Service Quality Dimensions: An Empirical Study of Restaurants of Indore City

*Dr. Chanchala Jain, #Dr.Pallavi (Joshi) Kapooria

*,#Assistant Professor, Prestige Institute of Management & Research, Indore, Affiliated to DAVV, Indore, India. *jainchanchal2005@gmail.com, #pallavikapooria@gmail.com

Abstract - Service sector is one of the most important pillars of Indian economy. Various industries are collectively responsible for the performance of this sector. Restaurant industry is one among them. Restaurants are place where individuals usually visit not only because of their hunger impulse but also to relax themselves and sometime to spend quality time with friends and family. Various chains of restaurants either Indian or foreign are running all over India. Indore the corporate city of Madhya Pradesh where the study has been conducted is also the business point for various famous restaurants chain such as ICH, McDonald's, KFC, Pizza Hut, etc. Therefore it becomes imperative to measure the important dimensions of service quality which make a customer happy and affect his behavioural intentions to revisit and recommend the restaurant. Present study is conducted with this purpose only. Firstly service quality dimensions were retested on the basis of SERVQUAL model given by Parasuraman et al. (1988) with 17 statements and overall satisfaction and behavioural intentions are measured with 2-2 items. Results suggest reliability is key dimension for service quality followed by empathy for restaurants of Indore.

Keywords: Service Quality, Restaurants, Behavioural Intentions, Satisfaction, SERVQUAL

I.   INTRODUCTION

The world is becoming service driven today. Although services are intangible in nature but efforts are being put by service providers to tangiblize them. Every service providing organization either Hospital or School or Restaurant or Parlour tries to maintain its service quality in better manner to get competitive edge. The success of such organizations depends on the way they deliver services to their customers and try to satisfy them. Services are well known for inconsistency and inseparability but service providers try to cope up with these parameters of service to maintain differential proposition. Restaurant industry is one of the fastest growing industries in India, not because of inhabitants of the particular place only but because of tourists of other states or country as well. Restaurants are such service providing places where customers visit to fulfil their one of the basic needs. But present day restaurants are unlike the earlier time restaurants which only serve food without considering ambience and customers' delight related factors. In present scenario, restaurants not only serve variety of foods to customers but also look after the ambience and hygiene factors up to the mark to attract customers.

Happy customer is the key potential customers. Satisfied customers not only revisit the restaurant but also spread positive word of mouth. For the service marketing community, behavioural intentions are one of the imperative goals because it is a key element for long-term viability or sustainability of any organization.

Nowadays customers have numerous choices for restaurants to select the best for them on the basis of menu, aroma, temperature, light, quality of service, hygiene, service, etc. therefore it becomes almost imperative for restaurants to maintain all the concerned attributes by customers in best way. Restaurants are forced by the changing pattern of eating behaviour, increased knowledge about food and competition to improve their food quality and service quality. There is wide scope for this industry to grow in future. Therefore, it becomes significant to explore the industry in context to food quality as well as service delivery.

Service Quality Dimensions

The only parameter to survive for service industry is service quality. Without maintaining service quality service provider cannot stay alive in the market for so long. There is a model called SERVQUAL for service quality which consists of technical and functional aspects of service. There are five dimensions of model which are bifurcated into technical and functional (Process) aspects. The model was developed by Parasuraman and his colleagues.

On the basis of five attributes i.e. reliability, responsiveness, assurance, empathy and tangibles consumer satisfaction in the light of service quality was measured by Parasuraman. Present study is also put efforts to assess

customer satisfaction, perceived service quality and behavioural intention by customers of restaurants of Indore city of Madhya Pradesh. The primary objective of the study is to understand the relationship between perceived service quality and dimensions of satisfaction.

II. LITERATURE REVIEW

Han & Ryu (2009) their results suggested that a restaurant should cautiously design the physical environment to improve the perception of customer for reasonableness of the price. Further, they indicated that utilization of physical design creatively in a restaurant operation would be necessary in increasing precise marketing purposes for example optimistic customer perception about quality, evaluation of experience positively and positive attitudes towards restaurant.

Ryu & Jang (2007) measured the collective effect of atmospheric variables on behavioral intentions of customers of exclusive restaurants. Results of the study reported that ambience (i.e. aroma, temperature and music) and worker appearance had the most significant influence on emotional responses of customers, which consecutively affect post-dining behavioral intentions of customers.

Chow et al. (2007) have investigated restaurant services in context to the Chinese restaurants. Study reported that to predict service quality for restaurant customers, interaction with staff and the physical environment are the more important than the outcome quality in predicting service quality for restaurant customers.

Zeithaml et al. (1996) their study reported that positive behavioral intentions are significantly associated with ability of service provider to get its customers to speak affirmative statements about them, suggest them to other customers, stay faithful to them, spend more time with the company and pay price premiums.

Oliver (1994), Fornell et al. (1996) and Oliver (1997) stated that customer satisfaction has been center of interest in service industry because satisfaction pushes buying/consumption to post-purchase phenomenon such as repeat purchase, attitude change, loyalty, and positive word-of-mouth.

Parasuraman et al. (1988) had made an instrument to measure service quality and named as SERVQUAL. This is one of the most broadly used tools since it intends to aid service managers to identify and improve the quality of services which are under their control. The model SERVQUAL is based on five dimensions of service, which are: 1) Tangibles represent appearance of physical facilities, equipment, appearance of personnel, and communication materials; 2) Responsiveness means willingness to help customers and provide prompt service; 3) Assurance indicates level of knowledge and courtesy of employees and their ability to inspire trust and confidence; 4) Empathy

signifies to caring, individualized attention the firm provides to its customers; 5) Reliability which states ability to perform the promised service dependably and accurately; which considers that customers evaluate service quality across these five dimensions. The SERVQUAL instrument consists of 22 questions for measuring expectations and further 22 questions to measure perceptions. Quality of services provided by organizations is measure on the basis of the discrepancy among expectations and perceptions by customers (Grönroos, 1984; Parasuraman et al., 1988).

Objectives of the Study

- To identify the main service quality dimensions that affect customer satisfaction and behavioral intentions in restaurant services in Indore.

Hypotheses Development

For achieving above stated objectives following hypotheses were developed for dependent and independent variables. Here for first hypothesis customer satisfaction was taken as dependent variable and perceived service quality was taken as independent variable. For second and third hypotheses customer satisfaction and perceived service quality were taken as independent variables whereas intention to revisit and intention to recommend were taken as dependent variable. Perceived quality was measured on the basis of previously test SERVQUAL model on five dimensions of service quality.

Following were the hypotheses:

H01: There is no positive relationship exists between perceived service quality dimensions and satisfaction.

H02: There is no significant influence of customer satisfaction and perceived service quality positively on intention to revisit.

H03: There is no significant influence of customer satisfaction and perceived service quality positively on intention to recommend.

III. RESEARCH METHODOLOGY

The Study

Present study was conducted to check the relationship between customers' satisfaction and service quality of restaurants of Indore city, where customers' satisfaction was considered as dependent variable and dimensions of service quality was considered as independent variable. The study is descriptive and exploratory in nature.

Sample

Sample Area

Sample area for the study was Indore city of Madhya Pradesh State.

Sampling Frame

Customers of restaurants of Indore city have formed the sampling frame of the study.

Sampling Technique

The convenient sampling (Probability Sampling) was considered for the study to select respondents.

Sample Size

For the purpose 200 customers were taken as sample size of various restaurants of Indore city.

Data Source

Both primary and secondary sources of data were used to complete the study. Pre-tested questionnaire (Parasuraman et al., 1990, 1988) was used for primary data collection, 17 questions with little modification, representing the five dimensions of service quality on 5 point Likert-type scale ranging from 1 = strongly disagree to 5= strongly agree were considered as per the context of restaurants of Indore, along with demographic variables such as age, gender, occupation and income.

Further for overall customer satisfaction 2 items were added from past study, i.e. first, how satisfied are you with the restaurant? (From "1 = very dissatisfied" to "5 = very satisfied") and second, I am happy about my decision to use this restaurant services (From "1 = strongly disagree" to 5 = strongly agree").

To study behavioral intentions 2 items were considered from Zeithaml et al. (1996) which were measured on 5-point Likert-type scale (1 = strongly disagree to = strongly agree).

For secondary data source journals, e-journals, internet, books, magazines, etc. were referred to frame the base of present study.

IV. DATA ANALYSIS TOOLS

For achieving the objective, firstly primary collected data was tabulated in MS Excel 2007 and then SPSS (16.0) was used to analyze the data. Descriptive analysis viz. means, standard deviation and frequencies were calculated. Correlation and Regression techniques were used to reach at conclusion. Reliability of the scale was checked and dimensionality of the scale was verified through an exploratory factor analysis.

Results

Following table represents the demographic profile of customers:

Table 1: Demographic Profile of Customers

Demographics		Frequency	%
Gender	Male	97	48.5
	Female	103	51.5
Age	20-25	32	16.0
	26-35	83	41.5
	36-45	49	24.5
	Above 45	36	18.0
Occupation	Student	23	11.5
	Working	133	66.5
	Retired	44	22.0
Monthly Income	10000-20000	28	14.0
	20000-30000	47	23.5
	30000-40000	59	29.5
	Above 40000	66	33.0

Above table 1 shows in the sample (n = 200) 51.5% respondents were female and 48.5% were male; maximum 41.5% respondents belong to age group 26-35 and then 24.5% to 36-35; more than half of the respondents (66.5%) in collected sample were working; and 33% respondents' monthly income was above 40000.

Reliability of Scale

Factor analysis was employed on 17 items given by Parasuraman et al. (1990, 1988) to check the dimensionality of collected data.

- The Bartlett test of sphericity (Chi-square = 1336.982, p < 0.000) was significant.
- The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was 0.824 which indicated high degree of intercorrelation among variables.
- Factor loading cut-off for factors was: Eigen value >1; factor loading $\geq .5$
- Average communality: $\geq .5$

Further, 5 factors were obtained by 17 items which explained 72.68% of the total variance. Communality indicates that the variance of the original values was captured fairly well by five factors in table 2.

Table 2: Factor Analysis

Factor	Items	Factor Load	Total Load	Communality
Tangible	Comfort and cleanliness of the dining area	0.82	3.38	0.782
	Visual attractiveness of the building and dining areas	0.74		0.700
	Neat and well groomed staff	0.69		0.626
	Attractive and readable menu	0.59		0.584
	The food are fresh and well presented	0.54		0.553
Reliability	Serve customer's food exactly as it was ordered	0.67	2.51	0.666
	Provide accurate bills to customers	0.64		0.608
	Sincere interest in correcting anything that is wrong	0.63		0.589
	Consistently courteous with customers	0.57		0.552
Responsiveness	Provide prompt and quick service	0.68	1.89	0.681
	Serve customers in the time promised	0.65		0.623
	Give extra effort to handle customer's special requests	0.56		0.582
Assurance	Have the knowledge to answer customers' questions such as menu items, their ingredients, and methods of preparations	0.66	1.83	0.638
	Make customers feel safe with the service and food	0.62		0.592
	Have customer's best interests at heart	0.55		0.514
Empathy	Give customers personal attention	0.68	1.32	0.596
	Understand customer's specific needs and wants	0.64		0.571

The Dimensions of Restaurant

Below table 3 indicates the mean and t-tests scores for the restaurants of Indore on dimensions tested in the study. This result reports that customers are usually not happy with the service quality taken as a whole on the basis of five dimensions. Most satisfying dimension for customer is Tangibles and with rest dimensions they are less satisfied as per the following results:

Table 3: Mean Scores and T-Test Results for the Dimensions of Restaurants of Indore

Dimension	Mean	S.D	t-statistic
Tangible	3.78	0.81	83.48**
Reliability	3.17	0.72	78.36**
Responsiveness	3.23	0.66	74.65**
Assurance	3.38	0.69	89.47**
Empathy	3.12	0.78	72.67**
Overall Service	3.02	1.32	43.02**
Significant at p < 5%			

Overall mean scores for the restaurant service quality. ** Significant at $p < 0.05$

Regression Analysis

Customer Satisfaction = $\alpha + \beta_1$ (Tangible) + β_2 (Reliability) + β_3 (Responsiveness) + β_4 (Assurance) + β_5 (Empathy)
--------- (1)

Intention to Revisit = $\alpha + \beta_1$ (Customer Satisfaction) + β_2 (Tangible) + β_3 (Reliability) + β_4 (Responsiveness) + β_5 (Assurance) + β_6 (Empathy)
--------- (2)

Intention to Recommend = $\alpha + \beta_1$ (Customer Satisfaction) + β_2 (Tangible) + β_3 (Reliability) + β_4 (Responsiveness) + β_5 (Assurance) + β_6 (Empathy)
--------- (3)

The main objective of the study was to identify the key service quality dimensions which affect customer satisfaction and behavioral intentions to visit restaurants in Indore city. Therefore, multiple regression analyses were employed to determine the relative importance of service quality dimensions in predicting overall customer satisfaction and behavioral intentions. Following equation 1 indicates the effect of five explored dimensions on customer satisfaction; equation 2 shows effect of

customer satisfaction & five dimensions on intention to revisit the restaurants; equation 3 exhibits the effect of customer satisfaction & five dimensions on intention to recommend:

Table 4: Prediction of Customer Satisfaction and behavioral Intentions

Dependent	Independent	B	β	t-statistic
Customer Satisfaction	Tangible	0.14	0.11	3.27**
	Reliability	0.58	0.44	6.13**
$R^2 = 0.63$	Responsiveness	0.19	0.12	3.08**
F = 98.47	Assurance	0.37	0.22	4.62**
p = .000	Empathy	0.47	0.36	5.87 **
Behavioural Intention:	Customer Satisfaction	0.383	0.162	2.824**
	Tangible	0.132	0.076	1.356**
Intention to Revisit	Reliability	0.321	0.178	2.102**
$R^2 = 0.38$	Responsiveness	0.162	0.089	1.568**
F = 46.44	Assurance	0.112	0.072	1.270**
p = .000	Empathy	0.248	0.169	2.422**
Intention to Recommend	Customer Satisfaction	0.392	0.148	2.986**
	Tangible	0.278	0.133	2.546**
$R^2 = 0.52$	Reliability	0.292	0.160	2.573**
F = 62.44	Responsiveness	0.186	0.099	0.874**
p = .000	Assurance	0.130	0.081	0.758**
	Empathy	0.066	0.026	0.244

Regression results measuring the dependent variable "customer satisfaction", "intention to return" and "intention to recommend" on the restaurant services

Result Interpretation for First Equation

- All five service quality dimensions have a significant influence on customer satisfaction.

- The adjusted R^2 value for this model is 0.63, which indicates that 63% of the variation in customer satisfaction was explained by the five dimensions.

- The significant F-ratio (F = 98.47, p = 0.000) shows that the results of the regression model could barely have arisen by chance. Therefore, the goodness-of-fit of the model is satisfactory. All five dimensions (Tangible, Reliability, Responsiveness, Assurance and Empathy) significantly and positively influence satisfaction of customers of restaurant customers.

- Further, beta coefficient of every independent variable helps to assess the impact of each independent variable on the dependent variable. From table 4 it is clear that the variable "Reliability" is the most imperative dimension of customers' satisfaction as its standardized coefficient value is 0.160 with the maximum t-value, 2.573, followed by "Empathy" with β = 0.36 & t-statistic = 5.87. Therefore hypothesis H01 can be rejected and it can be concluded that five dimensions of service quality influence the satisfaction of restaurants customers.

Result Interpretation for Second Equation

- All five service quality dimensions and customer satisfaction have a significant influence on intention to revisit of restaurant customers.

- The adjusted R^2 value for this model is 0.38, which indicates that 38% of the variation in intention to revisit was explained by the overall satisfaction along with five dimensions. In other words, almost 38% intention to revisit depends on the customer satisfaction and five dimensions of service quality.

- The significant F-ratio (F = 46.44, p = 0.000) shows that the results of the regression model could barely have arisen by chance. Therefore, the goodness-of-fit of the model is satisfactory. Customer satisfaction and all five dimensions (Tangible, Reliability, Responsiveness, Assurance and Empathy) significantly and positively influence revisit intention of restaurant customers.

- Further, beta coefficient of every independent variable helps to assess the impact of each independent variable on the dependent variable. From table 4 it is clear that the variable "Reliability" is the most imperative dimension of intention to revisit as its standardized coefficient value is 0.178, and the maximum t-value, 2.102, followed by "Empathy" with β = 0.169 & t-statistic = 2.422. The p =.000 which is less than .05, therefore hypothesis H02 can be rejected and it can be concluded that customer satisfaction and five dimensions of service quality influence the revisit of restaurants customers.

Result Interpretation for Third Equation

- All five service quality dimensions and customer satisfaction have a significant influence on intention to recommend.

- The adjusted R^2 value for this model is 0.38, which indicates that 38% of the variation in

intention to revisit was explained by the overall satisfaction along with five dimensions. In other words, almost 38% intention to revisit depends on the customer satisfaction and five dimensions of service quality.

- The significant F-ratio (F = 46.44, p = 0.000) shows that the results of the regression model could barely have arisen by chance. Therefore, the goodness-of-fit of the model is satisfactory. Customer satisfaction and all five dimensions (Tangible, Reliability, Responsiveness, Assurance and Empathy) significantly and positively influence revisit intention of restaurant customers.

- Further, beta coefficient of every independent variable helps to assess the impact of each independent variable on the dependent variable. From table 4 it is clear that the variable "Reliability" is the most imperative dimension of intention to revisit as its standardized coefficient value is 0.178, and the maximum t-value, 2.102, followed by "Customer Satisfaction" with β = 0.148 & t-statistic = 2.986. The p =.000 which is less than .05, therefore hypothesis H03 can be rejected and it can be concluded that customer satisfaction and five dimensions of service quality influence the intention of restaurants customers to recommend.

V.   DISCUSSION AND CONCLUSIONS

The primary objective of the study was to find the main dimension of service quality that affect customer satisfaction and behavioural intentions of restaurant customers of Indore city. For the purpose study used SERVQUAL model with 17 statements based on five dimensions namely tangible, reliability, responsiveness, assurance and empathy along with 2 questions to measure overall satisfaction and 2 more questions to measure behavioural intention of restaurant customers of Indore were considered. The result of the study reported that the most important dimension of the customer satisfaction is reliability and then empathy; for behaviour revisit intention reliability and empathy are again most important service dimensions but for intention to recommend reliability and customer satisfaction are important dimensions. Finally, it can be concluded that reliability is most crucial parameter in context to restaurants of Indore, which should be taken care by the owners of restaurants.

These dimensions of service quality are measured to be more significant in the minds of the Indorian customers, and therefore will be the main determinants of customer satisfaction along with behavioral intentions. This result is moderately consistent with the earlier findings of Pettijohn et al. (1997), Sulek & Hensley (2004) and Kim et al. (2009) that satisfaction and behavioral intentions are positively influenced by food quality (Tangibles-Fresh Food)

dimension. When measuring customer satisfaction with possibility of revisit and intention to recommend, the results exhibited that customer satisfaction is positive and is significantly associated to both the parameters. These results are in line with the prior results of the study of Ranaweera & Prabhu (2003).

The triumph of restaurant businesses depends on offering better service quality, value, and customer satisfaction, which consecutively improves customer behavioral intentions such as revisit and recommend intentions. Post-dining decision of the customers whether to revisit or not to come again to the restaurant is the moment of concluding truth for the manager of the restaurant. Therefore to retain customers and enhance their future visits to restaurants managers should try to provide more friendly services and better manner. The feedback of customers should not be confined to the pages of attractive diaries only but these should be implemented as much as and as soon as possible. Happy customers come back and bring potential customers to you.

Limitations of the Study

- Present research is limited up to only service sector especially to restaurants of Indore city. Other service sector can also be considered to get different results.
- Of course time and region of the study were the important constraint for the study.
- Other tests can also be applied for the future researches.
- Sample size is inadequate enough to generalize the results.

REFERENCES

[1] Chow, I.H., Lau, V.P., Lo, T.W., Sha, Z. & Yun, H. (2007). Service quality in restaurant operations in China: decision- and experiential-oriented perspectives. International Journal of Hospitality Management, 26(3), 698–710.

[2] Fornell, C., Johnson, M.D., Anderson, E.W., Cha, J. & Bryant, B.E. (1996). The American customer satisfaction index: Nature, purpose and findings. Journal of Marketing, 60, 7–18.

[3] Grönroos, C. (1988). Service quality: The six criteria of good perceived service quality. Review of Business, 9(3), 10-13.

[4] Han, H. & Ryu, K. (2009). The roles of the physical environment, price perception, and customer satisfaction in determining customer loyalty in the restaurant industry. Journal of Hospitality & Tourism Research, 33(4), 487-510

[5] Kim, W.G., Ng, C.Y.N. & Kim, Y-S. (2009). Influence of institutional DINESERV on customer satisfaction, return intention, and word-of-mouth. International Journal of Hospitality Management, 28(1), 10-17

[6] Oliver, R.L. (1994). Conceptual issues in the structural analysis of consumption emotion, satisfaction and quality: Evidence in a service setting. Advances in Consumer Research, 21, 16-22.

[7] Oliver, R.L. (1997). A Behavioral Perspective on the Consumer. McGraw-Hill, New York, N.Y

[8] Parasuraman, A., Zeithaml, V.A. & Berry, L.L. (1988). SERVQUAL: a multiple item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(5), 21- 40.

[9] Parasuraman, A., Berry, L.L. & Zeithaml, V.A. (1991). Refinement and reassessment of the SERVQUAL scale. Journal of Retailing, 67(4), 420-450.

[10] Pettijohn, L.S., Pettijohn, C.E. & Luke, R. (1997). An evaluation of fast food restaurant satisfaction: determinants, competitive comparisons and impact on future patronage. Journal of Restaurant and Foodservice Marketing, 2(3), 3–20.

[11] Ranaweera, C. and Prabhu, J. (2003). The influence of satisfaction, trust and switching barriers on customer retention in a continuous purchasing setting. International Journal of Service Industry Management, Vol. 14 Issue: 4, pp.374-395.

[12] Ryu, K., & Jang, S.S. (2007). The effect of environmental perceptions on behavioral intentions through emotions: The case of upscale restaurants. Journal of Hospitality & Tourism Research, Vol. 31 Issue: 1, pp. 56-72.

[13] Sulek, J.M. & Hensley, R.L. (2004). The relative importance of food, atmosphere and fairness of wait. Cornell Hotel and Restaurant Administration Quarterly, 45(3), 235-247.

[14] Zeithaml, V.A., Berry, L.L. & Parasuraman, A. (1996). The behavioural consequences of service quality. Journal of Marketing, 60(2), 31-46.