

Service Quality, Customer Attitude and Subscription Behavior: A Structural Equation Modeling Approach to Determine Mediating Relationship

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Abstract: The research study aims to investigate the nature, strength and direction of association between service quality and customer subscription behavior with attitude's mediation role. To achieve stated objective, causal research was designed where quantitative data was collected through self-administered questionnaires and 416 observations were collected from customers surveyed using convenience sampling. Instrument was adapted. Firstly, Regression Analysis with PROCESS Add-in was conducted to quantify the associational relationships. 2nd-order factor-based structural regression Model has been developed and tested for the study. Data analysis proves partial mediation. Service quality was having 92% positive direct influence on Customer subscription behavior but reduced to 39% because of mediating effect of attitude. This study offers new empirical support for the proposition that attitude towards service provider play mediating role between perceived service quality and subscription behavior. As such, findings from this study aspires managers to develop attitudinal strategies in order to increase customer retention and acquisition in telecommunication services. The findings can be generalized by expanding the industrial dynamics in sampling frame. The research study significantly contributes to existing body of service management literature because of its inherent empirical nature. The findings can be applied in variety of Subscription-base industries including magazines, websites, online social communities, newspapers, cable T.V, event management and financial services.

Key words: Service Quality • Consumer Attitude • Subscription Behavior • Telecommunications Industry
• Structural equation modeling

INTRODUCTION

Subscriptions are not a new form of retailing but they are in practice from a long time [1]. Many industries were benefited from subscription mode of retailing. Subscription Behavior has been defined as purchasing of products and services as a regular or for some specific time period [2]. Goods and services sold via subscriptions include printing industry, social networking sites, podcasts, health club membership, telecommunication services and many household items. It's common in various consumer and client industries to provide incentives to new members in the form of discounts and trial to attract the customers in order to increase subscription rate.

A notable demand for subscription rate is being felt as markets are getting more and more fragmented and most of commodities are now considered homogenous in nature, hence the service quality may have a notable

impact on the buyer subscription behavior. Service Quality is the degree or direction of discrepancy between perceived quality and expectations [3].

Several authors [4, 5] have carried out research initiatives to find impact of service quality on various dimensions of consumer behavior in various industries. However, each study exclusively focused on direct effects of five dimensions of service quality proposed in SERVQUAL model [6]. Service quality's indirect effect on customer behavior has not been tested and generalized on broader level especially with customer's attitude towards Telecom service provider as a mediator. Furthermore, it's evident from the phase of desk research that the buyer subscription behavior in telecommunication services has not been explored in the U.A.E.

Research Objectives: The present research intends to analyze the indirect effect of service quality on subscription behavior with attitude towards telecom

services as a mediating variable. Telecommunication market of UAE is perceived as one of the largest target market in emerging economies. An extensive amount of research has been and is being conducted all over the world to quantitatively determine the service quality's contribution to buyer subscription behavior, however, it is important to disclose that sufficient research studied have not been conducted to explore consumer dynamics in UAE which makes it a very viable area of research.

Literature Review

Marketing Concept and Subscription Behavior:

Consumer behavior research has witnessed a tremendous growth in the last 65 years since the inception of 'The marketing concept' [7]. The Marketing concept asserts importance of Customer as the focal stakeholder and centre of every marketing decision in any organization around the globe [7, 8]. These customers have been categorized as business clients and individual consumers. Business customers are the clients who enjoy an umbrella of contractual arrangement while individual consumers are the ones who purchase some goods and services for personal or home usage [7]. Many of individual, home or business services are acquired by these customers through paid subscriptions.

Quality has been considered a tool to drive customer satisfaction in both products oriented and service oriented firms [9]. A services provider, while inquiring about the potential problem they might face in services provision process, it can focus on three tries/levels in order to comprehend the 'Service Game' and can devise strategies accordingly to and up as a service winner and champion [9, 10].

The three tier view is the bottom to top approach in term of importance of each tier. The very import tier of any service organization is the CUSTOMER TIER. Customers are considered as the foundation of service organization and customers are not external to the organization they are the part of organization. The customer tier is analyzed in term of expectation for quality and need for security, esteem and justice.

The second important tier is the BOUNDARY TIER which is conceptualized as everything with which customer came in contact during service encounter including people, equipment and the overall ambience.

The third and last important tier is COORDINATION TIER. This tier is responsible for managing all the entire service climate and departments like marketing, operations, finance, human resource etc. The management

have to be very careful in controlling the entire environment as mistake in service cannot be unfold even if corrected later, as it leaves an impact on customers mind [11].

Service Quality: Defining the notion of service quality initially starts with a customer orientation, as quality is perceived by the customers and if meets or exceeds his perceptions further leads to profitability [12]. Service quality is also defined as the degree or direction of discrepancy between perceived quality and the expectation [6]. It's obvious that if the perceived quality is same as it was expected, the service quality [13] will be positive resulting in satisfied customers [14, 15]. However, if the perceived quality is not as per the expectations, negative attitude of the customers towards the service will result in customer loss [14, 15]. Service quality is most commonly defined as difference between perceived and expected service [16]. Past studies have proved the positive relationship between service quality and satisfaction [17, 18].

Customer Expectations serve as benchmark and foundations to access whether product or services is quality oriented or not [19]. If performance of product and services meets customer expectations, it is considered quality oriented and if it falls short of expectations than customer does not perceive it quality oriented [20].

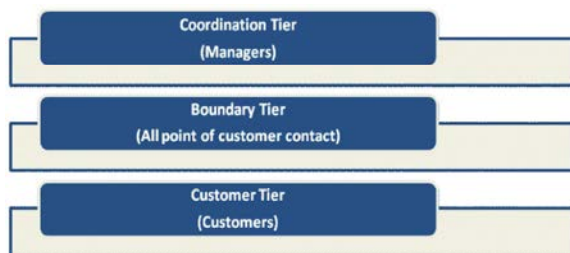


Fig. 1: Three tiered view of service Organization

Measuring Service Quality: Service quality deals with interaction between customer and service provider. It is very important to determine whether the perceived quality is positive or negative. There are two major approaches being used by the service providers to estimate the Service quality which are Passive Approach and Active approach [13]. In Passive approach the comments card are available at the counter, customers can pick up the comment card and fill it out if they wish to, whereas, the active approach is the formal survey and interview taken from the customers. The former approach is considered to be more accurate and reliable [21].

Table 1: Application of Service Dimensions in Telecom Sector

Service Dimension	Conceptualization and Application
1. Tangibility	The appearance of physical facilities, equipment, personnel and communication material of an organization e.g., Number of service centers, location of centers, counters in each service centre, design and layout of centers and Aesthetics of Centers along with employees.
2. Reliability	Ability of employees to perform the promised service dependably and accurately is the reliability e.g., number of complaints received versus number of complaints resolved versus number of complaints pending.
3. Responsiveness	Ability of Employees to provide timely and prompt responses e.g., waiting time for customers in physical and online settings.
4. Assurance	Ability of employees to assure customers about solvability of their issues and complaints e.g., knowledge about operating procedures and processes.
5. Empathy	Attitudes, communication and caring behavior of employees when they are having interactions with customers on any medium of access.

A perceived service is, thus, the outcome of how customers judge different dimensions of services quality. The Gaps Model [21, 22] continues to dominate amongst the service analysis and improvement frameworks. It determines where does the problems lies, what are the root causes and potential consequences and then suggest how to resolve them in order to increase customer satisfaction.

There are different models to quantify the service quality of products and services. The two essential approaches to conceptualizing and measuring service quality are SERVQUAL model and SERVPERF model [23]. The SERVPERF model was proposed by Cronin & Taylor (1992/1994) and it distinguishes perceived quality from expected quality, whereas, the SERVQUAL model which was later known as rater model is a quality management framework [3].

Parasuraman *et al.*, (1988) proposed SERVQUAL methodology consisting of five dimensions (reliability, assurance, tangibles, empathy and responsibility). Which have been a core service quality analysis toolkit and have been used, adopted and revised by many later scholars for their particular domains [24, 29]. The Table 1 presents conceptualization of 5 dimensions of services quality with respect to telecommunication industry. Managerial choices about any of 5 services dimensions can positively or negatively affect customer attitude towards service provider.

This approach contains five elements i.e. reliability, assurance, tangibles, empathy and responsiveness. A questionnaire is used to measure both the services expectation and perception [3, 13]. When service is perceived as positive, it will attract the customers to repeat the buying behavior, as buying behavior increase the loyalty factor in the customers would arise [29, 30].

In modern growing economy and increasing competition, SQ is considered very essential for the success and survival of the organization [22]. Whenever

the study is conducted on service quality, the gap is to be examined between expectation and perception of the service received by the service provider [31].

Servqual: Parasuraman (1985/1988) designed the SERVQUAL model. This model helps in better understanding the difference between expectations and perception of the customer [13]. The model contains 22 item questions which can be used in any service sector with some adjustments and changes. This model covers 5 dimensions which are tangibility, reliability, responsiveness, assurance and empathy. The data collected through this model assist the service provider to evaluate the difference between the expected service quality and perceived service quality. There are 5 Gaps in the SERVQUAL; these gaps are between the expectation and actual outcome of quality

GAP1: Gap between consumer expectations and management perceptions.

GAP2: Gap between management perception and SQ specification.

GAP3: Gap between SQ specification and service delivery.

GAP4: Gap between service delivery and external communication.

GAP5: Gap between perceived service and expected service.

Attitude: Attitude has been studied by social psychologist for last many years decade's. Marketers have used the concept of attitude to study the how consumer respond to the products and services offered[25-40].

Responses are classified in three types as actions, feelings and thoughts according to Tripartite Model [32]. Later, Ajzen & Fishbein, (1980) agreed with the Triandis (1980) argument that attitude represents person favorable and unfavorable feelings.

Attitude is person overall evolution of an objective it can be positive or negative. Evaluation is done by effective and cognitive system. Effective system consist of emotions, feelings, moods while Cognitive system refers to of consumer overall evolution based on knowledge, meanings and beliefs about object [15]. Attitude is based on the knowledge about market offering [21, 34, 35].

Attitude has been always been a primary research area for the all types of psycho logistics, however, it had no formal definition till year 1935. Allport (1935) offers a definition of attitude after understanding and reviewing 16 definition of attitude which have been developed and explain by previous researchers. Attitude, according to Allport, (1935), is "A mental and neural state of readiness, organized through experience, asserting a directive or dynamic influence upon the individual's response to all objects and situations with which it is related". Since then, researchers have evaluated, favored and extended this definition of attitude by applying it on various fields of study e.g. marketing and organizational behavior. Eagly and Chaiken (1993, 1998) describe attitudes as "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor". Prominent scholars have described attitude in variety of way, however, they have developed consensus on concept of evaluation being central to definition of attitude. Attitudes, thus, refers to a person's overall evaluation of objects, persons, organizations events which may result in positive and negative responses [37].

There have been many approaches to determine how do consumers evaluate the brands and what shape their response. Marketers improve service quality by focusing on reliability of their services offering. Customer expects the performance of service provider to be consistent and dependable [7, 13]. Marketers need to provided services on time and whenever needed by customers. Moreover, employees must be able to reduce customer dissonance whenever a problem a rises and they need to assure customer about solvability of complaint in a caring way in order to avoid or reduce customer chaos [38].

Customers encounter with service personnel, service itself, other customers waiting to be served in service outlet affect customer attitude toward the company and his intention to subscribe & generate word of mouth increases or decreases accordingly [39].

Customer Subscription Behavior: Subscription behavior has been defined as purchasing of products/services as a regular or for some specific time period [2]. Drucker

(1965) suggests winning and then retaining a customer as sole purpose of business and employing marketing strategies are, primarily, employed to win the customers share of wallet and heart. The success of marketing initiatives is determined through their ability of getting to know, entertain and influence customers in order to convert them from a prospect to a loyal customer [13].

Furthermore, a model of service consumption was proposed by Lovelock and Wirtz (2007/2010) which had pre-purchase stage, service encounter stage and post-purchase stages as three major stages a customer goes through to purchase any high-involvement or low-involvement service [41-56].

Pre-purchase stage refers to need recognition and information search for alternatives to alleviate that need [13, 23]. In the Second stage, potential solutions or alternatives are evaluated and compared and then customer places order for the desired service. This stage is known as service encounter stage because customer has encounter with producer, environment and other customers in the service centre and is thus known as moment of truth [13, 23]. In the third stage, post-consumption evaluation of the service is carried out. Customer compares service's actual performance with desired performance and depending on the zone of tolerance, develops positive or negative intentions towards future consumption of the service. This is the stage in which satisfaction or dissatisfaction will occur and the loyalty decision will be made by the customer [13, 23].

In the process of purchasing or subscribing to a mobile telephony service, the customer assesses the mobile service based on his/her evaluation of expected benefits versus risks and whether product/service attributes has fulfilled, exceeded or failed to satisfy expected bottom line. If service quality satisfies customer's expectations, customer will be satisfied and may return to purchase in future and if it exceeds his expectations, he will surely be returning back [13, 14]. However, if the expectations are not fulfilled by service performance, customer will churn [13].

MATERIALS AND METHODS

Research design refers to the plan, strategies, techniques and tools used to conduct investigation of any research problem [40]. The research is causal in nature as it intends to explain the cause-and-effect relationship between one independent, one dependant variable and one mediating variables. Researcher's dependence on primary data makes it primary research,

although this method of research requires lots of time and cost but it increases the quality of research being conducted. By using the primary data collection method, the researchers plan to have a tighter control over the research [57].

As, this research intends to inspect the effect of the service quality on customer subscription behavior along with customer attitude's mediation role in stimulating this effect, quantitative research techniques are needed for both data collection and data analysis. In order to collect data, survey technique is considered reliable one and thus, questionnaire has been adapted from the existing body of knowledge.

Hypotheses: As discussed above, the researchers intend to investigate the nature, strength and direction of association between service quality, attitude and buyer subscription behavior. In order to fulfill the stated objective, researchers developed following hypotheses.

H1: Service Quality positively impacts buyer subscription behavior.

H2: Service Quality positively impacts customer's attitude towards Telecom Service Provider.

H3: Attitude positively impacts buyer subscription behavior.

H4: Service quality positively impacts buyer subscription behavior mediated by Customer's attitude towards service provider.

Sampling Design: Respondents are all those people or participants who are involved in research for the purpose of extraction of information [41]. Respondents of this research include employees who work in organizations including DU telecommunication, KHDA and students from different universities. A total of 416 observations were collected using self-administered questionnaires and results were deduced from them.

Stevens (2009) suggests that a good rule of thumb in a multiple regression analysis is 15 cases per predictor. It is further suggested that in associational analyses, researcher can even go for five cases per variable but only if the distribution of collected data is perfectly normal and there are no outliers [42, 43]. So it is very important to distinguish that the Bentler and Chou (1987) and Steven's (2009) recommendations slot in at about five to fifteen cases for one variable. Furthermore, many researchers suggest a minimum of 10 observations per item in the questionnaire [44, 45].

Considering the suggestions [43, 44, 45], a sample of 300 observations was decided. However, a total of 416 observations were collected. The sampling technique employed was convenience sampling. Though it is a non-probability sampling technique, but was considered suitable because of time and cost constraints.

The data was reviewed and incomplete or inappropriate responses were eliminated after data screening. Missing Values Analysis (MVA) was carried out in SPSS and Expectation Maximization was used and missing values were replaced with series mean.

Research Instrument: This research was a primary in nature as the data was collected first hand. The research instrument was adapted from [2, 6, 13, 25, 46] and a self-administered questionnaire consisting of 2 parts was developed. The first part contained 5 demographic questions while the inferential part was subdivided into 3 categories mainly items belonging to Service Quality, Attitude and Customer Subscription Behavior. A 5-point summated rating scale, which is a variation of Likert-scale, was used where 5 refer to Strongly Agree and 1 refers to Strongly Disagree. The design of the questionnaire is as follows. As discussed above, questionnaire starts with demographic questions where first question asked gender of the respondent. The second question was of employment status. The third question probed about preferred service provider. The forth question was about preferred packages. The fifth question was of preferred type of service. The second part of questionnaire was divided according to three variables; services quality, attitude and subscription behavior. Service quality was further divided into five factors on the bases of SERVQUAL model proposed by [47, 48]. SERVQUAL is the active approach to measure the SQ. This approach is known to be more valid and standardized instrument. The use of this instrument is very common in the retail industry i.e. banks, hotels, restaurants, hospitals, telecommunication, travel agencies and libraries [21, 48, 49]. Attitude had three items borrowed from ABC model of attitude formation. Subscription behavior identifies five items which have been adopted from [37, 46, 50].

Reliability and Validity of the Research Instrument: As discussed above, the survey instrument was adapted from existing body of knowledge. However, it is absolutely necessary to establish construct validity along with reliability [43, 45]. For the purpose of establishing reliability and validity, researchers have used Cronbach's

Table 2: Reliability and Validity analysis

Variables	Cronbach's Alpha	CR	AVE	MSV
Service Quality	.928	0.875	0.792	0.537
Attitude	0.780	0.773	0.729	0.461
CSB	0.852	0.824	0.764	0.528

Alpha, composite reliability (CR), average variance extracted (AVE) were used to assess convergent validity. AVE is considered an outdated measure of convergent validity. Malhotra and Dash (2011; p.702) comment in their book as “AVE is a more conservative measure than CR. On the basis of CR alone, the researcher may conclude that the convergent validity of the construct is adequate, even though more than 50% of the variance is due to error.” Cronbach’s Alpha, on the other hand, ensures the internal consistency of the questions and responses. The values provided in Table 2 substantiate that researchers have ensured overall aggregate reliability.

Data Collection Procedure: The data collection process for this research was that surveys were physically distributed. The researchers distributed it along with pen given to respondents and with cover letter explaining a brief background of research and ensuring confidentiality. Respondents could fill the questionnaire and immediately the researcher could view responses.

Statistical Tool Analysis: Researchers used descriptive statistics to uncover perception patterns in Nominal and ordinal variables. However, multiple regression analysis was performed in order to find the cause-and-effect relationship between SQ and customer Subscription Behavior with attitude as a mediating variable. To check the mediating effect of attitude, researchers’ used 3 techniques in consideration which were Sobel’s Test, Bootstrapping and Structure equation modeling (SEM). Sobel [51] proposed an approach of multiplying two regression coefficients obtained in Model 1 and Model 2. However, Sobel’s test is an outdated approach and is considered a flawed one because of its inability to analyze complex models. Bootstrapping is another technique to check the mediation models but researchers decided to not use it because of its non-parametric nature. Researchers used Structure equation modeling (SEM) to do a path analysis of conceptual framework. Table 3 provides a summary of all statistical techniques used to conduct the analysis.

RESULTS

Hypotheses Testing: Theory claimed causal relationship between SQ and subscription behavior mediated by customer attitude towards service provider. In mediation analysis, 2 models surface. Model 1 claims the direct effect of predictor (SQ) on outcome variable (CSB) while model 2 determines indirect effect of SQ on CSB with mediating effect of attitude (M). In order to test hypothesis, researchers [43, 45, 52, 53] suggest the use of parametric tests because of greater accuracy, authenticity and inferential power. However, parametric statistics require certain assumptions to be checked in order to proceed further. Any violation of these assumptions does not allow researchers to move ahead and thus, non-parametric tests will be utilized. Table 3 provides a summary of assessment checks.

Assumptions of Parametric Statistics: As illustrated in Table 3, parametric statistical testing requires the data to have 6 characteristics. Firstly, the scale used to collect data shall have internal consistency and composite reliability. It has been tested using Cronbach Alpha, CR, AVE and MSV. The results (Table 2) revealed a reliable and valid measurement scale. Secondly, parametric statistics require sample adequacy and was tested using item-based rule, KMO & Bartlett’s test and HOELTER test. The results indicated data adequacy and sufficiency. Thirdly, data shall be normally distributed and it can be tested using Skewness and Kurtosis as well as Kolmogorove-Smirnov test. All of the values of skewness and kurtosis were within the range of +1 to -1.

Hence, data was found normally distributed. Fourthly, parametric statistics require data to have linearity and is usually tested using residual plots with Fitline. Residual plot indicated a perfectly linear line and heteroskedasticity was absent.

A very important assumption of causal analysis is absent of multicollinearity and is usually tested using Tolerance values, VIF values and condition Index. Results obtained in regression indicated no multicollinearity. Lastly, there shall be no correlation among independent variables and it is tested through Durbin Watson test. When applied, value of 1.938 indicated no presence of autocorrelation.

Mediation Analysis Using Process: When analysis was executed using PROCESS Ad-on and results are shown in Table 4, Model 1 yielded significant relationship (p=0.00)

Table 3: Parametric Statistics Assumptions check

Analysis / Test	Technique	Finding	Conclusion
1. Reliability Analysis	•Cronbach Alpha	•Above 0.59.	•Scale is Reliable and has no validity problem.
	•CR	•Above 0.70	
	•AVE	•Above 0.50	
	•MSV	•Less than AVE	
2. Sample Adequacy	•Item-Based Rule	•30 * 10 = 300 < 416	•Sample Size is sufficient and Adequate
	•KMO & Bartlett's Test	•0.850	
		•P = 0.00	
3. Data Normality	•HOELTER (0.05 & 0.01)	•244 & 256 < 416	•Data is normally distributed.
	•Skewness & Kurtosis.		
4. Multicollinearity	•Histograms.	Values are between -1 to +1.	•No multicollinearity.
	•Tolerance (>1-R ²)	•Tolerance values are above 1-R ² .	
5. Heteroskedasticity	•VIF	•VIF values are below 3.	•No Heteroskedasticity
	•Condition Index	•Values are below 30.	
	•Residuals Plot with Fit Line	•Linear line	
6. Autocorrelation	•Durbin-Watson	1.938	•No Autocorrelation
7. Casual Analysis	•Regression using PROCESS ad-on	•When attitude was entered as mediator, R ² value reduced but p-value remained significant.	•Partial Mediation

Table 4: Regression Results

Model = 4			
Y = CSB			
X = SQ			
M = Attitude			
Sample size			
416			
Outcome: Attitude			
Model 1 Summary			
R	R-sq	F	p
0.6998	0.4898	359.01	0.0000
Model 1			
	Coeff	T	p
Constant	0.3527	1.8483	0.0654
SQ	0.9277	18.9478	0.0000
Outcome: CSB			
Model 2 Summary			
R	R-sq	F	p
0.7582	0.5749	252.21	0.0000
Model 2			
	Coeff	T	p
Constant	-0.4353	-2.2468	0.0252
Attitude	0.3932	7.5220	0.0000
SQ	0.6826	9.8520	0.0000
Direct and Indirect effects			
Direct effect of X on Y			
Effect	T	P	
0.6826	9.8520	0.0000	
Indirect effect of X on Y			
Mediating Variable	Effect	BootLLCI	BootULCI
Attitude	0.3647	0.2474	0.4904
Partially Standardized Indirect Effect of X on Y			
Mediating Variable	Effect	BootLLCI	BootULCI
Attitude	0.3978	0.2688	0.5252
Completely Standerized Indirect effect of X on Y			
Mediating Variable	Effect	BootLLCI	BootULCI
Attitude	0.2488	0.1757	0.3263

Table 5: Item-based Factor Loadings

Items	Factor-loadings	P-Value
T1 (Tangibility)	0.53	0.000
T2 (Tangibility)	0.61	0.000
T3 (Tangibility)	0.63	0.000
RL1 (Reliability)	0.57	0.000
RL2 (Reliability)	0.63	0.000
RL3 (Reliability)	0.66	0.000
RL4 (Reliability)	0.65	0.000
RS1 (Responsiveness)	0.75	0.000
RS2 (Responsiveness)	0.74	0.000
RS3 (Responsiveness)	0.73	0.000
RS4 (Responsiveness)	0.56	0.000
RS5 (Responsiveness)	0.58	0.000
AS1 (Assurance)	0.72	0.000
AS2 (Assurance)	0.76	0.000
AS3 (Assurance)	0.77	0.000
AS4 (Assurance)	0.71	0.000
AS5 (Assurance)	0.74	0.000
EM1 (Empathy)	0.72	0.000
EM2 (Empathy)	0.69	0.000
EM3 (Empathy)	0.64	0.000
EM4 (Empathy)	0.66	0.000
EM5 (Empathy)	0.65	0.000
A1 (Attitude)	0.77	0.000
A2 (Attitude)	0.69	0.000
A3 (Attitude)	0.76	0.000
SB1 (Subscription Behaviour)	0.78	0.000
SB2 (Subscription Behaviour)	0.75	0.000
SB3 (Subscription Behaviour)	0.56	0.000
SB4 (Subscription Behaviour)	0.82	0.000
SB5 (Subscription Behaviour)	0.80	0.000

with γ^2 Value of 0.048. SQ positively ($t = 18.94$) impacts customer attitude and causes a change of 92% ($\beta = 0.92$). Analysis of model 2 revealed partial mediation because indirect effect of SQ on CSB was reduced from 0.6826 to 0.3647 while p-Value ($p = 0.00$) was still significant. The result was further substantiated by partially standardized effect (0.39) and completely standardized effect (0.24).

Structural Regression Model: Confirmatory factor analysis (CFA) was performed to measure the data fitness of latent variables with their constructs. Table 5 shows estimates along with P-Value of each construct and is reflecting strong factor loadings ($p = 0.3$) along with significant results ($p = 0.05$). CFA results strengthen the belief of inter-item consistency and true representation as no item was excluded from the instrument.

Structural regression model has been found exhibiting goodness-of-Fit. Researchers [43, 44, 45] suggest CMIN/DF (≤ 3.0), CFI (≥ 0.9), RMSEA (≤ 0.05), GFI (≥ 0.9) and AGFI (≥ 0.8). The results (Table 6) clearly prove goodness-of Fit of hypothesized model as value of all measures are greater than bottom-line values (CMIN/DF = 1.931, P = 0.00, CFI = 0.941, RMSEA = 0.047 and AGFI = 0.87)

All Four Hypotheses have been proved as p-Value for all causal relationships are below 0.05 and hence,

represent strong association. The β -Value for H1 is 0.790 representing a change of 79 % in CSB because of one degree change in SQ. Therefore, hypothesis I claiming positive impact of SQ on CSB is proved and accepted.

The regression weight between customer attitude and service quality is having a value of 0.832 revealing 83% positive change being caused by any change in SQ and thus, proving hypothesis II as well.

Moreover, hypothesis III claiming relationship between CA and CSB has also been proved as p-value is below 0.05 with β -Value of 0.708 revealing 70.8% positive change being caused in CSB by CA.

Lastly, hypothesis IV which claimed mediating effect of customer attitude between SQ & CSB has been accepted. Results show partial mediation as direct effect of SQ on CSB has been reduced from 0.790 to 0.338 upon addition of attitude as a mediator. However p-value (0.03) represents a significant partial mediating relationship.

Table 6: Goodness-of-Fit Statistics for Measurement Model

Model	NPAR	CMIN	DF	P	CMIN/DF
Default Model	83	737.832	382	0.000	1.931
Saturated model	465	.000	0		
Independence model	30	6426.781	435	.000	14.774
Baseline Comparison					
Model	NFI Delta1	RFI rho1	IFI Delta 2	TLI rho2	CFI
Default model	0.885	0.869	0.941	0.932	0.941
Saturated model	1.000		1.000		1.000
Independence model	0.000	0.000	0.000	0.000	0.000
RMSEA					
Model	RMSEA	LO 90	HI 90	PCLOSE	
Default model	0.047	0.042	0.052	0.797	
Independence model	0.182	0.178	0.186	0.000	

Table 7: Regression Weights

DV		IV	Estimate	S.E.	C.R.	P
Customer Subscription Behaviour	<-----	Service Quality	1.748	0.224	7.819	***
Attitude	<-----	Service Quality	0.604	0.042	14.272	***
Customer Subscription Behaviour	<-----	Attitude	0.708	0.164	4.323	***
Customer Subscription Behaviour	<-----	Service Quality	0.317	0.107	2.975	0.003

Table 8: Standardized Regression Weights

DV		IV	Estimate
Customer Subscription Behaviour	<-----	Service Quality	0.790
Attitude	<-----	Service Quality	0.832
Customer Subscription Behaviour	<-----	Attitude	0.548
Customer Subscription Behaviour	<-----	Service Quality	0.338

Table 9: Summary of Hypothesis Testing

Hypothesis	Concluded Status
H1: Service Quality positively impacts buyer subscription behaviour.	Accepted
H2: Service Quality positively impacts customer's attitude towards Telecom Service Provider.	Accepted
H3: Attitude positively impacts buyer subscription behaviour.	Accepted
H4: Service quality positively impacts buyer subscription behaviour mediated by Customer's attitude towards service provider.	Accepted

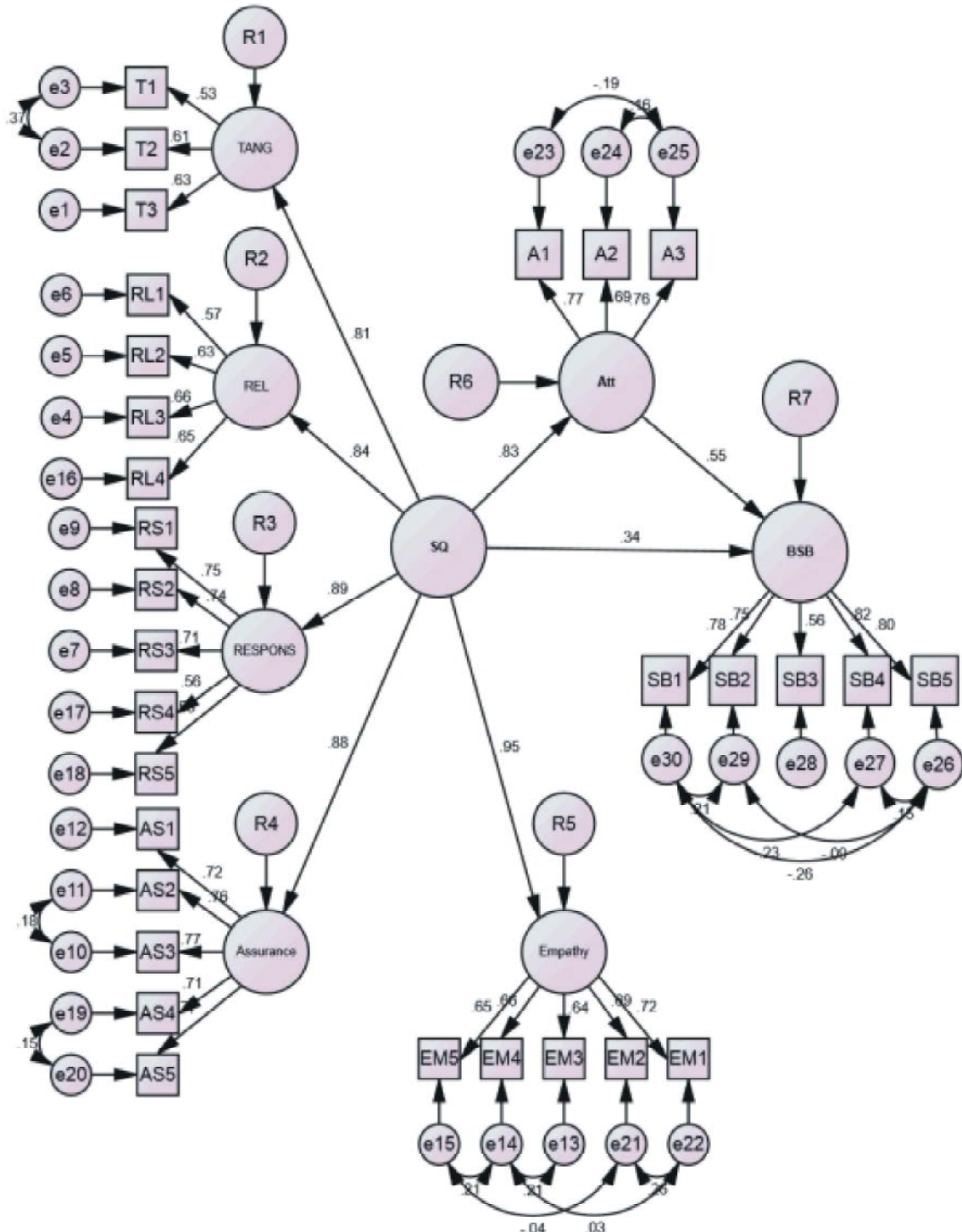


Fig. 2: Structural Regression Model with Standardized Coefficients

Managerial Implications: Descriptive analysis clearly charts customer's attitude towards the service determinants especially factors having propensity to influence at service encounter stage. Therefore, managers

need to focus on ambience of service outlets, appearance of employees, their ability of problem solving, effective communication with the customers and how do they behave with the customers.

According to the 'Servicescape' model, ambience is of due importance [23, 55, 56, 57]. The service centers should focus on making the physical infrastructure more appealing in terms of lighting, color, sounds, smells, temperature and availability of signage to guide customers through the service center. Moreover it's recommended that all the service centers should look similar, as it would reduce customer frustration of finding counters. Customer waiting times can be effectively managed and reduced by increasing number of self-serving kiosks.

Employees are the very first contact point which customers face and hence it matters that how they behave and act during service encounter. The facial expressions, dressing style and overall personality matters a lot for the customers. One study shows that the front line employees who were in professional dress were rated as good service quality as compared to the employees in casual dressing [31]. Managers should take the physical appearance of the employees as a serious issue in order to enhance the service quality. Employee wellbeing programs can be a viable option to increase their engagement and integrity with the organization. Special attention should be devoted to employee training, development and career progression. Frequent service learning workshops, seminars, webinars and conferences should be organized or employees should be encouraged to attend in order to make their encounter with customers more pleasant. Flexible working schedules can also reduce emotional labor and pleasant service encounters can be the resulting outcome.

Telecom companies of UAE should start thinking about some innovative techniques to match the expectations. Companies should try to make differentiation strategies so they would be able to serve in a better way as compared to the competitors. Speed should be further enhanced by improving fiber optics network and by having more number of service centers so that the traffic is controlled effectively and to reduce the number of customers waiting on hold to get their problems solved.

Availability and provision of services at all-times and through Omni-channels of access shall be ensured. An increase in quality, dependability, speed and flexibility of services ensures sustainable competitive advantage and companies' success in market.

CONCLUSION

Data analysis proves partial mediation. Service quality was having 92% positive direct influence on

Customer subscription behavior but reduced to 39% because of mediating effect of attitude. This study offers new empirical support for the proposition that attitude towards service provider play mediating role between perceived service quality and subscription behavior. As such, findings from this study aspires managers to develop attitudinal strategies in order to increase customer retention and acquisition in telecommunication services.

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