

## “Service Quality Dimensions and Their Impact on Customer Satisfaction and Loyalty: A Study of Fast-Food Chains in Delhi (NCR)”

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### Abstract

The present study gives a detailed insight into the connection between service quality standards, customer satisfaction, and loyalty in the fast-food industry of Delhi (NCR). With a quantitative methodology being used, the study identified and validated multiple dimensions, which serve as the criteria for service quality in fast-food outlets. They include tangibles and ambience, assurance and safety, reliability and accuracy, responsiveness and promptness, empathy and personalization, food quality and value, as well as technology and convenience. Besides, The study revealed that there were great differences between the perceptions and expectations of customers regarding all the five selected fast-food brands.. The use of the gap analysis method made the study show the presence of service quality gaps in all the five selected fast-food restaurants.

**Key Words :** Service Quality, Fast-Food Industry, Customer Satisfaction, Customer Loyalty, Hospitality Management,

### Introduction

Greek and Roman Cultures and has been developed with contributions from all religions. The Ancient Greeks used to travel around the Roman Empire and support their religious practices by allowing their priests and missionaries to travel on long-distance journeys and spreading religion through their travel as well as by other means (Kulshrestha et.al, 2016). The modern day Hotel Industry comes under the umbrella of complete hospitality for individuals when they are travelling and provides accommodation and food while travelling away



from home, as well as assisting travelers in making transportation arrangements and providing travelers with various services and products (Ninemeiere & Perdue, 2008). The Hotel Industry is known as the fastest growing Industry in the world today and it provides a wide range of auxiliary products and services in addition to accommodation and food which facilitates travelling (Kumar, 2016). In the past few years, the Indian hospitality industry has grown and changed in amazing ways, making it a major part of the country's economy. The Indian Brand Equity Foundation (IBEF) says that the sector's growth can be linked to a number of things. The demand for travel and tourism has grown because India's economy is growing quickly, the middle class is growing, and disposable incomes are rising. This has brought in a lot more tourists from both inside and outside the country, which has helped the hospitality industry. Indian hotels have been around for a long time. Most of them were owned and run by foreigners in the 17th century, when they housed their ambassadors and other officials there. Later, they also started using Indian hotels for business trips.

Government programs have played a big role in helping the sector grow, and they have made a big difference in its growth. The Incredible India campaign and the introduction of e-visa services have made India an even more appealing place for tourists to visit, leading to a big rise in the number of visitors. The government's focus on building up tourism infrastructure, like airports, highways, and tourist circuits, has helped the hospitality industry grow even more. Foreign direct investment (FDI) has been very important for the growth of the hospitality industry.

### **Fast food**

One of the fastest-growing food categories around the globe is fast food. It contains such items as onion rings and double cheeseburgers.. Fast food is a quick, cheap, and easy-to-find alternative to home-cooked meals. Fast food is easy and cheap for people who are always on the go, but it is usually high in calories, fat, saturated fat, sugar, and salt. There are a lot of other definitions for fast foods in the literature. Here are a few of them:

Bender and Bender (1995) say that fast food is "a general term for a limited menu of foods that can be made using production-line techniques." Typically, suppliers concentrate on products such as hamburger, pizza, chicken, or a sandwich.

### **The fast food business in India**

India's fast food industry is expanding at 40% annual growth rate and will gross more than a billion dollars in the future, according to Worldwatch.org. Nirula's also used to be a favourite among Indians before the multinational fast food chains came to India. The Nirula's started off as ice cream parlours and later on added lots of other fast foods such as burgers, pizzas, sandwiches and so on..

Nirula's was founded in 1934 and is now a diverse group with a chain of Elegant Business Hotels, Waiter Service Restaurants, Family Style Restaurants, Ice Cream Parlours, Pastry Shops, and Food Processing Plants in India.

### **Eating habits and fast food**



A recent online survey from AC Nielson India put it in seventh place. This is one of the top ten places in Asia-Pacific where people eat fast food every week. More than 70% of people who live in cities in India order food from take-out restaurants at least once a month. The survey shows that Pizza Hut is the most popular fast food place in India. The survey results show that Indians (66%) think that hygiene and cleanliness are the most important factors when choosing between brands.

Vanzyl et al. (2010) conducted a survey examining the dietary habits, socioeconomic factors, and additional influences affecting the fast food consumption of young adults from various socioeconomic backgrounds in Johannesburg, South Africa. The study showed that 21% of the people who answered eat fast food at least once a week, and 27.6% eat it two to three times a week. There was a strong link between socio-economic group and gender and how often people ate fast food. More people in the lower socio-economic group said they ate fast food more often. Men ate fast food more often than women. The researchers found that burgers, pizza, and fried chicken were the most popular fast foods.

### **Review of literature**

India's economy is growing very quickly, and it is now the fifth-largest in the world. Many multinational restaurant chains set up shop in India after the Liberalization, Privatization, and Globalization (LPG) model was put into place. Finkelstein (1989a) says that the modern idea of the food service industry is closely linked to the French Revolution. After the revolution, the power of the aristocracy went down, and many royal chefs lost their jobs. Some of these chefs opened restaurants where they served food to people who could pay for it. People started calling these places "restaurants" because they were places where people could get their energy back from being tired or hungry. Mennell (1996) said that the "London Tavern" was built in England around 1786.

The food and drink service industry grows mostly when a country's economy grows. A restaurant is a place where people can get food and drinks if they are willing to pay for them (Ninemeier, 1997). One of the most important things is the quality of the food, since restaurants mostly sell a dining experience (Yuksel & Yuksel, 2002). Most restaurants serve food on-site, but many also deliver food to customers' homes and allow them to take it home (Ninemeier, 1997).

The main goal of any service is to meet the needs of its customers. So, service means giving great quality and making sure that customers get their money's worth (Kasper et al., 1999). As part of the larger service sector, the restaurant business is very important for a country's economic growth. Rande (1995) says that service is very important in the restaurant business because people want to have a good time when they eat out. Customers are often willing to pay two or three times more for their meals just because they get better service.

Rande (1995) also said that even a meal of average quality can make customers happy if it is served in a professional and appealing way. On the other hand, even great food served poorly can make customers unhappy. Kotler et al. (1999) characterized service as "an activity that one party provides to another, which is fundamentally intangible and does not culminate in the acquisition of any tangible asset; it may or may not be

associated with a physical product.” This shows that in the restaurant business, the quality of service is just as important as the food when it comes to how customers feel about the whole dining experience. Kurtz and Clow (1998) stated that the characteristics of services differ significantly from those of goods and tangible products. As such it is critical that restaurant owners recognise these distinct challenges and tackle them to keep their customers and to gain new customers. Parasuraman et al (1988), Kerin (2003), Kotler (2003), and Solomon and Stuart (2003) all say that services have four important traits: they can't be touched, they can't be separated, they are different from each other, and they don't last long. In their book, Hoffman and Bateson (2001) also indicated that once a chance for offering the service is missed, it can never be regained. An illustration would be when a customer makes a reservation for the table but does not turn up on the day, and in such circumstances, the income from the table is completely lost (Kotler et al., 1998).

According to Kotler and Armstrong (2001), as well as Parasuraman et al. (1985), service provision requires a great deal of human effort and intervention, thus being quite unpredictable and inconsistent. Therefore, there may be significant differences in the service delivery and its overall quality from person to person, as well as from time to time even with the same provider of the service. The issue of inconsistency in food preparation and service delivery in the restaurant business is very relevant and problematic (Cadotte & Turgeon, 1998).

### **Definition of Service Quality**

“Service quality” can be defined in a number of ways. Danish (2018) defined service quality as a comparative process between customer's expectation and service provided.. On the other hand, according to Fida et al. (2020), service quality refers to the capabilities available for the organization concerned in meeting the expected customer needs. Moreover, Elvira & Shpetim (2016) viewed service quality as an assessment approach that can be used to measure long-term assessment. Nevertheless, despite the varied definitions, the definition commonly referred to concerning service quality is Danish (2018).

Elvira & Shpetim (2016) identified three components when considering service quality. Firstly, they presented consumers' technical quality that includes the service's technical attributes. Secondly, they introduced functional quality that includes the way services are delivered. Lastly, as per Elvira & Shpetim (2016), there exists the image quality of the service provider, which involves both the functional and technical attributes to form the basis for a service. They highlight that the functional quality is a key element in service quality compared to technical quality. This is because quality of service needs to be improved by enhancing the functional quality of the firm both in terms of transactional quality and employee-customer quality relationships.

### **Service Quality in Restaurant**

Service quality in the hospitality industry is defined by Avelini-Holjevac (2002) as “a realization of pre-established standards of quality, as well as their sustained achievement—this is a continuous process.” Based on this definition, the best standards and superior services and products are offered by high-class hotels, while economy-class hotels offer inferior products and services at relatively low cost and in limited varieties.

With the advancement of society and social changes, along with higher levels of education and increased culinary awareness and health consciousness, all these factors together contribute to change customer expectations for eating out.

For example, it was found by Mohsin et al. (2005) that customers dining in New Zealand restaurants and cafes expected variety and quality of food, staff skills and competence, presentation of meals, good manners, fast service, and value for money. Furthermore, other researchers have found that many factors contribute to the determination of restaurant quality.

Service quality measurement in restaurants becomes a challenging task since it encompasses the evaluation of both the result of the service and the entire process of its delivery. The impact on the quality of service has three main components: design, music, lighting; the employees and their professionalism and reliability; and customers and their interaction with the others (Wu & Liang, 2009). Many studies have been dedicated to the examination of the link between service quality and customer satisfaction in restaurants. Customer satisfaction was found to be influenced by such factors as employee responsiveness, pricing, and quality of meals provided. According to Kim et al. (2009), five dimensions affecting the general customer satisfaction include (1) food quality, (2) service quality, (3) price and value, (4) atmosphere, and (5) convenience. In its turn, Wu and Liang (2009) noted that employees were important to satisfy their customers.

There have been several studies conducted to specifically measure the level of service quality in the fast food industry considering its growing presence around the world and the competitive nature of its customer-oriented operations (Stevens et al., 1995; Johns & Tyas, 1996; Qin & Prybutok, 2008; Qin, Prybutok & Zhao, 2010). For instance, Kara, Kaynak, and Kucukemiroglu (1995) analyzed The perceptions of consumers about the quality of service provided by fast food restaurants in USA and Canada on the basis of eleven parameters, including price, friendly service, variety of food, quick delivery, cleanliness, calorie content, convenience, hours of operation, children's services, delivery system and seating facilities. Udayalakshmi and Sridevi (2023) conducted an analysis of prior service quality models and found that there is no universal model applicable in every situation. They stressed the impact of new digital technology, including AI, robots, and automation, in improving fast-food service quality. Pabalkar and Phogat (2023) applied the SERVQUAL model to digital platforms such as Swiggy and Zomato, identifying large discrepancies between expectations and actual service perceptions, especially regarding reliability and responsiveness.

Zhang et al. (2024) examined online-to-offline (O2O) food delivery services, concluding that exposure to several fast food options increases purchase probability. Therefore, it is crucial for QSRs to ensure convenience while still being health-conscious. Hota (2023) noted shifting preferences among millennials as a structural issue in India's QSR industry.

### **Restaurant Service Quality and Customer Satisfaction**

Andaleeb and Conway (2006) noted that customer satisfaction in full-service restaurants in the USA is affected by food quality, responsiveness, reliability, and price. Kim et al. (2009) asserted that in the USA, university food

service facilities, restaurant attributes such as food quality, service quality, price and value, convenience, and atmosphere significantly influenced customer satisfaction. Mohammad and Alhamadani (2011) conducted a survey study at a commercial bank in Jordan, revealing that service quality attributes—empathy, tangibles, reliability, responsiveness, and assurance—exhibit a positive and significant correlation with customer satisfaction. Oh (1999), Kyoon and Ah (2007), and Korda and Milfelner (2009) all agreed that service quality is directly related to customer satisfaction in the hotel industry in the USA.

### **Customer Loyalty**

The customer loyalty is defined as the purchase of goods and services over an extended period of time along with having a favorable attitude towards the products and services offered by the company. The customer loyalty in a business organization is considered to be a key element for the success of the organization. According to the authors, the loyal customers of a restaurant will spend a lesser amount of time in exploring other options. In the research carried out by Selnes in 1993, it was found that loyal customers have a tendency to refer their services to other individuals along with more possibilities of repeat purchases compared to non-loyal customers.

All these aspects in the restaurant contribute to the findings where the importance of food quality was found to be the most significant determinant in determining customer loyalty. As stated by Pettijohn et al., (1997), in their research on factors determining satisfaction among customers in fast food industries, the results revealed food quality and physical surroundings to gauge patron satisfaction and return intentions. According to Sulek & Hensley's (2004) research on "University Dining Facilities," the restaurant's ambience—including its lighting, music, and décor—had an impact on patrons' happiness and propensity to return.

### **Objectives**

1. To identify and analyze the key dimensions of service quality in fast-food chains in Delhi (NCR) using a quantitative (factor analysis) approach.
2. To examine the impact of service quality dimensions on customer satisfaction and customer loyalty in the fast-food industry in Delhi (NCR).

### **Research Methodology**

The systematic analysis of this paper using various statistical techniques is provided in this chapter. First, there is the discussion on the demographic characteristics of the respondents, which are necessary for the purpose of this study. Second, the dimensions of service quality in fast-food restaurants located in Delhi (NCR) are determined through the use of factor analysis. Subsequently, the first hypothesis (H1) of this study is tested.

This current study offers an overall perspective on the interplay between service quality standards, customer satisfaction, and customer loyalty in the fast-food industry in Delhi (NCR). Through the application of a quantitative research method, the study uncovered several dimensions contributing to the formation of service quality standards in fast-food restaurants. The dimensions include tangibles and ambiance, assurance and safety, reliability and accuracy, responsiveness and promptness, empathy and personalization, food quality and value,

and technology and convenience. Moreover, the study revealed considerable differences in The survey disclosed significant disparities in customer attitudes and expectations about all five fast-food chains examined.

## Results & Discussion

### Demographic Background of Respondents

The current study focuses on the presentation of empirical findings generated by means of statistical analyses. In this regard, the results obtained are demonstrated in terms of various demographic characteristics of students shown in Table No. 1

Table 1: Overview of Demographic Profile

Demographics	Features	Number	Percent
<b>Gender</b>	Male	288	74.8
	Female	97	25.2
<b>Age in Years</b>	15 to 20	94	24.4
	21 to 25	173	44.9
	26 to 30	70	18.2
	31 to 35	32	8.3
	Above 36	16	4.2
<b>Academic Qualification</b>	High School	104	27.0
	Graduate	142	36.9
	Postgraduate	91	23.6
	Above postgraduate	48	12.5
<b>Annual Income (INR)</b>	1,5,0000 - 2,00,000	233	60.5
	2,00,001-4,00,000	50	12.9
	4,00,001-6,00,000	46	12.0
	6,00,001-8,00,000	25	6.5
	Above 8,00,000	31	8.1
<b>Occupation</b>	Student	256	66.5
	self employed	26	6.8
	private sector	81	21.0
	Govt. employee	17	4.4
	Any others	5	1.3

The

demographics of the respondents are covered in Table No. 1. The survey respondents' demographic profile offers important information on the features of the sample being studied. The distribution of gender shows that male respondents dominate the sample (74.8%) compared to female respondents (25.2%). The predominance of males can be interpreted in terms of a preference for participating in the survey or the relatively high presence of males in fast food restaurants in Delhi (NCR).

According to the age distribution, it should be stated that the majority of respondents belong to young age groups where 44.9% of the total respondents have been found to be of the 21-25 years age category while 24.4% respondents belong to the 15-20 years age group. The combination of these two categories accounts for almost 70% of the total number of respondents and thus highlights the strong relationship between youth and the use of fast-food services. On the other hand, respondents within the 26-30 years age group and those who are older than 31 years belong to 18.2% and 12.5% of the sample respectively. It can thus be concluded that a young clientele of fast-food service providers dominates in this particular region.

As regards to the educational profile of the respondents, it can be seen that there is a considerable portion of respondents having high level of education. The largest share of the respondents has been occupied by graduates (36.9%) followed by respondents having high school education (27.0%). The third place is taken by postgraduates accounting for 23.6%. Thus, one can assume that fast-food consumers are not restricted to any particular educational category.

The income distribution clearly indicates the economic capability of the respondent. Most of the respondents (60.5%) have income levels ranging from INR 1,50,000 to INR 2,00,000, indicating low middle economic level. 12.99 percent of the respondents fall into the INR 2,00,001-4,00,000 economic group, while 12 percent are in the INR 4,00,001-6,00,000 income level. People with high income, i.e., more than INR 6,00,000, constitute only 14.6 percent. This clearly suggests that fast food has more accessibility and appeal among customers.

Based on the occupational profile wise classification, it can be seen that the most of the survey participants fall into the category of students (66.5%). This also corroborates the age group as well as the income distribution pattern among the survey participants. Employees working in the private sector form 21.0% of the survey respondents, whereas the self-employed account for 6.8%, followed by employees working in the government sector (4.4%). Only 1.3% of the survey respondents belong to the 'others' category. Again, the high number of students among the survey participants indicates that fast-food restaurants appeal to young people in search of affordable dining places.

In summary, the background information analysis of the survey participants indicates that the customers of the fast-food restaurant are predominantly young males and students belonging to lower to middle income categories with higher levels of education.

### **Factor Analysis for Identifying Underlying Dimension of Delhi-NCR Fast-Food Service Quality**

The Kaiser-Meyer-Olkin (KMO) score measure and Bartlett's Test of Sphericity provide crucial information about the suitability of the data for exploratory factor analysis (EFA). In this study on the dimensions of

international fast-food chain services' quality in NCR Delhi, The KMO Score is 0.931, representing the statistical criterion value specified by Kaiser (1974). The KMO scores lie within a range from 0 to 1, where the higher KMO score represents a higher level of commonality in the variables, thereby making it more appropriate for exploratory factor analysis. Any value of KMO score exceeding 0.80 demonstrates that the sample size and correlation of variables are appropriate for identifying the factors.

Consequently, the test result indicates that the suitability of the data for use in factor analysis. The suitability of using factor analysis for testing hypothesis was tested using the Bartlett's Test of Sphericity. Results obtained from the test show that the value of chi-square statistic is 28041.600 and degree of freedom of 2145 with significance level at  $p < 0.001$ . The results suggest that the matrix differs significantly from identity matrix, and thus, suggesting the variables share sufficient relationship for factor analysis (Field, 2018). Therefore, useful factors can be extracted from using factor analysis in the research.

Table 2: KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.931
Bartlett's Test of Sphericity	Approx. Chi-Square	28041.600
	df	2145
	Sig.	.000

The satisfactory value for KMO test statistics along with the significance level of Bartlett's test indicated adequacy and appropriateness of the data for conducting factor analysis. This allows us to be confident in proceeding with extracting factors of key dimensions that play an significant role in shaping customer experience in fast-food chains of Delhi (NCR). In the context of research on service quality, such statistical support is extremely significant as it proves the validity of using chosen variables that measure shared concepts instead of individual or non-related concepts (Field, 2018). The current study has used principal component analysis for reducing the number of variables representing service quality criteria from 66 to 53 variables which have been classified under seven categories. Thirteen variables having values less than 0.5 have been excluded. Items having values above 0.5, which form the minimum threshold limit as recommended by Hair et al. (2019), have been retained as they strengthen the primary dimensions.

Table 3: Eigenvalues and Total Variance Explained

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %

1	10.100	15.303	15.303	10.100	15.303	15.303	9.780	14.819	14.819
2	8.420	12.757	28.060	8.420	12.757	28.060	7.812	11.836	26.655
3	7.114	10.778	38.839	7.114	10.778	38.839	7.050	10.682	37.337
4	6.789	10.286	49.125	6.789	10.286	49.125	6.788	10.262	47.599
5	6.023	9.126	58.251	6.023	9.126	58.251	6.373	10.262	57.860
6	4.536	6.872	65.123	4.536	6.872	65.123	4.414	6.687	64.548
7	3.847	5.829	70.952	3.847	5.829	70.952	4.227	6.405	70.952
Extraction Method: Principal Component Analysis.									

The output generated by performing exploratory factor analysis with the help of rotated component matrix revealed that the eigenvalues of all the seven factors are above one. Therefore, all these factors are significant for differentiating the dataset. For any study conducted in the social sciences, where variance explanations of 50-60% are considered acceptable, these seven factors have explained a total of 70.952%, making it acceptable in terms of variance explanation. It implies that the dimensions that have been identified contain views of over fifty percent of respondents regarding the standards of service quality in fast-food restaurants (Hair et al., 2019). Before leading factor analysis with rotation, the first dimension explains the variance of 15.303% of the total variation; however, after rotation, it accounts for 14.819%. Therefore, we can say that after rotation, the variances are spread out over different factors for simplicity. After running the rotation process, the second dimension explains 11.836% of total variance, the third dimension explains 10.682%, and the fourth dimension explains 10.262%. The fifth, sixth, and seventh dimensions account for the variation of 10.262%, 6.687%, and 6.405% respectively (Tabachnick & Fidell, 2019).

The combined variance explained by these rotated factors clearly indicates that these seven factors as a whole indicate a holistic perspective of the standards of service quality as perceived by consumers of fast-food restaurants. This proves that service quality is indeed multidimensional, which is further emphasized in other studies, such as the development of a 'SERVQUAL' scale by Parasuraman et al. (1988), measuring the gaps existing between customers' expectations and perceptions of service quality.

To conclude from above, in relation to fast food chains operating in Delhi (NCR), it is clear that the quality of services is influenced by many factors, as highlighted above. The seven factors identified above—Tangibles & Ambience, Assurance & Safety, Reliability & Accuracy, Responsiveness & Prompt Service, Empathy & Personalization, Technology & Convenience, and Food Quality & Value—are very relevant to the definition of service quality in the fast food industry. The factors related to service quality dimensions are quite relevant to the general literature on the subject matter, in which the multi-dimensional nature of service quality and its impact on customer satisfaction and loyalty have been elaborated.

**Table 4.: Rotated-Component Matrix**



Table 4.4: Rotated-Component Matrix

<b>Rotated-Component Matrix<sup>a</sup></b>							
	Component						
	1	2	3	4	5	6	7
<b>Factor-1: Tangibles and Ambience</b>							
Modern interior design		.941					
Comfortable seating arrangements		.938					
Employees wear clean and proper uniform		.928					
Adequate parking facilities		.911					
Availability of hygienic washrooms		.907					
Attractive décor and ambience		.904					
Neat and professional appearance of staff		.892					
Cleanliness of dining area		.867					
Location is easy to find		.603					
Availability of sufficient dining space		.551					
<b>Factor-2: Assurance and Safety</b>							
Restaurant follows safety and health guidelines			.949				
Staff behaviour makes customers feel safe			.947				
Staff have sufficient knowledge about menu			.946				
Employees are consistently friendly			.921				
Courteous and polite staff			.903				
Employees are competent and skilled			.889				
Customers feel secure in transactions			.868				

Restaurant maintains proper hygiene standards			.865				
<b>Factor-3: Reliability and Accuracy</b>							
Correctness of order served				.951			
Food served as per committed time				.950			
Staff provide services as promised				.947			
Restaurant maintains consistent quality				.939			
Orders are served hot and fresh				.916			
No wrong items delivered in orders				.891			
Restaurant provides service at the promised time				.863			
Billing is accurate and error-free				.841			
<b>Factor-4: Responsiveness and Prompt Service</b>							
Waiting time is reasonable					.950		
Quick response to complaints					.943		
Food delivered quickly					.929		
Prompt service by staff					.918		
Speed of billing and checkout					.913		
Staff willingness to help customers					.910		
Availability of staff when needed					.880		
Restaurant adapts quickly to customer requests					.849		
<b>Factor-5: Empathy and Personalization</b>							
Employees understand customer's specific needs					.943		
Staff give personal attention					.918		
Individual customer preferences remembered					.901		
Staff show care and concern					.879		
Convenient operating hours					.835		
<b>Factor-6: Food Quality and Value</b>							
Food is served hot and fresh						.956	
Variety of food items available						.951	
Food presentation is attractive						.949	
Prices are competitive						.947	
Taste of food is good						.934	
Value for money is reasonable						.920	
Portion size is adequate						.911	
Healthy food options are available						.617	
Food quality is consistent						.575	



<b>Factor-7: Technology and Convenience</b>							
Self-service kiosks are available							.954
Mobile app / website is user-friendly							.942
Home delivery services available							.936
Online ordering facility available							.918
Availability of digital payment options							.917

### **Dimension-1: Tangibles and Ambience**

The first factor extracted from the research shows the highest eigenvalue and accounts for an important percentage of the variance in relation to physical and environmental characteristics of the service. Factors under this dimension are: modern interior (.941), comfortable seating arrangement (.938), staff wears clean and proper uniforms (.928), provision of ample parking facility (.911), presence of hygienic washrooms (.907), attractive décor and atmosphere (.904), professionally dressed staff (.892), clean dining area (.867), easy accessibility (.603), and provision of ample dining space (.551). It shows that the physical environment and its aesthetics have a direct impact on customer perceptions.

### **Dimension-2: Assurance and Safety**

The second component, which has a relatively high value of the eigenvalue, encompasses consumer trust and a sense of security in the service interaction. Highly weighted variables include: compliance with health regulations (.949), behavior of employees gives consumers a feeling of safety (.947), adequate familiarity with the menu on the part of the employees (.946), always friendly employees (.921), polite and courteous employees (.903), competent and skillful employees (.889), secure payment transactions (.868), and maintenance of hygiene standards (.865).

### **Dimension-3: Reliability and Accuracy**

The third factor shows that it has a solid eigenvalue, accounting for the variance attributable to reliability. High loading values for this factor are correctness of order served (.951), food served according to the committed time (.950), staff offering services according to their promise (.947), maintaining quality consistency (.939), serving hot and fresh orders (.916), wrong items not delivered (.891), service according to promise (.863), and correct billing (.841). The above items illustrate the restaurant's capacity to reliably keep its promises and deliver its services without errors.

### **Dimension-4: Responsiveness and Prompt Service**

The fourth factor with a considerable eigenvalue is related to variability associated with timeliness and flexibility in the provision of service. The items with high loads are:

appropriate waiting time (.950), fast handling of complaints (.943), quick delivery of food (.929), timely service rendered by the staff (.918), fast billing and check-out (.913), willingness of the staff to assist (.910), staff availability (.880), and the restaurant adjusts swiftly to requests (.849). In general, the factor indicates that responsiveness and proactive actions of the staff greatly influence consumer satisfied with fast-food service.

**Dimension-5: Empathy and Personalization**

Factor five, even though it accounts for a smaller portion of the variation than the previous factors, is also quite crucial. The high-loading items in this case are: understanding the need of the customer (.943), personal service by the employees (.918), remembering personal preferences (.901), employees being caring and concerned (.879), and convenience in opening hours (.835). Other items that do not load highly but are also conceptually important include comfort for children/elderly and lighting and ventilation.

**Dimension-6: Food Quality and Value**

The sixth factor accounted for the significant eigenvalue, showing the importance of this factor in capturing the variance within the observed items. This factor revealed that the characteristics of food are essential in determining service quality in international fast-food outlets. These items were highly loaded on the sixth factor and included the following: Food served hot and fresh (.956), Variety of food items available (.951), Attractive food presentation (.949), Competitive food prices (.947), Tasty food (.934), Reasonable value for money (.920), Adequate portion sizes (.911), and Others include healthy food choices (.617), Quality consistency of the food served (.575). This indicates that the most crucial component of service quality in fast food establishments is the quality of the meal.

**Dimension-7: Technology and Convenience**

This seventh component, with an eigenvalue higher than the cutoff, denotes technological convenience within the service. These variables are: self-service kiosk (.954), friendliness of mobile application/website (.942), availability of home delivery (.936), ability to order online (.918), and digital payment system (.917). On the whole, this variable suggests the increasing dependence on technological means for improving convenience and efficiency, especially for the contemporary consumer of fast food.

In the current study, the factor analysis was able to successfully identify seven dimensions which have a high level of validity and conceptual meaning and represent Delhi's (NCR) fast food industry's service quality standards. Factors like Tangibles & Ambiance, Assurance & Safety, Reliability & Accuracy, Responsiveness & Prompt Services, Empathy & Personalization, Food Quality & Value, Technology & Convenience, etc., each represent different dimensions of customer perception of service

quality in this particular context. Thus, in totality, all these factors represented a framework of service quality.

### **Conclusion**

This particular study brings about a deep knowledge about the relationship between service quality standards, customer satisfaction, and customer loyalty in the fast food industry of Delhi (NCR). Through the use of the quantitative method, the study was able to identify and validate multi-dimensional factors, which constitute service quality standards in fast food restaurants. The factors include tangible factors and ambiance, assurance and safety, reliability and accuracy, responsiveness and promptness, empathy and personalization, food quality and value, and technology and convenience. In addition, this study indicated significant differences in the perception and expectations of customers for all the five selected fast-food chains.

### **Directions for Future Research**

Research directions based on the study's findings may significantly improve the understanding of such concepts as service quality, customer satisfaction and loyalty in the fast-food business context.

First of all, one should consider the possibility of expanding the geographic boundaries of the survey, moving away from the region of proximity of Delhi (NCR), including other major cities in the country. The comparison between regions in question will help understand the impact of demographic, cultural and economic differences in consumer behavior within fast-food businesses.

Second, there is a great potential of longitudinal research methodologies that would track changes and evolution of consumers' attitude, level of their satisfaction, and loyalty over time. Long-term monitoring of consumer behavior and experience will demonstrate long-lasting impacts of improvements within service quality and loyalty programs. The difference in behavior resulting from seasonality of menu, promotions, or other economic factors would also become evident. Finally, foreign and local fast-food businesses may be included in future studies.

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