fourth category (51 years and more) is (3.80), in favor of the subjects with (51 years and more).

## 2. Reliability

Table 16: Results of **Scheffe Test** for posteriori comparisons between the averages of the perceptions of subjects towards reliability due to the variable of age:

Age category	Average	30 and below	40-31	41-50	51 and more
30 and below	3.51	-	-	*0.31	*0.36
40-31	3.68	-	-	-	-
50-41	3.82	-	-	-	-
51 and more	3.87	-	-	-	-

\* $\alpha \leq 0.05$

Table (16) indicates that are differences resources between the averages of subjects with (30 years and below) and with (51 years and more)

### 3. Emotionality

Table 17: Results of **Scheffe 'Test** for posteriori comparisons between the averages of the perceptions of subjects towards emotionality due to the variable of age:

Age category	Average	30 and below	40-31	41-50	51 and more
30 and below	3.53	-	-	-	*0.39
40-31	3.70	-	-	-	-
50-41	3.73	-	-	-	-
51 and more	3.92	-	-	-	-

Table (15) indicates that are differences resources between the averages of subjects with (30 years and below) and with (51 years and more). The average of first category (30 years and less) is (3.53), and the average of fourth category (51 years and more) is (3.92), in favor of the subjects with (51 years and more).

#### **Third: the differences in terms of the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "academic qualification":**

On conducting MANOVA on the differences between different categories of academic qualification towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics), the value of statistical Wilks was (0.998), and the corresponding value of (F) was 4.059, which is significant at  $\alpha \leq 0.05$ , This suggests that there are differences regarding the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "academic qualification." This, in turn, indicates the hypothesis is rejected with respect to this variable.

To determine the dependent variables of academic qualification differences, Univariate F- test was used for the differences between categories of academic qualification in each of (tangible evidence, reliability, response strength, security and confidence, and Emotionality) separately. Table 18 indicates the result of these tests:

Table 18: results of ANOVA of the JTC employees' perceptions towards the dimensions of perceived quality due to the variable academic qualification.

Dependent variable	Averages sum	Freedom degrees	Averages	F value	Significance level
The tangible evidence	16.776	3	5.59	*8.636	0.001
Dependency	14.960	3	4.99	*6.017	0.008
Response strength	4.626	3	1.54	2.331	0.073
Emotionality	15.210	3	5.07	*7.773	0.003
Confidence and security	4.439	3	1.48	2.501	0.059
Company characteristics	2.563	3	0.85	1.523	0.326

To determine the differences resources between categories of academic qualification variable in (tangible evidence, reliability, and emotionality) to JTC workers. **Scheffe' Test** for a posteriori comparisons was used.

Table 19: Results of **Scheffe' Test** for posteriori comparisons between the averages of the perceptions of subjects towards tangible evidence due to the variable of academic qualification:

Academic qualification	Average	Secondary	Diplomid	Bachelor	Graduate
Secondary and below	3.61	-	-	-	*0.24
Diploma	3.67	-	-	-	-
bachelor	3.74	-	-	-	-
Graduate studies	3.85	-	-	-	-

Table (19) indicates that are differences resources between the averages of subjects with graduate level and with general secondary and below). The average of fourth category (Graduate) is (3.85), and the average of first category (general secondary and below) is (3.61), in favor of the subjects with graduate qualification.

## 2. Reliability:

Table (20) indicates that are differences resources between the averages of subjects with graduate level and with (general secondary and below). The average of fourth category (Graduate) is (3.86), and the average of first category (general secondary and below) is (3.59), in favor of the subjects with graduate qualification.

Table 20: Results of **Scheffe Test** for posteriori comparisons between the averages of the perceptions of subjects towards reliability due to the variable of academic qualification

Academic qualification	Average	Secondary	Diploid	Bachelor	Graduate
Secondary and below	3.59	-	-	-	*0.27
Diploma	3.68	-	-	-	-
bachelor	3.75	-	-	-	-
Graduate studies	3.86	-	-	-	-

\* $\alpha \leq 0.05$

## 3. Emotionality

Table (21) indicates that are differences resources between the averages of subjects with graduate level and with (general secondary and below). The average of fourth category (Graduate) is (3.88), and the average of first category (general secondary and below) is (3.62), in favor of the subjects with graduate qualification. Besides, it indicates that are differences resources between the averages of subjects with graduate level and with (diploma). The average of fourth category (Graduate) is (3.88), and the average of second category (diploma) is (3.67), in favor of the subjects with graduate qualification.

Table 21: Results of **Scheffe Test** for posteriori comparisons between the averages of the perceptions of subjects towards reliability due to the variable of academic qualification

Academic qualification	Average	Secondary	Diploma	Bachelor	Graduate
Secondary and below	3.62	-	-	-	*0.26
Diploma	3.67	-	-	-	*0.21
bachelor	3.71	-	-	-	-
Graduate studies	3.88	-	-	-	-

\* $\alpha \leq 0.05$

**Fourth: the differences in terms of the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "job":**

On conducting MANOVA on the differences between different categories of job towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics), the value of statistical Wilks was (0.709), and the corresponding value of (F) was 1.014, which is insignificant at  $\alpha \leq 0.05$ , This suggests that there are no differences regarding the perception of JTC employees towards the dimensions of perceived quality, depending on the variable " job." This, in turn, indicates the hypothesis is accepted with respect to this variable

**Fourth: the differences in terms of the perception of JTC employees towards the dimensions of perceived quality, depending on the variable "sex":**

On conducting MANOVA on the differences between different categories of sex towards all perceived quality dimensions (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics), the value of statistical Hotellings was (0.011), and the corresponding value of (F) was 2.077, which is insignificant at  $\alpha \leq 0.05$ , This suggests that there are no differences regarding the perception of JTC employees towards the dimensions of perceived quality, depending on the variable " sex." This, in turn, indicates the hypothesis is accepted with respect to this variable

**Discussion**

The results indicated that the values of (T) calculated is moral and statistically significant at the level ( $0.05 \geq \alpha$ ) in favor of workers. This means that the perception of employees in Jordan Telecom Company for fixed-lines in Greater Amman region to the dimensions of perceived quality (tangible evidence, reliability, response strength, security and confidence,

emotionality, company characteristics) is higher than those of customers' perception, which requires rejecting the hypothesis and accepting the alternative one.

Further, the results indicated that the averages of JTC customers' perception in the area of Greater Amman to the dimensions of perceived quality (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics) are moderate. Response strength ranked first, followed by the tangible evidence. Reliability ranked third followed by the company characteristics.

Moreover, the results indicated that the averages of JTC employees' perception in the area of Greater Amman to the dimensions of perceived quality (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics) are high. Emotionality ranked first, followed by the tangible evidence. The company characteristics ranked third followed by the security and confidence.

Therefore, this study is in harmony with other related studies such as: Al-Zaydain (2006), Latifa, et al (2002), Shadih (2002), Al-Ahmadi(2006), Al-Amareen (2007), Soliman (2002), Al-Shammri (2001) and Al-Allaq (2001).

The results indicated that there are differences in the JTC customers' perception in the area of Greater Amman to the dimensions of perceived quality depending on the variable "sex". The differences on all dimensions of perceived quality (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics) are in favor of males.

In addition, the results indicated that there are no differences in the JTC employees' perception in the area of Greater Amman to the dimensions of perceived quality depending on the variable "experience". There are differences on all dimensions of perceived quality (tangible evidence, reliability, response strength, security and confidence, emotionality, company characteristics) due to age and especially those with (51 years and more).

## **Recommendations**

Based on the results obtained, the study recommends the following:  
A. Jordan Telecom for fixed lines in the Greater Amman area pays more importance to the customers to enhance their directions towards perceived service quality. It must give them the confidence and security and treat them properly to meet their needs and expectations.

B. Jordan Telecom for fixed-lines has a level of commitment, embodied in promoting quality sense among workers in order to develop their skills and provide them with a strategic vision, training courses and workshops.

C. The need to link the increase and improvement of the productivity and quality with the improvement the conditions of workers within an integrated strategy for the management of human resources. Accordingly, we propose the following to the Jordan Telecom for fixed line to adopt:

1. A system of rewards which makes it possible to adopt the culture of participation in the various activities in general and in training on quality of service programs in particular.



2. Giving individuals adequate opportunities to use their skills and provide them with the necessary potential to analyze and solve problems
4. Expanding the use of teamwork and developing the team spirit
5. Providing security systems and safety at work.

## References

- Abu Tayeh, S. (1999) level of satisfaction with public sector services: a field study, *DIRASAT: Management Science*, 26 (1), the University of Jordan, Amman.
- Abu Musa, R. (2000) *The impact of service quality on profitability and customer satisfaction in Jordanian banks: a comparative study between the Housing Bank and the Islamic Bank*. Unpublished Master, Al al-Bayt University, Mafraq.
- Ahmed, A. and Batarseh, S. (1994) level of citizens' satisfaction with public services in Jordan: A Field Study, *Yarmouk Research - a series of Social Sciences and Humanities*, University of Yarmouk, 10 (4) of Irbid.
- Alzeidanaan, M. (2006), *the impact of empowerment in the application of administrative principles of Total Quality Management in the Jordanian financial institutions*, MA unpublished, Mutah University, Karak, Jordan.
- Ahmadi H. (2006), the determinants of the quality of primary health care services, a qualitative study, *Journal of Public Administration*, vol (46), number (3), p. 543-505.
- Al-Edwan, Y. (1998) The impact of the level of service on the satisfaction of the beneficiaries of the health centers in the province north of Jordan. *The scientific journal of the Faculty of Management and Economic*, p 9, the University of Qatar, Doha.
- Al-Edwan, Y. and Abdel Halim, A. (1997) Factors associated with achieving satisfaction with the services provided to patients in hospitals Jordanian, *Yarmouk research, a series Humanities and Social Sciences*, University of Yarmouk, 13 (1), Irbid.
- Al-Allaq, B. (2001) "Measuring the quality of services from the point of view of the yen as an indicator of beneficiary effective on the successful performance of the administrative leadership in service organizations, *the Second Arab Conference in management*, the Arab Organization for Administrative Development, Cairo, p: 182.
- Ammarin, M. (2007) "*The impact of the application of the concept of total quality management in organizational excellence from the point of view of workers in the Jordanian Customs Department*, unpublished Master, Mutah University, Karak, Jordan.
- Aaltonen Sinikka, Elli,(1999) "client- oriented quality assessment within municipal social services , *the international journal of social welfare* , Vol.8 , issue 2, P.132.
- Al-Marri Khalid, Abdel Moneim M. Baheeg Ahmed, Mohamed Zairi (2007) Excellence in service: an empirical study of the UAE banking sector, *International Journal of Quality & Reliability Management*, Volume: 24 Issue: 2 pp: 164 – 176.
- Anoop patel, (1994) " Quality assurance ( BS 5750) in social services departments " *the international journal of public sector management*, Vol.7 , No.2 , PP.4-5.
- Augustus E. Osseo-Asare, David Longbottom, Pieris Chourides (2006)Managerial leadership for total quality improvement in UK higher education, *The TQM Magazine*, Volume: 19 Issue: 6 Page: 541 – 560.

- Bernhardt, K.L., Donthu, N. and Kennett, P.A. (2000) "A Longitudinal Analysis of Satisfaction and profitability", *Journal of Business Research*, 4(2) (Feb): 161-171.
- Carman, J.M. (1990) "Consumer perceptions of service Quality :an Assessment of the SERVQUAL Dimensions", *journal of Retailing*, 66,No.1, pp369-378.
- Cormin, J., (1992) Measuring Service Quality, *Journal of Marketing*, 56.
- Cronin, J.J. Jr. And Taylor, S.A. (1994), "SERVPERF vs SERVQUAL: Reconciling Performances Based Perception-Minus-Expectations Measurement of Service uality", *Journal of Marketing*, Vol.58, pp125-131.
- Donnelly Mike,(1995) " measuring service quality in local government : the SERVQUAL approach , *international journal of public sector management* , Vol . 8 No.7, P.17.
- Edward Secan , mark,(1996) "*Quality management in public organizations : The United States and Germany*" PhD thesis , Dissertation Abstracts international, Vol. 57 , No . 4, p. 1841 – A
- Gemayel, G. (1992) *consumers' perception of the quality of banking services in Jordan*, unpublished Master, University of Jordan, Amman.
- Hellofs, L. and Jacobson, R. (1999) Market Share and Customers' Perceptions and Quality: When Can Firms Grow Their Way to Higher Versus Lower Quality, *Journal of Marketing*, 63 (1).
- Henderson, Joan; McAdam, Rodney & Leonard, Denis. (2006), Reflecting on a TQM-based University/Industry Partnership: Contributions to Research Methodology and Organisational Learning. *Management Decision Journal*, Vol. 44, Issue 10, pp. 1422-1440.
- Hernon , F ,(1999) " service quality and customer satisfaction : An Assessment and future Directions " *journal of Academic librarianship* , Vol . 25, issue 1, P.11.
- Hynnjoo .M, Suntan, H, Hwajeog, W (2002) Southwest Airlines - living total quality in a service organization, *Managing Service Quality*, 1999 Volume: 9 Issue: 2 Page: 90 – 95.
- Khatib, F. and Gharaibeh, M. (1998) the level of customers' expectations and perceptions of the quality of services provided by commercial banks. *DIRASAT*, University of Jordan, Amman, Volume 25, Issue 1, pp. 145 - 187.
- Khawaldeh, K. and Abu Tayeh, S. (2004) The relationship between indicators of quality management and financial metrics for performance in industrial companies in Jordan, *DIRASAT*, Volume: 31, Issue: 2, pp. 447-461.
- Karia, Noorliza; Asaari, Muhammad Hasmi Abu Hassan(2006) The effects of total quality management practices on employees' work-related attitudes, *The TQM Magazine*, Volume 18, Number 1, pp. 30-43(14)
- Khatib F., Awwad M., (2003), " Measuring Of Service Quality Of Marketing Information System Technology" , Mutah Lil- Buhuth Wad- *Dirasat*, Vol.18, No.4, PP.108.
- Latifa , sharifah and et.al, (2000) . " on service improvement capacity index : case study the public service sector in malaysia " *total quality management* , Vol,11 issue 4-6 , P838.
- Mowen, J. (1995) *Consumer Behavior*, 4th ed., Pentice – Hall, U.S.A
- Mohammed, I. (1999): satisfaction with the service learning and academic excellence for students: An Empirical Study on the students of the Faculty of Commerce, Cairo

- University, Beni Suef Branch, Class of 2000, *Journal of Financial Studies and Business* 2 (3), Cairo.
- Ma'alla, N, (1998) measure the quality of banking services offered by commercial banks in Jordan: A Field Study, *DIRASAT*, University of Jordan, 25 (2), Amman.
- Maghaleb, K. (2003) "The reality of the health tourism in Jordan: Poll views of tourists patients not Jordanians, *DIRASAT*, Management Science, University of Jordan, Volume (30), number (2), pp. 358-373.
- Najim, A. (1997), Service Management: Review and recent trends, *public administration*, Volume 37, Issue 2, p: 263 - 269.
- Navaratnam K.K. & Bill Harris, (1995), " Quality process analysis : a technique for management in the public sector " *international journal of public sector management* , Vol. 8 , No. 1, PP.13-17 .
- Nguyen, Thuy Quynh Loan, (2006), *Improving Performance Through Linking it and TQM in Vietnamese Organizations*, Unpublished Thesis Doctor, University of Fribourg, Switzerland.
- Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988) Conceptual Model of Service Quality and Its implications for Future Research, *Journal of marketing*, 49(1).
- Redman Tom & et.al,(1995) " Quality management in services : is the public sector keeping pace ? *International journal of public sector management* , Vol,8, No.7 , PP. 21-23.
- Rod sheaff and et. al, (2002) " public service responsiveness to users demands and needs : theory , practice and primary healthcare in England " *public administration* . Vol . 80 , No.3 , PP.435-436 .
- Roth, A.V. and Jackson III, W.E. (1995) Strategic Determinants of service Quality and performance: Evidence From the Banking Industry, *Management Science*, 41(11).
- Santos, J. (2003), "E-service quality: a model of virtual service quality dimensions", *Management Service Quality*, Vol. 13 No.3, pp.233-46.
- Scharitzer and et.al, (2000) " New public management : Evaluating the success of total Quality management and change management in interventions in public services from the Employees and customers perspectives " , *TQM*, Vol.11, issue7, P.65.
- Soliman and Alzaid ,(2002) " service Quality in Riyadh's Elite Hotels : measurement and Evaluation , " *journal of king saud university* , Vol . 14 . PP.84-85 .
- Soltani, Ebrahim, & Meer, Robert van der, & Williams, Terry M. (2005). A Contrast of HRM and TQM Approaches to Performance Management: Some Evidence, *British Journal of Management*, 16 (3).
- Sureshchander, G.S., Rajendran, C., Anatharaman, R.N. (2002), "The relationship between service quality and customer satisfaction – a factor specific approach", *Journal of Services Marketing*, Vol. 16 No.4, pp.363-79.
- Suleiman, A. (2002), psychological trends of consumers about marketing strategies for businesses Saudi market, *Journal of Public Administration*, Institute of Public Administration, 42 (1) Riyadh.
- Shami, A. and Ahmad, S. and Mohamed Y. (2004) "Analysis of the benefits of the application of quality management systems from the perspective of food factories services in Jordan" *DIRASAT*, Volume: 31, Issue: 2, pp: 268 - 276.

- Shehadeh, I. (2002) industrial investor's satisfaction with public services: a field study in the city of Damascus and its countryside, Damascus University *Journal for Economic and Legal Sciences*, 18, of Damascus.
- Shammemari, A. (2001), "the quality of postal services in the Kingdom of Saudi Arabia," *Public Administration*, Volume 41, Issue 2. Pp. 265-301.
- Sahin, M. (1998) *Marketing: Concepts and Strategies*, University House for Printing and Publishing, Alexandria.
- Tai, H. (1999) Factors influencing the decision to food preference: a field study, *DIRASAT : Management Science*, 26 (1), the University of Jordan, Amman.
- Tarawneh, M. (2002) "overall quality and competitiveness," An Empirical Study on the pharmaceutical sector in Jordan, " *DIRASAT*, Volume: 29, Issue: 1, pp: 32 - 47.
- Taamna, M. and Al-Harabsheh, B. (1995) The impact of the level of service on the satisfaction of the beneficiaries of health service centers in Mafraq Governorate, *Mutah for Research and Studies*, University of Mutah 10 (6), Karak.
- Teas, K.R. (1993), "Expectations, Performance Evaluation, and Consumers' Perceptions of Quality", *Journal of Marketing*, Vol.57, 18-34.
- Victoria Konidari, Yvan Abernot (2006), "From TQM to learning organisation: Another way for quality management in educational institutions", *International Journal of Quality & Reliability Management*, Vol.23, No. 1, pp.256-274.
- Vouzas F., Psychogios A.G. (2007), "Assessing managers' awareness of TQM", *The TQM Magazine*, Vol.19, No. 1, pp.146-168.
- Wisniewski , mik, and Donnelly , mike ,(1996) " Measuring Service Quality in the public sector : The potential for servqual " *Total quality management* , Vol .7 , issue 4, P357 .