THE RELATIONSHIPS OF SERVICE QUALITY WITH CUSTOMER SATISFACTION, TRUST, AND LOYALTY IN SERVICE CENTERS OF THE AUTOMOBILE INDUSTRY

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Abstract

Service quality is generally viewed as the output of the service delivery system, especially in the case of pure service quality. Moreover, service quality is linked to customer satisfaction, trust and loyalty. Although there is limited consensus in the research community about the direction of causality relating quality and satisfaction, the common assumption is that service quality leads to satisfied customers. The aim of this paper is to analyze the relationship between the service quality dimensions and customer satisfaction, trust and loyalty of service center of automobile industry in Tamilnadu. The sample size was set at 440 since the research expected a 10% non-response or non-corporative rate. The systematic random sampling technique was used to choose these sample respondents. With Mean & Standards, a one-way ANOVA is performed. It is observed that the post graduates are experienced higher level of opinion towards the dimensions tangibility, reliability, responsiveness and empathy. Illiterate customers are experienced higher level of opinion toward assurance.

Keywords: Service quality, Automobile industry, Customer satisfaction, Trust,

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Introduction

Service quality is defined as the result of comparison between customers' expectation about the service and their perception of the way the service has been performed (Grönroos, 1984; Parasuraman *et al*., 1985, 1988, 1991, 1994); the "delivery of excellent or superior service relative to the customer expectation" (Zeithaml and Bitner, 1996); the customers' interpretation of their experience (Garavan, 1997). It is viewed as a multidimensional construct (Johnston *et al*., 1995); and as overall assessment (Wang and Lo, 2003). Service quality creates an essential ingredient for establishing and maintaining loyal and profitable customer base (Rust *et al*., 1995; Zeithaml, 2000) and acts as the driving force for productivity and profitability (Edvardson *et al*., 1994). Achieving the right quality could be done through do-it-yourself production systems; customer education; and individual preferences and perceptions. Service quality data is very useful in attaining service improvement (Shaw and Haynes, 2004) and the root of customer satisfaction (Yavas *et al.,* 2004). There are obstacles to service quality improvements, such as lack of visibility; difficulties in assigning specific accountability; time required to improve service quality; delivery uncertainties (Ghobadian *et al*., 1994); and variability (Gummersson, 1991). The service providers could provide good service through empowerment (Tschohl, 1998) as giving front-line staff the latitude to make important decisions on customer needs and enhance service quality; and training, as inadequately trained front-line staff would find it difficult to perform the task effectively (Gummersson, 1991).

Zeithaml and Bitner (2003) define satisfaction as a customer's judgment that a product or service provides a pleasurable level of consumption-

related accomplishment. Determinants of satisfaction include perception of service quality, product quality, price, situation factors, and personal factors (Zeithaml & Bitner, 2003). The expectancydisconfirmation theory has been described by Oh (1999) as one of the most common and widely accepted theories for the analysis of customer satisfaction in the service industry. Oliver (1981) employed the expectancy-disconfirmation model to explain that customer satisfaction is determined by comparing customers' expectations and perceptions of performance. The theory posits that customer satisfaction is measured by the gap between customer expectation and perceived performance. Thus, if perceived performance exceeds expectation of the performance, the expectation is positively disconfirmed and the customer is satisfied as the actual performance exceeds the customer's expectations. On the contrary, if the perceived performance falls short of expectations, the resultant effect is a negative disconfirmation as the customer becomes dissatisfied with the performance.

Rhoades et al (2000) in their research paper have addressed efforts in bringing up quantitative index of factors & characteristics which comprises quality in airport operations & facilities from varied customer's perspective. It has shown and identified 12 broad factors that, in customer view affect the quality of operations at airport. The important factors are ground transportation,

parking, shopping and restaurant services, capacity as well as the waiting area. Similar study may be undertaken for hotels and other accommodations.

Kandapally. J. et al (2001) have stated that expected services go beyond the essential services required for the company to stay in business and such services need to be offered to remain competitive. Over the year, expected services increases and guest becomes more demanding, requiring service provider to move beyond what is commonplace.

Farner et al (2001) have examined empirically the popular concept of internal customer service. Even if there is significant descriptive literature on internal service is available, till date there has been hardly any empirical assessment service quality. The concept of assuming coworkers as customers needs intuitive sense but there is still a difference in opinion among industry and institutes as to the true value of internal customer service on the external service quality. This study has used data of a large food and grocery wholesaler and examined the impact of internal customer service on external customer service. Farner et al finds that internal customer service seems to have a mixed and complex relation with external customer service.

Lawrence & McCollough (2001) have mentioned that lessons of quality management apply to services as well as products. Awareness also has been increasing that services, like products may be guaranteed as tools of implementing a total quality management orientation in the organization.

The nature of service and company‟s interaction with customer has been changed profoundly due to invention of technology; however on other hand it has some down side as well.

Bitner(2001) in his paper elaborates on the opportunities that technology offers to develop new services and deliver it better, more efficient services to customers as well as the contrasts and dark side of technology and services. However the paper suggests to company‟s driven by technology that even after changing many things, few things remain same. Consumers still demand quality service irrespective of firm‟s choice to structure the relationship. It is solely upon firms to adapt technology-based services that can provide the same high level of service matching customer‟s expectation in conventional service providers.

Research Methodology

The aim of this paper is to analyse the relationship between the service quality dimensions and customer satisfaction, trust and loyalty of service center of automobile industry in tamilnadu. In 1988, Parasuraman used 22 statements to investigate five elements of service excellence. The tool developed by Parasuraman, et al. (1988) was used in this investigation. This measure is made up of 22 assertions that are classified into five categories: empathy, reliability, responsiveness, assurance, and tangibility. The required sample size, according to the calculations, is 400. The sample size was

set at 440 since the research expected a 10% non-response or non-corporative rate. The systematic random sampling technique was used to choose these sample respondents. Data is collected from those who are all use cars in Chennai city. Mean & Standard deviation, and one-way ANOVA is performed for to know the relationship between the variables.

Analysis and Result

Table No-1: Service quality of service center based on education

Service quality	Education	Mean	S.D	F-value	P-value
Tangibility	Illiterate	20.40	3.18	1.488	0.217 (NS)
	High School	20.55	3.75		
	Degree	19.77	3.65		
	Post-Graduation	20.95	3.89		
Reliability	Illiterate	22.34	5.12	11.964	0.001*
	High School	25.59	4.72		
	Degree	22.83	5.09		
	Post-Graduation	24.21	3.75		
Responsiveness	Illiterate	18.46	5.16	11.459	0.001*
	High School	19.65	4.66		
	Degree	16.48	4.84		
	Post-Graduation	18.78	3.71		
Assurance	Illiterate	21.04	4.15	3.890	0.005**
	High School	20.98	3.96		
	Degree	19.48	4.52		
	Post-Graduation	20.69	3.26		
	Total	20.52	4.18		
Empathy	Illiterate	21.95	6.49	6.433	0.001*
	High School	23.74	5.30		
	Degree	21.02	5.78		
	Post-Graduation	23.43	5.51		

Source: Primary data computed * *Significant at five percent level; *Significant at one percent level, NS Non-significant

Table 1 indicates the customer opinion towards service quality dimension of service center based on the education. The respondent's education is classified into four categories. Service quality dimensions mean score and standard deviation value are calculated with respect to the educational qualification of the respondents. From the mean score, it is observed that the post graduate are experienced higher level of opinion towards the dimensions tangibility, reliability, responsiveness and empathy. Illiterate customers are experienced higher level of opinion toward assurance

Ho: There is no difference of opinion towards service quality dimension based on the respondent educational qualification.

In order to examine the above stated hypothesis, One-way ANOVA is executed. Tangibility, reliability, responsiveness, assurance and empathy are service quality dimension are the found to be significant. Because, the calculated p-value is significant. Hence, tangibility, reliability, responsiveness, assurance and empathy are the dimensions significantly varied based on the respondent's educational

qualification. Hence, the stated hypothesis is rejected.

With regard to reliability, illiterate categories respondent are secured the mean score of 22.34. Those, who are having high school education, they are having mean score of 25.59, degree holders are having the mean score of 22.83. The postgraduates are experienced with mean score of 24.21.While observing the mean score, it is inferred that the reliability service of the service center is varied based on educational qualification of the customers. Here, corresponding f-value is found to be 11.964 and p-value is 0.001, which is significant at one percent level. Hence, there is a mean difference between educational qualification and reliability service of the service center. It is found that the high school level educators and post graduates level educators are experienced higher level of reliability service than other groups.

In the case of responsiveness, among the illiterate level of education groups are secured the mean score of 18.46. The high school level educators are having the mean score of 19.65. Degree holders are secured the mean score of 16.48. The post graduate groups are having the mean score of 18.44.From the mean values, it is observed that the respondents opinion toward responsiveness service of the service center are varied based on the educational qualification. ANOVA result indicates that there is significant difference of opinion towards responsiveness service of the service centers. It is found that high school level educators are having higher level of opinion towards responsiveness services of the service centers than other groups.

For assurance, the calculated mean score is lies between 21.04 to 19.48. Here, the illiterate respondents are experienced higher (21.04) level of services relating to assurance followed by high school level educators (20.98), post graduates (20.68) and degree holder (19.48). Further ANOVA result indicates that (F-value 3.890 and p-value 0.005) there is difference of opinion toward assurance aspect among the customer based on the educational qualification. It is found that the illiterate and high school level customer are experienced better services relating to assurance aspect.

In the case of empathy service, the calculated mean score is ranged between 23.79 to 21.03. Those who are in the illiterate categories, they are secured the mean score of 21.95.High school level educators group are having the mean score of 23.24. Degree holders are having the mean score of 23.43. Further, the calculated f-value is 6.43 and p-value is 0.001, which is significant at one percent level. It is inferred that the customer opinion towards empathy service is significantly varied based on the educational qualification. It is found that the high school level educators and post graduate level customer are having better experience toward empathy service.

It is observed that the mean score is significantly varied due to respondent educational qualifications towards the service quality dimensions namely reliability, responsiveness, assurance and empathy. It is found that post graduate respondents are experienced higher amount of quality of services towards reliability, responsiveness and empathy than others. But, illiterate are experienced the better service on assurance aspects.

Table No: 2 Customer satisfaction and education

Education	Customer satisfaction		ANOVA result	
	Mean	S.D	F-value	P-value
Illiterate	15.39	4.88	4.352	0.005**
High School	14.23	3.71		
Degree	13.26	4.05		
Post graduation	13.30	4.30		

Source: Primary data computed;
**Significant at five percent level

Table 2, indicates the customer opinion towards level of satisfaction with the service center based on the educational qualification. The mean score and standard deviation value of customer satisfaction is calculated with respect to the educational qualification. From the mean score, it is observed that the illiterate groups are secured higher levels of means score (15.39) followed by high school level (14.23), post graduates (13.30) and degree holders (13.26). It shows that illiterate groups are having higher level of satisfaction than other groups.

Ho: There is no difference of opinion towards of satisfactions level based on customer educational qualification.

In order to test the above stated hypothesis, One-way ANOVA is applied. The calculated F-value is 4.352 and P-value is 0.005. The P-value is significant at five percent level. Hence, the stated hypothesis is rejected. Hence, the customer satisfaction is significantly varied based on the educational qualification. It is found that illiterate groups are having more satisfaction towards the service centers when compared to other groups.

Table No:3 Trust based on educational qualification

Educational qualification	Trust		ANOVA result	
	Mean	S.D	F-value	P-value
Illiterate	25.27	5.50	6.634	0.001*
High School	24.63	5.13		
Degree	22.17	6.30		
Post graduation	24.08	4.15		

Source: Primary data computed;
*Significant at one percent level

Table 3, explains the customer opinion towards trust of the service center based on the educational qualification. The mean score and standard deviation value of trust is calculated with respect four groups of educational qualification of respondents. The calculated mean value is ranged between 25.27 to 22.11. It is observed that the illiterate group secured higher levels of mean score (25.27) followed by high school level (24.63), post graduates (24.08) and degree holder (22.17). It is inferred that illiterate group is having higher level of trust towards the service centers.

Ho: There is no difference of opinion towards trust of service center based on the educational qualification.

Here, One-way ANOVA is applied to examine the above stated hypothesis. From the ANOVA result, (f-value 6.634 and p-value is 0.001), it is noted that the p-value is significant at five percent level. Hence the stated hypothesis is rejected. It is inferred that the customer trust towards the service centers is significantly varied based on the educational qualification. It is found that illiterate group, high school level educators and post graduate are having higher level of trust towards the service centers when compared to degree holders.

Table No: 4 Customer loyalty based educational qualification

Educational qualification	Loyalty		ANOVA result	
	Mean	S.D	F-value	P-value
Illiterate	25.33	6.16	2.821	0.039**
High School	25.30	5.40		
Degree	23.55	5.52		
Post-Graduation	24.21	6.99		

Source: Primary data computed;
**Significant at five percent level

Table 4, explains the customer opinion towards customer loyalty of service center based on the educational qualification.

The respondents are classified into four categories based on the educational level. Customer loyalty mean score and standard deviation value are calculated with respect to the respondent's educational qualification. From the mean score, it is observed that those who are in the illiterate groups and high school level, they are secured higher levels of means score followed by post graduate (24.21) and degree holder (3.55). It is inferred that illiterate and high school level education are having higher level of loyalty towards the service centers.

Ho: There is no significant difference of opinion towards loyalty based on the educational qualification.

To test the above stated hypothesis, one-way ANOVA is executed. From the ANOVA result (f-value is 2.821 and p-value 0.039), it is inferred that stated hypothesis is rejected. Because of the p.value is significant at five level. It is noted that the customer loyalty is significantly varied based on the educational qualification. It is found that illiterate group and high school levels of people are having higher level of loyalty towards the service centers when compared to other groups.

Conclusion

A careful observation of this paper revealed that quality of service centers and provided deeper knowledge on various dimensions of service quality. Further, it shows that adoption of service quality models as a tool of measurement suggest that Service standards and compliance strategies are especially critical for this industry to ensure customer satisfaction

and repeat business. Such a strategies are limiting negative impacts on reputation of the automobile industry. All the important dimensions have been partly addressed in these studies. This paper also suggests that a comprehensive consolidation of service quality innovative techniques is widely acceptable in automobile industry and effective quality oriented service processes leads to higher customer satisfaction, trust and loyalty.

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