

## Impact of SERVQUAL Model Dimensions on Customer Satisfaction: Accounting View

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### Abstract

It is obvious that customers are important stakeholders in organizations and their satisfaction is a priority to management. Customer satisfaction has been a subject of great interest to organizations and researchers alike. The study explored the relationship among customer satisfaction, service quality, firm image, and price of service rendered. The results show that the SERVQUAL instrument with five-dimension provides good measurement of service quality, service quality has a positive effect on customer satisfaction, firm image and the price service have positive impact on customer satisfaction, and the price of service directly influences service quality. The impact on satisfaction from highest to lowest in order was, overall firm image, price compared to quality and service quality (empathy), respectively. This tells us the firm image is the most important factor to customer satisfaction, price next and service quality last from firms' perspective. From our empirical results, we may infer that the client believe that no matter which accounting firm they choose should have a certain degree of service quality guaranteed in the highly competitive battle field.

**Keywords:** SERVQUAL, service quality, customer satisfaction, firm image

### INTRODUCTION

Customer satisfaction has been a subject of great interest to organizations and researchers alike. The principal objective of organizations is to maximise profits and to minimise cost. Profit maximisation can be achieved through increase in sales with lesser costs. One of the factors that can help to increase sales is customer satisfaction, because satisfaction leads to customer loyalty (Wilson et al., 2008, p. 79), recommendation and repeat purchase. Business organizations make considerable use of professional services. However, it has received less attention in the context of professional business services than of other consumer services in general. There are few articles to investigate customer satisfactions of professional accounting firms and how business organizations select and switch accounting firms. In the present economic environment, characterized by technological dynamism and intensive competition, the issue of customer satisfaction has become extremely important for the success of any business. If not recognized and responded to rapidly changing business environments effectively, a firm may result in increased pressure of work, lost revenue opportunities, increased costs and, ultimately, in increased levels of customer dissatisfaction (Gurau and Ranchhod 2002). Nowadays many accounting firms are also stuck in a highly competitive market. Sometimes, a firm gets a disturbing message that the client is not pleased with the services. By this time it may be too late for taking any correctable action. Therefore, a firm must constantly ask itself, "what do clients want from us?" and "how do we improve what clients actually perceive?" With the emergence of competitive battlefield, the need for an appropriate approach to quality measurement in the context of professional business became apparent. Quality is such an important issue that it is considered a really significant concept in our real life. It is regarded as a strategic organizational weapon. And the pressing need of developing service organizations and upgrading their services necessitates the measuring of service quality. This assets in checking the quality progress and providing bases for improving it. As a result of economic changes throughout history, the concept of 'quality' has changed. 'Quality' comes from the Latin word 'Qualitas', which refers to the nature of a person or the nature of an object. In the past Quality meant accuracy and perfection (Al-Dararkah, 2002).

The SERVQUAL, an instrument frequently employed to assess the quality of consumer services, was adapted to assess customers' perceptions of service quality in the context of professional business (Bojanic 1991; Freeman and Dart 1993; Weekes, Scott, and Tidwell 1996). Some researchers examined the relationship between audit quality attributes and client satisfaction (Behn, Carcello, Hermanson, and Hermanson 1997). Client satisfaction with the audit team was positively associated with audit fees paid by Fortune 1000 clients (Behn et al., 1999). Taking these studies into consideration, the literature is focused on either examining the determinants of service quality only or audit quality attributes oriented. Business organizations make considerable use of professional services. However, it has received less attention in the context of professional business services than of other consumer services in general. Besides, extant satisfaction research offers little insight into the role of price might have on customer satisfaction.

The purpose of this study is to assess customers' perceptions of service quality with an accounting service firm. It was a study where investigations using SERVQUAL was carried out to assess the quality of services provided to clients of local accounting firms in Northern Cyprus.

A professional accounting firms in Northern Cyprus were investigated with the following objectives set for the study:

- 1.1 To examine the potential application of SERVQUAL in the case of a professional accounting services companies.
- 1.2 To identify those managerially actionable factors (such as price and firm image) that impact service quality and customer satisfaction at the selected professional accounting firms.

## LITERATURE REVIEW

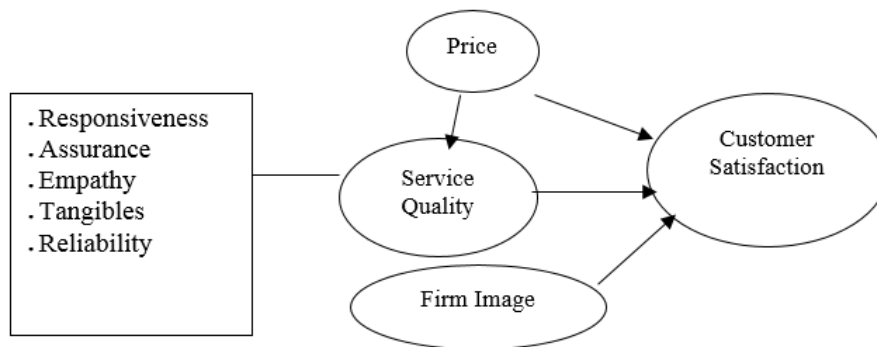
This section briefly introduces SERVQUAL as an instrument used to assess customer perceptions on service quality and depicts a model as a framework to be used for the objectives of the study. SERVQUAL is a multi-item scale developed to assess customer perceptions of service quality in service and retail businesses (Parasuraman et. al., 1988). The scale decomposes the notion of service quality into five constructs as follows:

<b>Tangibles:</b>	physical facilities, equipment, staff appearance, etc.
<b>Reliability:</b>	ability to perform service dependably and accurately
<b>Responsiveness:</b>	willingness to help and respond to customer need
<b>Assurance:</b>	ability of staff to inspire confidence and trust
<b>Empathy:</b>	the extent to which caring individualized service is given

SERVQUAL represents service quality as the discrepancy between a customer's expectations for a service offering and the customer's perceptions of the service received, requiring respondents to answer questions about both their expectations and their perceptions (Parasuraman et. al., 1988). The use of perceived as opposed to actual service received makes the SERVQUAL measure an attitude measure that is related to, but not the same as, satisfaction (Parasuraman et. al., 1988). Parasuraman et. al. (1991) presented some revisions to the original SERVQUAL measure to remedy problems with high means and standard deviations found on some questions and to obtain a direct measure of the importance of each construct to the customer.

## Conceptual Framework

Figure 2.1 depicts the conceptual framework for the proposed study. This model begins with SERVQUAL measurement scale, consisting of five-dimensional structure (responsiveness, assurance, empathy, tangibles, and reliability), to assess service quality. Next, we develop a set of hypotheses surrounding major variables (such as price, firm image, service quality and customer satisfaction). Then, we examine the effect of these variables. Finally, we present a discussion in support of the hypothesized influence of the various variables on service quality and customer satisfaction.



**Figure 2.1: A model of customer satisfaction in the context of professional services**

### Service Quality

By definition, service quality construct is the difference between perceived service and expected service (Parasuraman, Zeithaml and Berry1985). Customer expectations capture a customer's prior consumption experience with a firm's products or services as well as advertising and word-of-mouth information. (Fornell1992). Researchers generally agree that expectations serve as reference points in customers' assessment of service performance. Zeithaml & Bitner (2000) stated, "the dominant view among CS/D researchers is that expectations are predictive standards- i.e., what customers feel a service provider will offer."

Service providers must realize that the key to service quality is consistently meeting or exceeding consumer expectations (Bojanic 1991). The consumer's perception of the service does matter rather than the service provider's. Consumers' perceptions of service quality depend on the size and direction of the gap between perceived service and expected service which, in turn depend on the nature of the gaps associated with the design, marketing and delivery of services (Parasuraman et al. 1985).

Service quality is more difficult for the consumer to evaluate than product quality because of the lack of tangible evidence associated with service. This is especially true for professional services because they tend to be very people-based. Service quality can be measured by how well the service delivery matches a client's

expectations (Lewis and Booms 1983).

Since the appearance of Parasuraman et al.'s (1985, 1988) research, which developed their scale to measure service quality (SERVQUAL), numerous researchers have attempted to empirically replicate the instrument's five-dimensional structure as follows:

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

Most work performed evaluating or using the SERVQUAL instrument indicates that the generic determinants of the instrument provide a platform for expanding the instrument to include constructs for assessing extra case specific determinants such as professionalism, value for money and especially the core service or the business (Walbridge and Delene 1993). Since the SERVQUAL instrument has been productively used for measuring service quality in many proprietary studies, this study intended to employ SERVQUAL instrument to measure service quality in the context of professional service.

### **Customer Satisfaction**

Oliver (1997) defines satisfaction as "the consumer's fulfilment response, the degree to which the level of fulfilment is pleasant or unpleasant." Zeithaml and Bitner (2000) define satisfaction as the customers' evaluation of a product or service in terms of whether that product or service has met their needs and expectations. Dissatisfaction with the product or service is resulted as failure to meet the customers' needs and expectations.

Satisfaction and perceived quality are highly intercorrelated (Bitner and Hubbert 1994; Churchill and Surprenant 1982). Some studies find that satisfaction drives a general perception of quality, while others find that perceptions of quality drive satisfaction (De Ruyter, Bloemer, and Peters 1997). Most marketing researchers accept a theoretical framework in which quality leads to satisfaction (Dabholkar, Shepherd, and Thorpe 2000; Oliver 1997), which in turn influences purchasing behaviour (Johnson and Gustafson 2000; Oliver 1999). These arguments suggest that service quality is likely to affect customer satisfaction. This leads to our first research hypothesis:

H1: Service quality will have a positive direct effect on customer satisfaction.

### **Firm image**

Firm image is defined as perceptions of a firm reflected in the associations held in consumer memory (Keller 1993). Gronroos (1990) contended that a favourable and well-known image is an asset for any organization because image can impact perceptions of quality, value, and satisfaction. Researchers have emphasized firm image affects perceptions of quality performance as well as satisfaction and loyalty (Andreessen & Lindestand 1998). Zeithaml and Bitner (2000) argued that firm image would influence customer perceptions of the service firm's operations and would be reinforced by actual service experiences to solidify the desired image. Some researchers also mentioned that firm image would have been affected by the customer's more recent consumption experiences, or customer satisfaction (Johnson, Fornell, Andreessen, Lervik, and Cha 2001). Therefore our second hypothesis is as follows:

H2: Firm image will have positive effect on customer satisfaction.

### **Price**

Price is defined what is given up or sacrificed to obtain a product or service from the consumer's perspective (Zeithaml 1988). Considerable empirical studies have shown different results of the relationship between price and service quality. Peterson and Wilson (1985) concluded that the relationship between price and quality is not universal and that the direction of the relationship may not always be positive. A positive price-service quality relationship does appear to exist in some empirical results (Monroe and Krishnan 1985; Dodds, Monroe, and Grewal 1991; Teas and Agarwal 2000). Based on the conceptual model of service quality proposed by Parasuraman et al. (1985), discrepancies between service delivery and external communications cause Provider Gap 4. Zeithaml and Bitner (2000) stated, "one of the important types of external communications in services is the price of the service." In addition, customers likely depend on price as a cue to quality and because price sets expectations of quality, service prices must therefore be considered.

On the other hand, the effect of price on satisfaction has received considerably less research attention than have the roles of expectations and performance perceptions (Spreng, Dixon, and Olshavsky 1993). Postpurchase price perceptions have a significant, positive effect on satisfaction (Voss, Parasuraman, and Grewal 1998). Zeithaml and Bitner (2000) contended, "the price of the service can greatly influence perceptions of quality, satisfaction, and value. Because services are intangible and often difficult to judge before purchase, price is frequently relied on as a surrogate indicator that will influence quality expectations and perceptions." Some

researchers argued that client satisfaction with the audit team is positively associated with fees (Behn et al., 1999). Therefore, we propose the following:

H3: The price of service directly influences customer satisfaction.

H4: The price of service directly influences service quality.

## METHODOLOGY

Sources, collection and analysis of data are discussed in this section in order to justify the methods chosen for the proposed investigations.

### Sources of data

Key motivating literatures that were scanned and the empirical steps that were followed in the study are discussed below. Literature review into customer satisfaction with regard to service products and the SERVQUAL model was carried out for mainly two reasons. First, whether the SERVQUAL instrument is applicable in the context of professional accounting business was discussed. The appropriate numbers of dimensions of SERVQUAL was explored. Second, the course of analysis of the full model for investigations was introduced.

### The measuring instrument, sample and primary data collection

In preparation for the study, in-depth interviews with some partners from accounting firms and some existing clients of the sample companies was conducted to ensure the face validity of the measures. Several academic researchers were approached to provide some advices. Based on their feedback, several items of the original SERVQUAL questionnaire was deleted and modified. The questionnaire was pre-tested with 30 clients of various accounting firms. Respondents have explicitly been asked to indicate any ambiguities or potential sources of error stemming from the format or the wording of the questionnaire. Inputs from these respondents were used to further refine and modify the SERVQUAL instrument. A cover letter explaining the nature and importance of the research offering a summary report of the findings on completion of the study was sent to the clients of the companies who will be selected purely by random sampling.

**Table 1 Demographic information**

Items	Total	%
1. Title:		
Chairman/President	55	55
Vice President	30	30
Accounting Manager	10	10
Other	5	5
2. Type of Business Engaged:		
Textile	19	19
Service sector	15	15
Electricity company	4	4
Construction	15	15
Rent A Car	5	5
Tourism	4	4
Other	38	38
3. Number of year:		
0-5	50	50
6-10	18	18
11-15	13	13
16-20	12	12
21-.....	7	7

### Measurement of the Constructs

This section explains our measures and validation. All the final scale items are provided in the Appendix 1 and 2. A 5-point Likert scale was applied to measure the different constructs anchored from strongly disagree to strongly agree.

As to service quality, we described 19 measurement variables adapted from Parasuraman et al. (1988; 1991) SERVQUAL instrument to this particular professional accounting business. This led to five-factor dimension of service quality, consisting of tangibles, reliability, responsiveness, assurance and empathy. Customer satisfaction was measured using identical items adapted from Fornell, Anderson, Cha, and Bryang (1996): (1) an overall rating of satisfaction, (2) the degree to which performance that fall short of or exceeds expectations, and (3) a rating of performance relative to the customer's ideal good or service in the category. Measures for price were adapted from items used by Mayhew & Winer (1992) and Winer (1986). Firm image was measured by

adapting relevant scale items from Johnson & Gustafsson (2000).

### Validation of Measures

The SPSS programme was used to analyze the results of the questionnaire. We assessed the validity (reliability) by reviewing the t-test, and after that we explored the interrelationship among dependent variable (customer satisfaction) and the independent variables (service, quality, firm image, and price of services rendered). Durbin-Watson statistic was used to test for the presence of serial correlation among the residuals and Collinearity Diagnostics was tested for possible multicollinearity among the above mentioned explanatory variables.

As discussed in earlier sections, we conducted in-depth interviews with some partners from accounting firms and some of their existing clients while preparing our SERVQUAL questionnaire. Since SERVQUAL is a well-established measure, the scale can be considered to possess content validity. Empirically, convergent validity can be assessed by reviewing the t-tests for the factor loadings of the indicators. If all factor loadings for the indicators measuring the same construct are statistically significant (greater than twice their standard error), this can be viewed as evidence supporting the convergent validity of those indicators (Anderson and Gerbing 1988). Table 2 presents that all t-tests were significant showing that all indicators were effectively measuring the same construct, or high convergent validity. In addition, those reliability coefficients were also found acceptable: 0.866 (responsiveness), 0.766 (assurance), 0.772 (empathy), 0.829 (tangibles), and 0.891 (reliability). For subsequent measurement model evaluation and hypothesis testing, we aggregated the SERVQUAL to have five indicators (i.e., RES, ASS, EMP, TAN, and REL) by summing of the measurement items at the first-order construct level.

Table 2 Sig. (2-Tailed) and T values of SERVQUAL scale			
Parameter	Sig. ( 2- Tailed)	T-Value	Reliability (Cronbach's $\alpha$ )
Responsiveness			.866
RES 1	.000	-4.187	
RES 2	.000	-4.119	
RES 3	.000	-5.327	
RES 4	.000	-3.987	
Assurance			.766
ASS 5	.000	-3.796	
ASS 6	.010	-2.619	
ASS 7	.002	-3.112	
ASS 8	.002	-3.188	
Empathy			.772
EMP 9	.004	-2.938	
EMP 10	.000	-4.191	
EMP 11	.000	-3.697	
EMP 12	.003	-3.063	
Tangibles			.829
TAN 13	.047	2.009	
TAN 14	.480	.709	
TAN 15	.917	.104	
Reliability			.891
REL 16	.002	-3.235	
REL 17	.004	-2.947	
REL 18	.001	-3.306	
REL 19	.000	-4.950	

The second measurement model included customer satisfaction, price, and firm image. We calculated Cronbach's alpha for the scale items to ensure that they exhibited satisfactory levels of internal consistency. Reliability was checked by calculating Cronbach's alpha. The reliabilities of these scales were .788 (customer



satisfaction), .842 (price), and .844 (firm image), respectively .

### Analysis and Results

Regression results of customer satisfaction and service quality:

H1: Service qualities have a positive effect on overall customer satisfaction

**Table : Summary of Model 1 Between Service Quality and Customer Satisfaction**

Model	R Square	Adjusted R Square	Durbin-Watson		Sum of Squares	df	Mean Square	F	Sig.
1	.366	.332	1.873	Regression	12.874	5	2.575	10.860	.000(a)
				Residual	22.286	94	.237		
				Total	35.160	99			

a Predictors: (Constant), rel2q, tan2q, res2q, emp2q, ass2q

b Dependent Variable: customer satisfaction1

The above model summary indicates that the model explains 36.6 % of the variability (dispersion) in the dependent variable also above F value and significance level indicates that the independent variables, service quality (res, ass, emp, tan, rel) explain a highly significant proportion of the variation in the dependent variable, customer satisfaction. Therefore our first hypothesis has been accepted.

**Table: Coefficients for Model 1**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.399	.058		75.944	.000
	RESAVEQS	.211	.197	.250	1.073	.286
	ASSAVEQS	-.049	.240	-.054	-.205	.838
	EMPAVEQS	.274	.130	.307	2.111	.037
	TANAVEQS	.013	.063	.019	.201	.841
	RELAVEQS	.139	.117	.159	1.185	.239

a. Dependent Variable: customer satisfaction

The above coefficients and significance levels indicate that empathy has the greatest influence on the dependent variable, customer satisfaction, (0.307).The direction of influence is positive.

**Table: Collinearity Diagnostics for Model 1**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions					
				(Constant)	res2q	ass2q	emp2q	tan2q	rel2q
1	1	3.776	1.000	.02	.01	.00	.02	.01	.02
	2	1.137	1.823	.19	.00	.00	.00	.44	.00
	3	.555	2.608	.77	.02	.01	.00	.34	.00
	4	.268	3.757	.00	.08	.04	.04	.15	.67
	5	.219	4.153	.01	.03	.00	.87	.04	.30
	6	.045	9.139	.01	.87	.95	.07	.03	.00

a Dependent Variable: customer satisfaction1

### Regression results of firm image and customer satisfaction:

H2: Firm image have a positive effect on overall customer satisfaction

**Table: Summary of Model 2 between Firm Image and Customer Satisfaction**

Model	R Square	Adjusted R Square	Durbin-Watson		Sum of Squares	df	Mean Square	F	Sig.
2	.167	.149	1.949	Regression	5.859	2	2.930	9.699	.000(a)
				Residual	29.301	97	.302		
				Total	35.160	99			

a. Predictors: (Constant), firm image8, firm image7

b. Dependent Variable: customer satisfaction1

The R value in the above table indicates that model explain 16,7% of the variable in the dependent variable. Significance level in the above table indicates that the independent variables (firm image) explain a highly significant proportion of the variation in the dependent variable (customer satisfaction).

**Table: Coefficients for Model 2**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.737	.349		7.831	.000
	firm image7	.383	.119	.442	3.221	.002
	firm image8	-.036	.103	-.047	-.345	.731

a. Dependent Variable: customer satisfaction1

Coefficients in the above table indicate that overall firm image is highly significant explanatory variable for the customer satisfaction (0.442). The direction of influence is positive. Therefore our second hypothesis has been accepted.

**Table: Collinearity Diagnostics for Model 2**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions		
				(Constant)	fýrm ýmage7	fýrm ýmage8
2	1	2.974	1.000	.00	.00	.00
	2	.019	12.622	.81	.02	.31
	3	.007	19.996	.19	.98	.69

a. Dependent Variable: customer satisfaction1

**Regression results of price and customer satisfaction:**

**H3: Price of service directly influences customer satisfaction**

**Table: Summary of Model 3 between Price and Customer Satisfaction**

Model	R Square	Adjusted R Square	Durbin-Watson		Sum of Squares	df	Mean Square	F	Sig.
3	.103	.075	1.928	Regression	3.638	3	1.213	3.694	.014(a)
				Residual	31.522	96	.328		
				Total	35.160	99			

a. Predictors: (Constant), price6, price4, price5

b. Dependent Variable: customer satisfaction1

The R square in the above table indicates that model explains 10.3 % of the variability in the dependent variable also the above F value and significance level indicates that the independent variable, price, explain a moderately significant proportion of the variation in the dependent variable (customer satisfaction). Therefore our third hypothesis has been accepted.

**Table: Coefficients for Model 3**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.079	.357		8.630	.000
	price4	.244	.108	.296	2.267	.026
	price5	.049	.100	.067	.488	.627
	price6	-.018	.109	-.025	-.168	.867

a. Dependent Variable: customer satisfaction1

The above coefficients and significance levels indicate that the price compared to quality has the greatest influence on the dependent variable, customer satisfaction, (0.296). The direction of influence is positive.

**Table: Collinearity Diagnostics for Model 3**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	price4	price5	price6
3	1	3.953	1.000	.00	.00	.00	.00
	2	.023	13.067	.65	.01	.23	.10
	3	.014	16.943	.21	.41	.58	.15
	4	.010	19.774	.14	.58	.19	.75

a. Dependent Variable: customer satisfaction1

**Regression results of price and service quality:**  
**H4: Price of service directly influences service quality**  
**Table: Summary of Model 4 between Price and Service Quality**

Model	R Square	Adjusted R Square	Durbin-Watson		Sum of Squares	df	Mean Square	F	Sig.
4	.225	.201	1.857	Regression	7.584	3	2.528	9.278	.000(a)
				Residual	26.159	96	.272		
				Total	33.743	99			

a. Predictors: (Constant), price6, price4, price5  
 b. Dependent Variable: SQ

The R square in the above table indicates that model explains 22.5% of the variability in the dependent variable (service quality).

**Table: Coefficients for Model 4**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
4	(Constant)	-1.913	.325		-5.887	.000
	price4	.199	.098	.247	2.032	.045
	price5	.150	.091	.210	1.640	.104
	price6	.061	.100	.086	.613	.542

a. Dependent Variable: service quality

The above findings indicates that the independent variable price, explain a slightly significant proportion of the variation in the dependent variable (service quality) and price compared to quality (price4) has the greatest influence on the dependent variable (service quality). The direction of influence is positive (0.247).

**Table: Collinearity Diagnostics for Model 4**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions			
				(Constant)	price4	price5	price6
4	1	3.953	1.000	.00	.00	.00	.00
	2	.023	13.067	.65	.01	.23	.10
	3	.014	16.943	.21	.41	.58	.15
	4	.010	19.774	.14	.58	.19	.75

a. Dependent Variable: service quality

Autocorrelation' and 'multicollinearity' are the basic problems of regression analysis. When tables for four models are considered together, the same generalized evaluation can be made as follows:

The Durbin-Watson test is a widely used method of testing for autocorrelation. The Durbin-Watson Statistic is used to test for the presence of serial correlation among the residuals. Unfortunately, SPSS does not print the probability for accepting or rejecting the presence of serial correlation, though probability tables for the statistic are available in other texts. The value of the Durbin-Watson statistic ranges from 0 to 4. As a general rule of thumb, the residuals are uncorrelated is the Durbin-Watson statistic is approximately 2. A value close to 0 indicates strong positive correlation, while a value of 4 indicates strong negative correlation (Durbin and Watson, 1971). *Durbin-Watson should be between 1.5 and 2.5 indicating the values are independent* (Statistica). As shown in the relevant tables above all Durbin-Watson values belonging to four models are between 1.5 and 2.5 showing the absence of auto correlation.

Collinearity diagnostics were run to test for possible multicollinearity among the explanatory variables in model 1, model 2, model 3 and model 4. The relevant tables show multicollinearity test results. As can be seen from all relevant tables, there is no evidence of a multicollinearity problem since the condition index for each dimension is lower than 30 and at least two variance proportions are lower than 0.50 (Tabashnick and Fidell, 1996).

**Discussion and Implications for management**

This study added to the understanding and applicability of SERVQUAL by examining the validity of the instrument in the context of accounting firms. In addition, we also explored the relationship among customer satisfaction, service quality, firm image, and price of service rendered by calculating the mean differences between perception and expectation.



**Table 3 Perception, Expectation and mean differences**

	Perception				Expectation				Mean differ.
	Top box	Low box	Mean	Std Dev.	Top box	Low box	Mean	Std Dev.	
<b>Responsiveness (RES)</b>									
QS1	4.4804	4.2196	4.350	.65713	4.7017	4.4983	4.600	.51247	-.250
QS2	4.3681	4.0719	4.220	.74644	4.6471	4.4329	4.540	.53973	-.320
QS3	4.3971	4.1229	4.260	.69078	4.7905	4.5895	4.690	.50642	-.430
QS4	4.4716	4.1684	4.320	.76383	4.7546	4.5354	4.640	.57770	-.320
Total:			17.15				18.47		-1.32
<b>Assurance (ASS)</b>									
QS5	4.4608	4.1392	4.300	.81029	4.7700	4.5500	4.660	.55450	-.360
QS6	4.5844	4.3556	4.470	.57656	4.7531	4.5469	4.650	.51981	-.180
QS7	4.5621	4.2579	4.410	.76667	4.7864	4.5936	4.690	.48607	-.280
QS8	4.6345	4.4055	4.520	.57700	4.8319	4.6481	4.740	.46319	-.220
Total:			17.70				18.74		-1.04
<b>Empathy (EMP)</b>									
QS9	4.4955	4.2645	4.380	.58223	4.6837	4.4563	4.570	.57305	-.190
QS10	4.3912	4.0288	4.210	.91337	4.6727	4.4673	4.570	.51747	-.360
QS11	4.4035	4.0565	4.230	.87450	4.6899	4.4701	4.580	.55377	-.350
QS12	4.3154	3.9846	4.150	.83333	4.5773	4.3227	4.450	.64157	-.30
Total:			16.97				18.17		-1.20
<b>Tangibles (TAN)</b>									
QS13	4.4788	4.2012	4.340	.69949	4.3170	3.9030	4.110	1.0434	.23
QS14	4.3921	4.1079	4.250	.71598	4.3429	4.0171	4.180	.82118	.070
QS15	4.3869	4.0931	4.240	.74019	4.3762	4.0838	4.230	.73656	.001
Total:			12.83				12.52		.310
<b>Reliability (REL)</b>									
QS16	4.6331	4.3269	4.480	.77172	4.8497	4.6703	4.760	.45216	-.280
QS17	4.6544	4.4056	4.530	.62692	4.8408	4.6592	4.750	.45782	-.220
QS18	4.6822	4.3978	4.540	.71661	4.8846	4.7154	4.800	.42640	-.260
QS19	4.6636	4.3964	4.530	.67353	4.9661	4.8339	4.900	.33333	-.370
Total:			18.08				19.21		-1.13

**Dimensionality of SERVQUAL**

The five dimensions of SERVQUAL (i.e., Responsiveness, Assurance, Empathy, Tangibles, and Reliability) were supported by the data collected here. This study also found that a significant expectation gap does exist in the sample population. On average, management appears to be only marginally satisfied with accounting firms' service quality. Since the average difference score was calculated by perception minus expectation (negative values imply that perceptions fall short of expectation, and positive values imply that perceptions exceed expectations), the mean score also indicates that the higher (less negative) the score, the higher is the level of perceived service quality. This implies that there is still some room for improvement in terms of service quality. Specifically, they are responsiveness (mean score= -1.320), empathy (mean score= -1.200), reliability (mean score= -1.130), and assurance (mean score= -1.040) from the highest to lowest in order. This indicates that clients need more responsiveness and empathy from their accounting firms and less care about accounting firms' assurance. This result makes sense since most of the filed work is performed at the client's sites. So if an accounting firm needs to stand out in a highly competitive environment, more concerns to their clients are greatly needed. We have positive mean score only for tangibles which means that perceptions of respondents statistically equal to their expectations.

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