




A comparative analysis of service quality in public and private sector hotels

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ABSTRACT

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Service quality has been found to improve with trained staff, a proper customer feedback mechanism, and quick complaint resolution in business organisations. In India, people have a skewed perception of the efficiency of public sector service delivery as compared to private business organisations. The present study aims to investigate the impact of trained staff, proper customer feedback and quick complaint resolution on service quality in the public and private sector hotels. Research instruments such as questionnaires, personal interviews, and participatory observation were used to collect primary data from the respondents. The data were analyzed through the appropriate statistical tools by using Microsoft Excel ToolPak. Statistical tools such as the percentage method, cross tabulation, Chi-square test, independent sample t-test, one-way ANOVA, and Multiple Regression were used for the analysis. The findings reveal that Staff training, a proper feedback mechanism, and the resolution of customer complaints were essentially the indicators of good service quality in the hotel industry. The failure of the public sector organisations to properly address all three essential components of good service quality was a major factor in their inability to meet customer expectations.

Contribution/Originality: The study is the first of its kind where a comparative analysis of service quality in the tourism industry across the public and private sectors has been done.

1. INTRODUCTION

Meeting and delivering customers' expectations is key to service quality (Antony, Jiju Antony, & Ghosh, 2004; Harvey, 1998). According to Parasuraman, Zeithaml, and Berry (1985), service quality is a perception of the gap between performance and expectations. However, the concept of service quality is no longer restricted to customer expectations but also includes innovation to match the degree of customer fulfilment. Many academics have expressed diverse views on the elements influencing service quality in the tourist business. However, in recent years, trained staff, customer feedback and speedy complaint resolution, and a positive environment have developed as areas of consumer awareness. Training is described as the method that helps an employee in completing their duties effectively (Rouiller & Goldstein, 1993). There has been a surge in the number of studies which shows a positive relationship between the training and effectiveness of service delivery. According to Dhar (2015), employee training is critical to improving performance and service quality. When training opportunities and approachability are limited, service quality and the organization's brand image suffer. Sánchez-Aragón, Barba-Aragón, and Sanz-Valle (2003) investigated the direct favourable impacts of training on service quality, and established that training had a direct beneficial impact on service quality.

Feedback is a term used to describe accommodating information about a product or service from an individual, which is then transmitted to the service provider, who may utilise the information to change and advance current and future actions and behaviours (Wyse, 2015). Customer feedback guides and evaluates a company's decisions and shapes its services and products delivery. According to Ciotti (2013), a frequent feedback mechanism enhances services in the tourist and hospitality industries. Feedback may help hotels and resorts gain a unique and innovative insight of their service quality and client expectations. Customer feedback is also regarded as immediate damage control for the modern world. A complaint is an action taken in reaction to dissatisfaction with products and services (Thøgersen, Juhl, & Poulsen, 2009). Complaints are not a bad thing for the business; rather, they present a chance for the business to address its flaws and shortcomings in service delivery. The complaints give companies the opportunity to devise remedies to these difficulties. The settlement of customer complaints has a direct beneficial influence on the consumers' perception of the organization's competency. According to Gruber, Szmigin, and Voss (2006), addressing customer complaints has an influence on an organization's service quality. It contributes to the formation of trust between the service supplier and the purchaser.

2. QUALITY OF PUBLIC AND PRIVATE SERVICES

People's perceptions of the quality of services are indicators of an institution's performance (Chingos, Henderson, & West, 2012). In India, people have a skewed perception of government organisations. The perceived performance gap between the public and private sectors is related to both quality and customer service, as well as service delivery efficiency (Sensenbrenner, 1991). Public service organizations are frequently found to be deficient in providing enough internal systems and optimal capability to perform services (Munhurrun, Bhiwajee, & Naidoo, 2010). Osborne and Gaebler (1992) mention a deep-seated distrust of government in the preface to "Reinventing Government". They assert that the key concern with governments now is "not what they do, but how they operate." In several fields such as banking, healthcare, insurance, and marketing, the private sector has done well in providing its customers (Elango & Gudep, 2006).

2.1. Indian Evidence

Rohini and Mahadevappa (2006) conducted a study on service quality perception in five Bangalore hospitals. The well-documented 'Service Quality Model' was used as a conceptual framework for understanding service quality delivery in healthcare services. A survey of 500 patients revealed a broad service quality gap between patients' perceptions and expectations. Elango and Gudep (2006) examined service quality and customer satisfaction in India's private, public, and international banks. To extract the important elements and determine if there was a significant difference in service quality across the three banking sectors, the authors employed 'factor analysis' (FA) and the 'one-way analysis of variance' categorization. The study revealed that international and new generation private sector banks were providing superior service to their consumers.

Dhar and Vigg Kushwah (2019) concluded that if public sector banks were to compete in the global economy, they must focus on closing the gap in consumer expectations and perceptions of service quality. To that aim, public sector banks should constantly examine and re-review how consumers perceive their services in order to determine whether they met, exceeded, or fallen short of their customers' expectations. Kingdon (1996) studied Indian public and private schools in the urban Lucknow area of Uttar Pradesh. Through a comparative examination of the service quality of three different types of schools: government, private added, and private non-added. It was discovered that while government schools and private aided schools were good in terms of cost efficiency, private no-added schools were the best in terms of service quality. The service quality of the government school was good but less than that of the private school. Karekar, Tiwari, and Agrawal (2015) studied the service quality of private and government hospitals in homeopathic hospitals in West Bengal. They concluded that the majority of individuals obtain medical

care from private hospitals and believed that the service quality of private hospitals was far superior than that of government hospitals.

2.1.1. Statement of Problem

Given common beliefs about the greater quality of private sector service delivery, such comparisons might be useful in putting views about government and public services into context. In addition, there are very few studies in the Indian setting that focus on a comparative analysis of service quality expectations of customers of public and private sector hotels. As a result, this study not only focuses on various aspects influencing service quality, but also attempts to compare customer expectations of service quality in the public and the private sector hotels in Panchkula and Kurukshetra. Panchkula and Kurukshetra were chosen as the primary research areas since they are both tourist destinations in Haryana. Kurukshetra is a global pilgrimage site, while Panchkula, as part of the tri-city area, attracts a young demographic for social tourism. In recent years, the number of visitors visiting Haryana has decreased, and in some years, Haryana has seen negative growth in terms of tourist arrivals. Poor service quality might be one of the numerous reasons why Haryana has struggled to establish itself as a popular tourist destination.

3. METHODOLOGY

The study is restricted to the public and private sector hotels in Panchkula and Kurukshetra, Haryana. The study includes the hotel staff, and customers from these hotels. The study focuses on various aspects influencing service quality, and also attempts to compare customer expectations of service quality in the public and the private sector hotels in Panchkula and Kurukshetra.

3.1. Research Instruments

There were two questionnaires, one for the hotel, the second for the visitors:

- The questionnaire used for surveying the hotels consisted of dichotomous questions having a nominal scale of measurement.
- The questionnaire used for surveying the visitors consisted of two parts, part one consisted of dichotomous questions related to tourism development having a nominal scale. Part two consisted of questions related to the quality of service at tourist hotels, some questions had a nominal scale and the rest had a five-point Likert scale.

3.2. Primary Data

Primary data was collected through two surveys:

- Visitors at tourist hotels in Panchkula and Kurukshetra.
- Hotels in Panchkula and Kurukshetra.

3.3. Official Data

Official data was collected from state government tourism reports and state government statistic reports.

3.4. Identification of Population and Sampling Strategies

The population consists of all the tourists visiting Kurukshetra and Panchkula in the year 2022. The sample size was calculated as:

$$S = z^2 \times N \times P \times (1-P) / e^2 \times N + z^2 \times P \times (1-P)$$

Where:

S= sample size.

z= standardized value that corresponds to the confidence level, for 95% confidence value, z= 1.96.

N= the population size.

P= the population proportion (assumed to be .50).

e= the degree of accuracy expressed as a proportion (0.05).

S= 385.

The estimated sample size has arrived at a 95% confidence level, with a 5% significance level. A convenience sampling technique was adopted for the collection of data from the respondents. Though the minimum sample size thus arrived at was 385, a sample of 400 respondents was chosen for the research. Considering an infinite population, the default sample size for 95% confidence level, with a 5% significance level is 385.

3.5. Reliability and Validity

Reliability is demonstrated by checking the Cronbach alpha for the interval variables and Kuder–Richardson Formula 20 (KR-20)¹ for nominal variables for the items for each construct and the correlation among the items for the construct. Typically, a scale is said to be reliable if Cronbach’s alpha and KR20 value is 0.70 or higher.

The alpha value for the questionnaires is as follow:

Cronbach Alpha for Quality of Service: 0.95

Kuder–Richardson 20 coefficient for the Tourism Development: 0.81

Table 1. Table showing the relevance rating on the item scale by two experts for the hotel questionnaire.

Hotel questionnaire	Expert 1	Expert 2		Experts in agreement	Item wise- CVI	UA
Q1	1	1		2	1	1
Q2	1	1		2	1	1
Q3	1	1		2	1	1
Proportion relevance	1	1		S-CVI/Ave	1	
	Average proportion		1	S-CVI/UA		1

Table 2. Table showing the relevance rating on the item scale by two experts for the visitor questionnaire.

Visitor questionnaire	Expert 1	Expert 2		Experts in agreement	Item wise- CVI	UA
Q1	1	1		2	1	1
Q2	1	1		2	1	1
Q3	1	1		2	1	1
Q4	1	1		2	1	1
Q5	1	1		2	1	1
Q6	1	1		2	1	1
Q7	1	1		2	1	1
Q8	1	1		2	1	1
Q9	1	1		2	1	1
Q10	1	1		2	1	1
Q11	1	1		2	1	1
Q12	1	1		2	1	1
Q13	1	1		2	1	1
Proportion relevance	1	1		S-CVI/Ave	1	
	Average proportion		1	S-CVI/UA		1

The questionnaire was checked for content validity. Content validity is defined as the degree to which elements of an assessment instrument are relevant to and representative of the targeted construct for a particular assessment purpose. Content validity was established by calculating the validity index calculation. Two domain experts

¹ The Kuder-Richardson Formula 20, often abbreviated KR-20, is used to measure the internal consistency reliability of a test in which each question only has two answers: right or wrong.

critically reviewed the questionnaire and scored the items on the questionnaire. The irrelevant questions were removed from the questionnaire. The Content Validity Index (CVI)² was calculated as below:

Table 1 presents the relevance rating on the item scale by two experts for the hotel questionnaire, and Table 2 presents relevance rating on the item scale by two experts for the visitor questionnaire.

Based on the above calculation, we can conclude that I-CVI, S-CVI/Ave, and S-CVI/ meet the satisfactory level for the two questionnaires, and thus the scale of the questionnaire has achieved a satisfactory level of content validity. For content validity by two experts, at least 0.80 CVI value shall be obtained, Davis (1992). The content validity obtained for the two questionnaires is 1.

3.6. Objective

To study tourist perception in terms of reliability of service quality across the public & private sectors across two districts of Haryana i.e., Panchkula and Kurukshetra.

3.7. Hypothesis

1. Quality of service is better with trained staff.
2. Quality of service is better with trained staff in the private sector than public sector.
3. Quality of service is better with trained staff in Kurukshetra than Panchkula.
4. Quality of services is better when tourists' feedback is taken.
5. Quality of services is better in the private sector than public sector when tourists' feedback is taken.
6. Quality of services is better in the Kurukshetra than Panchkula when tourists feedback is taken
7. Quality of service is better when tourist's complaints are resolved.
8. Quality of service is better in the private sector than the public sector when tourist's complaints are resolved.
9. Quality of service is better in Kurukshetra than Panchkula when tourist's complaints are resolved.

4. RESULTS

The data were analyzed through the appropriate statistical tools by using Microsoft Excel ToolPak. Statistical tools such as the percentage method, cross tabulation, Chi-square test, independent sample t-test, one-way ANOVA³, and Multiple Regression were used for the analysis.

H1: Quality of service is better with trained staff.

For analyzing the research hypothesis, 10 hotels from the private sector in Panchkula and Kurukshetra each; and 5 hotels in Panchkula and 3 in Kurukshetra from the public sector were surveyed.

The independent variable was trained staff (variable number 1) and the dependent variable was the quality of service (variable number 2).

Variable number 1 was measured by surveying the hotel staff:

Do you train your staff in-house? Yes/no.

Based on the responses received, results were segregated into two groups, hotels that have trained staff and hotels that did not have trained staff.

Variable number 2 was measured by surveying the visitors of the same hotel on:

How would you rate the quality of service delivered by the staff on a scale of 1 to 5, 1 being the lowest 5 being the highest?

² Content validity index (CVI) is the most widely used index in quantitative evaluation. There are 2 kinds of CVI: I-CVI and S-CVI. A method to compute a modified kappa statistic (K*) can be used to adjust I-CVI for chance agreement. S-CVI/UA and S-CVI/Ave are both scale level CVI with different formulas.

³ Analysis of variance is a collection of statistical models and their associated estimation procedures used to analyze the differences among means. ANOVA was developed by the statistician Ronald Fisher.

Table 3. The responses to variable 1.

Panchkula	
Private hotel with trained staff	8
Private hotel with untrained staff	2
Public hotel with trained staff	2
Public hotel with untrained staff	3
Kurukshetra	
Private hotel with trained staff	8
Private hotel with untrained staff	2
Public hotel with trained staff	2
Public hotel with untrained staff	1

Source: Primary data.

Table 3 presents the responses to 'variable 1'.

Below is the tabulation of visitor survey response, wherein count represents the number of visitors in that group, the sum represents the sum of the quality-of-service rating in that group and the average is the rating average.

Table 4. Table showing groups of trained and untrained staff in the public and private sector.

Groups	Count	Sum	Average
Quality of service at hotels with trained staff in the public sector	107	402	3.75
Quality of service at hotels with untrained staff in the public sector	93	349	3.75
Quality of service at hotels with trained staff in the private sector	160	667	4.16
Quality of service at hotels with untrained staff in the private sector	40	166	4.15
Quality of service for hotels with trained staff in Kurukshetra	147	587	3.99
Quality of service for hotels with untrained staff in Kurukshetra	53	217	4.09
Quality of service for hotels with trained staff in Panchkula	120	482	4.01
Quality of service for hotels with untrained staff in Panchkula	80	298	3.72

Table 4 presents the groups of trained and untrained staff in the public and private sector.

The dependent variable was continuous and had interval measurement and the independent variable was categorical and has nominal measurement. This hypothesis was analyzed using the independent sample t-test. The one tail probability value will be considered since the hypothesis states that the quality of service was more effective with trained staff.

The mean quality of service ratings at hotels with the trained staff was 4.00 and the mean quality of service ratings at hotels with the untrained staff was 3.87, indicating that the quality of service was better at hotels with trained staff. Also, the calculated t-stat value was coming out to be 1.475571417 and the t critical one-tail value was 1.65080425. The one-tail probability value was 0.070641534, which was higher than the 0.05 probability value.

Inference: Therefore, it can be said that there was no significant difference between the means of the two groups of the independent variable, which means there was no dependence between trained staff and the quality of service provided to the visitor. The null hypothesis was supported and the alternate hypothesis has been rejected.

H2: Quality of service is better with trained staff in the private sector than public sector.

The output of the ANOVA single factor analysis is given below:

The mean of quality of service ratings at hotels with trained staff in the public sector was 3.75, the mean of quality of service ratings at hotels with untrained staff in the public sector was 3.75, the mean of quality of service ratings at hotels with trained staff in the private sector was 4.16 and the mean of quality of service ratings at hotels with untrained staff in the private sector was 4.15, indicating that the quality of service was better at hotels in private sector irrespective of trained or untrained staff. In both sectors, the quality of service was better at hotels with trained staff.

The calculated F value was coming out to be 8.522861 and the F critical value was 2.62744077. Also, the probability value was 1.69E-05, which was lower than the 0.05 probability value. Therefore, it can be said that there was a significant difference between the groups of the independent variable. For analyzing which of the groups have a significant difference between them out of the four groups, post hoc analysis was done with the help of Tukey's test.

Tukey's test analysis showed that the critical q value (Appendix 1) for 396 degrees of freedom and 4 groups was 3.633. By comparing the calculated q values with the critical q value, only those pairs of groups had a significant difference between them. Out of the three pairs, the quality of service at hotels with trained staff in the private sector was better than the quality of service at hotels with trained staff in the public sector.

Inference: It can be concluded that the quality of service was superior in the private sector than the public sector having trained staff. The null hypothesis was rejected, and the alternate hypothesis has been accepted in sector-wise comparison for the above pair of groups.

H3: Quality of service is better with trained staff in Kurukshetra than Panchkula.

The output of the ANOVA single factor analysis is given below:

The mean of quality-of-service ratings at hotels with trained staff in Kurukshetra was 3.99, the mean of quality-of-service ratings at hotels with untrained staff in Kurukshetra was 4.09, the mean of quality of service ratings at hotels with trained staff in Panchkula was 4.01 and the mean of quality of service ratings at hotels with untrained staff in Panchkula was 3.72, indicating that the quality of service was better at hotels in Kurukshetra irrespective of trained or untrained staff. At Kurukshetra, the quality of service was better at hotels with untrained staff and at Panchkula, the quality of service was better at hotels with trained staff. The calculated F value was coming out to be 2.87978 and the F critical value was 2.62744077. Also, the probability value was 0.035796, which was lower than the 0.05 probability value. Therefore, it can be said that there was a significant difference between the groups of the independent variable. For analyzing which of the groups have a significant difference between them out of the four groups, post hoc analysis was done with the help of Tukey's test. According to Tukey's test analysis, three groups were formed based on the critical q value. None of the three pairs overall exhibited a significant difference.

Inference: Therefore, it can be said that there was no significant difference between the groups of the independent variable. The null hypothesis was accepted and the alternate hypothesis has been rejected for location wise comparison between Kurukshetra and Panchkula.

H4: Quality of services is better when tourists' feedback is taken.

The independent variable was feedback (variable number 1) and the dependent variable was the quality of service (variable number 2).

Variable number 1 was measured by surveying the visitors of the hotel on:

Did the hotel staff take feedback from you? Yes/no (online and or offline feedback, both were considered yes).

Based on the responses received, results were segregated into two groups, feedback taken and feedback not taken.

Variable number 2 was measured by surveying the same visitors on:

Based on your feedback, how would you rate the quality of service from 1 to 5, 1 being the lowest and 5 being the highest?

The responses of variables 1 and 2 are given below.

Table 5. Table showing feedback counts and visitor responses.

Location	Visitor response		
	Feedback not taken	Feedback was taken	Grand total
Kurukshetra	38	162	200
Panchkula	59	141	200
Grand total	97	303	400

Table 5. Continue.....

Sector	Visitor response		
	Feedback not taken	Feedback was taken	Grand total
Public	25	175	200
Private	72	128	200
Grand total	97	303	400

Source: Primary data.

Table 5 presents the feedback counts and visitor responses.

The dependent variable was continuous and had interval measurement and the independent variable was categorical and had nominal measurement. This hypothesis was analyzed using the independent sample t-test. The one tail probability value will be considered since the hypothesis states that the quality of service was more effective where feedback was taken.

The output of the t-test is given below:

The mean quality of service ratings at hotels where feedback was taken was 4.17 and the mean quality of service ratings at hotels where feedback was not taken was 3.27, indicating that the quality of service was better at hotels where feedback was taken.

The calculated t-stat value was coming out to be 8.892229878 and the t critical one-tail value was 1.656659413. Also, the one-tail probability value was 2.16824E-15, which was lower than the 0.05 probability value.

Inference: Therefore, it can be said that there was a significant difference between the means of the two groups of the independent variable, it means there was a dependence between feedback and quality of service provided to the visitor, from the value of quality of service was more at hotels where feedback was taken. The null hypothesis was rejected, and the alternate hypothesis has been accepted.

H5: Quality of services is better in the private sector than public sector when tourists' feedback is taken.

The output of the ANOVA test is given below:

The mean of quality of service at hotels where feedback was taken in the public sector was 4.00, the mean of quality of service at hotels where feedback was not taken in the public sector was 3.31, the mean of quality of service at hotels where feedback was taken in the private sector was 4.30 and the mean of quality of service at hotels where feedback was not taken in the private sector was 3.16, indicating that the quality of service was better at hotels where feedback was taken than at the hotels where feedback was not taken in both public and private sector. Also, the quality of service at hotels where feedback was taken was better in the private sector than in the public sector.

From the above data, the calculated F value was coming out to be 42.05055 and the F critical value was 2.627441. Also, the probability value was 1.31E-23, which was lower than the 0.05 probability value. Therefore, it can be said that there was a significant difference between the groups of the independent variable. For analyzing which of the groups have a significant difference between them out of the four groups, post hoc analysis was done with the help of Tukey's test.

The critical q value led to the formation of three groups, using Tukey's test analysis. Following differences between the three pairs of groups were statistically significant:

- The quality of service at hotels where feedback was taken in the public sector was better than the quality of service at hotels where feedback was not taken in the public sector.
- The quality of service at hotels where feedback was taken in the private sector was better than the quality of service at hotels where feedback was not taken in the private sector.

Inference: By comparing the aforementioned pairs of groups, it can be said that in each sector, the hotels where feedback was taken provided higher-quality service. The level of service in the private sector was higher than that of the public sector. The null hypothesis was rejected, and the alternative hypothesis was accepted.

H6: Quality of services is better in Kurukshetra than Panchkula when tourists' feedback is taken.

The output of the ANOVA test is given below:

ANOVA single factor analysis regarding the quality of service at hotels where feedback was taken and feedback was not taken across Panchkula and Kurukshetra.

The mean of quality of service at hotels where feedback was taken in Kurukshetra was 4.28, the mean of quality of service at hotels where feedback was not taken in Kurukshetra was 2.89, the mean of quality of service at hotels where feedback was taken in Panchkula was 4.05 and the mean of quality of service at hotels where feedback was not taken in Panchkula was 3.52, indicating that the quality of service was better at hotels where feedback was taken than at the hotels where feedback was not taken in both Kurukshetra and Panchkula. Also, the quality of service at hotels where feedback was taken was better in Kurukshetra than at Panchkula.

From the above data, the calculated F value was coming out to be 46.78885 and the F critical value was 2.627441. Also, the probability value was 6.66E-26, which was lower than the 0.05 probability value. Therefore, it can be said that there was a significant difference between the groups of the independent variable. For analyzing which of the groups have a significant difference between them out of the four groups, post hoc analysis was done with the help of Tukey's test.

Using Tukey's test analysis, the critical q value resulted in the development of three groups. The following differences between the three groups were statistically significant:

- Quality of service at hotels where feedback was taken in Kurukshetra was better than the quality of service at hotels where feedback was taken in Panchkula.
- Quality of service at hotels where feedback was taken in Kurukshetra was better than the quality of service at hotels where feedback was not taken in Kurukshetra.
- Quality of service at hotels where feedback was taken in Panchkula was better than the quality of service at hotels where feedback was not taken in Panchkula.

Inference: According to the above pairs of groups, the quality of service where feedback was taken was better in Kurukshetra than in Panchkula, and the quality of service at each location was better at hotels where feedback was taken. The null hypothesis was rejected, while the alternative hypothesis was accepted.

H7: Quality of service is better when tourist's complaints are resolved.

The independent variable was complaint resolution (variable number 1) and the dependent variable was the quality of service (variable number 2).

Variable number 1 was measured by surveying the visitors:

If you had a complaint, was it resolved to your satisfaction? Yes/no.

Variable number 2 was measured by surveying the visitors of the same hotel on:

How would you rate the quality of service based on your complaint resolution on a scale of 1 to 5, 1 being the lowest 5 being the highest?

Based on the responses received, results were segregated into three groups, visitors whose complaint was resolved, visitors whose complaint was unresolved, and the visitors who had not registered any complaint.

The responses of variable 1 are given below:

Table 6. The visitor responses to variable 1.

Location	Visitors who had a complaint and it was not resolved	Visitors who had a complaint and it was resolved	Visitors who had not registered any complaint	Grand total
Kurukshetra	48	148	4	200
Panchkula	14	72	114	200
Grand total	62	220	118	400

Table 6. Continue.....

Sector	Visitors who had a complaint and it was not resolved	Visitors who had a complaint and it was resolved	Visitors who had not registered any complaint	Grand total
Public	22	125	53	200
Private	40	95	65	200
Grand total	62	220	118	400

Source: Primary data.

Table 6 presents the visitor responses to 'variable 1'.

The dependent variable was continuous and had interval measurement and the independent variable was categorical and had nominal measurement. This hypothesis was analyzed using the one-way ANOVA test.

The output of the ANOVA is given below:

The mean value of quality-of-service ratings at hotels where complaints were resolved and unresolved. The mean quality of service ratings at hotels where complaints were resolved was 4.29 and the mean quality of service ratings at hotels where complaints were unresolved was 2.91, indicating that the quality of service was best at hotels where visitor complaints were resolved.

From the above data, the calculated F value was coming out to be 98.22342 and the F critical value was 3.018452. Also, the probability value was 2.21E-35, which was lower than the 0.05 probability value. Therefore, it can be said that there was a significant difference between the groups of the independent variable. For analyzing which of the groups have a significant difference between them out of the groups, post hoc analysis was done with the help of Tukey's test.

The critical q value resulted in the formation of three groups using Tukey's test analysis. The following distinctions between one group were statistically significant:

- Quality of service at hotels where the complaint was resolved was better than the quality of service at hotels where the complaint was unresolved.

Inference: As seen in the above pairings of groups, the quality of service was better if visitor complaints were resolved. The null hypothesis was rejected, while the alternative hypothesis was accepted.

H8: Quality of service is better in the private sector than the public sector when tourist's complaints are resolved.

The output of the ANOVA: Single-factor test is given below:

The mean of quality of service ratings at hotels where the complaint was resolved in the public sector was 4.07, the mean of quality of service ratings at hotels where the complaint was unresolved in the public sector was 3, the mean of quality of service ratings at hotels where the complaint was resolved in the private sector was 4.45 and the mean of quality of service ratings at hotels where the complaint was unresolved in the private sector was 2.77, indicating that the quality of service was better at hotels in the private sector where the complaint was resolved than in public sector where the complaint was resolved. In both sectors, the quality of service was better at hotels where the complaint was resolved.

From the above data, the calculated F value was coming out to be 46.63054 and the F critical value was 2.236895. Also, the probability value was 8.19E-38, which was lower than the 0.05 probability value. Therefore, it can be said that there was a significant difference between the groups of the independent variable. For analyzing which of the groups have a significant difference, post hoc analysis was done with the help of Tukey's test.

Using Tukey's test analysis, the critical q value resulted in the development of six groups. The differences between three groups were statistically significant:

- Quality of service where the complaint was resolved in private sector hotels was better than the quality of service where the complaint was resolved in public sector hotels.
- Quality of service where the complaint was resolved in private sector hotels was better than the quality of service where the complaint was unresolved in private sector hotels.

- Quality of service where the complaint was resolved in public sector hotels was better than the quality of service where the complaint was unresolved in public sector hotels.

Inference: Observing the pairs of groups above, it can be stated that the quality of service was superior in the private sector than in the public sector hotels where complaints were resolved, and that the quality of service was better in each sector at hotels where complaints were resolved. The null hypothesis was rejected, while the alternative hypothesis was accepted.

H9: Quality of service is better in the Kurukshetra than Panchkula when tourist's complaints are resolved.

The output of the ANOVA: Single-factor test is given below:

The mean of quality of service ratings at hotels where the complaint was resolved in Kurukshetra was 4.35, the mean of quality of service ratings at hotels where the complaint was unresolved in Kurukshetra was 2.93, the mean of quality of service ratings at hotels where the complaint was resolved in Panchkula was 4.16, the mean of quality of service ratings at hotels where the complaint was unresolved in Panchkula was 2.85, indicating that the quality of service was better at hotels in Kurukshetra where the complaint was resolved than in Panchkula where the complaint was resolved. In both sectors, the quality of service was better at hotels where the complaint was resolved.

From the above data, the calculated F value was coming out to be 42.11093 and the F critical value was 2.236895. Also, the probability value was 1.03E-34, which was lower than the 0.05 probability value. Therefore, it can be said that there was a significant difference between the groups of the independent variable. For analyzing which of the groups have a significant difference between them, post hoc analysis was done with the help of Tukey's test. We will only be considering the pairs of groups having the hotels where complaints were resolved and the hotels where complaints were unresolved.

The critical q value resulted in the formation of six groups using Tukey's test analysis. There were statistically significant differences between two groups:

- Quality of service at hotels in Kurukshetra where the complaint was resolved was better than the quality of service at hotels where the complaint was unresolved.
- Quality of service at hotels in Panchkula where the complaint was resolved was better than the quality of service at hotels where the complaint was unresolved.

Inference: Based on the comparison of the two groups, it can be concluded that the quality of service was higher in Kurukshetra and Panchkula hotels where complaints were resolved than in hotels where complaints remained unresolved. The null hypothesis was rejected, while the alternative hypothesis was accepted.

5. DISCUSSIONS

1. Quality of service was better in both the public and private sector hotels having trained staff, however, the quality of service at hotels with the trained staff was better in the private sector than in the public sector. In Panchkula, the quality of service was better with trained staff. However, in Kurukshetra, the training of staff did not have an impact on the quality of service.

2. In both Panchkula and Kurukshetra, tourist feedback led to a better quality of service in both the public and private sectors. In Kurukshetra quality of service at hotels where feedback was taken was better than in Panchkula. Also, the quality of service at hotels where feedback was taken was better at the private sector than the public sector.

3. In both Panchkula and Kurukshetra, tourist complaint resolution led to a better quality of service in both the public and private sectors, however, the quality of service was better in the private sector than the public sector.

As a result, it is feasible to argue that the private sector outperformed the public sector in terms of providing high-quality hotel accommodation in Haryana. In the private sector, more trained staff, a proper feedback mechanism, and quick complaint resolution have resulted in higher service quality. Whereas in public sector hotels

and resorts, a lack of trained staff, an ineffective feedback mechanism, and slower complaint resolution resulted in poor service quality. Overall, factors such as trained staff, feedback, and complaint resolution were discovered to have an impact on the overall service quality of hotels in Haryana. The findings of the study are in line with previous studies such as Dhar (2015) where it was found that trained staff provided better quality of service. The findings of this study corroborate well with an earlier study of Jannach, Zanker, and Fuchs (2014) where it was found that feedback was important for improved quality of services. The quality of service was better where the complaint was resolved Ekiz and Au (2011).

5.1. Theoretical Contributions

The study makes a significant contribution to Osborne and Gaebler (1992) re-inventing government. The authors highlighted the need for new types of lean, adaptable public institutions and systems, such as the use of competition and customer choice to increase government efficiency and effectiveness while achieving higher levels of "customer" satisfaction. The findings are also significant in establishing a relationship between staff training, customer feedback, and complaint resolution and their positive effect on service quality.

5.2. Practical Implications

The research pinpoints key areas of service quality where the Haryana tourism department can improve in order to boost tourism in the state. Furthermore, the study is the first of its kind to compare the public and private sectors in the tourism sector. As a result, it lays the groundwork for future research on the comparison of the public and private sectors in the tourism sector.

5.3. Limitations and Future Research Recommendations

This study only takes into account hotels in the Panchkula and Kurukshetra districts of Haryana. However, there are numerous other components to the tourism industry. Other important service providers in the Haryana tourism industry include travel agents, tour operators, shopping malls, movie theatres, tourism information centres, museums, temples, gardens, and theme parks, among others. As a result, future researchers should conduct research from the perspectives of other service providers in various other districts of Haryana.

6. CONCLUSIONS

Staff training, a proper feedback mechanism, and the resolution of customer complaints are essentially the indicators of good service quality in the hotel industry. The failure of the public sector hotels to properly address all three essential components of good service quality was a major factor in their inability to meet customer expectations. As rightly proposed by Osborne and Gaebler (1992) in re-inventing government, the government should clearly focus on "How they perform things" rather than "What they do." The findings indicate that the government needs to do better in terms of service delivery and meeting customer expectations in order to remain as competitive in the tourism industry as the private sector.

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Appendix

Appendix 1. Studentized Q table.

DF	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	17.969	26.976	32.819	37.082	40.408	43.119	45.397	47.357	49.071	50.592	51.957	53.194	54.323	55.361	56.320	57.212	58.044	58.824	59.558
2	6.085	8.331	9.798	10.881	11.734	12.435	13.027	13.539	13.988	14.389	14.749	15.076	15.375	15.650	15.905	16.143	16.365	16.573	16.769
3	4.501	5.910	6.825	7.502	8.037	8.478	8.852	9.177	9.462	9.717	9.946	10.155	10.346	10.522	10.686	10.838	10.980	11.114	11.240
4	3.926	5.040	5.757	6.287	6.706	7.053	7.347	7.602	7.826	8.027	8.208	8.373	8.524	8.664	8.793	8.914	9.027	9.133	9.233
5	3.635	4.602	5.218	5.673	6.033	6.330	6.582	6.801	6.995	7.167	7.323	7.466	7.596	7.716	7.828	7.932	8.030	8.122	8.208
6	3.460	4.339	4.896	5.305	5.628	5.895	6.122	6.319	6.493	6.649	6.789	6.917	7.034	7.143	7.244	7.338	7.426	7.508	7.586
7	3.344	4.165	4.681	5.060	5.359	5.606	5.815	5.997	6.158	6.302	6.431	6.550	6.658	6.759	6.852	6.939	7.020	7.097	7.169
8	3.261	4.041	4.529	4.886	5.167	5.399	5.596	5.767	5.918	6.053	6.175	6.287	6.389	6.483	6.571	6.653	6.729	6.801	6.869
9	3.199	3.948	4.415	4.755	5.024	5.244	5.432	5.595	5.738	5.867	5.983	6.089	6.186	6.276	6.359	6.437	6.510	6.579	6.643
10	3.151	3.877	4.327	4.654	4.912	5.124	5.304	5.460	5.598	5.722	5.833	5.935	6.028	6.114	6.194	6.269	6.339	6.405	6.467
11	3.113	3.820	4.256	4.574	4.823	5.028	5.202	5.353	5.486	5.605	5.713	5.811	5.901	5.984	6.062	6.134	6.202	6.265	6.325
12	3.081	3.773	4.199	4.508	4.750	4.950	5.119	5.265	5.395	5.510	5.615	5.710	5.797	5.878	5.953	6.023	6.089	6.151	6.209
13	3.055	3.734	4.151	4.453	4.690	4.884	5.049	5.192	5.318	5.431	5.533	5.625	5.711	5.789	5.862	5.931	5.995	6.055	6.112
14	3.033	3.701	4.111	4.407	4.639	4.829	4.990	5.130	5.253	5.364	5.463	5.554	5.637	5.714	5.785	5.852	5.915	5.973	6.029
15	3.014	3.673	4.076	4.367	4.595	4.782	4.940	5.077	5.198	5.306	5.403	5.492	5.574	5.649	5.719	5.785	5.846	5.904	5.958
16	2.998	3.649	4.046	4.333	4.557	4.741	4.896	5.031	5.150	5.256	5.352	5.439	5.519	5.593	5.662	5.726	5.786	5.843	5.896
17	2.984	3.628	4.020	4.303	4.524	4.705	4.858	4.991	5.108	5.212	5.306	5.392	5.471	5.544	5.612	5.675	5.734	5.790	5.842
18	2.971	3.609	3.997	4.276	4.494	4.673	4.824	4.955	5.071	5.173	5.266	5.351	5.429	5.501	5.567	5.629	5.688	5.743	5.794
19	2.960	3.593	3.977	4.253	4.468	4.645	4.794	4.924	5.037	5.139	5.231	5.314	5.391	5.462	5.528	5.589	5.647	5.701	5.752
20	2.950	3.578	3.958	4.232	4.445	4.620	4.768	4.895	5.008	5.108	5.199	5.282	5.357	5.427	5.492	5.553	5.610	5.663	5.714
21	2.941	3.565	3.942	4.213	4.424	4.597	4.743	4.870	4.981	5.081	5.170	5.252	5.327	5.396	5.460	5.520	5.576	5.629	5.679
22	2.933	3.553	3.927	4.196	4.405	4.577	4.722	4.847	4.957	5.056	5.144	5.225	5.299	5.368	5.431	5.491	5.546	5.599	5.648
23	2.926	3.542	3.914	4.180	4.388	4.558	4.702	4.826	4.935	5.033	5.121	5.201	5.274	5.342	5.405	5.464	5.519	5.571	5.620
24	2.919	3.532	3.901	4.166	4.373	4.541	4.684	4.807	4.915	5.012	5.099	5.179	5.251	5.319	5.381	5.439	5.494	5.545	5.594
25	2.913	3.523	3.890	4.153	4.358	4.526	4.667	4.789	4.897	4.993	5.079	5.158	5.230	5.297	5.359	5.417	5.471	5.522	5.570
26	2.907	3.514	3.880	4.141	4.345	4.511	4.652	4.773	4.880	4.975	5.061	5.139	5.211	5.277	5.339	5.396	5.450	5.500	5.548
27	2.902	3.506	3.870	4.130	4.333	4.498	4.638	4.758	4.864	4.959	5.044	5.122	5.193	5.259	5.320	5.377	5.430	5.480	5.528
28	2.897	3.499	3.861	4.120	4.322	4.486	4.625	4.745	4.850	4.944	5.029	5.106	5.177	5.242	5.302	5.359	5.412	5.462	5.509
29	2.892	3.493	3.853	4.111	4.311	4.475	4.613	4.732	4.837	4.930	5.014	5.091	5.161	5.226	5.286	5.342	5.395	5.445	5.491
30	2.888	3.486	3.845	4.102	4.301	4.464	4.601	4.720	4.824	4.917	5.001	5.077	5.147	5.211	5.271	5.327	5.379	5.429	5.475
31	2.884	3.481	3.838	4.094	4.292	4.454	4.591	4.709	4.812	4.905	4.988	5.064	5.134	5.198	5.257	5.313	5.365	5.414	5.460
32	2.881	3.475	3.832	4.086	4.284	4.445	4.581	4.698	4.802	4.894	4.976	5.052	5.121	5.185	5.244	5.299	5.351	5.400	5.445
33	2.877	3.470	3.825	4.079	4.276	4.436	4.572	4.689	4.791	4.883	4.965	5.040	5.109	5.173	5.232	5.287	5.338	5.386	5.432

34	2.874	3.465	3.820	4.072	4.268	4.428	4.563	4.680	4.782	4.873	4.955	5.030	5.098	5.161	5.220	5.275	5.326	5.374	5.420
35	2.871	3.461	3.814	4.066	4.261	4.421	4.555	4.671	4.773	4.863	4.945	5.020	5.088	5.151	5.209	5.264	5.315	5.362	5.408
36	2.868	3.457	3.809	4.060	4.255	4.414	4.547	4.663	4.764	4.855	4.936	5.010	5.078	5.141	5.199	5.253	5.304	5.352	5.397
37	2.865	3.453	3.804	4.054	4.249	4.407	4.540	4.655	4.756	4.846	4.927	5.001	5.069	5.131	5.189	5.243	5.294	5.341	5.386
38	2.863	3.449	3.799	4.049	4.243	4.400	4.533	4.648	4.749	4.838	4.919	4.993	5.060	5.122	5.180	5.234	5.284	5.331	5.376
39	2.861	3.445	3.795	4.044	4.237	4.394	4.527	4.641	4.741	4.831	4.911	4.985	5.052	5.114	5.171	5.225	5.275	5.322	5.367
40	2.858	3.442	3.791	4.039	4.232	4.388	4.521	4.634	4.735	4.824	4.904	4.977	5.044	5.106	5.163	5.216	5.266	5.313	5.358
48	2.843	3.420	3.764	4.008	4.197	4.351	4.481	4.592	4.690	4.777	4.856	4.927	4.993	5.053	5.109	5.161	5.210	5.256	5.299
60	2.829	3.399	3.737	3.977	4.163	4.314	4.441	4.550	4.646	4.732	4.808	4.878	4.942	5.001	5.056	5.107	5.154	5.199	5.241
80	2.814	3.377	3.711	3.947	4.129	4.277	4.402	4.509	4.603	4.686	4.761	4.829	4.892	4.949	5.003	5.052	5.099	5.142	5.183
120	2.800	3.356	3.685	3.917	4.096	4.241	4.363	4.468	4.560	4.641	4.714	4.781	4.842	4.898	4.950	4.998	5.043	5.086	5.126
240	2.786	3.335	3.659	3.887	4.063	4.205	4.324	4.427	4.517	4.596	4.668	4.733	4.792	4.847	4.897	4.944	4.988	5.030	5.069
Inf	2.772	3.314	3.633	3.858	4.030	4.170	4.286	4.387	4.474	4.552	4.622	4.685	4.743	4.796	4.845	4.891	4.934	4.974	5.012

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