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A SCIENTIFIC APPROACH TO ASSESS THE ASSOCIATION BETWEEN QUALITY OF SERVICE AND LOYALTY OF CUSTOMERS USING CUSTOMER SATISFACTION AS A MEDIATOR

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ABSTRACT

Hospitality industry is encountering high competitive pressure due to innovations in technology, changing market scenarios and demanding market segments. All hotels are increasing their standards of quality of service to match the demand of specific market segments and achieve higher satisfaction of customers. The current study aims to examine the impact of quality of service on satisfaction of customers and loyalty of customers as well as the impact of satisfaction of customers on loyalty of customers. The study also aims to examine the mediating effects of satisfaction of customers on the relationship of quality of service and loyalty of customers. The study focused on star category hotels of Delhi and NCR. The total sample size taken was 500 customers of star category hotels. The analysis of the data was done using IBM SPSS software. Frequency analysis, correlation analysis and multiple linear regression analysis were used to analyze the relationship between variables. Sobel test was used to detect the mediating effects. The study proved that, there is a direct, positive and significant relationship between quality of service, satisfaction of customers and loyalty of customers. Satisfaction of customers mediates the relationship between quality of service and loyalty of customers. Improving the timeliness and accuracy of the service delivery process is a strategic plan for transforming dissatisfied consumers into loyal customers in hospitality industry. Similar studies can be conducted on other categories of the hotels like budget hotels or standalone properties. Advance research could be conducted by focusing on the needs and demands of customers from different market segments of the society.

KEYWORDS: Chronic kidney disease (CKD), atherosclerosis, hypertriglyceridemia.

SHORT FORMS: Quality of Service- SQ; Loyalty of Customers- CL; Satisfaction of

Customers - CS

INTRODUCTION

Hospitality associations have encountered highly competitive pressure for decades, and the competition in the market appears to be getting even more demanding in the coming years [1], specifically after pandemic. The trends in market are changing and competition is rising with innovations in technology and market scenarios. All hotels are increasing their quality-of-service standards to match the demand of specific market segments and achieve higher satisfaction of customers. For survival, sustainability and repeat business in hospitality industry, it is necessary that perceptions of services are customer consistent with expectations [2]. By improving the quality of service, hospitality business can survive the increasing competition in the market and achieve higher market share [3]. In hospitality industry, measuring the quality of service and customers satisfaction levels becomes even more important as it is a core serviceoriented industry. Customers' satisfaction and loyalty are largely determined by the quality of service provided, which shows that service quality is a significant angle in accomplishing satisfaction of customers and consumer loyalty [4,5].

The tourism and hospitality industries are critical economic generators for the government. As per IBEF information, India's travel industry and accommodation industry has arisen as one of the country's essential drivers of progress and advancement in service sector. The travel industry is a vital wellspring of foreign exchange earnings in India. Foreign exchange earnings have expanded at a CAGR of 7% from

2016 to 2019, however fell in 2020 because of the COVID-19 pandemic. From an expected US\$ 75 billion in financial year 2020, India's travel and tourism market is relied upon to develop to US\$ 125 billion by financial year 2027. The travel and

tourism industry will contribute \$122 billion (approx.) to the GDP in

2020. This is expected to reach US\$ 512 billion by 2028. Between 2019 and 2028, the industry's direct contribution to GDP in India, is forecasted to grow at a pace of 10.35 % per year. Due to increased consumer spending, there has been an demand increase in for luxury accommodations among Indian customers [6]. As a consequence, many nations are endeavouring to attract tourists and travellers to their places in order to fortify and strengthen their economies [7].

Guests have a variety of needs, but when it comes to the hospitality sector, quality of service is the most crucial component. Because the quality of service provided by star-rated hotels determines satisfaction of customers, a good quality of service strategy is necessary Substandard quality of service may hinder the demand and popularity of the hotel. To attract new guests the hotels, have to rely on sales and marketing department [9], but loyalty of customers can be increased by focusing on strategies related to quality of service [10].

The present market scenario indicates that the key to competitive market success is giving a high quality of service, which will result in a rise in satisfaction of customers. Therefore, measuring quality of service from customers' perception becomes essential for any hospitality organisation [12]. To please its consumers and gain their loyalty, hotels should provide a competitive service [13]. Satisfaction of customers has numerous advantages for the hospitality organisation, including the development of their strong relationship as well as the development of loyalty of customers [14]. Loyalty of customers is essential for hotels to keep their current customers. It is a behavioural concept shown by consumers that indicates loyalty of customers by repetitive purchasing of goods and services. from same organisation, are not interested

comparable brands, and want to promote to others. In long run, loyalty of customers may reduce operational and administrative costs and increase profitability of the organisation [15]. Overall, it can be said that developing loyalty of customers is one of the most famous strategies for a competitive advantage, by gaining providing high quality of service and exceptional features to the consumers [16]. In today's uncertain economy, traditional methods of managing and sustain an organisation are no more reliable. It is essential to look into new ways and strategies to meet the demands of the customer. Due to globalisation, the needs and demands of customers are changing dramatically [18]. This shift has impacted the expanding hotel industry, and we must be vigilant in the market to monitor and embrace creative customer service methods that will set us apart from the competition [17]. Keeping in view the fact the present study analyses the association between quality of service, satisfaction of customers and loyalty of customers.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPEMENT

Integrity of a business depends upon its quality of service. According to [11], quality of service is critical in ensuring that a business fully utilizes several opportunities given by the market in which it operates. [19] mentioned that company's survival is determined on the level of service it gives to its customers. In their study, [20] stated that great quality of service can take various forms in the hotel sector, but the most essential markers of good quality of service are cleanliness, safety, room upkeep, and a nice attitude from employees of hospitality industry. In their study, [21] established that any service sector may improve if it is concerned about maintaining quality of service. Author also mentioned that reasonable rates will help the firm develop and remain competitive in this market.[22] proved in their study

that satisfaction of customers is a subjective feeling, which is achieved when the given services meet or surpass the customer's expectations. Customers are more likely to be unhappy if their expectations are higher than the perceived services. [19] states that the expectations of the customers vary in purview of their knowledge and experience. Loyalty of customers, according to [23], is defined as abiding allegiance to a product or service that results in future purchases of the same brand regardless of other contextual considerations. Consumer loyalty, according to [24], refers customers' commitment to a service provider, such that they opt to utilise the same provider when they require a specific service or set of services. Consumer loyalty simple words means recurrent purchases for the company [25-26] described in their studies that satisfaction of customers is a result of many factors such as quality of service, service delivery, product quality, its price and individualized environment created by the organisation and employees. Customers' presence and participation have a significant impact on their fellow customers' service experience in service-oriented industries. In Malaysian airlines and retail banking, [27-28] through their research on online transportation, discovered that, improved and consistent quality of service has a strong influence on consumer satisfaction. [29] discovered that quality of service has an encouraging and substantial influence on consumer satisfaction. According to this study, satisfaction of customers is measured by how well customers perceive their needs have been met. Accordingly, the present research put forward the following hypothesis:

H1: Influence of Quality of Service on Satisfaction of customers is positive and significant.

The association strong correlation between quality of service and loyalty of customers, has been discussed and proved many times in past literature review [30-34]. Many

organisations may fail to reach the ultimate goal of loyalty of customers without high level of consistent quality of service. [34-35] also proved in their studies that, if the hotel's quality of service is inconsistent or below the industry standard, clients may get dissatisfied and stop purchasing, resulting in a significant loss in hotel revenues. Accordingly, the present research put forward the following hypothesis:

H2: Influence of Quality of Service on Loyalty of customers is positive and significant.

[31],[36-38] have discussed and proved respective studies their significance of satisfaction of customers in achieving loyalty of customers. The authors said that loyal customers recommend the hotel and brand to other prospective customers, show less brand switching intentions, and in turn prove profitable in long run to the organisation. However, [16] said that, an unsatisfied visitor may not normally express or report disappointment to the management, but he or she may notify or discuss the poor quality of service and negative experience with at least nine other individuals. Accordingly, the present research put forward the following hypothesis:

H3: Influence of Satisfaction of customers on Loyalty of customers is positive and significant. Previous research demonstrated the direct and indirect impact of quality of service on loyalty of customers. Satisfaction of customers, according to [39], has a role in the indirect effect. [40] describes in their study that; satisfaction of customers has a considerable impact on customers' projected attitudes and behaviours. Satisfaction of customers, according to [28], plays a role in mitigating the effects of quality of service on loyalty of customers. According to [41], exceptional quality of service can escalate the number of loyal customers by boosting their level of satisfaction. [43] concludes in their study that customers'

opinions of quality of service are formed by professional behavior and performance during the service encounter, which leads to their involvement, commitment and overall satisfaction with the firm. In light of the previous studies, present study proposes the following hypothesis:

H4: Satisfaction of customers mediates the association between Quality of Service and Loyalty of customers.

METHODOLOGY

present exploratory study was conducted based on primary data which was collected through a closed ended structured questionnaire, designed to measure the direct association of quality of service with satisfaction of customers, quality of service with loyalty customers and satisfaction of customers with lovalty of customers. questionnaire also measured how mediating impact of satisfaction on the relationship between quality of service and loyalty of customers. The study focused on star category hotels of Delhi and NCR. The total sample size taken was 500 customers of star category hotels. The analysis of the data was done using IBM SPSS version 25. Descriptive analysis, factor analysis, correlation analysis and linear regression analysis were used to analyze the relationship between variables. Sobel test was used to detect the mediating effects.

The Reliability investigation of the data was done by calculating the Cronbach's Alpha value for assessing the consistency of entire scale. There were 26 items measured under the dimension quality of service, 23 items under satisfaction of customers and 10 items under loyalty of customers. The Cronbach's value was .981 for quality of service, .983 for satisfaction of customers and .921 for loyalty of customers. The values of Cronbach's Alpha are very high which signifies that entire data as well as all the dimensions have very high reliability.

In present research, since data has only 500 elements, the Shapiro-Wilk test is considered. The p-value is significant. Hence, we can conclude that the data comes from a non-normal distribution. Therefore, non- parametric tests were used for further statistical analysis until the normalisation of the data.

Scale Development

Researcher developed a scale to measure the quality of service, satisfaction of customers, and loyalty of customers of consumers of star category hotels. Researcher studied a total of 59 number of variables under three dimensions i.e., quality of service (SQ), satisfaction of customers (CS) and loyalty of customers (CL) such as there were 26 items measured under the dimension quality of service, 23 items under satisfaction of customers and 10 items under loyalty of customers.

SQ **CS** CL Valid 500 500 500 0 0 0 Missing Mean .0000 .0000 .0000 97.91 41.38 Range 109.61 Minimum -82.34 -75.59 -29.41 27.28 22.32 11.97 Maximum **Class Interval** 22 20 From -83.0 To -61.0 From -76.0 To -56.0 From -30.0 To -Very Low Level 22.0 From -55.99 To -36.0 From -21.99 To -Low Level From -60.99 To -39.0 14.0 **Moderate Level** From -38.99 To -From -35.99 To -16.0 From -13.99 To -17.0 6.0 From -16.99 To 5.0 From -15.99 To 4.0 From -5.99 To 2.0 **High Level** Very High Level From 5.01 To 28.0 From 4.01To 24.0 From 2.01 To 12.0

TABLE 1. Scale development

The final questionnaires were distributed amongst the respondents (customers of star category hotel). The final version of questionnaire consists of the variables measured on five-point Likert scale. The service dimensions quality of satisfaction of customers were measured on Highly Satisfied (5), Satisfied (4), Neutral (3),Dissatisfied (2),and Highly Dissatisfied (1). The dimension loyalty of customers was measured on Strongly Agree (5), Agree (4), Neutral (3), Disagree (2) and Strongly Disagree (1) (as shown in table 1).

- 1. In order to measure the level of 3 dimensions, researcher performed following calculations:
- 2. All the scores were converted into Z scores for all the variables of each dimension.

- 3. Total score of all the variable of each of the 3 dimensions for all the 500 respondents were calculated.
- 4. On the basis of the range class interval was decided, by dividing the range by 5.
- 5. Then 5 categories were decided on the basis of Z score division.
- 6. Lowest value was coded as 1 and highest value as 5.
- a. Thus, all the variables after calculating
- Z scores were again converted into

- categorical variables that is Very low level, Low level, Moderate level, High level, very high level.
- b. After scale development the relationship between independent and dependent variables were determined with corelation and regression analysis. For analysing mediating effects Sobel test was applied.

ANALYSIS AND INTERPRETATIONS

Demographic Profile of Respondents

TABLE 2. Demographic characteristics of respondents

Variables		Frequency	Percentage	
Gender	Male	340	68	
	Female	159	31.8	
	Other	1	0.2	
Age	18 years to 30 years	312	62.4	
	31 years to 40 years	129	25.8	
	41 years to 50 years	42	8.4	
	51 years to 60 years	12	2.4	
	Above 60 years	5	1	
Marital Status	Single	302	60.4	
	Married	195	39	
	Other	3	0.6	
Nationality	Indian	493	98.6	
	Foreigner	7	1.4	
Educational	Undergraduate	92	18.4	
Qualifications				
	Post-graduate	168	33.6	
	Doctorate	13	2.6	
	Professional Course	33	6.6	
Employment Status	Private Sector	226	45.	
	Government			
	Sector	46	9.2	
	Self-employed	86	9.2 17.2	
	Student	124	24.8	
	Unemployed	18	3.6	
Annual Income	Up-to 5 Lakhs	129	25.8	
	5 – 10 Lakhs	123	24.6	

10 – 15 Lakhs	50	10
Above 15	56	11.2
Not earning	142	28.4

Profile of Respondents Related to Their Hotel Stay

While asking the respondents regarding their visits to star category hotels it was found that, out of 500 respondents 24.8% respondents visited/stayed in star category hotels up-to 2 times; 57.2% respondents visited/stayed in star category hotels 3-6 times; 9.4 % respondents visited/stayed in star category hotels up-to times; 8.6% respondents 7-10 and visited/stayed above 10 times in star category hotels in Delhi & NCR region. When asked about how the respondents came to know about the property, 32.6%

said they came to know about the hotel stayed through websites and 48.2% came to know through their friends and relatives. People visit star category hotels as a part of their professional and personal trips.

Exploratory Factor Analysis

The KMO measure of sampling adequacy is 0.978 (Quality of Service); .0977 (Satisfaction of Customers) and .927 (Loyalty of Customers) which indicates the present data is suitable for factor analysis.

KMO and Bartlett's Test									
			SQ	CS	\mathbf{CL}				
Kaiser-Meyer-Olkin	Measure	of	0.978	0.977	0.927				
Sampling Adequacy.									
	Approx.	Chi-	13958.2	13941.8	3333.83				
Bartlett's	Square								
Test of Sphericity	Df		325	253	45				
	Sig.		0	0	0				

TABLE 3. KMO and Barlett's test

While analysing the variables of quality of service, before extraction, output has identified 2 linear components within the data set. After extraction and rotation, the most important factor 1 explained 67.519% of total variance, and factor 2 explained 4.013% of total variance that can be extracted (see appendix Table 1). While analysing the variables of satisfaction of customers, before extraction, output has identified 1 linear component within the data set. After extraction and rotation, the most important factor explained is 73.134% of total variance that can be extracted (see appendix Table 2). While analysing the variables of loyalty of customers, before extraction, Output has identified 2 linear components within the data set. After extraction and rotation, the most important factor 1 explained 60.118% of total variance, and factor 2 explained 10.756% of total variance that can be extracted (see appendix Table 3).

Analysing The Influence of Quality of Service on Satisfaction of Customers

Correlation and regression analysis has been performed to detect the influence of level of quality of service on level of satisfaction of customers. (H1): There is positive and significant Influence of Quality of service (Independent Variable) Satisfaction of customers (dependent variable) in case of Star Category Hotels.

(H01): There is no positive and significant Influence of Quality of

service (Independent Variable) Satisfaction of customers (dependent variable) in case of Star Category Hotels.

Correlation Analysis

TABLE 4. Correlations Matrix Between Quality Of Service And Satisfaction Of Customers

Correlations			
	Satisfaction		Quality of
		Service	
Pearson	Satisfaction of customers	1.000	.558
		.558	1.000
Sig. (1-tailed)	Satisfaction of customers		.000
	Quality of service	.000	
N	Satisfaction of customers	500	500
	Quality of service	500	500

The correlation matrix presented above shows that there is a positive correlation (.558) between Quality of service (Independent Variable) and Satisfaction of customers (dependent variable) in case of Star Category hotels.

Regression Analysis

The objective is to measure the relationship and influence of Quality of service (Independent Variable) on Satisfaction of customers (dependent variable) in case of Star category Hotels. In the proposed regression model between quality of service and satisfaction of customers, the amount of explained variance as measured by R-SQUARE was (R2=0.312) which indicates that about 31.2% of the variance in Quality of service (Independent Variable) and Satisfaction of customers (dependent variable) in case of Star Category hotels. The p-value (0.0000) associated with F value is less than 0.05, which specifies that the independent variable reliably predicts the dependent variable.

TABLE 5. Regression coefficients of Quality of Service and Satisfaction of customers

Coefficients ^a									
	Unstan <u>Coeffic</u> B	dardized cients Std.	Stand ardized Coefficie nts Beta		Zero-	Partia		Colline y Statis Tolera	
Model		Error		Т	order	1	Part	nce	VIF

		(Constant)										
1			974	167	.838		000					
			Quality		•							
		of 585 service	2	039	558	5.011	000	558	558	558	.000	.000
a	ı. De	ependent Varia	ble: Leve	el of Sati	sfaction o	f custo	mers					

It can be seen that in case of Level of Quality of service (Independent Variable), the value of standardised (βeta) coefficient is 0.558; it means that 1-unit positive standard deviation change in it, would result in the increase of dependent variable 'Satisfaction of customers by 0.558 unit. Hence, it can be concluded that, as the value of coefficient is significant, thus, Level of Quality of service have positive and significant relationship with dependent variable. As a result, we can claim that the Alternate Hypothesis (H1) has been accepted and the Null Hypothesis (H01) has been rejected.

Analysing The Influence of Quality of Service on Loyalty of Customers

Correlation and regression analysis has been performed to detect the impact of level of quality of service on level of loyalty of customers.

(H2): There is positive and significant Influence of Quality of service (Independent Variable) on Loyalty of customers (dependent variable) in case of Star category hotels.

(H02): There is no positive and significant Influence of Quality of service (Independent Variable) on Loyalty of customers (dependent variable) in case of Star category hotels.

Correlation Analysis

To study the correlation between Quality of service (Independent Variables) and Loyalty of customers (dependent variable): Star Category Hotels (Shown in Table 6).

TABLE 6. Correlations Matrix between Quality of Service and Loyalty of customers

Correlations			
		Loyalty of customers	Quality of service
Pearson	Loyalty of customers	1.000	.724
Correlation	Quality of service	.724	1.000
Sig. (1-tailed)	Loyalty of customers		.000
	Quality of service	.000	
N	Loyalty of customers	500	500
	Quality of service	500	500

The correlation matrix presented above shows that there is a positive correlation (.724) between Quality of service (Independent Variable) and Loyalty of customers (dependent variable) in case of Star Category hotels.

Regression Analysis

The objective is to measure the relationship and influence of Quality of Service (Independent Variable) on customers (dependent variable) in case of Star category Hotels.

In the proposed regression model between quality of service and loyalty of customers, the amount of explained variance **R-SQUARE** measured by (R2=0.524) which indicates that about 52.4% of the variance in Quality of service (Independent Variable) Loyalty of customers (dependent variable) in case of Star Category hotels. The p-value (0.0000) associated with F value is less than 0.05, which indicates

that the independent variable reliably predicts the dependent variable.

It can be seen (table 7) that in case of Level of Quality of service (Independent Variable), the value of standardised (βeta) coefficient is 0.724, it means that 1-unit positive standard deviation change in it, would result in the increase of dependent variable 'Quality of service by 0.724 unit. Hence, it can be concluded that, as the value of coefficient is significant, thus, Level of Quality of service have positive and significant association with dependent variable. As a result, we can claim that the Alternate Hypothesis (H2) has been accepted and the Null Hypothesis (H02) has been rejected.

TABLE 7. Regression coefficients of Quality of Service and Loyalty of customers

			Coef	ficients	a					
	Unstanda Coefficie	ardized	Stand ardized Coefficie nts			Zero-			Colline rity Sta Tolera	
	В		Beta			order	Partial	Part	nce	VIF
(Const										
ant)	1.299	.123	10.522		.000					
of Quality of	.674	.029	.724	23.400	.000	.724	.724	.724	1.000	1.000
a. Dependent Varia	a. Dependent Variable: Level of Loyalty of customers									

Analysing The Influence of Satisfaction of Customers on Loyalty of Customers

Correlation and regression analysis has been performed to detect the Influence of satisfaction of customers on loyalty of customers.

(H3): There is positive and significant Influence of Satisfaction of customers (Independent Variable) on Loyalty of customers (dependent variable) in case of Star category hotels.

(H03): There is no positive and significant Influence of Satisfaction of customers (Independent Variable) on Loyalty of customers (dependent variable) in case of Star category hotels.

Correlation Analysis

The correlation matrix presented in Table 8 shows that there is a positive correlation (.580) between Satisfaction of customers (Independent Variable) and Loyalty of customers (dependent variable) in case of

Star Category hotels. The correlation analysis shows that the two variables are

significant at the 0.000 level, which is lower than the 0.05 confidence level for the study.

TABLE 8. Correlations Matrix Between Satisfaction Of Customers And Loyalty Of Customers

		Loyalty of	Satisfaction of
		customers	customers
Pearson	Loyalty of customers	1.000	.580
Correlation	Satisfaction of customers	.580	1.000
Sig. (1-tailed)	Loyalty of customers	•	.000
	Satisfaction of customers	.000	
N	Loyalty of customers	500	500
	Satisfaction of customers	500	500

Regression Analysis

The objective is to measure the relationship and impact Satisfaction of customers (Independent Variable) on Loyalty of customers (dependent variable) in case of Star category Hotels. In the proposed model of satisfaction of customers and loyalty of customers, the amount of explained variance as measured by R-SQUARE

was (R2=0.569) which indicates that about 56.9% of the variance in Satisfaction of customers (Independent Variable) and Loyalty of customers (dependent variable) in case of Star Category hotels. The p-value (0.0000) associated with F value is less than 0.05, which indicates that the independent variable reliably predicts the dependent variable.

Table 9. Regression coefficients of Satisfaction of customers and Loyalty of customers

Coefficients ^a														
Model		zed	ndardi	Stand ardize d Coeffi ci ents	T	ig		Correlations				Collinearity Statistics		
		В	Std. Erro r	Beta			S	Zer o- orde r	Par tial	a rt	P	o Pleran e	VIF	
(Constant)			.12		8.									
1		107	2		86	0								
Level Satisfaction customers	of of	7 .22 8	.03	.256	.2	0	•	.58	.3	1	•	.68	1.452	

a. Dependent Variable: Level of Loyalty of customers

It can be seen (table 9) that, in case of Satisfaction of customers (Independent Variable), the value of standardised (βeta) coefficient is 0.256, it means that 1-unit positive standard deviation change in it, would result in the increase of dependent variable 'Loyalty of customers by 0.256 unit. Hence, it can be concluded that, as the value of coefficient is significant, thus, Satisfaction of customers have positive and significant relationship with dependent variable. So, we can say that Alternate Hypothesis (H3) -is accepted and Null Hypothesis (H03) - is rejected.

Satisfaction Of Customers Mediates the Association Between Quality of Service and Loyalty of Customers

(H04): There is no indirect positive and significant relationship between Quality of service and Loyalty of customers with mediating effect of Satisfaction of customers.

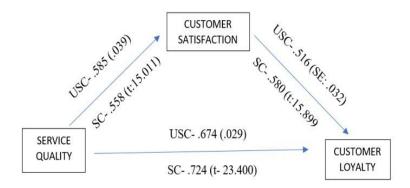


Figure 1.Usc- unstandardised coefficients, sc- standardised coefficients, se: standard error

Purpose of Sobel test is to test whether a mediator carries the influence of an IV to a DV and if the mediation effect is statistically significant.

Null Hypothesis (H0): The mediated effect equals zero in the population. (H0: ab = 0)

This program calculated the critical ratio as a test of whether the indirect effect of the IV on the DV via the mediator is significantly different from zero.

Table 10. Sobel Test Statistics

Input:		Test statistic:	Std. Error:	p-value:
.585	Sobel test:	10.98280107	0.02748479	0
.516	Aroian test:	10.97149644	0.02751311	0
a .039	Goodman test:	10.99414072	0.02745644	0
ь .032	Reset all		Calculate	

 t_a and t_b are the *t*-test statistics for the difference between the *a* and *b* coefficients

and zero. Results should be identical to the first test, except for error due to rounding.

Table 11. Sobel t-Test Statistics

FOR THE SOBEL TEST n tool for mediation tests

The ab product is judged to be statistically significant if z is greater than +1.96 or less than -1.96. The test statistic for the Sobel test is 10.982 (Critical Ratio (C.R.) value), with an associated p-value less than 0.01. The Critical Ratio (C.R.) values for all the three tests were greater than ± 1.96 , indicating significant regression coefficient is achieved. Hence, it can be concluded that the Null Hypothesis is rejected.

Therefore, it can be concluded that indirect effect (a*b) the association between the IV and the DV (in this case, Quality of service and Loyalty of customers) is statistically significant by the inclusion of the mediator (in this case, Satisfaction of customers) in the model; hence it can be concluded that there is evidence of mediation.

The estimate of Indirect Effect (a*b) is 0.30168. it can be seen that the value of unstandardized coefficient for indirect effect is less that direct effect; therefore, it can be concluded that mediating variable has also the significant impact on dependent variable but direct effect is more than the indirect effect.

Results of the Sobel tests are similar to the Aroian tests, which were also found to be significant (p < .01). This Aroian test is being used by researchers as an additional way for testing mediation. Thus, all of the statistical tests supported Satisfaction of customers as mediating the relationship between supportive Quality of service and Loyalty of customers and thus provides full support for the study's major hypothesis.

CONCLUSION AND SUGGESTION

Satisfaction of customers and loyalty have a clear, positive, and significant relationship with the quality of service in star-rated hotels, according to the research. Client happiness has a significant and positive impact on customer retention. This observation is persistent with the results of the studies [31], [36-38]. In an indirect approach, satisfaction of customers plays a critical and positive function in mediating the association between quality of service and loyalty of customers. The above findings are in line with the conclusions of a study conducted by [40-42],[28]. The research implicates the managers of star category hotels to focus on improving and maintain the tangible aspects (room amenities, groomed and hygienic employees, décor, ambience and over all atmosphere), responsiveness and assurance in maintaining quality of service of their property. Furthermore, the research shows that quality of service has a significant part in defining customer expectations before purchase of a service and evaluating the same afterward, which influences customers' repeat purchase behavior. In context to service industry and star category hotels, service delivery process and physical evidence plays a significant role. The first and the foremost requirement of star categorization in hotels is that the façade, architectural features and general construction of the hotel should have distinctive qualities. If the aspects of ambience, architecture, modern gadgets & equipment's and clean hygienic atmosphere are compromised, there seems a direct impact on quality of service and star categorization of the hotels. For improving the quality of service,

hospitality industry should improve their service delivery process. To improve the quality of service dimensions, focus needs to be on the procedures adopted for the services for example delivering repetitive procedure during operations can be deleted, billing and settlement of bills should be made easier and flexible. As in hospitality industry production and delivery of the services is a simultaneous process, proper steps and techniques should be followed to standardize the services. Employees should be given regular trainings about improvisation of services, equipment's and gadgets, adapting new and up to date standard operating procedures to maintain their quality of service and in turn the image of the hotel in the minds of the customer.

In addition, the research shows that improved quality of service has a direct impact on satisfaction of customers and loyalty. Satisfaction of customers also plays a role in the relationship between quality of and lovaltv of customers. service Satisfaction of customers is critical in determining consumer expectations and behaviour. consumer Satisfied repetitive visits to the star category hotel irrespective of the price of the product. Service failure is unavoidable in hospitality industry. Service providers should bear full responsibility for customer dissatisfaction if the service process is defective in order to avoid consumer loss. Improving timeliness and accuracy of the service delivery process is a strategic plan for transforming satisfied consumers into loyal customers in hospitality industry. Above analysis has proved that satisfaction of customers and loyalty increase as quality of service improves. Complaints of the customers should be handled with utmost professionalism and personalisation to prevent the loss of customer.

LIMITATION OF STUDY

The study surveyed the importance of quality of service based on consumer

perceptions. From the perspective of hotel management and employees, the same may be different. Therefore, future studies may be done from the management and employee point of view. Second, because the study was limited to the Delhi and NCR region, the results cannot be applied to other parts of the country. Thirdly, similar studies can be conducted on other categories of the hotels like budget hotels or standalone properties. Advance research could be conducted by focusing on the needs and demands of customers from different market segments of the society.

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APPENDIX

TABLE 1. Factor analysis of Quality of service

Rotated Component Matrix ^a		
	Component	
	1	2
Room amenities supplied were adequate	.771	.343
Hotel was clean and well maintained	.768	.365
Overall atmosphere of hotel was inviting	.766	.420
Employees were well groomed and hygienic	.764	.433
The décor & ambience were appealing	.756	.367
Room service equipped with good clean and hygienic equipment	.754	.428
Payment/ currency handling procedures were adequate	.748	.418
Employees were reliable	.710	.483
Gadgets & equipment were modern and well placed	.686	.401
Billing and settlement were fast and efficient	.646	.519
All procedures during stay handled efficiently	.637	.556
f Hotel outdoor surroundings were visually attractive	.636	.481
Environment of the hotel was safe	.634	.595
Safe storage for my belongings were available	.611	.574
Personalised services were provided	.336	.801
Price of product / service were satisfactory	.355	.791
Employees anticipated my needs & amp;	.460	.763
expectation		
Front line staff offered all available options	.418	.759
Special attention guest was taken care of	.396	.745
(Handicapped, VIP etc.)		
Informative literature about hotel provided	.371	.707

Hotel managers were prompt and approachable	.516	.707
Complaints were attended promptly	.492	.695
Employees made every effort to fulfil my request	.490	.691
Valet parking available & efficient	.534	.618
Price of services offered were acceptable	.547	.581
F&B services were prompt	.571	.576

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

TABLE 2. Factor Analysis of Satisfaction of customers

Component Matrix ^a	
	Component
	1
Hospitality of employees	.899
Water & Drainage	.884
Room service	.881
Cleanliness of hotel	.879
Communication facilities	.878
Comfort of rooms	.874
Elevation of the hotel	.873
Air-conditioning facilities	.871
Ventilation facilities	.866
Interiors of the hotel	.863
Billing & settlement	.863
Cleanliness of toilets	.862
Promptness of services of food & beverage	.861
Parking facilities	.858
Location of hotel	.854
Taste of food & amp; beverages	.843
Atmosphere of the hotel	.836
Other facilities like spa, beauty salon, shopping arcade, swimming pool, health club etc.	.836
Packages offered by hotel	.829

a. Rotation converged in 3 iterations.

Quick check-in and check-out procedures	.823
Personal attention by employees	.822
New and modern facilities of the room	.815
Price of products/services	.792
Extraction Method: Principal Component Analysis.	
a. 1 components extracted.	

TABLE 3. Factor Analysis of Loyalty of customers

Rotated Component Matrix ^a		
	Component	
	1	2
I intend to repeat my stay with the hotel	.873	.180
Recommend hotel to others	.847	.246
Always say positive things about the hotel	.827	.236
Hotel offers superior service then other hotel in region	.792	.229
Selected hotel is my first choice to avail lodging facilities	.748	.374
Even if other hotels are offering services at lower rate i will continue my stay with the hotel	.737	.146
I identify myself with the hotel	.728	.381
I am willing to pay higher price for superior quality of service offered by hotel	.599	.479
Will shift business to other hotel which offer services at lower price	.189	.876
I may switch my business to competitor in case quality of service of the hotel is not maintained	.255	.837
Extraction Method: Principal Component Analysis Normalization.	s. Rotation M	ethod: Varimax with Kaiser
a Datation conversed in 2 itematicus		

a. Rotation converged in 3 iterations.

TABLE 4. Regression: Model Summary (SQ N CS)

Model St	umn	naryb							
				Std.	Change Sta	atistics			
M		R Squar	Adjust ed R	Error of the		F Chang	df	df	Sig. F
ode		е	Square	Estimate	Change	е	1	2	Change
1	R								

1	.5	.31	.310	.7904	.312	22	1	49	.000	
	58a	2		7		5.318		8		
a. P	a. Predictors: (Constant), Level of Quality of service									
b. I	Depender	nt Variab	ole: Level	of Satisfaction	on of cus	tomers				

TABLE 5. ANOVA (SQ N CS)

	Sum of		Mean		
Model	Squares	Df	Square	F	Sig.
Regre	ssio n 140.787	1	140.787	225.31	.000b
Residu	nal 311 171	498	.625	8	
Total	451.958	499	.023		

TABLE 6. Regression: Model Summary (SQ N CL)

Mode	el Sumn	naryb							
				Std. Error	Change Sta		1	T	
M		P Squar	Adjust ed	of	R Square	F			
ode		e Squar	Adjust ed R Square	the	Change	Chang	df	df	Sig. F
1	R			Estimate		e	1	2 Ch	ange
1	.7	.52	.523	.5847	.524	54	1	49	.000
	24a	4		9		7.548		8	
a. Pre	dictors:	(Constan	nt), Level c	of Quality o	f service	•	•	•	•
b. Der	<u>oendent</u>	Variable	e: Level of	Loyalty of	customers				

TABLE 7. ANOVA (SQ N CL)

ANOVAa									
		Sum of		Mean					
Model		Squares	Df	Square	F	Sig.			
1	Regressio n			187.251	547.54 8	.000b			
	Residual Total	170.507	498 499	.342					
	ndent Variab	eant), Level of Qual			•	•			

TABLE 8. Regression: Model Summary (CS N CL)

			Std.	Change St	atistics			•
. 1	R	Adjust	Error of	R	F			
M	Squar	ed R	the	Square	Chang	df	df	Sig. F
ode	e	Square	Estimate	Change	e	1	2	Change
.7	.56	.567	.5569	.569	32	2	49	.000
54a	9		3		7.886		7	
Predicto	rs: (Const	ant) Leve	of Satisfact	ion of custo	mers I	evel	of Quali	ty of service

TABLE 9. ANOVA (CS N CL)

ANOV	Aa					
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	203.402	2	101.701	327.88 6	.000 ^b
	Residual	154.156	497	.310		
	Total	357.558	499			
a. Depe	ndent Variable	: Level of Loyalt	y of custom	ners		
b. Predi	ctors: (Constan	nt), Level of Satis	sfaction of c	customers		