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Measuring Service Quality in the Car Service Agencies

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Abstract: This study highlights the important dimensions of service quality from customers' perspective in car service agencies. Additionally, it aimed to identify differences between expectations and perceptions of customers from service quality dimensions and compares differences across agencies. The objectives of this study were achieved by using the SERVQUAL questionnaire. A cluster sampling technique was also used for collecting the data. The questionnaires were distributed amongst 400 customers who had Peugeot 206, Peugeot 405 or Peugeot Persia in four Iran Khodro car service agencies. The results demonstrated that there was a gap between expectations and perceptions of customers from dimensions of service quality. The negative gaps were related to the intangible dimensions. Additionally, in the comparison amongst four agencies related to the level of expected service quality, significant differences were found for tangibles and reliability dimensions. Furthermore, the analysis of variance revealed that the differences in customers' perceptions of the level of provided service quality across four agencies was only for the dimension of tangibles. Lastly, the findings demonstrated that there were significant ($p<0.05$) negative and positive relationships between expectation and perception means with the gap score means, respectively. The results suggest that car service agencies should not exaggerate their quality of services and increase employees' attitude training to close the gap between customers' expectations and perceptions of services.

Key words: Customers' expectations and perceptions, service quality, car agencies

INTRODUCTION

The quality improvement by manufacturers and service providers has become an extremely preferred objective in today´s competitive markets. Hence, the measurement and management of service quality is considered as the essential issue for the sustenance and growth of service company (Legcevic, 2008). The application of superior service quality by service providers is increasingly widespread to seek out competitive advantages (Lee *et al.*, 2004) and experience higher academic returns (Gilbert *et al.*, 2004). It has been widely accepted that customer assessment of service quality is increasingly important for service providers to enhance business performance, make core companies stronger and positions themselves more strategically in the market place (Cronin and Taylor, 1992; Jain and Gupla, 2004). In other words, organizations have to afford the opportunity to explore the customers' expectations of service quality and their perceptions of its actual service performance.

Knowledge about how customers integrate their perceptions of quality of service as well as how these perceptions lead to the customer satisfaction enables organizations to manage the resources on important fields which have direct influence their competitive advantage. The comparison of the customer's expectations and the perceptions of the actual performance lead to either their satisfaction or dissatisfaction with a service (Homburg *et al.*, 2002). It has been shown that customer satisfaction depends on how well perceived performance matches or exceeds customers' expectations of services (Van Looy *et al.*, 2003). Unsatisfied customers have a tendency to generate negative word-of-mouth and express their negative feeling to other customers (Lewis, 1991; Newman, 2001; Caruana, 2002). Therefore, managers have to close the gaps between expectations and perceptions of the customers and attempt to keep long-term relationships with them.

For exploring and measuring customer perceptions of service quality, the service quality scale (SERVQUAL)

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developed by Parasuraman *et al.* (1985) has been widely used in the current literature. The SERVQUAL is designed to measure customer's expectations and perceptions of actual performance. The original SERVQUAL instrument included 10 dimensions which were later simplified in to five generic dimensions namely Tangibles, Reliability, Responsiveness, Assurance and Empathy (Parasuraman *et al.*, 1991). Tangibles are related to the physical quality such as appearance of physical facilities, equipment and personnel. Reliability is defined as the employee's ability to perform the promised services dependably and accurately. Responsiveness involves willingness to facilitate customers and provide prompt service. Assurance concerns knowledge, politeness, courtesy, trustworthiness and honesty of employees. Empathy is characterized as understanding, caring and listening to customers and admitting their comments.

It has been shown that the influence of dimensions of service quality vary across service industry types. For example, hotel managers should pay a lot of attention to tangible environment such as cleanliness and comfort of rooms, quality and variety of food served (Ramsaran-Fowdar, 2007). The other study revealed that in the school of education, tangible dimension is less important than the others (Harris, 2002).

Despite the importance of measuring service quality in today's marketplace, little empirical research has been conducted in the context of the car service agencies. Therefore, the present study aimed to investigate the extent to which dimensions of service quality permeates the car agencies as well as gain insight into differences between expectations and perceptions of customers and compared them across four agencies.

MATERIALS AND METHODS

Data collection: A cluster sampling technique was used for this study. In this method, the researchers selected the groups (agencies) and then from the elements within each selected group (customers) the required informations were collected. Therefore, from 10 Iran Khodro (The biggest car factory in Iran) car service agencies in the target population, 4 were chosen. After that, 400 customers were selected based on the Morgan table. Respondents were selected amongst the customers who had Peugeot 206, Peugeot 405 or Peugeot Persia and visited the sampled agencies during day time and at various days for a week or a month. The customers who had Peugeot 206 account for 32.5%, Peugeot 405 and Peugeot Persia make up each 33.75% of the customers. Every customer who entered the agencies handed a questionnaire.

Measures: Data were collected by using the SERVQUAL questionnaire as a measurement tool, conducted in four agencies in Iran during October to December 2007. The SERVQUAL scale is a two part instrument. First part of the questionnaire includes 22 items which measures expectations of customers in conjunction with second part consisted of 22 items which evaluates their perceptions of actual performance.

The SERVQUAL instrument was slightly modified to reflect the nature of delivery services in car agencies. The original items were translated into Persian language and the validity of content such as wording and meaning were checked carefully by two Iranian experts. A seven-point Likert scale was used to measure the expectation and perception of service quality which ranged from 1 = strongly disagree to 7 = strongly agree. A pre-test was then conducted with 20 customers and minor changes to the scales were made to ensure that the questions were not repetitive.

RESULTS

Reliability tests: To assess the internal consistency reliability of the five dimensions, Cronbach's coefficient alpha was computed for both the expectation and perception sections. These alpha coefficients ranged from 0.71 to 0.89 for expectation part and alpha ranged from 0.65 to 0.85 for perception part. As it has been shown in Table 1; the dimensions of service quality appeared to have satisfactory reliable.

Hypothesis testing: The first hypothesis stated that there are significant differences between customers' expectations and their perceptions of existing levels of service quality at the delivery service department of their own agencies. Differences were calculated by subtracting the mean ratings of expectations from the mean ratings of perceptions. The negative value is characterized as a service quality gap (Parasuraman *et al.*, 1985). We performed dependent t-test to determine if the differences between customer's expectations and perceptions were statistically significant.

Table 2 showed differences between customer's expectations and perceptions of service quality in each agency. The negative values were obtained for all

Table 1: Reliability coefficient for dimensions of service quality

Dimensions of service quality	Reliability of expectations	Reliability of perceptions
Tangibles	0.86	0.85
Reliability	0.71	0.73
Responsiveness	0.79	0.85
Assurance	0.86	0.65
Empathy	0.89	0.73

Table 2: Mean score differences of expectations and perceptions of customer from dimensions of service quality within agencies

Dimension of service quality	Agency			
	1	2	3	4
Tangible				
Mean (expectation)	5.78±0.66	5.50±0.56	5.47±0.59	5.45±0.60
Mean (perception)	5.83±0.68	5.60±0.65	5.58±0.65	5.54±0.64
Perception-expectation	0.05	0.10	0.11	0.09
p-value	0.55	0.35	0.26	0.36
Reliability				
Mean (expectation)	5.86±0.48	5.78±0.64	5.59±0.58	5.72±0.60
Mean (perception)	5.38±0.56	5.39±0.46	5.32±0.53	5.40±0.51
Perception-expectation	-0.48	-0.39	-0.27	-0.32
p-value	0.000	0.000	0.001	0.000
Responsiveness				
Mean (expectation)	5.72±0.61	5.85±0.54	5.85±0.50	5.76±0.60
Mean (perception)	5.56±0.64	5.48±0.63	5.53±0.56	5.55±0.60
Perception-expectation	-0.16	-0.37	-0.32	-0.21
p-value	0.062	0.000	0.000	0.01
Assurance				
Mean (expectation)	5.94±0.64	5.91±0.62	5.89±0.65	5.97±0.60
Mean (perception)	5.60±0.61	5.67±0.63	5.74±0.59	5.63±0.61
Perception-expectation	-0.34	-0.24	-0.15	-0.34
p-value	0.000	0.006	0.11	0.000
Empathy				
Mean (expectation)	5.90±0.55	5.96±0.55	5.82±0.57	5.86±0.55
Mean (perception)	5.45±0.57	5.46±0.48	5.44±0.50	5.42±0.55
Perception-expectation	-0.45	-0.50	-0.38	-0.44
p-value	0.000	0.000	0.000	0.000

Values are Means±SD. $p < 0.05$

Table 3: Analysis of variance for differences in combined means of expected and perceived service quality according to the agencies

Dimension of service quality	Agency				p-value
	1	2	3	4	
Tangible					
Mean (expectation)	5.78±0.66[a]	5.50±0.56[b]	5.47±0.59[b]	5.45±0.60[b]	0.000
Mean (perception)	5.83±0.68[a]	5.60±0.65[b]	5.58±0.65[b]	5.54±0.64[b]	0.008
Reliability					
Mean (expectation)	5.86±0.48[a]	5.78±0.64[a]	5.59±0.58[b]	5.72±0.60[ab]	0.012
Mean (perception)	5.38±0.56	5.39±0.46	5.32±0.53	5.40±0.51	0.710
Responsiveness					
Mean (expectation)	5.72±0.61	5.85±0.54	5.85±0.50	5.76±0.60	0.310
Mean (perception)	5.56±0.64	5.48±0.63	5.53±0.56	5.55±0.60	0.760
Assurance					
Mean (expectation)	5.94±0.64	5.91±0.62	5.89±0.65	5.97±0.60	0.810
Mean (perception)	5.60±0.61	5.67±0.63	5.74±0.59	5.63±0.61	0.380
Empathy					
Mean (expectation)	5.90±0.55	5.96±0.55	5.82±0.57	5.86±0.55	0.350
Mean (perception)	5.45±0.57	5.46±0.48	5.44±0.50	5.42±0.55	0.977

Values are Means±SD. Means within a row, with no common superscript differed significantly ($p < 0.05$)

dimensions except the dimension of tangibles in all agencies. The results of dependent t-test revealed that apart from tangibles dimension in all agencies and assurance in agency three, there were significant differences between customers' expectations of service quality and their perceptions ($p < 0.05$). Consequently, H1 was supported. In addition, according to the size of the gaps between customer perceptions and expectations of service quality empathy received the most negative ratings amongst agencies 2, 3 and 4 (-0.50, -0.38 and -0.44, respectively) and reliability dimension in agency 1 (-0.48).

The second hypothesis concerned whether significant differences existed in the level of service quality expected amongst four agencies. To test the hypotheses, one-way analysis of variance was employed. The FISHER test was used when analysis of variance resulted in a significant F ratio to determine the specific areas where significant differences existed in the mean ratings of expected service quality for the agencies in the present study.

As it has been shown in Table 3, the significant differences were only found for tangibles and reliability dimensions. The results revealed that customers who

Table 4: Correlation among expectation, perception and service quality

Factors	Service quality (gap score)
Expectation	
Pearson correlation	-0.728
Sig. (2-tailed)	0.000
Perception	
Pearson correlation	0.720
Sig. (2-tailed)	0.000

$p < 0.05$

attended in agency 1 rated expected tangibles significantly more important than did customers at the other agencies. Also, there were statistically significant differences between agencies 1 and 3 as well as agencies 2 and 3 for the dimension of reliability. Customers at agency 1 and 2 rated expected reliability significantly more important than did customers at agency 3. Customers in agency 1 had a significant higher overall expected service quality as compared with customers in agencies 3 and 4 ($p < 0.05$). Overall expected service quality of agency 2 was also significantly higher than agency 3.

The third hypothesis concerned whether significant differences existed in customers' perceptions of the level of service quality provided amongst four agencies. Analysis of variance was used to test this hypothesis. As shown in Table 3, the significant differences was only revealed for one of the five dimensions of perceived service quality; tangibles. The Fisher test demonstrated that perceived tangibles dimension in agency 1 was significantly higher than the other three agencies. However, agencies 2, 3 and 4 were not different in this area.

The last hypothesis referred to whether there are significant relationships amongst expectations, perceptions and overall service quality. For testing this hypothesis Pearson correlation was conducted. The result (Table 4) showed that there were significant negative relationships between expectation means and gap score means ($r = -0.728$, $p < 0.01$). In contrast, there were positive relationships between perception means and gap score means ($r = 0.720$, $p < 0.01$).

DISCUSSION

The present study demonstrated that there was a gap between customers' expectations and perceptions. The negative gaps revealed that the overall service quality of the four car service agencies is not satisfactory. These results were consistent with Van Looy *et al.* (2003), who reported that if the perceived performance matches or exceeds customers' expectations of services they are satisfied, if it does not, they are dissatisfied. The correlation analysis indicated that two factors included high expectation of the customers and low performance of

administrators were responsible for negative gap scores. These findings of the current study are consistent with those of Ruiqi and Adrian (2009) as well as Johns *et al.* (2004), who found that high customers' expectations and poor performance of the service providers would lead to lower satisfaction levels in the consumers.

Moreover, customers in four agencies expected higher from intangible dimensions of service quality in comparison to the tangibles. These results supported the findings of Bowen and Schneider (1985), Chase and Bowen (1991) and Kohli and Jaworski (1990), who imply that, customers' perceptions of service quality can be influenced by attitudes and behaviors of the contact employees because delivery of services occurs during interaction between contact employees and customers. Previous studies also indicated that attentive, courteous, cooperative employees generate and enhance positive perceptions of service quality and satisfaction among customers (Guiry, 1992; Johnston, 1995; Dabholkar *et al.*, 2000).

Tangibles dimension that is related to the appearance of facilities, personnel and equipment were rated lowest in importance for all agencies. In this area, the perceptions of customers exceed their expectations although it was not significant. Present findings showed that tangibles have little contribution to overall customers' satisfaction with service quality in car delivery service agencies. On the other hand, in the delivery of services, managers or administrators have to spend the money for staff training and innovations to improve reliability, responsiveness, assurance and empathy as intangible dimensions of service quality.

CONCLUSION AND FUTURE RESEARCH

It could be concluded that car agencies have to close the gap between customers' expectations and perceptions of services. Car agencies should not exaggerate their quality of services in order to prevent higher customer expectation of the service. Otherwise customers' expectation does not match their perception and service quality is considered low (Ruiqi and Adrian, 2009). Finally, in order to enhance service quality, retain customer attraction and gain competitive advantage, people-based companies have to increase employees' attitude training and improve knowledge of the services.

The study considered only the customers' viewpoint from service quality of the car agencies. Hence, future studies are recommended to conduct surveys of managers and employees because their understanding of customers' expectations as well as their communication with the customers is important to the final perceived service quality of the car agencies.

REFERENCES

Bowen, D.E. and B. Schneider, 1985. Boundary-Spanning-Role Employees and the Service Encounter some Guidelines for Management and Research. In: The Service Encounter Managing Employee/Customer Interaction in Service Business, Czepiel, J.A., M.R. Soloman and C.F. Surprenant (Eds.). D.C. Heath and Co., Lexington MA., pp: 127-47.

Caruana, A., 2002. Service loyalty the effects of service quality and the mediating role of customer satisfaction. Eur. J. Market., 36: 811-828.

Chase, R.B. and D.E. Bowen, 1991. Service Quality and the Service Delivery System: A Diagnostic Framework in Service Quality: Multidisciplinary and Multinational Perspectives. Lexington Books, Canada, ISBN 0-669-21152-4.

Cronin, J.J. and S.A. Taylor, 1992. Measuring service quality a reexamination and extension. J. Market., 56: 55-68.

Dabholkar, P.A., C.D. Shephers and D.I. Thrope, 2000. A comprehensive framework for service quality an investigation of critical conceptual and management issues through a longitudinal study. J. Retail., 7: 139-173.

Gilbert, G.R., C. Veloutsou, M.M.H. Goode and L. Moutinho, 2004. Measuring customer satisfaction in the fast food industry: A cross-national approach. J. Serv. Mark., 18: 371-383.

Guiry, M., 1992. Consumer and employee roles in service encounters. Adv. Consum. Res., 19: 666-672.

Harris, B.L., 2002. A study of Service Quality Gap Analysis of Expectations Versus University of Alabama, Birmingham.

Homburg, C., W. D. Hoyer and M. Fassnacht, 2002. Service orientation of a retailer's business strategy: dimensions, antecedents and performance outcomes. J. Mark., 66: 86-101.

Jain, S.K. and G. Gupla, 2004. Measuring service quality: SERVQUAL VS. SERVPERF scales. VIKALPA., 29: 25-37.

Johns, N., T. Avci and O.M. Karatepe, 2004. Measuring service quality of travel agents: Evidence from Northern Cyprus. Serv. Ind. J., 24: 82-100.

Johnston, R., 1995. The determinants of service quality: Satisfiers and dissatisfiers. Int. J. Serv. Ind. Manage., 6: 407-427.

Kohli, A. and B.J. Jaworski, 1990. Market orientation: The construct, research proposition and managerial implications. J. Mark., 54: 1-18.

Lee, S., Y. Kim, N. Hemminglon and D. Yun, 2004. Competitive service quality improvement (CSQI): A case study in the fast food industry. Food Serv. Tech., 4: 75-84.

Legcevic, J., 2008. Measuring customer satisfaction and service quality: The case of Croatia. J. Am. Acad. Bus. Camb., 14: 123-130.

Lewis, B.R., 1991. Service quality: An international comparison of bank customers expectations and perceptions. J. Mark. Manage., 7: 47-62.

Newman, K., 2001. Interrogating SERVQUAL: A critical assessment of service quality measurement in a high street retail bank. Int. J. Bank Mark., 19: 126-139.

Parasuraman, A., L. Berry and V. Zeithaml, 1985. A conceptual model of SQ and its implications for future research. J. Mark., 49: 41-50.

Parasuraman, A., L.L. Berry and V.A. Zeithaml, 1991. Refinement and reassessment of the SERVQUAL scale. J. Retailing, 67: 420-450.

Ramsaran-Fowdar, R.R., 2007. Developing a service quality questionnaire for the hotel industry in Mauritius. J. Vacation Market., 13: 19-27.

Ruiqi, Z. and P. Adrian, 2009. Using SERVQUAL to measure the service quality of travel agents in Guangzhou, South China. J. Serv. Res., 9: 87-107.

Van Looy, B., R. Dierdonck and P. Gemmel, 2003. Services Management an Integrated Approach. Prentice-Hall, UK., ISBN-13: 9780273673538.