

Chapter-6

DATA ANALYSIS - Objective 1

This chapter deals with presentation, analysis, and interpretation of the collected data for objective 1. The researcher applied SPSS 27 software to run various statistical techniques to analyse the data. The techniques used for analysing the data for Objective 1 were exploratory factor analysis, paired T-tests, and gap analysis. For reducing the complexity of data, the exploratory factor analysis technique was used with the principal component and the varimax rotation method. After extracting the factors, a structure of factors was prepared, whose validity and reliability were checked. Throughout the analysis, acceptance and rejection of hypotheses were done at the confidence level of 95% (or 5% of the level of significance). The chapter has been divided into five steps. The first step relates to conducting the exploratory factor analysis; the second step involves testing the reliability and validity of the instrument; the third step involves proposing a conceptual model; the fourth step relates to conducting a gap analysis and paired t-test to analyse the objective; and the fifth step is related to conducting an individual as well as a comparative analysis of the service quality of the study areas.

OBJECTIVE 1

To measure the tourist expectation, and perception towards the service quality variables at the selected Pilgrimage Sites of North India.

The aim of first objective was to measure the tourist expectation, and perception towards the service quality variables. So, to find the factors to measure service quality, the first step was conducting an exploratory factor analysis.

Step 1: Exploratory Factor Analysis

Extraction Of Factors

For the purpose of finding the factors to measure service quality in pilgrimage sites, the exploratory factor analysis technique was applied to reduce data complexity and to extract factors that assess the service quality in the studied areas. For this purpose, the principal component and varimax rotation processes were used, and only those factors were kept and considered for further analysis whose factor loading was more than 0.5.

KMO and Bartlett's Test of Sphericity

To find the sample adequacy, KMO and Bartlett 's test of sphericity was applied by the researcher to the data. The value of KMO 's test ranges between zero and one. A value that is near zero shows that sample data is irrelevant for factor analysis, while a value near one shows that sample data is adequate for exploratory factor analysis (Field, 2005).

Table 6.1: KMO Test

| KMO and Bartlett's Test | | |
|--|--------------------|-----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .909 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 15128.414 |
| | d.f. | 351 |
| | Sig. | .000 |

Source: Primary Data analysis using SPSS

If the value of the KMO test is > 0.5 , the sample is considered good for factor analysis (Kaiser 1974). The findings of the KMO test are shown in Table 6.1, which is 0.909, which is considered relevant for factor analysis. The table also shows the value of Bartlett 's test of sphericity is 0.00, which is less than 0.05 and is considered significant. The significant value of Bartlett 's test of sphericity stipulates that the sampled data is normally multivariate and relevant for factor analysis. It is observed from Table 6.2 that the communality for all statements is 0.5. Hence, it can be concluded that all 27 items are suitable for further analysis. Tables 6.2 and 6.3 are presented in Annexure II. Table 6.3 displays the total variance that factor analysis has been able to explain. According to the table, the first six factors of service quality together explain 67.259 percent of the total variance. In social sciences, if the total variance explained by the sample data is more than 60 %, then the sample can be considered good and can be used for further analysis (Hooper, 2012). For the purpose of retaining factors, only those factors are taken for further analysis that have an Eigen value ≥ 1 . In the present research study, more than 60% of variance is explained by the sample data, and six factors are extracted, which have Eigen values equal to or more than 1 (Hair et al., 2010). The first factor has Eigen value 8.735 and explains 32.351% of total variance, the second factor has Eigen value 3.003 and explains 11.121% of total variance, the third factor has Eigen value 2.218 and explains 8.215% of total variance, the fourth factor has Eigen value 1.634 and explains 6.050% of total variance, the fifth factor has Eigen value 1.318 and explains 6.050% of the total variance, and the sixth factor has Eigen value 1.252 and explains 4.638% of the

total variance. So, it is clear from this analysis that the rest of the factors are not statistically important because they have an Eigen value less than 1. According to Table 6.3, it is clear that 67.259 % of the total variance is explained by these first six factors, which are more than the required value (60) (Hair et al. 2010).

Factor Loading Using Rotated Component Matrix

The rotated component matrix provides simple structure of factors which is also referred to as loadings. This matrix is the main output of principle component analysis because it shows the estimates of correlation among each of the variable and the estimated components. The value of factor loading lies between 0 to 1; a value which is near to 1 shows the high factor loading, while value near to 0 shows low factor loading. A negative sign is ignored when determining factor membership. There is no hard and fast rule for deciding the minimum cut off point but usually it is taken above 0.5 (Hair 2010). As shown in Table 6.4 (Annexure II) six factors were extracted from rotated component matrix.

According to the Rotated Component matrix, the first factor has loading of 0.781, 0.768, 0.753, 0.735, 0.712 and 0.631 is extracted from statements P14, P17, P15, P18, P13 and P16. The second factor have loading of 0.775, .767, .742, 0.736 and 0.689 is extracted from statements P28, P29, P27, P30, and P26. The third factor have loading of .871, .865, .840 and .758 is extracted from statements from P2, P3, P1 and P4. The fourth factor have loading of .743, .677, .668, .662, .627 and .580 is extracted from statements P20, P22, P21, P23, P19 and P24. The fifth factor have loading of .839, .838 and .746 is extracted from statements P31, P32, and P33. The sixth factor have loading of 0.837, 0.777 and 0.657 is extracted from statements P11, P7 and P12.

Nomenclature Of the Factors

Factor 1: Ease of Information and Proper Management

The first factor is named as 'ease of information and proper management'. it is the combination of six items namely: P13, P14, P15, P16, P17, P18. Each of the items has positive factor loading which means that these items share most of the variance between them and co-vary with each other. This factor/ Dimension includes *Clear direction regarding public facilities, Information about the protocols inside the destination, Easy communication with presence of guides, Proper management of street vendors, Temple*

management addresses pilgrim's grievance quickly, and Proper queue management at the temple.

Ease of Information and Proper Management will be abbreviated as EOI further in the document.

Factor 2: Transportation

The first factor is named as 'transportation'. It is the combination of five items namely: P26, P27, P28, P29, P30. Each of the items has positive factor loading which means that these items share most of the variance between them and co-vary with each other. This factor/ Dimension includes *Proper Walkable Road, walk to be easy, Fare price to be charged for transportation, Cordial attitude and behaviour of the transporters and Good conditioned motorable road.*

Transportation will be abbreviated as Trans further in the document.

Factor 3: Accommodation

The first factor is named as 'accommodation'. It is the combination of six items namely: P19, P20, P21, P22, P23, P24. Each of the items has positive factor loading which means that these items share most of the variance between them and co-vary with each other. This factor/ Dimension includes *Fair price of the accommodation available, Availability of accommodation near the destination, Availability of clean toilet and washroom in the accommodation, Credible and courteous staff in the accommodation, Staff responds to tourists' requests quickly and Staff meets the needs, wants and complaints of tourists.*

Accommodation will be abbreviated as Accom further in the document.

Factor 4: Safety and Security

The first factor is named as 'safety and security'. It is the combination of four items namely: P1, P2, P3, P4. Each of the items has positive factor loading which means that these items share most of the variance between them and co-vary with each other. This factor/ Dimension includes *Presence of security (police/forces) at the destination, Availability of proper prevention measures for hazardous situation, expect to be safe while waiting in the queue at the pilgrimage destination, and Necessary first aid to be available at the destination.*

Safety and Security will be abbreviated as S&S further in the document.

Factor 5: Desirable Facility

The first factor is named as ‘desirable facility’. It is the combination of three items namely: P7, P11, P12. Each of the items has positive factor loading which means that these items share most of the variance between them and co-vary with each other. This factor/ Dimension includes *Wheelchair facility for sick/old age citizens/PWD, Facility to keep footwear and Availability of locker facility.*

Desirable Facility will be abbreviated as DF further in the document.

Factor 6: Hygienic Food and Water

The first factor is named as ‘hygienic food and water’. It is the combination of three items namely: P31, P32, P33. Each of the items has positive factor loading which means that these items share most of the variance between them and co-vary with each other. This factor/ Dimension includes *Hygiene to be maintained in terms of food, Availability of clean drinking water at the destination and Availability of preferred Choices of food items.*

Hygienic Food and Water will be abbreviated as F&W further in the document.

Testing the instrument

Normality

An essential requirement in statistical analyses is to verify the normality of the data. Normality signifies that the data is derived from a population that adheres to a Gaussian distribution. The central limit theorem states that when the sample size has 100 or more observations, violation of the normality is not a major issue (Altman & Bland, 1995; Ghasemi & Zahediasl, 2012). But when the data approximately follows a normal distribution, parametric statistical tests, such as t-tests, can be appropriately applied. However, if there is a substantial departure from normality, it is advisable to employ non-parametric tests or consider data transformation techniques as more suitable alternatives.

One of the methods to determine normality is by examining measures of skewness and kurtosis. For a sample size >300 , normality of the data is dependent on the absolute values of skewness and kurtosis. Either an absolute skewness value ≤ 2 or an absolute kurtosis (excess) ≤ 4 may be used as reference values for determining considerable normality (Hair et al., 2010; Kim, 2013). Another method of normality of the data is the relative value of

the SD with respect to the mean. If SD is less than half mean (i.e., $CV < 50\%$), data are considered normal (Gupta et al., 2019; Mishra et al., 2019). The measure of mean, S.D., skewness, and kurtosis that shows the data is normal is shown in Table 6.5, presented in Annexure II.

Reliability and Validity

The factors extracted from the factor analysis were then tested for their reliability and validity. Construct reliability of the scale was evaluated using both Cronbach's alpha as well as composite reliability (CR). Cronbach's alpha value was determined in SPSS and should ideally be greater than 0.7 to establish the reliability of the scale (Hair et al., 2010). The test results so generated led to the acceptance of all items as the values were above the cut-off range.

Table 6.6: Reliability Analysis using Cronbach's Alpha

| | <i>Expectation Statements</i> | | <i>Perception Statements</i> | |
|--|----------------------------------|---------------------|----------------------------------|---------------------|
| Statements | Value of Cronbach's Alpha | No. of Items | Value of Cronbach's Alpha | No. of Items |
| Accommodation Statements | 0.907 | 6 | 0.835 | 6 |
| Ease of information statements and proper management | 0.905 | 6 | 0.886 | 6 |
| Transportation Statements | 0.886 | 5 | 0.867 | 5 |
| Safety and security Statements | 0.890 | 4 | 0.887 | 4 |
| Food and Water Statements | 0.823 | 3 | 0.810 | 3 |
| Desirable Facility | 0.764 | 3 | 0.794 | 3 |
| Overall Reliability | 0.941 | 27 | 0.914 | 27 |

Source: Primary Data analysis using SPSS

However, Cronbach's alpha value is criticised in higher statistical analyses such as structural equation modelling. This is because Cronbach's alpha either overestimates or underestimates the value as it is based on the internal consistency of items and not the coefficient of internal consistency of items (Yang & Green, 2011)

Therefore, the researcher has also estimated the composite reliability manually using the given formulae using the factor loadings from EFA.

$$CR = \frac{(\sum \lambda_i)^2}{(\sum \lambda_i)^2 + \sum (1 - \lambda_i^2)}$$

where λ_i is the completely standardized factor loading (for which both indicators and latent constructs are standardized) of item 'i' (Hair et al., 2010) noted that CR values of 0.7 or higher denote good reliability. The composite reliability for all constructs were >0.9 which indicates a good reliability (Cheung et al., 2023). The detailed computation of AVE and C.R. (table 6.7) is presented in Annexure II.

Next, the convergent validity for the research instrument was tested using Fornell-Larcker criterion. AVE was calculated manually using the given formula.

$$AVE = \frac{\sum \lambda^2}{n}$$

To establish convergent validity, CR values must be above 0.7 and for Average Variance Extracted (AVE), the values above 0.7 are considered very good whereas values above 0.5 are also considered acceptable (Fornell-Larcker, 1981). The AVE for five constructs > 0.5 stating that the instrument holds sufficient convergent validity. However, the AVE for one construct was 0.43 which is acceptable due to condition that if AVE value is less than 0.5, but composite reliability is higher than 0.6, the convergent validity of the construct is acceptable (Lam, 2012; Fornell & Larcker, 1981). Next, the discriminant validity for the research instrument was also tested using Fornell-Larcker criterion. The first condition for discriminant validity is establishing convergent validity (Bagozzi et al., 1991). Stated alternatively, unless a construct is well-represented by its indicators, it is pointless to examine whether the construct can be distinguished from others. Moreover, to establish discriminant validity, the square root of AVE should be higher than its respective inter-construct correlations (Henseler et al., 2015).

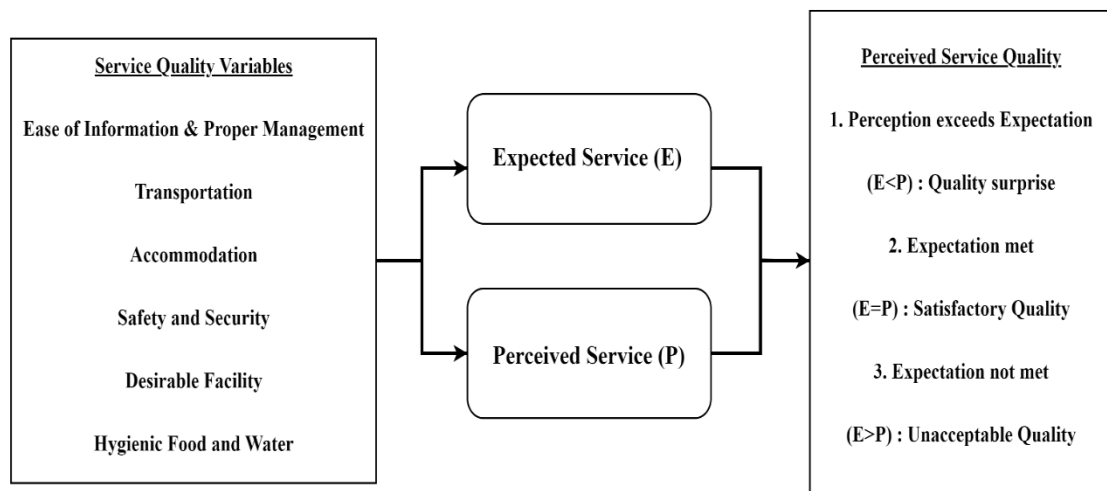
As shown in Table 6.8 (Annexure II) the value of the square root of the AVE of each variable is significantly larger than its correlation coefficients with other variables (Gefen

& Straub, 2005). Here all the dimensions of the scale have met the aforementioned criterion and, therefore, both convergent as well as discriminant validity was achieved. Thus, final proposed instrument, with fully checked reliability and validity, consists of 27 items classified 6 dimensions.

Step 2: Proposed Conceptual Model

After deriving the factors from Exploratory Factor Analysis, the proposed conceptual model for the study is given below:

Figure 6.1: Conceptual Model of Perceived Service Quality



Source: Own proposed model Derived from (Zeithaml et al., 1990)

The following hypotheses are formed based on the conceptual framework:

Ho1: There exists no significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P > .005$).

Ha1: There exists a significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P < .005$).

Ho2: There exists no significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P > .005$).

Ha2: There exists a significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P < .005$).

Ho3: There exists no significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P > .005$).

Ha3: There exists a significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P < .005$).

Ho4: There exists no significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P > .005$).

Ha4: There exists a significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P < .005$).

Ho5: There exists no significant difference between expectation and perception of the tourists regarding the *Desirable Facility* variable of Service Quality ($P > .005$).

Ha5: There exists a significant difference between expectation and perception of the tourists regarding the Hygienic *Desirable Facility* variable of Service Quality ($P < .005$).

Ho6: There exists no significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P > .005$).

Ha6: There exists a significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P < .005$).

Step 3: Paired t-test AND Gap analysis

After forming hypotheses for the study, a paired t test was used to measure whether the mean differences between the perception and expectation of the tourists are statistically significant. Thereafter, gap analysis helps to identify the gaps between the perceived service and the expected service. Gap scores are the difference between the mean perception and mean expectation scores, and these gap scores measure service quality. The more perceptions are close to expectations, the higher the perceived level of quality. Table 6.9 shows the gap mean differences between perception and expectation of the tourists.

Table 6.9: Paired Sample T-test statistics (N=1047, d.f. = 1046)

| Paired Samples Test | | | | | | | |
|---------------------|--------------------|------------------|----------|---|---|-----------------|---------|
| | Paired Differences | | | | t | Sig. (2-tailed) | Remarks |
| | Perception Mean | Expectation Mean | Gap Mean | 95% Confidence Interval of the Difference | | | |

| | | | | Lower | Upper | | | |
|---|-------|-------|--------|----------|----------|---------|-------|----------------------|
| Accommodation | 5.08 | 4.72 | 0.36 | 0.27975 | 0.44486 | 8.611 | 0.000 | Quality Surprise |
| Ease of Information and Proper Management | 4.512 | 4.816 | -0.304 | -0.39267 | -0.21415 | -6.670 | 0.000 | Unacceptable Quality |
| Transportation | 4.82 | 4.63 | 0.19 | 0.09838 | 0.28443 | 4.038 | 0.000 | Quality Surprise |
| Safety and Security | 4.72 | 4.346 | 0.374 | 0.27021 | 0.47811 | 7.063 | 0.000 | Quality Surprise |
| <i>Hygienic</i> Food and Water | 5.14 | 4.42 | 0.72 | 0.64391 | 0.80212 | 17.935 | 0.000 | Quality Surprise |
| Desirable Facility | 3.95 | 4.79 | -0.84 | -0.97661 | -0.71138 | -12.488 | 0.000 | Unacceptable Quality |

Source: Primary Data analysis using SPSS

Both expectations and perceptions were rated on a 7-point rating scale, where the higher scores indicated towards a more positive rating. In some cases, tourist perception ratings showed that actual service they received fell short of expectations. This resulted in a negative gap score (Perception – Expectation). According to Parasuraman et al., (1985) it is however common for tourist's expectation to exceed the actual service perceived and this signifies that there is always need for improvement. Table 6.10 shows the item wise gap differences between tourist perception and expectation (Annexure II).

1. Ease of Information and Proper Management variable of Service Quality

The test statistic is $t = -6.67$, with d.f. 1046, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 1046, i.e. ± 1.962 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Ease of Information and Proper Management* variable of Service Quality. The mean values indicate that the expectation of the tourist before visiting

(M=4.816) the Pilgrimage sites was significantly higher than perception after the visit. (M= 4.512). Hence, the difference between the means is *statistically significant*.

2. Transportation variable of Service Quality

The test statistic is $t = 4.038$, with d.f. 1046, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 1046, i.e. ± 1.962 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of **Transportation** variable of Service Quality. This indicate that there is a *statistically significant difference* between the expectation of the tourist before visiting (M= 4.63) the Pilgrimage sites and the perception after the visit. (M=4.82).

3. Accommodation variable of Service Quality

The test statistic is $t = 8.61$, with d.f. 1046, and $p < 0.01$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 1046, i.e. ± 1.962 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.08) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit. (M=4.72). Hence, the difference between the means is statistically significant.

4. Safety and Security variable of Service Quality

The test statistic is $t = 7.063$, with d.f. 1046, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 1046, i.e. ± 1.962 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of **Safety and Security** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 4.72) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit. (M=4.34). Hence, the difference between the means is statistically significant.

5. Desirable Facility variable of Service Quality

The test statistic is $t = 3.95$, with d.f. 1046, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 1046, i.e. ± 1.962 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of **Desirable Facility variable** of Service Quality. Hence, the difference between the means is statistically significant. The mean values indicate that the expectation of the tourist before visiting (M=4.79) the Pilgrimage sites was significantly higher than perception after the visit. (M= 3.95).

6. Hygienic Food and Water variable of Service Quality

The test statistic is $t = 17.935$, with d.f. 1046, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 1046, i.e. ± 1.962 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Hygienic Food and Water* variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M = 5.14$) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit ($M = 4.42$). Hence, the difference between the means is statistically significant.

Step 4: Service Quality of Study Areas

4.1 Study Area 1: Kedarnath Jyotirlinga

The following hypotheses are formed based on the conceptual framework:

Ho7: There exists no significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P > .005$).

Ha7: There exists a significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P < .005$).

Ho8: There exists no significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P > .005$).

Ha8: There exists a significant between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P < .005$).

Ho9: There exists no significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P > .005$).

Ha9: There exists a significant between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P < .005$).

Ho10: There exists no significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P > .005$).

Ha10: There exists a significant between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P < .005$).

Ho11: There exists no significant difference between expectation and perception of the tourists regarding the *Desirable Facility* variable of Service Quality ($P > .005$).

Ha11: There exists a significant between expectation and perception of the tourists regarding the Hygienic *Desirable Facility* variable of Service Quality ($P < .005$).

Ho12: There exists no significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P > .005$).

Ha12: There exists a significant between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P < .005$).

Table 6.12 shows the item wise gap differences between tourist perception and expectation (Annexure II).

Table 6.11: Paired Sample T-test Statistics (N=160, d.f. 159)

| Paired Samples Test | | | | | | | | |
|---|--------------------|------------------|----------|---|-------|-------|--------------------|----------------------|
| | Paired Differences | | | | | t | Sig. (2-tailed) | Remarks |
| | Perception Mean | Expectation Mean | Gap Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Accommodation | 4.77 | 5.22 | -0.44 | -0.68 | -0.20 | -3.6 | 0.00 | Unacceptable Quality |
| Ease Of Information and Proper Management | 4.38 | 5.18 | -0.79 | -1.02 | -0.57 | -6.9 | 0.00 | Unacceptable Quality |
| Transportation | 4.66 | 5.28 | -0.61 | -0.87 | -0.35 | -4.6 | 0.00 | Unacceptable Quality |
| Safety And Security | 5.37 | 5.08 | 0.29 | 0.06 | 0.52 | 2.5 | 0.012 | Quality Surprise |
| Food And Water | 5.33 | 4.91 | 0.41 | 0.22 | 0.61 | 4.218 | 0.00 | Quality Surprise |

| | | | | | | | | |
|-----------------------|------|------|-----------|-----------|-----------|-----------|------|-----------------------------|
| Desirable Facility | 1.91 | 5.45 | - 3.54 | - 3.78 | - 3.29 | - 28.4 | 0.00 | Unaccepta ble Quality |
|-----------------------|------|------|-----------|-----------|-----------|-----------|------|-----------------------------|

Source: Primary Data analysis using SPSS

1. *Ease of Information and Proper Management* variable of Service Quality

The test statistic is $t = -6.94$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Ease of Information and Proper Management*** variable of Service Quality. The mean values indicate that the expectation of the tourist before visiting (M=5.183) the Pilgrimage sites was significantly higher than perception after the visit. (M= 4.38). Hence, the difference between the means is *statistically significant*.

2. *Transportation* variable of Service Quality

The test statistic is $t = -4.617$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Transportation*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 4.66) the Pilgrimage sites was significantly lower than expectation of the tourist before the visit. (M=5.28).

3. *Accommodation* variable of Service Quality

The test statistic is $t = -3.647$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 4.77) the Pilgrimage sites was significantly lower than expectation of the tourist before the visit. (M=5.22).

4. *Safety and Security* variable of Service Quality

The test statistic is $t = 2.55$, with d.f. 159, and $p < 0.012$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a *statistically significant* difference between tourist expectation and tourist perception of ***Safety and Security*** variable of Service Quality. This indicate that there is a *statistically significant difference* between the expectation of

the tourist before visiting (M= 5.08) the Pilgrimage sites and the perception after the visit. (M=5.37).

5. *Desirable Facility* variable of Service Quality

The test statistic is $t = -28.47$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Desirable Facility* variable of Service Quality. Hence, the difference between the means is statistically significant. The mean values indicate that the expectation of the tourist before visiting (M=5.45) the Pilgrimage sites was significantly higher than perception after the visit. (M= 1.91).

6. *Hygienic Food and Water* variable of Service Quality

The test statistic is $t = 4.218$, with d.f. 159, and $p < 0.05$. Since p value is equal to $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Hygienic Food and Water* variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.33) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit (M=4.91). Hence, the difference between the means is statistically significant.

4.2 Study Area 2: Kashi Vishwanath Jyotirlinga

The following hypotheses are formed based on the conceptual framework:

Ho13: There exists no significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P > .005$).

Ha13: There exists a significant between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P < .005$).

Ho14: There exists no significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P > .005$).

Ha14: There exists a significant between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P < .005$).

Ho15: There exists no significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P > .005$).

Ha15: There exists a significant between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P < .005$).

Ho16: There exists no significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P > .005$).

Ha16: There exists a significant between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P < .005$).

Ho17: There exists no significant difference between expectation and perception of the tourists regarding the Desirable Facility variable of Service Quality ($P > .005$).

Ha17: There exists a significant between expectation and perception of the tourists regarding the Hygienic Desirable Facility **variable** of Service Quality ($P < .005$).

Ho18: There exists no significant difference between expectation and perception of the tourists regarding the Hygienic Food and Water Variable of Service Quality ($P > .005$).

Ha18: There exists a significant between expectation and perception of the tourists regarding the Hygienic Food and Water Variable of Service Quality ($P < .005$).

Table 6.13: Paired Sample T-test Statistics (N=156, d.f. 155)

| Paired Samples Test | | | | | | | | |
|---|--------------------|------------------|----------|---|-------|-------|--------------------|------------------|
| | Paired Differences | | | | | t | Sig. (2-tailed) | Remarks |
| | Perception Mean | Expectation Mean | Gap Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Accommodation | 5.68 | 4.67 | 1.00 | 0.87 | 1.141 | 15.13 | 0.000 | Quality surprise |
| Ease Of Information and Proper Management | 5.46 | 4.64 | 0.81 | 0.65 | 0.98 | 9.66 | 0.000 | Quality surprise |
| Transportation | 5.56 | 4.55 | 1.01 | 0.87 | 1.15 | 14.69 | 0.000 | Quality surprise |

| | | | | | | | | |
|---------------------|------|------|------|------|------|-------|-------|------------------|
| Safety And Security | 5.62 | 4.24 | 1.37 | 1.22 | 1.53 | 17.30 | 0.000 | Quality surprise |
| Food And Water | 5.81 | 4.7 | 1.11 | 0.96 | 1.26 | 15.02 | 0.000 | Quality surprise |
| Desirable Facility | 5.31 | 4.52 | 0.79 | 0.58 | 0.99 | 7.58 | 0.000 | Quality surprise |

Source: Primary Data analysis using SPSS

1. *Ease of Information and Proper Management* variable of Service Quality

The test statistic is $t = 9.669$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Ease of Information and Proper Management*** variable of Service Quality. The mean values indicate that the expectation of the tourist before visiting ($M=4.64$) the Pilgrimage sites was significantly lower than perception after the visit. ($M=5.46$). Hence, the difference between the means is *statistically significant*.

2. *Transportation* variable of Service Quality

The test statistic is $t = 14.697$ with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is more than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Transportation*** variable of Service Quality. This indicate that there exists a *statistically significant difference* between the expectation of the tourist before visiting ($M= 4.55$) the Pilgrimage sites and the perception after the visit. ($M=5.56$).

3. *Accommodation* variable of Service Quality

The test statistic is $t = 15.13$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 5.68$) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit. ($M=4.67$). Hence, the difference between the means is statistically significant.

4. *Safety and Security* variable of Service Quality

The test statistic is $t = 17.301$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject

the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Safety and Security* variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.46) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit. (M=4.64). Hence, the difference between the means is statistically significant.

5. *Desirable Facility* variable of Service Quality

The test statistic is $t = 7.58$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Desirable Facility* variable of Service Quality. Hence, the difference between the means is statistically significant. The mean values indicate that the expectation of the tourist before visiting (M=4.52) the Pilgrimage sites was significantly lower than perception after the visit. (M= 5.31).

6. *Hygienic Food and Water* variable of Service Quality

The test statistic is $t = 15.025$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Hygienic Food and Water* variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.81) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit (M=4.7). Hence, the difference between the means is statistically significant.

Table 6.14 shows the item wise gap differences between tourist perception and expectation (Annexure II).

4.3 Study Area 3 : Omkareshwar

The following hypotheses are formed based on the conceptual framework:

Ho19: There exists no significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P > .005$).

Ha19: There exists a significant between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P < .005$).

Ho20: There exists no significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P > .005$).

Ha20: There exists a significant between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P < .005$).

Ho21: There exists no significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P > .005$).

Ha21: There exists a significant between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P < .005$).

Ho22: There exists no significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P > .005$).

Ha22: There exists a significant between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P < .005$).

Ho23: There exists no significant difference between expectation and perception of the tourists regarding the *Desirable Facility* variable of Service Quality ($P > .005$).

Ha23: There exists a significant between expectation and perception of the tourists regarding the Hygienic *Desirable Facility* variable of Service Quality ($P < .005$).

Ho24: There exists no significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P > .005$).

Ha24: There exists a significant between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P < .005$).

Table 6.15: Paired Sample T-test Statistics (N=120, d.f. 119)

| Paired Samples Test | | | | | | | | |
|---------------------|--------------------|------------------|----------|---|-------|------|--------------------|----------------------|
| | Paired Differences | | | | | t | Sig. (2-tailed) | Remarks |
| | Perception Mean | Expectation Mean | Gap Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Accommodation | 5.12 | 4.23 | 0.88 | 0.71 | 1.05 | 10.4 | 0.00 | Quality Surprise |
| Ease Of Information | 3.22 | 4.33 | -1.11 | -1.34 | -0.87 | -9.2 | 0.00 | Unacceptable Quality |

| | | | | | | | | |
|-----------------------|------|------|--------|-------|--------|-------|-------|----------------------|
| and Proper Management | | | | | | | | |
| Transportation | 4.90 | 4.12 | 0.78 | 0.61 | 0.95 | 9.1 | 0.00 | Quality Surprise |
| Safety and Security | 3.16 | 3.64 | - 0.48 | -0.75 | - 0.20 | - 3.4 | 0.001 | Unacceptable Quality |
| Food and Water | 4.84 | 3.85 | 0.98 | 0.78 | 1.18 | 9.8 | 0.00 | Quality Surprise |
| Desirable Facility | 2.85 | 4.13 | - 1.28 | -1.55 | - 1.01 | - 9.3 | 0.00 | Unacceptable Quality |

Source: Primary Data analysis using SPSS

1. *Ease of Information and Proper Management* variable of Service Quality

The test statistic is $t = -9.284$, with d.f. 119, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 119, i.e. ± 1.980 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Ease of Information and Proper Management* variable of Service Quality. The mean values indicate that the expectation of the tourist before visiting (M=4.33) the Pilgrimage sites was significantly higher than perception after the visit. (M=3.22). Hence, the difference between the means is *statistically significant*.

2. *Transportation* variable of Service Quality

The test statistic is $t = 9.156$, with d.f. 119, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 119, i.e. ± 1.980 , we reject the null hypothesis and state that there exists a *statistically significant* difference between tourist expectation and tourist perception of *Transportation* variable of Service Quality. This indicate that there exists *statistically significant difference* between the expectation of the tourist before visiting (M= 4.12) the Pilgrimage sites and the perception after the visit. (M=4.90) as the perception after the visit was higher, signifying quality surprise.

3. *Accommodation* variable of Service Quality

The test statistic is $t = 10.478$, with d.f. 119, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 119, i.e. ± 1.980 , we reject

the null hypothesis and state that there is a difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 5.12$) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit. ($M=4.23$). Hence, the difference between the means is statistically significant.

4. *Safety and Security* variable of Service Quality

The test statistic is $t = -3.43$, with d.f. 119, and $p < 0.01$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 119, i.e. ± 1.980 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Safety and Security*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 3.16$) the Pilgrimage sites was significantly lower than expectation of the tourist before the visit. ($M=3.64$). Hence, the difference between the means is statistically significant.

5. *Desirable Facility* variable of Service Quality

The test statistic is $t = -9.36$, with d.f. 119, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 119, i.e. ± 1.980 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Desirable Facility*** variable of Service Quality. Hence, the difference between the means is statistically significant. The mean values indicate that the expectation of the tourist before visiting ($M=4.13$) the Pilgrimage sites was significantly higher than perception after the visit. ($M= 2.85$).

6. *Hygienic Food and Water* variable of Service Quality

The test statistic is $t = 9.82$, with d.f. 119, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 119, i.e. ± 1.980 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Hygienic Food and Water*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 4.84$) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit ($M=3.85$). Hence, the difference between the means is statistically significant.

Table 6.16 shows the item wise gap differences between tourist perception and expectation (Annexure II).

4.4 Study Area 4 : Mahakaleshwar

The following hypotheses are formed based on the conceptual framework:

Ho25: There exists no significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P > .005$).

Ha25: There exists a significant between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P < .005$).

Ho26: There exists no significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P > .005$).

Ha26: There exists a significant between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P < .005$).

Ho27: There exists no significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P > .005$).

Ha27: There exists a significant between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P < .005$).

Ho28: There exists no significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P > .005$).

Ha28: There exists a significant between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P < .005$).

Ho29: There exists no significant difference between expectation and perception of the tourists regarding the *Desirable Facility* variable of Service Quality ($P > .005$).

Ha29: There exists a significant between expectation and perception of the tourists regarding the Hygienic *Desirable Facility* variable of Service Quality ($P < .005$).

Ho30: There exists no significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P > .005$).

Ha30: There exists a significant between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P < .005$).

Table 6.17: Paired Sample T-test Statistics (N=160, d.f. 159)

| Paired Samples Test | | | | |
|---------------------|--------------------|---|--|---------|
| | Paired Differences | t | | Remarks |

| | Percepti on Mean | Expectati on Mean | Gap Mea n | 95% Confidence Interval of the Difference | | | Sig. (2- taile d) | |
|--|------------------------|----------------------|-----------------|---|-----------|---------------|----------------------------|---|
| | | | | Low er | Upp er | | | |
| Accommoda tion | 4.47 | 4.61 | - 0.13 | -0.33 | 0.06 | - 1.3 7 | 0.17 3 | Not statisticall y significant |
| Ease Of Information and Proper Management | 4.05 | 4.81 | - 0.75 | -0.93 | - 0.57 | - 8.2 6 | 0.00 | Unaccepta ble Quality |
| Transportati on | 4.06 | 4.29 | - 0.23 | -0.46 | - 0.01 | - 2.0 9 | 0.03 7 | Unaccepta ble Quality |
| Safety and Security | 4.90 | 3.98 | 0.92 | 0.69 | 1.14 | 8.0 7 | 0.00 0 | Quality Surprise |
| Food and Water | 4.74 | 4.47 | 0.26 | 0.01 | 0.51 | 2.0 8 | 0.03 8 | Quality Surprise |
| Desirable Facility | 4.40 | 4.68 | - 0.27 | -0.48 | - 0.06 | - 2.6 0 | 0.01 0 | Unaccepta ble Quality |

Source: Primary Data analysis using SPSS

1. *Ease of Information and Proper Management* variable of Service Quality

The test statistic is $t = -8.260$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a statistically significant difference between tourist expectation and tourist perception of *Ease of Information and Proper Management* variable of Service Quality. The mean values indicate that the expectation

of the tourist before visiting ($M=4.81$) the Pilgrimage sites was significantly higher than perception after the visit. ($M= 4.05$).

2. *Transportation variable of Service Quality*

The test statistic is $t = -2.098$, with d.f.159, and $p < 0.037$. Since p value is less than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a *statistically significant* difference between tourist expectation and tourist perception of ***Transportation*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 4.06$) the Pilgrimage sites was significantly lower than expectation of the tourist before the visit. ($M=4.29$).

3. *Accommodation variable of Service Quality*

The test statistic is $t = -1.370$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a statistically significant difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 4.47$) the Pilgrimage sites was significantly lower than expectation of the tourist before the visit. ($M=4.61$).

4. *Safety and Security variable of Service Quality*

The test statistic is $t = 8.072$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Safety and Security*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 4.90$) the Mahakaleshwar *Jyotirlinga* was significantly higher than expectation of the tourist before the visit. ($M=3.98$). Hence, the difference between the means is statistically significant and there is a quality surprise.

5. *Desirable Facility variable of Service Quality*

The test statistic is $t = -2.60$, with d.f. 159, and $p < 0.010$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Desirable Facility variable*** of Service Quality. Hence, the difference between the means is statistically significant. The mean values indicate that

the expectation of the tourist before visiting (M=4.68) the Pilgrimage sites was significantly higher than perception after the visit. (M= 4.40).

6. Hygienic Food and Water variable of Service Quality

The test statistic is $t = 2.089$, with d.f. 159, and $p < 0.038$. Since p value is less than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 159, i.e. ± 1.974 , we accept the null hypothesis and state that there is a *statistically significant* difference between tourist expectation and tourist perception of **Transportation** variable of Service Quality. The mean value indicates that the expectation of the tourist before visiting (M= 4.47) was lower than the Pilgrimage sites and the perception after the visit. (M=4.74) denoting a quality surprise.

Table 6.18 shows the item wise gap differences between tourist perception and expectation (Annexure II).

4.5 Study Area 5 : Baidyanath Dham

The following hypotheses are formed based on the conceptual framework:

Ho31: There exists no significant difference between expectation and perception of the tourists regarding the **Ease of Information and Proper Management** variable of Service Quality ($P > .005$).

Ha31: There exists a significant between expectation and perception of the tourists regarding the **Ease of Information and Proper Management** variable of Service Quality ($P < .005$).

Ho32: There exists no significant difference between expectation and perception of the tourists regarding the **Transportation** variable of Service Quality ($P > .005$).

Ha32: There exists a significant between expectation and perception of the tourists regarding the **Transportation** variable of Service Quality ($P < .005$).

Ho33: There exists no significant difference between expectation and perception of the tourists regarding the **Accommodation** variable of Service Quality ($P > .005$).

Ha33: There exists a significant between expectation and perception of the tourists regarding the **Accommodation** variable of Service Quality ($P < .005$).

Ho34: There exists no significant difference between expectation and perception of the tourists regarding the **Safety and Security** variable of Service Quality ($P > .005$).

Ha34: There exists a significant between expectation and perception of the tourists regarding the **Safety and Security** variable of Service Quality ($P < .005$).

Ho35: There exists no significant difference between expectation and perception of the tourists regarding the *Desirable Facility* variable of Service Quality ($P > .005$).

Ha35: There exists a significant between expectation and perception of the tourists regarding the Hygienic *Desirable Facility* variable of Service Quality ($P < .005$).

Ho36: There exists no significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P > .005$).

Ha36: There exists a significant between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P < .005$).

Table 6.19: Paired Sample T-test Statistics (N=156, d.f. 155)

| Paired Samples Test | | | | | | | | |
|--|--------------------|---------------------|-------------|---|-------|-------|--------------------|-------------------------|
| | Paired Differences | | | | | t | Sig. (2-tailed) | Remarks |
| | Perception Mean | Expectation Mean | Gap Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Accommodation | 4.684 | 5.170 | -0.48 | -0.64 | -0.32 | -5.9 | 0.00 | Unacceptable Quality |
| Ease Of Information and Proper Management | 3.84 | 5.28 | -1.44 | -1.58 | -1.29 | -20.1 | 0.00 | Unacceptable Quality |
| Transportation | 3.76 | 5.00 | -1.23 | -1.45 | -1.02 | -11.4 | 0.00 | Unacceptable Quality |
| Safety and Security | 4.60 | 4.97 | -0.36 | -0.56 | -0.16 | -3.6 | 0.00 | Unacceptable Quality |

| | | | | | | | | |
|--------------------|------|------|-------|-------|-------|-------|-------|-------------------------------|
| Food And Water | 4.78 | 4.77 | 0.01 | -0.17 | 0.20 | 0.13 | 0.894 | Not statistically significant |
| Desirable Facility | 2.56 | 5.34 | -2.77 | -2.97 | -2.57 | -27.0 | 0.000 | Unacceptable Quality |

Source: Primary Data analysis using SPSS

1. *Ease of Information and Proper Management* variable of Service Quality

The test statistic is $t = -20.145$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Ease of Information and Proper Management* variable of Service Quality. The mean values indicate that the expectation of the tourist before visiting (M=5.284) the Pilgrimage sites was significantly higher than perception after the visit. (M= 3.842). Hence, the difference between the means is *statistically significant*.

2. *Transportation* variable of Service Quality

The test statistic is $t = -11.44$, with d.f., 155 and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Transportation* variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 3.76) the Baidyanath Dham was significantly lower than expectation of the tourist before the visit (M=5.00). Hence, the difference between the means is statistically significant.

3. *Accommodation* variable of Service Quality

The test statistic is $t = -5.93$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 4.68) the Pilgrimage sites was significantly lower than expectation of the tourist before the visit. (M=5.170). Hence, the difference between the means is statistically significant.

4. *Safety and Security* variable of Service Quality

The test statistic is $t = -3.618$, with d.f. 155, and $p < 0.01$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Safety and Security*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M = 4.60$) Baidyanath Dham was significantly lower than expectation of the tourist before the visit. ($M = 4.97$). Hence, the difference between the means is statistically significant.

5. *Desirable Facility* variable of Service Quality

The test statistic is $t = -27.021$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of ***Desirable Facility*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M = 2.56$) Baidyanath Dham was significantly lower than expectation of the tourist before the visit. ($M = 5.34$). Hence, the difference between the means is statistically significant.

6. *Hygienic Food and Water* variable of Service Quality

The test statistic is $t = 0.13$, with d.f. 155, and $p < 0.965$. Since p value is more than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 155, i.e. ± 1.975 , we accept the null hypothesis and state that there is no *statistically significant* difference between tourist expectation and tourist perception of ***Hygienic Food and Water*** variable of Service Quality.

Table 6.20 shows the item wise gap differences between tourist perception and expectation (Annexure II).

4.6 Study Area 6 : Somnath

The following hypotheses are formed based on the conceptual framework:

Ho37: There exists no significant difference between expectation and perception of the tourists regarding the ***Ease of Information and Proper Management*** variable of Service Quality ($P > .005$).

Ha37: There exists a significant between expectation and perception of the tourists regarding the ***Ease of Information and Proper Management*** variable of Service Quality ($P < .005$).

Ho38: There exists no significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P>.005$).

Ha38: There exists a significant between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P<.005$).

Ho39: There exists no significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P>.005$).

Ha39: There exists a significant between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P<.005$).

Ho40: There exists no significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P>.005$).

Ha40: There exists a significant between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P<.005$).

Ho41: There exists no significant difference between expectation and perception of the tourists regarding the *Desirable Facility* variable of Service Quality ($P>.005$).

Ha41: There exists a significant between expectation and perception of the tourists regarding the Hygienic *Desirable Facility* variable of Service Quality ($P<.005$).

Ho42: There exists no significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P>.005$).

Ha42: There exists a significant between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P<.005$).

Table 6.21: Paired Sample T-test Statistics (N=160, d.f. 159)

| Paired Samples Test | | | | | | | | |
|---------------------|--------------------|------------------|----------|---|-------|------|--------------------|------------------|
| | Paired Differences | | | | | t | Sig. (2-tailed) | Remarks |
| | Perception Mean | Expectation Mean | Gap Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Accommodation | 5.676 | 4.21 | 1.45 | 1.25 | 1.66 | 14.2 | 0.000 | Quality Surprise |

| | | | | | | | | |
|---|------|------|------|------|-------|------|-------|------------------|
| Ease Of Information and Proper Management | 5.54 | 4.45 | 1.09 | 0.87 | 1.31 | 9.94 | 0.000 | Quality Surprise |
| Transportation | 5.67 | 4.24 | 1.43 | 1.24 | 1.624 | 14.8 | 0.000 | Quality Surprise |
| Safety and Security | 5.68 | 3.84 | 1.84 | 1.64 | 2.047 | 17.9 | 0.000 | Quality Surprise |
| Food and Water | 5.42 | 3.90 | 1.51 | 1.32 | 1.70 | 15.7 | 0.000 | Quality Surprise |
| Desirable Facility | 5.73 | 4.36 | 1.36 | 1.12 | 1.61 | 11.1 | 0.000 | Quality Surprise |

Source: Primary Data analysis using SPSS

1. Ease of Information and Proper Management variable of Service Quality

The test statistic is $t = 9.942$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a *statistically significant* difference between tourist expectation and tourist perception of ***Ease of Information and Proper Management*** variable of Service Quality. The mean values indicate that the expectation of the tourist before visiting ($M=4.4$) the Somnath *Jyotirlinga* was significantly lower than perception after the visit. ($M= 5.54$).

2. Transportation variable of Service Quality

The test statistic is $t = 14.876$ with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a statistically significant difference between tourist expectation and tourist perception of ***Transportation*** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting ($M= 5.67$) the

Somnath *Jyotirlinga* was significantly higher than expectation of the tourist before the visit. (M=4.20).

3. Accommodation variable of Service Quality

The test statistic is $t = 14.28$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a statistically significant difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.67) the Somnath *Jyotirlinga* was significantly higher than expectation of the tourist before the visit. (M=4.21).

4. Safety and Security variable of Service Quality

The test statistic is $t = 17.98$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a statistically significant difference between tourist expectation and tourist perception of **Safety and Security** variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.68) the Somnath *Jyotirlinga* was significantly higher than expectation of the tourist before the visit. (M=3.84).

5. Desirable Facility variable of Service Quality

The test statistic is $t = 11.17$, with d.f. 159, and $p < 0.02$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of **Desirable Facility variable** of Service Quality. Hence, the difference between the means is statistically significant.

The mean values indicate that the expectation of the tourist before visiting (M=4.36) the Somnath *Jyotirlinga* was significantly lower than perception after the visit. (M= 5.73).

6. Hygienic Food and Water variable of Service Quality

The test statistic is $t = 15.77$, with d.f. 159 and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of **Hygienic Food and Water** variable of Service Quality. This indicate that there exists a *statistically significant difference* between the expectation of the tourist

before visiting (M= 3.90) the Somnath *Jyotirlinga* and the perception after the visit. (M= 5.42).

Table 6.22 shows the item wise gap differences between tourist perception and expectation (Annexure II).

4.7 Study Area 7 : Nageshwar Jyotirlinga

The following hypotheses are formed based on the conceptual framework:

Ho43: There exists no significant difference between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P > .005$).

Ha43: There exists a significant between expectation and perception of the tourists regarding the *Ease of Information and Proper Management* variable of Service Quality ($P < .005$).

Ho44: There exists no significant difference between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P > .005$).

Ha44: There exists a significant between expectation and perception of the tourists regarding the *Transportation* variable of Service Quality ($P < .005$).

Ho45: There exists no significant difference between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P > .005$).

Ha45: There exists a significant between expectation and perception of the tourists regarding the *Accommodation* variable of Service Quality ($P < .005$).

Ho46: There exists no significant difference between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P > .005$).

Ha46: There exists a significant between expectation and perception of the tourists regarding the *Safety and Security* variable of Service Quality ($P < .005$).

Ho47: There exists no significant difference between expectation and perception of the tourists regarding the *Desirable Facility* variable of Service Quality ($P > .005$).

Ha47: There exists a significant between expectation and perception of the tourists regarding the Hygienic *Desirable Facility* variable of Service Quality ($P < .005$).

Ho48: There exists no significant difference between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P > .005$).

Ha48: There exists a significant between expectation and perception of the tourists regarding the *Hygienic Food and Water* Variable of Service Quality ($P < .005$).

Table 6.23: Paired Sample T-test Statistics (N=137, d.f. 136)

| Paired Samples Test | | | | | | | | |
|---|--------------------|------------------|----------|---|-------|-------|--------------------|-------------------------------|
| | Paired Differences | | | | | t | Sig. (2-tailed) | Remarks |
| | Perception Mean | Expectation Mean | Gap Mean | 95% Confidence Interval of the Difference | | | | |
| | | | | Lower | Upper | | | |
| Accommodation | 5.20 | 4.80 | 0.39 | 0.23 | 0.55 | 4.94 | 0.000 | Quality Surprise |
| Ease Of Information and Proper Management | 4.79 | 4.88 | -0.08 | -0.18 | 0.021 | -1.57 | 0.118 | Not statistically significant |
| Transportation | 5.18 | 4.80 | 0.37 | 0.23 | 0.52 | 5.18 | 0.000 | Quality Surprise |
| Safety and Security | 3.09 | 4.50 | -1.41 | -1.66 | -1.16 | -11.2 | 0.000 | Unacceptable Quality |
| Food and Water | 5.01 | 4.19 | 0.82 | 0.66 | 0.99 | 9.94 | 0.000 | Quality Surprise |
| Desirable Facility | 4.72 | 4.91 | -0.18 | -0.32 | -0.04 | -2.62 | 0.010 | Unacceptable Quality |

Source: Primary Data analysis using SPSS

1. *Ease of Information and Proper Management* variable of Service Quality

The test statistic is $t = -1.57$, with d.f. 136, and $p < 0.118$. Since p value is more than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 136, i.e. ± 1.977 , we accept the null hypothesis and state that there is no *statistically significant* difference between tourist expectation and tourist perception of *Ease of Information and Proper Management*

variable of Service Quality. This indicate that there was *no statistically significant difference* between the expectation of the tourist before visiting (M= 4.88) the Pilgrimage sites and the perception after the visit. (M= 4.79).

2. Transportation variable of Service Quality

The test statistic is $t = 5.18$, with d.f. 136, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 136, i.e. ± 1.977 , we reject the null hypothesis and state that there is a statistically significant difference between tourist expectation and tourist perception of transportation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.18) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit. (M=4.80).

3. Accommodation variable of Service Quality

The test statistic is $t = 4.94$, with d.f. 136, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 136, i.e. ± 1.977 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of Accommodation variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.20) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit. (M=4.80).

4. Safety and Security variable of Service Quality

The test statistic is $t = -11.23$, with d.f. 136, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 136, i.e. ± 1.977 , we reject the null hypothesis and state that there is a statistically significant difference between tourist expectation and tourist perception of *Safety and Security* variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 3.09) the Pilgrimage sites was significantly lower than expectation of the tourist before the visit. (M=4.50).

5. Desirable Facility variable of Service Quality

The test statistic is $t = -2.62$, with d.f. 136, and $p < 0.010$. Since p value is less than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 136, i.e. ± 1.977 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Ease of Information and Proper Management* variable of Service Quality. This indicate that there was *no statistically significant difference* between the

expectation of the tourist before visiting (M= 4.917) the Pilgrimage sites and the perception after the visit. (M=4.931).

6. *Hygienic Food and Water* variable of Service Quality

The test statistic is $t = 9.94$, with d.f. 136, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 136, i.e. ± 1.977 , we reject the null hypothesis and state that there is a difference between tourist expectation and tourist perception of *Hygienic Food and Water* variable of Service Quality. The mean values indicate that the perception of the tourist after visiting (M= 5.01) the Pilgrimage sites was significantly higher than expectation of the tourist before the visit (M=4.19). Hence, the difference between the means is statistically significant.

Table 6.24 shows the item wise gap differences between tourist perception and expectation (Annexure II).

4.8 Comparative analysis of the study areas

4.8.1 Comparative analysis

The following is the result for hypothesis testing and service quality of the seven study areas.

Table 6.25: Comparative analysis of Hypothesis testing and gap analysis

| Study Area | Factor | Perception Mean | Expectation Mean | Gap Mean | Sig. (2-tailed) | Hypothesis Result | Remarks |
|------------------|---------------|-----------------|------------------|----------|-----------------|-------------------|----------------------|
| Kedarnath | Accommodation | 4.77 | 5.22 | -0.44 | 0.00 | Rejected | Unacceptable Quality |
| Kashi Vishwanath | Accommodation | 5.68 | 4.67 | 1 | 0.00 | Rejected | Quality surprise |
| Omkareshwar | Accommodation | 5.12 | 4.23 | 0.88 | 0.00 | Rejected | Quality Surprise |
| Mahakaleshwar | Accommodation | 4.47 | 4.61 | -0.13 | 0.173 | - | Not statistically |

| | | | | | | | |
|------------------|---|-------|------|--------|------|----------|----------------------|
| | | | | | | | significant |
| Baidyanath Dham | Accommodation | 4.684 | 5.17 | - 0.48 | 0.00 | Rejected | Unacceptable Quality |
| Nageshwar | Accommodation | 5.2 | 4.8 | 0.39 | 0.00 | Rejected | Quality Surprise |
| Somnath | Accommodation | 5.676 | 4.21 | 1.45 | 0.00 | Rejected | Quality Surprise |
| Kedarnath | Desirable Facility | 1.91 | 5.45 | - 3.54 | 0.00 | Rejected | Unacceptable Quality |
| Kashi Vishwanath | Desirable Facility | 5.31 | 4.52 | 0.79 | 0.00 | Rejected | Quality surprise |
| Omkareshwar | Desirable Facility | 2.85 | 4.13 | - 1.28 | 0.00 | Rejected | Unacceptable Quality |
| Mahakaleshwar | Desirable Facility | 4.4 | 4.68 | - 0.27 | 0.01 | Rejected | Unacceptable Quality |
| Baidyanath Dham | Desirable Facility | 2.56 | 5.34 | - 2.77 | 0.00 | Rejected | Unacceptable Quality |
| Nageshwar | Desirable Facility | 4.72 | 4.91 | - 0.18 | 0.01 | Rejected | Unacceptable Quality |
| Somnath | Desirable Facility | 5.73 | 4.36 | 1.36 | 0.00 | Rejected | Quality Surprise |
| Kedarnath | Ease Of Information and Proper Management | 4.38 | 5.18 | - 0.79 | 0.00 | Rejected | Unacceptable Quality |

| | | | | | | | |
|------------------|---|------|------|--------|-------|----------|-------------------------------|
| Kashi Vishwanath | Ease Of Information and Proper Management | 5.46 | 4.64 | 0.81 | 0.00 | Rejected | Quality surprise |
| Omkareshwar | Ease Of Information and Proper Management | 3.22 | 4.33 | - 1.11 | 0.00 | Rejected | Unacceptable Quality |
| Mahakaleshwar | Ease Of Information and Proper Management | 4.05 | 4.81 | - 0.75 | 0.00 | Rejected | Unacceptable Quality |
| Baidyanath Dham | Ease Of Information and Proper Management | 3.84 | 5.28 | - 1.44 | 0.00 | Rejected | Unacceptable Quality |
| Nageshwar | Ease Of Information and Proper Management | 4.79 | 4.88 | - 0.08 | 0.118 | - | Not statistically significant |
| Somnath | Ease Of Information and Proper Management | 5.54 | 4.45 | 1.09 | 0.00 | Rejected | Quality Surprise |
| Kedarnath | Food And Water | 5.33 | 4.91 | 0.41 | 0.00 | Rejected | Quality Surprise |

| | | | | | | | |
|------------------|---------------------|------|------|--------|-------|----------|-------------------------------|
| Kashi Vishwanath | Food And Water | 5.81 | 4.7 | 1.11 | 0.00 | Rejected | Quality surprise |
| Omkareshwar | Food and Water | 4.84 | 3.85 | 0.98 | 0.00 | Rejected | Quality Surprise |
| Mahakaleshwar | Food and Water | 4.74 | 4.47 | 0.26 | 0.038 | Rejected | Quality Surprise |
| Baidyanath Dham | Food And Water | 4.78 | 4.77 | 0.01 | 0.894 | Accepted | Not statistically significant |
| Nageshwar | Food and Water | 5.01 | 4.19 | 0.82 | 0.00 | Rejected | Quality Surprise |
| Somnath | Food and Water | 5.42 | 3.9 | 1.51 | 0.00 | Rejected | Quality Surprise |
| Kedarnath | Safety And Security | 5.37 | 5.08 | 0.29 | 0.012 | - | Not statistically significant |
| Kashi Vishwanath | Safety And Security | 5.62 | 4.24 | 1.37 | 0.00 | Rejected | Quality surprise |
| Omkareshwar | Safety and Security | 3.16 | 3.64 | - 0.48 | 0.001 | Rejected | Unacceptable Quality |
| Mahakaleshwar | Safety and Security | 4.9 | 3.98 | 0.92 | 0.00 | Rejected | Quality Surprise |
| Baidyanath Dham | Safety and Security | 4.6 | 4.97 | - 0.36 | 0.00 | Rejected | Unacceptable Quality |
| Nageshwar | Safety and Security | 3.09 | 4.5 | - 1.41 | 0.00 | Rejected | Unacceptable Quality |

| | | | | | | | |
|------------------|---------------------|------|------|--------|-------|----------|----------------------|
| Somnath | Safety and Security | 5.68 | 3.84 | 1.84 | 0.00 | Rejected | Quality Surprise |
| Kedarnath | Transportation | 4.66 | 5.28 | - 0.61 | 0.00 | Rejected | Unacceptable Quality |
| Kashi Vishwanath | Transportation | 5.56 | 4.55 | 1.01 | 0.00 | Rejected | Quality surprise |
| Omkareshwar | Transportation | 4.9 | 4.12 | 0.78 | 0.00 | Rejected | Quality Surprise |
| Mahakaleshwar | Transportation | 4.06 | 4.29 | - 0.23 | 0.037 | Rejected | Unacceptable Quality |
| Baidyanath Dham | Transportation | 3.76 | 5 | - 1.23 | 0.00 | Rejected | Unacceptable Quality |
| Nageshwar | Transportation | 5.18 | 4.8 | 0.37 | 0.00 | Rejected | Quality Surprise |
| Somnath | Transportation | 5.67 | 4.24 | 1.43 | 0.00 | Rejected | Quality Surprise |

Source: Own compilation

The conclusions presented below are derived from the information provided in the above table.

1. In *accommodation* variable of service quality Kashi Vishwanath, Nageshwar, Omkareshwar and Somnath have positive gaps implying good service quality.
2. In *desirable facility* variable of service quality have positive gaps in Kashi Vishwanath and Somnath implying good service quality.
3. In *Ease of Information and Proper Management* variable there are positive gaps implying good service quality in Kashi Vishwanath and Somnath.
4. In *Hygienic Food and Water* variable of service quality there are positive gaps in Kashi Vishwanath, Kedarnath, Mahakaleshwar, Nageshwar, Omkareshwar and Somnath implying good service quality.

5. In *Safety and security* variable of service quality have positive gaps implying good service quality in Kashi Vishwanath, Mahakaleshwar, and Somnath..
6. In *Transportation* variable of service quality there are positive gaps in Kashi Vishwanath, Nageshwar, Omkareshwar and Somnath implying good service quality.

4.8.2 Overall Service Quality

The following hypotheses are formed based on the conceptual framework:

Ho49: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at Kedarnath ($P > .005$).

Ha49: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at Kedarnath ($P < .005$).

Ho50: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at Kashi Vishwanath ($P > .005$).

Ha50: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at Kashi Vishwanath ($P < .005$).

Ho51: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at Omkareshwar ($P > .005$).

Ha51: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at Omkareshwar ($P < .005$).

Ho52: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at Mahakaleshwar ($P > .005$).

Ha52: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at Mahakaleshwar ($P < .005$).

Ho53: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at Baidyanath ($P > .005$).

Ha53: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at Baidyanath ($P < .005$).

Ho54: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at Somnath ($P > .005$).

Ha54: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at Somnath ($P < .005$).

Ho55: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at Nageshwar ($P>.005$).

Ha55: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at Nageshwar ($P<.005$).

Ho56: There exists no significant difference between overall expectation and overall perception of the tourists regarding the Service Quality at selected pilgrimage sites in North India ($P>.005$).

Ha56: There exists a significant between overall expectation and overall perception of the tourists regarding the Service Quality at selected pilgrimage sites in North India ($P<.005$).

1. Kedarnath

The test statistic is $t = -8.722$, with d.f. 159, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we *reject the null hypothesis* and state that there is a *statistically significant* difference between overall tourist expectation and overall tourist perception regarding the Service Quality at Kedarnath. The mean values indicate that the overall expectation of the tourist before visiting ($M=5.19$) the Pilgrimage sites was significantly higher than perception after the visit ($M= 4.5$), indicating *Unacceptable Quality*.

2. Kashi Vishwanath

The test statistic is $t = 20.96$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we *reject the null hypothesis* and state that there is a *statistically significant* difference between overall tourist expectation and overall tourist perception regarding the Service Quality at Kashi Vishwanath. The mean values indicate that the expectation of the tourist before visiting ($M=4.56$) Kashi Vishwanath was significantly lower than perception after the visit ($M= 5.57$), indicating *Quality Surprise*.

3. Omkareshwar

The test statistic is $t = -0.15$, with d.f., 119 and $p < 0.874$. Since p value is more than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 119, i.e. ± 1.98 , we accept the null hypothesis and state that there is no *statistically significant* difference between overall tourist expectation and overall tourist perception regarding the Service Quality at Omkareshwar. This indicates that there was *no statistically significant difference* between the expectation of the tourist before visiting ($M= 4.09$) Omkareshwar and the perception after the visit. ($M=4.08$).

4. Mahakaleshwar

The test statistic is $t = -1.95$, with d.f. 159, and $p < 0.052$. Since p value is more than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e., ± 1.974 , we accept the null hypothesis and state that there is no *statistically significant* difference between overall tourist expectation and overall tourist perception regarding the Service Quality at Mahakaleshwar.

5. Baidyanath

The test statistic is $t = -21.84$, with d.f. 155, and $p < 0.00$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 155, i.e. ± 1.975 , we *reject the null hypothesis* and state that there is a *statistically significant* difference between overall tourist expectation and overall tourist perception regarding the Service Quality at Baidyanath. The mean values indicate that the expectation of the tourist before visiting ($M=5.11$) Baidyanath *Jyotirlinga* was significantly higher than perception after the visit. ($M= 4.09$), indicating *Unacceptable Quality*.

6. Somnath

The test statistic is $t = 15.68$, with d.f. 159, and $p < 0.02$. Since p value is less than $\alpha < 0.05$, and test statistic value is greater than the t value at d.f. 159, i.e. ± 1.974 , we *reject the null hypothesis* and state that there is a *statistically significant* difference between overall tourist expectation and overall tourist perception regarding the Service Quality at Somnath *Jyotirlinga*. The mean values indicate that the expectation of the tourist before visiting ($M=4.2$) Somnath was significantly lower than perception after the visit. ($M= 5.62$), indicating *Quality Surprise*.

7. Nageshwar

The test statistic is $t = 0.02$, with d.f., 136 and $p < 0.97$. Since p value is more than $\alpha < 0.05$, and test statistic value is less than the t value at d.f. 136, i.e. ± 1.977 , we accept the null hypothesis and state that there is no *statistically significant* difference between overall tourist expectation and overall tourist perception regarding the Service Quality at Nageshwar. This indicate that there was *no statistically significant difference* between the expectation of the tourist before visiting ($M= 4.72$) the Pilgrimage sites and the perception after the visit. ($M=4.72$).

Table 6.26: Paired Sample T-test Statistics for all study areas

| Paired Samples Test |
|---------------------|
|---------------------|

| Study Area | Paired Differences | | | t | d.f. | Sig. (2-tailed) | Hypothesis | Remarks |
|------------------|--------------------|------------------|----------|-------|------|-----------------|------------|-------------------------------|
| | Perception Mean | Expectation Mean | Gap Mean | | | | | |
| Kedarnath | 4.5 | 5.19 | -0.69 | -8.72 | 15 | 0.000 | Rejected | Unacceptable Quality |
| Kashi Vishwanath | 5.57 | 4.56 | 1 | 20.9 | 15 | 0.000 | Rejected | Quality surprise |
| Omkareshwar | 4.08 | 4.09 | -0.00 | -0.15 | 11 | 0.87 | - | Not statistically significant |
| Mahakaleshwar | 4.39 | 4.49 | -0.10 | -1.95 | 15 | 0.05 | - | Not statistically significant |
| Baidyanath | 4.09 | 5.11 | -1.01 | -21.8 | 15 | 0.000 | Rejected | Unacceptable Quality |
| Somnath | 5.62 | 4.2 | 1.42 | 15.6 | 15 | 0.000 | Rejected | Quality Surprise |
| Nageshwar | 4.72 | 4.72 | 0.00 | 0.02 | 13 | 0.97 | - | Not statistically significant |

Source: Primary Data analysis using SPSS

Conclusion

The above analysis in Table 6.43 shows the service quality of *Kashi Vishwanath* and *Somnath* shows a quality surprise, whereas the service quality in *Kedarnath* and *Baidyanath* shows unacceptable quality, indicating there is room for service

improvement. However, there was a statistically significant difference in the tourist perception and expectation of services in *Omkareshwar, Mahakaleshwar, and Nageshwar Jyotirlinga*.

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