



# Service expectations and perceptions of guests at Ethiopian Hotels

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## Abstract

Determining customers' (guests') perception of service quality and ensuring that service delivery 'gaps' are addressed is critical to ensuring the success of hotels and tourist establishments. This article aims at determining the 'gap' between the hotels customers' expectations (E) and perceptions (P) of the actual service delivered by graded hotels in Ethiopia. Despite limited criticisms, the renowned SERVQUAL instrument was used with minor adaptations, which included adding five items to the Tangibles dimension, and using a 5-point, instead of a 7-point scale. The instrument was deemed valid and reliable through Confirmatory Factor Analysis and determining the Cronbach Alpha co-efficient values. From the response to survey using a self-administered questionnaire, it became evident that of the 415 responses, the majority (54.7%) indicated that their  $P > E$ , and 12.5% indicated that  $P = E$ ; and the rest (32.8%) indicated that their  $E > P$ . Furthermore, although the mean difference ( $P - E$ ) was significant ( $t(N415) = 3.100, p = .002$ ), the difference was very small (0.07398). Thus, it could be stated with 95% confidence that the true mean increase in perception lies somewhere between 0.027 and 0.121, implying that the hotel customers' service expectations were being mostly met. With respect to those few areas, where the net ( $P - E$ ) score is negative, the hotel management needs to address this so as to narrow or eliminate the service delivery 'gap'.

**Keywords:** service equality, hospitality, leisure, travel, hotels

## Introduction

The hotel industry is a sub-sector of the tourism industry, which is one of the most rapidly expanding businesses in the service sector (Jauhari, 2012). In Ethiopia, the hotel industry is growing at a high pace, but the industry is not without challenges, the main being poor quality of service (Kifle, 2012). Service quality is the consumers' judgment of the excellence and superiority of the service encounter (Kim, Holland and Han, 2013). In the hotel industry, guests will have certain perceptions of the hotel service quality depending on the services offered to them or the experiences they have had (Boon-Liat and Md. Zabid Abdul, 2013). Evaluating the customers' perception of service quality is widely acknowledged as being an effective strategy to boost profitability in the hospitality industry (Tam, 2004, Claver, José Tarí and Pereira, 2006). In order to anticipate customers' expectations and understand their perceptions, it was suggested that hotel managers make service quality measurements as part of their quality management program (Creelman, 1992 cited by Narangajavana (2007)).

There is abundant research on service quality, including in the hospitality industry, however very limited published research exists on the Ethiopian hotel industry. Thus, the overall aim of this article is to explore service quality 'gaps' in the Ethiopian graded hotel industry.



## Measuring Service Quality

Service quality was measured in combination with other measurement tools and techniques by researchers such as, Keith and Simmers (2013), Moisescu and Gica (2013), Abdullah (2006), Paul (2003) and Cronin and Taylor (1994). Parasuraman (1985) developed the multi-attribute quantitative model called SERVQUAL in the late 80's, and since then, the model has been used as is or adapted by many scholars and practitioners in studying service quality in different service contexts (Boon-Liat and Md. Zabid Abdul, 2013). SERVQUAL or its modified version was used by many researchers (Nayak, 2013, Srivastava and Rai, 2013, Hyun Soon, Zhang, Dae Hyun, Chen, Henderson, Min and Haiyan, 2014, Kim-Soon, Rahman and Visvalingam, 2014, Po-Hsuan, Ching-Yuan and Cheng-Kai, 2014, Torres, 2014, Wu, Huang and Chou, 2014) in their study on hotel service quality. The SERVQUAL instrument has also been used by many scholars in the hospitality industry (Reisinger, Kandampully, Mok and Sparks, 2001, Alexandris, Dimitriadis and Markata, 2002, Tam, 2004, Claver et al., 2006, Briggs, Sutherland and Drummond, 2007, Sanchez-Gutierrez, Gonzalez-Urbe and Coton, 2011, Malik, 2012, Mohajerani and Miremadi, 2012, Setó-Pamies, 2012, Yein Ping, Suki and Suki, 2012, Abd-El-Salam, Shawky and El-Nah, 2013, Al-Ababneh, 2013, Auka, Bosire and Matern, 2013).

According to Hyun Soon et al. (2014:760), SERVQUAL measures “individual quality attributes of the service quality rather than the overall perception of the service offerings, or measuring the indirect service quality through customer satisfaction”. In general, customers compare the perceived service with the expected service (Kotler, Bowen and Makens, 2010), and the perceived service quality is positive when the perceived service experience exceeds the expected service, and negative when perceived service fell short of the expected service (Hoyer and MacInnis, 2010).

In spite of being a widely used and cited model in the literature on service marketing, the SERVQUAL measurement model has been criticized from both practical and theoretical facets (Cronin and Taylor, 1994, Cheng and Rashid, 2013). The main criticism of SERVQUAL was its length, predictive power and more importantly its validity; however this was refuted by the authors (Rahman, Khan and Haque, 2012). Cronin and Taylor (1994) argued that the scales measuring service quality were inconsistent and varied in different industries. There were also concerns over the measurement of the expectations of customers, as the method was ineffective in practice, since new customers may not have expectations as they had no previous experience (Moisescu and Gica, 2013). However, the aforementioned may be questionable as hotel customers' behaviour is changing, and on average, a potential hotel customer reviews at least ten hotels and online travel agents' websites before making a reservation to a hotel (PhoCusWright, 2011).

The power of the SERVQUAL measurement model to predict the intention or expectation of customers was less than the ability of the method that measures only the customers perception of services (Hoffman and Bateson, 2010). Furthermore, there was reluctance on the part of managers to adopt the SERVQUAL measurement model for their firm due to the length of the questionnaire and “unnecessary” repetition (Hyun Soon et al., 2014). For other researchers, such as Brady and Cronin (2001), measuring only customer's perception of service quality is more applicable and appealing. Parasuraman, Berry and Zeithaml (1994) however, argued that assessing the ‘gap’ between the customers' service expectations and actual experience was more valuable for improvement of the service. In line with the aforementioned, Cronin and Taylor (1992) promoted the use of the SERVPERF measurement model which is a modified



version of SERVQUAL<sup>1</sup> which only assesses the perceived performance using a 7 point scale, rather than the gap between expectation and performance. Due to its simplicity there was widespread preference for the new instrument, however, according to the developers of SERVQUAL, this preference didn't necessarily translate into better quality measurement (Parasuraman et al., 1994). Cronin and Taylor (1994) however, asserted that SERVPERF was more practically applicable, by arguing that measuring the quality of service in terms of performance using SERVPERF provided an index of service quality perception over a time period and among different categories of customers. Despite the differences in opinion, Korda and Snoj (2010) found that the difference between the two instruments regarding prediction was negligible. In spite of all criticism of the SERVQUAL, following extensive research, Ladhari (2009), concluded that the SERVQUAL measurement model is still relevant and contributes a lot to the improvement of quality of service.

### **Measuring Service Quality in the Hotel Industry**

Most of the studies to measure service quality in the hospitality industry used the SERVQUAL or a modified version. A modified version of SERVQUAL, named LODGSERV was developed to measure the hotel guests service quality expectations using a 26 item index developed on the five dimensions of SERVQUAL (Stevens, Knutson and Patton, 1995). Subsequently, Stevens et al. (1995) created a different version of SERVQUAL to measure the quality of service in restaurants, which was named DINESERV. Assessment for fine-dining restaurants was also attempted by Lee and Hing (1995) using SERVQUAL which was later extended by Wong Ooi Mei, Dean and White (1999) in assessing the hospitality industry, and the instrument was called HOLSERV. This new tool (HOLSERV) comprised a 27-item scale and a different approach from three perspectives, by including information on the employees (appearance and behaviours), reliability, and tangibles. Narangajavana (2007) used SERVQUAL with the original five (5) dimensions in the hospitality industry; however their result revealed that this instrument differed from the original model.

Furthermore, Al-Sabbahy, Ekinci and Riley (2004) suggested the Q-sort technique to evaluate service quality in hotels and the validate the dimensions of service quality models. Another measuring tool called Lodging Quality Index" (LQI), was developed to measure service quality in hotel industry by using tangibility, reliability responsiveness, confidence and communication dimensions which is a modified version of SERVQUAL dimensions (Getty and Getty, 2003).

By extending the SERVQUAL model for a rural context, Albacete-Saez, Fuentes-Fuentes and Lloréns-Montes (2007) developed measures and scales to assess the quality of service in rurally located tourism lodgings. By using multivariate statistics, the aforementioned researchers found five dimensions as being useful, namely, personnel response, complementary offer, tourist relations, tangible elements and empathy. Hsieh, Lin and Lin (2008) used the SERVQUAL model to measure service quality of hotels in Taiwan and then derived weights for service quality measurement dimensions.

It would seem that apart from recorded objections, SERVQUAL is a useful service quality measurement tool in the hotel industry. Therefore, in this paper the SERVQUAL instruments were used to measure the customers' perceived quality.

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<sup>1</sup> SERVQUAL in this paper refers to the service quality measurement model



## Methodology

A quantitative research approach was employed since it was deemed appropriate, considering the volume of data that was needed to be collected and analysed quantitatively (Cooper and Schindler, 2009). The target population was all hotel guests staying in star rated<sup>2</sup> (graded) hotels in Ethiopia for one night or more. A two-stage stratified cluster sampling strategy was used, whereby the hotels were defined as a cluster to group the guests, as there was no composite list of the hotel guests available. The hotels were then stratified by their star ratings, and 40 hotels were randomly selected. The participants, namely, 30 guests in each cluster, were selected randomly during check-in at the reception desks, by handing the questionnaire to every second guest who checked in during the data collection period. A random sample of 1200 guests (30 per hotel) was selected.

## Data Collection and Analysis

The data was collected through a survey using a self-administered questionnaires, since according to Gupta and Gupta (2011), this method is preferred due to the low cost factor, the interviewers freedom from bias; the adequate time given to the respondents to respond at their leisure, the convenience of reaching the respondents, the anonymity of respondents, and the larger sample size leading to the reliability of the results.

This questionnaire was a modified version of the SERVQUAL instrument which included five additional tangible attributes, and all items were positively phrased. The service expectations and perceptions were explored using the 27 attributes to describe the five service quality determinants<sup>3</sup> and respondents were asked to indicate on a five-point scale from 'Strongly Disagree = 1' to 'Strongly Agree = 5', what they expected from the service at the hotel.

A pilot study was conducted among a convenience sample of 120 guests from four hotels. Only 41 questionnaires were returned and analysed. It was ascertained that on average, it took the participants between 8 to 12 minutes to complete the questionnaire. The clarity of the questions was not an issue for any of the respondents; however, in the 'Expectations' section of the questionnaire, the ratings "Much less than expected and Less than Expected" were replaced by "Much less expected" and "Less expected" respectively, since it seemed that the respondents were confused. One of the main issues that was raised by some of the respondents was the length of the questionnaires, which was in line with Cronin and Taylor (1994) criticism of the SERVQUAL instrument. An Excel spreadsheet was used to enter the data which was analysed using SPSS Version 23, and Stata Version 13.

## Findings

Of the 40 hotel customers surveyed, 31 hotels returned questionnaires, with some as low as four to a maximum of 30 participants per hotel, resulting in a total response of 427 out of 1200 (35.6%). However, 12 questionnaires had missing data and had to be removed, which resulted in only 415 (36.6%) of the responses being analysed. The overall response (36.6%) was deemed more than adequate for statistical inference (Saunders, Lewis and Thornhill, 2012).

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<sup>2</sup> In this study star and grade were used alternatively

<sup>3</sup> In this research determinant, dimensions and factors were used alternatively to indicate the latent variables of service quality dimensions.



## Validity

The service quality dimensions<sup>4</sup> were developed by taking the original SERVQUAL dimensions and factoring the individual attribute's scores into the dimensions. Confirmatory Factor Analysis (CFA) using the maximum likelihood estimation was conducted to reduce the 27 service expectations and perceptions attributes into the five SERVQUAL dimensions called tangibility, reliability, responsiveness, assurance and empathy. Since the first output didn't fit the expectations model, there was need to run a Modification of Indices (MI) test to show the omitted paths in the model, and a number of covariance paths were added between most of the variables, as shown in Figure 1. The modified results as shown in Table 1 reflect the number of observations (415), the "Log likelihood" for the model (-11749.615 cases) and the factor loadings for the tangibility, reliability, responsiveness, assurance and empathy dimensions. Furthermore, Table 1 provided the Standardized Factor Loading (SFL) values for each of the 27 observed variables, their standard error, significance, and confidence intervals. The SFLs for all observed variables compared to their corresponding latent variable were greater than 0.94 with significance at  $p < .001$ , and a 95% confidence interval that ranged from 0.85 to 1.5. The Chi-Square/degree of freedom was 2.7 at  $p < .001$ . Although all factor loadings looked good, further tests of goodness of fit were conducted to reconfirm the results.

**Table 1: Factor loadings for Service Quality Expectations**

```
Structural equation model                               Number of obs   =       415
Estimation method = ml
Log likelihood   = -11749.615

( 1) [TA_EQ1]E_Tangibles = 1
( 2) [REL_EQ12]E_reliability = 1
( 3) [RES_EQ16]E_Responsiveness = 1
( 4) [AS_EQ20]E_Assurance = 1
( 5) [EM_EQ24]E_Emphaty = 1
```

|             |             | OIM      |               |       |       |                      |
|-------------|-------------|----------|---------------|-------|-------|----------------------|
|             |             | Coef.    | Std. Err.     | z     | P> z  | [95% Conf. Interval] |
| Measurement |             |          |               |       |       |                      |
| TA_EQ1 <-   | E_Tangibles | 1        | (constrained) |       |       |                      |
|             | _cons       | 3.619277 | .045747       | 79.12 | 0.000 | 3.529615 3.708939    |
| TA_EQ2 <-   | E_Tangibles | 1.016043 | .0726437      | 13.99 | 0.000 | .8736642 1.158422    |
|             | _cons       | 3.715663 | .0457481      | 81.22 | 0.000 | 3.625998 3.805327    |
| TA_EQ3 <-   | E_Tangibles | 1.20452  | .0855265      | 14.08 | 0.000 | 1.036892 1.372149    |
|             | _cons       | 3.612048 | .0511467      | 70.62 | 0.000 | 3.511802 3.712294    |
| TA_EQ4 <-   | E_Tangibles | 1.349956 | .1011744      | 13.34 | 0.000 | 1.151657 1.548254    |
|             | _cons       | 3.850602 | .0494262      | 77.91 | 0.000 | 3.753729 3.947476    |
| TA_EQ5 <-   | E_Tangibles | 1.194299 | .0975117      | 12.25 | 0.000 | 1.003179 1.385418    |
|             | _cons       | 3.715663 | .04834        | 76.87 | 0.000 | 3.620918 3.810407    |
| TA_EQ6 <-   | E_Tangibles | 1.246302 | .0993545      | 12.54 | 0.000 | 1.05157 1.441033     |
|             | _cons       | 3.879518 | .0473716      | 81.90 | 0.000 | 3.786671 3.972365    |
| TA_EQ7 <-   | E_Tangibles | 1.158207 | .1057684      | 10.95 | 0.000 | .950905 1.365509     |
|             | _cons       | 3.780723 | .0488536      | 77.39 | 0.000 | 3.684972 3.876474    |
| TA_EQ8 <-   | E_Tangibles | 1.342445 | .1079032      | 12.44 | 0.000 | 1.130958 1.553931    |
|             | _cons       | 3.761446 | .0506243      | 74.30 | 0.000 | 3.662224 3.860668    |
| TA_EQ9 <-   | E_Tangibles | 1.03748  | .1182564      | 8.77  | 0.000 | .8057013 1.269258    |
|             | _cons       | 3.137349 | .0630741      | 49.74 | 0.000 | 3.013726 3.260972    |
| TA_EQ10 <-  | E_Tangibles | 1.334059 | .1125254      | 11.86 | 0.000 | 1.113513 1.554605    |
|             | _cons       | 3.571084 | .055399       | 64.46 | 0.000 | 3.462504 3.679664    |
| TA_EQ11 <-  | E_Tangibles | 1.076852 | .1044626      | 10.31 | 0.000 | .8721093 1.281595    |
|             | _cons       | 3.325301 | .0544751      | 61.04 | 0.000 | 3.218532 3.43207     |

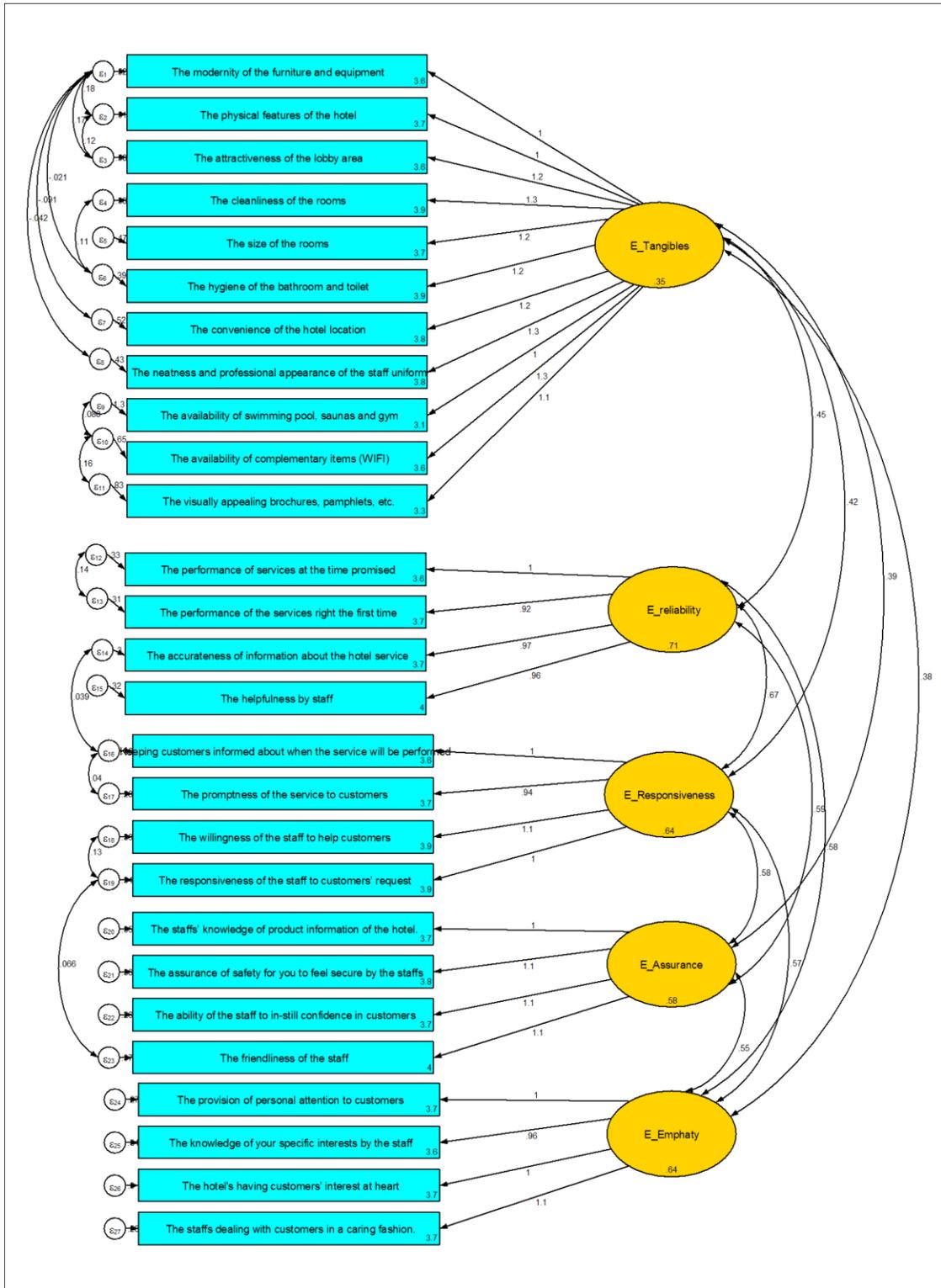
<sup>4</sup> Dimensions, latent variables, predictor constructs and factors were used alternatively.



|             |                           | OIM                  |                           |                |                |                      |                      |  |
|-------------|---------------------------|----------------------|---------------------------|----------------|----------------|----------------------|----------------------|--|
|             |                           | Coef.                | Std. Err.                 | z              | P> z           | [95% Conf. Interval] |                      |  |
| Measurement |                           |                      |                           |                |                |                      |                      |  |
| REL_EQ12 <- | E_reliability<br>_cons    | 1<br>3.624096        | (constrained)<br>.0501621 | 72.25          | 0.000          | 3.52578              | 3.722412             |  |
| REL_EQ13 <- | E_reliability<br>_cons    | .924431<br>3.720482  | .0345245<br>.0469463      | 26.78<br>79.25 | 0.000<br>0.000 | .8567642<br>3.628469 | .9920978<br>3.812495 |  |
| REL_EQ14 <- | E_reliability<br>_cons    | .9745705<br>3.653012 | .0474859<br>.0485696      | 20.52<br>75.21 | 0.000<br>0.000 | .8814999<br>3.557817 | 1.067641<br>3.748207 |  |
| REL_EQ15 <- | E_reliability<br>_cons    | .9566747<br>3.971084 | .0483011<br>.0482922      | 19.81<br>82.23 | 0.000<br>0.000 | .8620062<br>3.876433 | 1.051343<br>4.065735 |  |
| RES_EQ16 <- | E_Responsiveness<br>_cons | 1<br>3.578313        | (constrained)<br>.0490973 | 72.88          | 0.000          | 3.482084             | 3.674542             |  |
| RES_EQ17 <- | E_Responsiveness<br>_cons | .942801<br>3.73494   | .0456562<br>.0452629      | 20.65<br>82.52 | 0.000<br>0.000 | .8533165<br>3.646226 | 1.032286<br>3.823654 |  |
| RES_EQ18 <- | E_Responsiveness<br>_cons | 1.050735<br>3.93253  | .0538315<br>.0499738      | 19.52<br>78.69 | 0.000<br>0.000 | .9452274<br>3.834583 | 1.156243<br>4.030477 |  |
| RES_EQ19 <- | E_Responsiveness<br>_cons | 1.006954<br>3.893976 | .0530263<br>.0488637      | 18.99<br>79.69 | 0.000<br>0.000 | .9030242<br>3.798205 | 1.110884<br>3.989747 |  |
| AS_EQ20 <-  | E_Assurance<br>_cons      | 1<br>3.686747        | (constrained)<br>.0472975 | 77.95          | 0.000          | 3.594046             | 3.779448             |  |
| AS_EQ21 <-  | E_Assurance<br>_cons      | 1.073642<br>3.783133 | .0587631<br>.0496457      | 18.27<br>76.20 | 0.000<br>0.000 | .9584686<br>3.685829 | 1.188816<br>3.880436 |  |
| AS_EQ22 <-  | E_Assurance<br>_cons      | 1.077248<br>3.737349 | .05525<br>.0472419        | 19.50<br>79.11 | 0.000<br>0.000 | .9689603<br>3.644757 | 1.185536<br>3.829942 |  |
| AS_EQ23 <-  | E_Assurance<br>_cons      | 1.097974<br>3.963855 | .0605178<br>.0507133      | 18.14<br>78.16 | 0.000<br>0.000 | .979361<br>3.864459  | 1.216587<br>4.063252 |  |
| EM_EQ24 <-  | E_Emphaty<br>_cons        | 1<br>3.708434        | (constrained)<br>.0469552 | 78.98          | 0.000          | 3.616403             | 3.800464             |  |
| EM_EQ25 <-  | E_Emphaty<br>_cons        | .9607779<br>3.648193 | .0497869<br>.0473809      | 19.30<br>77.00 | 0.000<br>0.000 | .8631973<br>3.555328 | 1.058358<br>3.741058 |  |
| EM_EQ26 <-  | E_Emphaty<br>_cons        | 1.002243<br>3.715663 | .0491933<br>.0476139      | 20.37<br>78.04 | 0.000<br>0.000 | .9058263<br>3.622341 | 1.09866<br>3.808984  |  |
| EM_EQ27 <-  | E_Emphaty<br>_cons        | 1.116764<br>3.744578 | .0515698<br>.0510551      | 21.66<br>73.34 | 0.000<br>0.000 | 1.015689<br>3.644512 | 1.217839<br>3.844644 |  |

LR test of model vs. saturated:  $\chi^2(300) = 801.82, Prob > \chi^2 = 0.0000$

The structural equation model is shown in Figure 1. The numbers on the arrows show the SFL of each observed variable to its corresponding latent variable (dimension).



Source: Primary data.

Figure 1: Confirmatory Factor Analysis of the Service Quality Expectations Instrument



Table 2 shows a very good fit of the 27 expectation items to the respective (five) service quality dimensions. The results of RMSEA 0.063, CFI of 0.943 and TLI value of 0.934 were all in acceptable ranges. The CD value of 0.997 which is similar to the  $R^2$  value indicated a good fit of the model.

**Table 2: Goodness of fit of the Service Quality Expectations Variables**

| Fit statistic        | Value     | Description                              |
|----------------------|-----------|--|
| Likelihood ratio     |           |  |
| chi2_ms(300)         | 801.820   | model vs. saturated                      |
| p > chi2             | 0.000     |  |
| chi2_bs(351)         | 9222.217  | baseline vs. saturated                   |
| p > chi2             | 0.000     |  |
| Population error     |           |  |
| RMSEA                | 0.063     | Root mean squared error of approximation |
| 90% CI, lower bound  | 0.058     |  |
| upper bound          | 0.069     |  |
| pclose               | 0.000     | Probability RMSEA <= 0.05                |
| Information criteria |           |  |
| AIC                  | 23709.229 | Akaike's information criterion           |
| BIC                  | 24132.199 | Bayesian information criterion           |
| Baseline comparison  |           |  |
| CFI                  | 0.943     | Comparative fit index                    |
| TLI                  | 0.934     | Tucker-Lewis index                       |
| Size of residuals    |           |  |
| SRMR                 | 0.036     | Standardized root mean squared residual  |
| CD                   | 0.997     | Coefficient of determination             |

**Source:** Primary data

The output of equation level goodness of fit (egof) provided the  $R^2$  for all of the expectation variables, which is the squared value of the SFL for each variable. As in the goodness of fit table the mc and mc<sup>2</sup> values are squared multiple correlation coefficients, but these values are identical to the SFL coefficient and the  $R^2$  value. The overall  $R^2$  value (0.997) indicated in Table 3 was a perfect value, thus validating its suitability and indicating a very good fit of the model. Therefore, the model confirms the loading of the 27 expectation variables to the five dimensions or latent variables of expectation.



**Table 3: Goodness of fit of the Service Quality Expectations Variables**

| depvars  | Variance |           |          | R-squared | mc       | mc2      |
|----------|----------|-----------|----------|-----------|----------|----------|
|          | fitted   | predicted | residual |           |          |          |
| observed |          |           |          |           |          |          |
| TA_PQ1   | .9050087 | .4453508  | .4596579 | .4920956  | .7014953 | .4920956 |
| TA_PQ2   | .8298098 | .3913579  | .4384519 | .4716236  | .6867486 | .4716236 |
| TA_PQ3   | 1.01336  | .5243548  | .4890056 | .5174416  | .7193341 | .5174416 |
| TA_PQ4   | .8310292 | .4956403  | .3353888 | .5964175  | .7722807 | .5964175 |
| TA_PQ5   | .8229003 | .4550091  | .3678912 | .5529335  | .743595  | .5529335 |
| TA_PQ6   | .8507162 | .4621075  | .3886087 | .5431982  | .7370198 | .5431982 |
| TA_PQ7   | .9714966 | .430488   | .5410086 | .4431184  | .6656714 | .4431184 |
| TA_PQ8   | .969685  | .5113848  | .4583002 | .5273721  | .7262039 | .5273721 |
| TA_PQ9   | 1.608617 | .3659205  | 1.242696 | .2274753  | .4769437 | .2274753 |
| TA_PQ10  | 1.194143 | .5804769  | .6136661 | .4861033  | .6972111 | .4861033 |
| TA_PQ11  | .8381826 | .4506128  | .3875698 | .537607   | .7332169 | .537607  |
| REL_PQ12 | .9576658 | .6316657  | .3260002 | .6595888  | .8121507 | .6595888 |
| REL_PQ13 | .8781536 | .534263   | .3438906 | .6083936  | .7799959 | .6083936 |
| REL_PQ14 | .8877501 | .5821373  | .3056128 | .6557446  | .8097806 | .6557446 |
| REL_PQ15 | .9254173 | .6074565  | .3179608 | .6564136  | .8101936 | .6564136 |
| RES_PQ16 | 1.157869 | .7366826  | .4211861 | .6362402  | .7976466 | .6362402 |
| RES_PQ17 | .9503034 | .602963   | .3473404 | .6344953  | .7965521 | .6344953 |
| RES_PQ18 | .9515111 | .6848978  | .2666133 | .7198001  | .8484103 | .7198001 |
| RES_PQ19 | .8697161 | .5812877  | .2884285 | .6683648  | .8175358 | .6683648 |
| AS_PQ20  | .8972797 | .5899678  | .3073119 | .6575071  | .8108681 | .6575071 |
| AS_PQ21  | .9612077 | .6456481  | .3155597 | .671705   | .8195761 | .671705  |
| AS_PQ22  | .8868283 | .6068434  | .2799848 | .6842852  | .8272153 | .6842852 |
| AS_PQ23  | 1.052653 | .6685937  | .3840594 | .6351511  | .7969637 | .6351511 |
| EM_PQ24  | .9489099 | .6737686  | .2751412 | .7100449  | .8426416 | .7100449 |
| EM_PQ25  | .9610684 | .6800605  | .2810079 | .7076089  | .8411949 | .7076089 |
| EM_PQ26  | .9576194 | .7048326  | .2527868 | .7360259  | .8579195 | .7360259 |
| EM_PQ27  | .9475047 | .6806066  | .2668981 | .7183147  | .8475345 | .7183147 |
| overall  |          |           |          | .9977768  |          |          |

mc = correlation between depvar and its prediction

mc2 = mc^2 is the Bentler-Raykov squared multiple correlation coefficient

Source: Primary data

### Confirmatory Factor Analysis (CFA) of the Service Quality Perceptions Instrument

Confirmatory Factor Analysis using maximum likelihood estimation tests, was conducted to reduce the 27 service quality perception attributes into five service quality dimensions (latent variables or predictor constructs), namely tangibility, reliability, responsiveness, assurance and empathy, in accordance to the SERVQUAL model. Since the first CFA output didn't fit the model (Table 4), Modification of Indices (MI) were conducted to show the omitted paths in the model and a number of covariance paths were added, as shown in Figure 2.



**Table 4: Overall Goodness of Fit of SERVQUAL Measurement before Modification Indices**

. estat gof, stats(all)

| Fit statistic               | Value     | Description                              |
|-----------------------------|-----------|--|
| <b>Likelihood ratio</b>     |           |  |
| chi2_ms(324)                | 3041.810  | model vs. saturated                      |
| p > chi2                    | 0.000     |  |
| chi2_bs(351)                | 9167.259  | baseline vs. saturated                   |
| p > chi2                    | 0.000     |  |
| <b>Population error</b>     |           |  |
| RMSEA                       | 0.142     | Root mean squared error of approximation |
| 90% CI, lower bound         | 0.138     |  |
| upper bound                 | 0.147     |  |
| pclose                      | 0.000     | Probability RMSEA <= 0.05                |
| <b>Information criteria</b> |           |  |
| AIC                         | 25318.611 | Akaike's information criterion           |
| BIC                         | 25644.902 | Bayesian information criterion           |
| <b>Baseline comparison</b>  |           |  |
| CFI                         | 0.692     | Comparative fit index                    |
| TLI                         | 0.666     | Tucker-Lewis index                       |
| <b>Size of residuals</b>    |           |  |
| SRMR                        | 0.441     | Standardized root mean squared residual  |
| CD                          | 1.000     | Coefficient of determination             |

The aforementioned also warranted conducting Exploratory Factor Analysis (EFA) for the perceptions variables, and the modified result is shown on the standardized table (Table 5). The table shows the number of observations (415), the “Log likelihood” for the model (-11459.469) cases and the factor loadings for tangible, reliability, responsiveness, assurance and empathy dimensions. Furthermore, the table provided Standardized Factor Loading (SFL) values for each of the 27 observed variables, their standard error, significance, and confidence intervals. Once again, the SFL values for all observed variables compared to their corresponding latent variable were greater than 0.90, with the significance being at  $p < .001$ , and had a 95% confidence interval that ranged from 0.83 to 1.3. The Chi-square/degree of freedom was 2.7 at  $p < .001$ .





|             |                           | OIM                         |                      |                |                | [95% Conf. Interval] |                      |
|-------------|---------------------------|-----------------------------|----------------------|----------------|----------------|----------------------|----------------------|
|             |                           | Coef.                       | Std. Err.            | z              | P> z           |                      |                      |
| Measurement |                           |                             |                      |                |                |                      |                      |
| REL_PQ12 <- | P_reliability<br>_cons    | 1 (constrained)<br>3.672289 | .0480378             | 76.45          | 0.000          | 3.578137             | 3.766441             |
| REL_PQ13 <- | P_reliability<br>_cons    | .919674<br>3.746988         | .0465086<br>.0460004 | 19.77<br>81.46 | 0.000<br>0.000 | .8285188<br>3.656829 | 1.010829<br>3.837147 |
| REL_PQ14 <- | P_reliability<br>_cons    | .9599952<br>3.715663        | .0504001<br>.046251  | 19.05<br>80.34 | 0.000<br>0.000 | .8612129<br>3.625012 | 1.058778<br>3.806313 |
| REL_PQ15 <- | P_reliability<br>_cons    | .9806498<br>3.915663        | .0521767<br>.047222  | 18.79<br>82.92 | 0.000<br>0.000 | .8783853<br>3.823109 | 1.082914<br>4.008216 |
| RES_PQ16 <- | P_Responsiveness<br>_cons | 1 (constrained)<br>3.737349 | .0528209             | 70.76          | 0.000          | 3.633822             | 3.840876             |
| RES_PQ17 <- | P_Responsiveness<br>_cons | .9047011<br>3.679518        | .0432463<br>.0478528 | 20.92<br>76.89 | 0.000<br>0.000 | .8199398<br>3.585728 | .9894624<br>3.773308 |
| RES_PQ18 <- | P_Responsiveness<br>_cons | .9642123<br>3.913253        | .0493064<br>.0478832 | 19.56<br>81.73 | 0.000<br>0.000 | .8675735<br>3.819404 | 1.060851<br>4.007102 |
| RES_PQ19 <- | P_Responsiveness<br>_cons | .8882912<br>3.93494         | .0480818<br>.0457788 | 18.47<br>85.96 | 0.000<br>0.000 | .7940526<br>3.845215 | .9825297<br>4.024665 |
| AS_PQ20 <-  | P_Assurance<br>_cons      | 1 (constrained)<br>3.737349 | .0464986             | 80.38          | 0.000          | 3.646214             | 3.828485             |
| AS_PQ21 <-  | P_Assurance<br>_cons      | 1.046125<br>3.889157        | .0542034<br>.0481265 | 19.30<br>80.81 | 0.000<br>0.000 | .9398886<br>3.79483  | 1.152362<br>3.983483 |
| AS_PQ22 <-  | P_Assurance<br>_cons      | 1.014201<br>3.853012        | .0516313<br>.046227  | 19.64<br>83.35 | 0.000<br>0.000 | .9130058<br>3.762409 | 1.115397<br>3.943615 |
| AS_PQ23 <-  | P_Assurance<br>_cons      | 1.064552<br>4.048193        | .0578229<br>.0503638 | 18.41<br>80.38 | 0.000<br>0.000 | .9512214<br>3.949482 | 1.177883<br>4.146904 |
| EM_PQ24 <-  | P_Emphaty<br>_cons        | 1 (constrained)<br>3.80241  | .0478177             | 79.52          | 0.000          | 3.708689             | 3.896131             |
| EM_PQ25 <-  | P_Emphaty<br>_cons        | 1.004658<br>3.73494         | .0464219<br>.048123  | 21.64<br>77.61 | 0.000<br>0.000 | .913673<br>3.64062   | 1.095644<br>3.829259 |
| EM_PQ26 <-  | P_Emphaty<br>_cons        | 1.022793<br>3.742169        | .04656<br>.0480366   | 21.97<br>77.90 | 0.000<br>0.000 | .9315367<br>3.648019 | 1.114049<br>3.836319 |
| EM_PQ27 <-  | P_Emphaty<br>_cons        | 1.005062<br>3.881928        | .0467935<br>.0477823 | 21.48<br>81.24 | 0.000<br>0.000 | .9133479<br>3.788276 | 1.096775<br>3.975579 |

LR test of model vs. saturated:  $\chi^2(300) = 804.14$ , Prob >  $\chi^2 = 0.0000$

Source: Primary data

Figure 2 reflects the factor loadings of perception variables to the service quality dimensions.

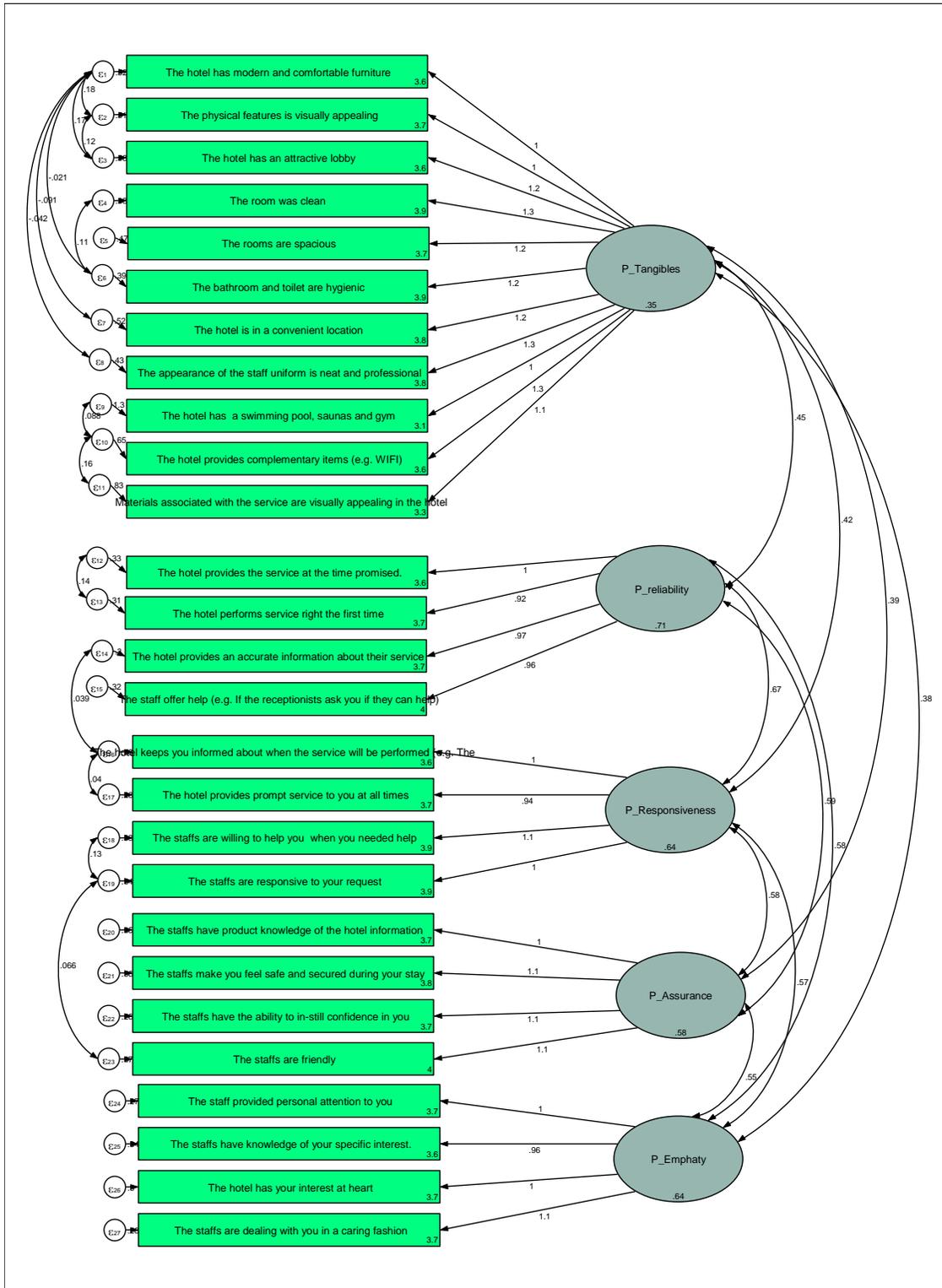


Figure 2: Confirmatory factor analysis of the Service Quality Perceptions Instrument

Source: Primary data



Table 6 shows a very good fit of the 27 perception items to the respective five service quality dimensions. The results of RMSEA 0.064, CFI of 0.943 and TLI value of 0.933 were all in acceptable ranges. The CD value of 0.998 is similar to  $R^2$  value indicating a good fit of the model.

**Table 6: Goodness of Fit of Service Quality Expectations Variables**

| Fit statistic        | Value     | Description                              |
|----------------------|-----------|--|
| Likelihood ratio     |           |  |
| chi2_ms(300)         | 804.138   | model vs. saturated                      |
| p > chi2             | 0.000     |  |
| chi2_bs(351)         | 9167.259  | baseline vs. saturated                   |
| p > chi2             | 0.000     |  |
| Population error     |           |  |
| RMSEA                | 0.064     | Root mean squared error of approximation |
| 90% CI, lower bound  | 0.058     |  |
| upper bound          | 0.069     |  |
| pclose               | 0.000     | Probability RMSEA <= 0.05                |
| Information criteria |           |  |
| AIC                  | 23128.939 | Akaike's information criterion           |
| BIC                  | 23551.908 | Bayesian information criterion           |
| Baseline comparison  |           |  |
| CFI                  | 0.943     | Comparative fit index                    |
| TLI                  | 0.933     | Tucker-Lewis index                       |
| Size of residuals    |           |  |
| SRMR                 | 0.033     | Standardized root mean squared residual  |
| CD                   | 0.998     | Coefficient of determination             |

**Source:** Primary data

The overall  $R^2$  value (0.9977768) in Table 7 was a perfect value, showing suitability and a very good fit of the model. Therefore, the model confirms the loading of the 27 variables into the five service quality perception dimensions or latent variables.



**Table 7: Goodness of fit of Service Quality Perception variables**

| depvars  | Variance |           |          | R-squared | mc       | mc2      |
|----------|----------|-----------|----------|-----------|----------|----------|
|          | fitted   | predicted | residual |           |          |          |
| observed |          |           |          |           |          |          |
| TA_PQ1   | .9050087 | .4453508  | .4596579 | .4920956  | .7014953 | .4920956 |
| TA_PQ2   | .8298098 | .3913579  | .4384519 | .4716236  | .6867486 | .4716236 |
| TA_PQ3   | 1.01336  | .5243548  | .4890056 | .5174416  | .7193341 | .5174416 |
| TA_PQ4   | .8310292 | .4956403  | .3353888 | .5964175  | .7722807 | .5964175 |
| TA_PQ5   | .8229003 | .4550091  | .3678912 | .5529335  | .743595  | .5529335 |
| TA_PQ6   | .8507162 | .4621075  | .3886087 | .5431982  | .7370198 | .5431982 |
| TA_PQ7   | .9714966 | .430488   | .5410086 | .4431184  | .6656714 | .4431184 |
| TA_PQ8   | .969685  | .5113848  | .4583002 | .5273721  | .7262039 | .5273721 |
| TA_PQ9   | 1.608617 | .3659205  | 1.242696 | .2274753  | .4769437 | .2274753 |
| TA_PQ10  | 1.194143 | .5804769  | .6136661 | .4861033  | .6972111 | .4861033 |
| TA_PQ11  | .8381826 | .4506128  | .3875698 | .537607   | .7332169 | .537607  |
| REL_PQ12 | .9576658 | .6316657  | .3260002 | .6595888  | .8121507 | .6595888 |
| REL_PQ13 | .8781536 | .534263   | .3438906 | .6083936  | .7799959 | .6083936 |
| REL_PQ14 | .8877501 | .5821373  | .3056128 | .6557446  | .8097806 | .6557446 |
| REL_PQ15 | .9254173 | .6074565  | .3179608 | .6564136  | .8101936 | .6564136 |
| RES_PQ16 | 1.157869 | .7366826  | .4211861 | .6362402  | .7976466 | .6362402 |
| RES_PQ17 | .9503034 | .602963   | .3473404 | .6344953  | .7965521 | .6344953 |
| RES_PQ18 | .9515111 | .6848978  | .2666133 | .7198001  | .8484103 | .7198001 |
| RES_PQ19 | .8697161 | .5812877  | .2884285 | .6683648  | .8175358 | .6683648 |
| AS_PQ20  | .8972797 | .5899678  | .3073119 | .6575071  | .8108681 | .6575071 |
| AS_PQ21  | .9612077 | .6456481  | .3155597 | .671705   | .8195761 | .671705  |
| AS_PQ22  | .8868283 | .6068434  | .2799848 | .6842852  | .8272153 | .6842852 |
| AS_PQ23  | 1.052653 | .6685937  | .3840594 | .6351511  | .7969637 | .6351511 |
| EM_PQ24  | .9489099 | .6737686  | .2751412 | .7100449  | .8426416 | .7100449 |
| EM_PQ25  | .9610684 | .6800605  | .2810079 | .7076089  | .8411949 | .7076089 |
| EM_PQ26  | .9576194 | .7048326  | .2527868 | .7360259  | .8579195 | .7360259 |
| EM_PQ27  | .9475047 | .6806066  | .2668981 | .7183147  | .8475345 | .7183147 |
| overall  |          |           |          | .9977768  |          |          |

mc = correlation between depvar and its prediction

mc2 = mc<sup>2</sup> is the Bentler-Raykov squared multiple correlation coefficient

**Source:** Primary data

### Reliability

The Cronbach's alpha coefficients for the service quality expectations instrument was .952, and for the service equality perceptions it was .957, which confirm the internal consistency of the measuring scales (Nunnally (1978). The reliability test output for the service quality dimensions as per Table 8 also reveal that the measurements used were considered to be both consistent and stable (Nunnally 1978).



**Table 8: Reliability of the Service Quality Dimensions**

| Construct      | Alpha Coefficient |             | Number of Items |
|----------------|-------------------|-------------|-----------------|
|                | Expectations      | Perceptions |                 |
| Empathy        | 0.841             | 0.855       | 4               |
| Tangibles      | 0.864             | 0.880       | 11              |
| Reliability    | 0.875             | 0.930       | 4               |
| Responsiveness | 0.815             | 0.838       | 4               |
| Assurance      | 0.851             | 0.857       | 4               |

**Source:** Primary data

### Service Quality Gap

The paired sample test was conducted to explore the difference between service quality expectations and service quality perceptions, which in effect is the service quality “Gap”. The aforementioned procedure subtracted the mean value of the expectation score from the mean value of the perception score for all 27 attributes and the ‘Gap’ score per attribute is presented in Table 9. The positive scores indicate that the customers’ service expectations exceeded their perceptions, and the negative scores indicate the customers’ expectations did not meet their expectations.

As reflected in Table 9, positive results were derived for 24 of the 27 service quality attributes indicating positive service quality. The three attributes that reflected negative results were, the helpfulness of the staff (-0.55), the promptness of the service to customers (-0.55) and the willingness of the staff to help customers (-0.19).

In all of these cases, the Gap (difference) was very small, indicating that customer’s service perceptions were close to their expectations. Furthermore, the mean scores of 12 attributes showed a statistically significant difference ( $p > 0.05$ ), with the mean differences being between 0.084 and 0.294, which were very small.

The other variables didn’t show a statistically significant difference ( $p < 0.05$ ). This indicated that there were no significant differences in the mean scores of the customers’ expectation and perception, indicating that the customers’ expectations were met by their perceptions.



**Table 9: Mean Service Quality Gap Scores**

| Service quality attributes  | Mean   |                 | GAP<br>(P-E) | 95% Confidence<br>Interval of the<br>Diff. |       | Sig. (2-<br>tailed) |
|---|--|-----------------|--------------|--|-------|---------------------|
|   | Perce<br>ption                               | Expect<br>ation |              | Lower                                      | Upper |                     |
|   | The modernity of the furniture and equipment | 3.81            | 3.62         | .190                                       | .101  | .279                |
| The physical features of the hotel                                  | 3.74   | 3.72            | .022         | -.068                                      | .112  | .635                |
| The attractiveness of the lobby area                                | 3.70   | 3.61            | .092         | .005                                       | .179  | .039                |
| The cleanliness of the rooms  | 3.91   | 3.85            | .063         | -.024                                      | .149  | .155                |
| The size of the rooms   | 3.84   | 3.72            | .125         | .037                                       | .214  | .006                |
| The hygiene of the bathroom and toilet                              | 3.90   | 3.88            | .022         | -.062                                      | .106  | .612                |
| The convenience of the hotel location                               | 3.86   | 3.78            | .082         | -.005                                      | .169  | .065                |
| The neatness and professional appearance of the staff uniform       | 3.76   | 3.76            | -.005        | -.098                                      | .088  | .919                |
| The availability of swimming pool, saunas and gym                   | 3.28   | 3.14            | .142         | .042                                       | .242  | .005                |
| The availability of complementary items (WIFI)                      | 3.74   | 3.57            | .166         | .064                                       | .269  | .002                |
| The visually appealing brochures, pamphlets, etc.                   | 3.62   | 3.33            | .294         | .190                                       | .398  | .000                |
| The performance of services at the time promised                    | 3.67   | 3.62            | .048         | -.041                                      | .137  | .287                |
| The performance of the services right the first time                | 3.75   | 3.72            | .027         | -.057                                      | .110  | .535                |
| The accurateness of information about the hotel service             | 3.72   | 3.65            | .063         | -.022                                      | .148  | .149                |
| The offering of the staff to help                                   | 3.92   | 3.97            | -.055        | -.147                                      | .036  | .233                |
| Keeping customers informed about when the service will be performed | 3.74   | 3.58            | .159         | .067                                       | .251  | .001                |
| The promptness of the service to customers                          | 3.68   | 3.73            | -.055        | -.150                                      | .039  | .248                |
| The willingness of the staff to help customers when asked           | 3.91   | 3.93            | -.019        | -.103                                      | .064  | .651                |
| The responsiveness of the staff to customers' request               | 3.93   | 3.89            | .041         | -.043                                      | .125  | .337                |
| The staffs' knowledge of product information of the hotel.          | 3.74   | 3.69            | .051         | -.032                                      | .133  | .228                |
| The assurance of safety for you to feel secure by the staffs        | 3.89   | 3.78            | .106         | .014                                       | .198  | .024                |
| The ability of the staff to in-still confidence in customers        | 3.85   | 3.74            | .116         | .035                                       | .196  | .005                |
| The friendliness of the staff                                       | 4.05   | 3.96            | .084         | .004                                       | .164  | .039                |
| The provision of personal attention to customers                    | 3.80   | 3.71            | .094         | .005                                       | .183  | .038                |
| The knowledge of your specific interests by the staff               | 3.73   | 3.65            | .087         | .002                                       | .171  | .045                |
| The hotel's having customers' interest at heart                     | 3.74   | 3.72            | .027         | -.059                                      | .112  | .541                |
| The staffs dealing with customers in a caring fashion.              | 3.88   | 3.74            | .137         | .055                                       | .220  | .001                |
|   | 3.78   | 3.71            | 0.078        |  |       |                     |



The lowest mean score of both the service expectation and service perception resulted from availability of swimming pools, saunas and gyms (3.28). There were high expectations regarding the neatness and professional appearance of the staff, the promptness of services and the willingness of staff to help customers, since these attributes did not meet the customers' expectations. This was confirmed by the negative service quality scores. The highest service expectation mean score (3.97) was obtained for the 'helpfulness of staff' while the highest perception score (4.05) was obtained for the friendliness of the staff. This was an indication that while the staffs were friendly, they didn't meet the expectations regarding prompt service and their willingness to help.

When Gap analysis was conducted on individual respondents (Table 10), 136 (32.77%) of the respondents stated that their service expectations were not met, indicating negative service quality perceptions. However, 227 (54.70%) of the respondents' expectations were exceeded, thus implying positive service quality.

**Table 10: Service Quality Perceptions and Expectations**

|                          | No of respondents | Percent        | Differences of means total |
|--------------------------|-------------------|----------------|----------------------------|
| Expectation > Perception | 136               | 32.77%         | -48.15                     |
| Perception > Expectation | 227               | 54.70%         | 78.93                      |
| Expectation = Perception | 52                | 12.53%         | 0                          |
| <b>Total</b>             | <b>415</b>        | <b>100.00%</b> |                            |

Source: Primary data

Based on the CFA results, the five dimensions were used to analyse the service quality gaps and the result is depicted in Table 11.

**Table 11: GAP between the Mean Perception and Expectation Scores** Source: Primary data

| Service quality Dimensions | N          | Perception  |             | Expectation |             | GAP (P-E)    |
|----------------------------|------------|-------------|-------------|-------------|-------------|--------------|
|                            |            | Mean        | S           | Mean        | S           |              |
| Tangibles                  | 415        | 3.74        | .933        | 3.63        | .947        | 0.108        |
| Reliability                | 415        | 3.76        | .933        | 3.74        | .907        | 0.020        |
| Responsiveness             | 415        | 3.82        | 1.040       | 3.78        | 1.002       | 0.031        |
| Assurance                  | 415        | 3.88        | 1.001       | 3.79        | .905        | 0.089        |
| Empathy                    | 415        | 3.79        | .983        | 3.70        | .900        | 0.086        |
| <b>Total</b>               | <b>415</b> | <b>3.78</b> | <b>.965</b> | <b>3.71</b> | <b>.920</b> | <b>0.078</b> |



As can be inferred from Table 11, the gap between the dimensions were less than or equal to 0.11, indicating that the mean differences between expectations and perceptions were very small. The highest 'Gap' score was obtained for the "tangibles" dimension. This was due to hotels being relatively new and had the least (mean = 3.74) expectations from hotel guests, compared to the other service quality dimensions. The reliability and responsiveness dimension scores, though positive, had the smallest value of all the service quality dimensions. These low scores resulted from the negative values given under the variables regarding "helpfulness of staff" in the "reliability dimension" and "the promptness of service to customers" and the "willingness of the staff to help customers" from the "responsiveness dimension". This was further confirmed by the paired T-test of the dimension reflected in Table 12. The tangibility, assurance and empathy dimensions showed a statistical difference in the mean score of perception and expectation at  $p < .05$ , while the reliability and responsiveness dimensions showed no statistical differences in the mean scores at  $p < .05$ .

**Table 12: Paired T-test of service quality dimensions**

**Source:** Primary data

| Dimensions GAP (P-E) | Dimensions Differences |                |                 |   |       | T     | df  | Sig. (2-tailed) |
|----------------------|------------------------|----------------|-----------------|---|-------|-------|-----|-----------------|
|                      | Mean                   | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |       |       |     |                 |
|                      |                        |                |                 | Lower                                     | Upper |       |     |                 |
| Tangibility          | .108                   | .513           | .025            | .059                                      | .158  | 4.310 | 414 | .000            |
| Reliability          | .020                   | .682           | .033            | -.045                                     | .086  | .612  | 414 | .541            |
| Responsiveness       | .031                   | .696           | .034            | -.036                                     | .098  | .917  | 414 | .360            |
| Assurance            | .089                   | .642           | .032            | .027                                      | .151  | 2.829 | 414 | .005            |
| Empathy              | .086                   | .684           | .034            | .020                                      | .152  | 2.565 | 414 | .011            |

The overall significant difference in the mean scores between expectations and perceptions was further tested using a paired T-test. To do a T-test, it was necessary to set the following hypotheses:

H<sub>0</sub>:  $\mu_d=0$ , there is no difference between the means of the customers' service expectation and customers' perception

H<sub>a</sub>:  $\mu_d \neq 0$ , there is a difference between the means of the customers' service expectation and customers' perception

As indicated in Table 13, the result is significant ( $t(N415) = 3.100, p = .002$ ). Thus, the null hypothesis is rejected in favour of the alternative hypothesis, which means that only in two out of 1000 times, the null hypothesis may be true with a t-statistics of the same sample size. Even though the mean difference between the expectations and perceptions is statistically significant, this difference was in actual fact very small (0.07398). Thus, it can be stated with 95% confidence that the true mean increase lies somewhere between 0.027 and 0.12090, implying that customer's service expectations were met by their perceptions.



**Table 13: Overall service quality gap**

| Mean   | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference |        | T     | Df  | Sig. (2-tailed) |
|--------|----------------|-----------------|---|--------|-------|-----|-----------------|
|        |                |                 | Lower                                     | Upper  |       |     |                 |
| .07398 | .48620         | .02387          | .02707                                    | .12090 | 3.100 | 414 | .002            |

Source: Primary data

### Discussion of the Findings

The 'gaps' between each service quality measurement dimensions were less than 0.11, indicating that the mean difference between service expectation and perception was very small. The highest gap score was obtained for the "tangibles" dimension, due to hotels being relatively new. They however had the least expectation (mean = 3.74) from the hotel guests, compared to the other dimensions. The reliability and responsiveness dimension scores, though positive, had the smallest value of all the dimensions which resulted from the negative values given under the attributes regarding "helpfulness of staff" in the "reliability dimension" and "the promptness of service to customers" and the "willingness of the staff to help customers" from the "responsiveness dimension.

The tangibility, assurance and empathy dimensions showed that customers' service expectations exceeded their perceptions with regard to these dimensions, indicating positive service quality. The reliability and responsiveness dimensions showed no statistically significant differences in the mean scores between the customer service expectation and perception, indicating that customer's service expectations were just met by their perception on these dimensions. The tangibility dimension showed the highest service quality as most of the hotels in Ethiopia, which were included in this study, were less than 10 years old, indicating an improvement in the infrastructure and an increasing number of good quality hotels.

The tangible elements (infrastructure) of the service therefore exceeded the customers' expectations and this was in line with studies in the Romanian (Souca, 2012), and Mauritian (Juwaheer and Ross, 2013) hotel industries. Although the employees, in this study, were friendly, caring for the safety of the customers, and having the customer's interest at heart, they were not however able to respond to the customers' needs promptly, and thus were not very helpful. This was an indication of a lack of training on customer service and knowledge of the hotel industry. A study on the determinants of service quality in the Malaysian hotel industry also found that employees were courteous, but not efficient (Sohail, Roy, Saeed and Ahmed, 2007).

### Conclusions and Recommendations

The average score for hotel customers' service expectations in this study was 3.71, which makes it imperative for hotel management to exceed these expectations. Guests develop expectations which were set by the hotel ratings systems through the hotels' websites, online



travel agents' websites, and the Ethiopian authorities. It is up to the hotel management and employees to exceed the customers' expectations so that they have both positive service experience and perceptions of quality. The very essence of the hotel managements' task is to close gap between service expectations and the perceived service. The first negative result was evident from the attribute 'helpfulness of the staff' to customers, which was in the 'reliability' dimension. This meant that hotel staffs were perceived as being less helpful than what the guests expected. The second and third gaps resulted from the attribute of 'willingness of the staff to help customers' and promptness of the service delivered to customers which were under the 'responsiveness' dimension. Meeting the service attributes of the 'responsiveness' dimension is vital to hotel guests who have special needs. The difference between the 'helpfulness of the staff' and the 'willingness of the staff' was that in former case, staff were not helping customers through not knowing what needed to be addressed through lack of training and education. In the latter, the 'willingness of the staff to help customers' resulted from the attitude problem of the staff, rather than lack of education.

Thus, it is recommended that management should develop training programmes on customer service and its implication on both the hotel managers and the employees should be demonstrated using real-world examples. The hotel management needs to create and develop a culture of employee willingness to help customers and follow through with the program until it becomes second nature (a culture in the organization) to everyone. This is especially important for front-line employees who will have direct contact with guests. In addition to the training, hotel management needs to involve employees in both planning and organizing activities, and to recognize that guest contact (front-line) employees directly and immediately affect the perception of customers. Management also needs to understand the effects of all employees on service delivery and devise a strategy that can ultimately promote the service experience.

The highest service quality 'gap' emanated from the tangible dimensions. All ten attributes showed relatively higher service quality scores, except for the 'neatness and professional appearance of the staff uniform.' Most of the hotels' in Ethiopia are relatively new, as most of them were built within this decade. This might explain why the tangibility dimension exceeded customers' expectations. It is recommended to management to ensure that employees, especially those that have direct contact with guests, are always neat and professional. There needs to be professional uniforms for all employees and these should be cleaned regularly with grooming standards (following training), according to their hotel's ratings, so that it becomes a culture of the hotel.

In summary, the hotel management is recommended to deliver quality service on a regular basis by incorporating the culture of hiring the best employees, training them with the appropriate skills and treating them with respect so as to retain them. The new employees need to have adequate induction, so that they understand the hotel culture and values and are empowered to become valued members of the customer service team. Employees should be able to attend to anything that fosters customer service satisfaction experience, through setting up a reward and recognition program for team members, and informing team members about everything regarding service information on a daily basis.

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