

# A Circular Approach to SERVQUAL and HOLSAT: An Implementation Suggestion

Cemil Ceylan<sup>1</sup> and Ayse Bengi Ozcelik<sup>2\*</sup>

<sup>1</sup>Assistant Professor, Istanbul Technical University, Faculty of Management, Macka, Istanbul / Turkey

<sup>2</sup>Research assistant, Istanbul Bilgi University, Faculty of Communication, Kazim Karabekir Cad. No: 2, Eyup, Istanbul / Turkey

\*Corresponding author: Ozcelik AB, Research assistant, Istanbul Bilgi University, Faculty of Communication, Kazim Karabekir Cad. No: 2, Eyup, Istanbul / Turkey, Tel: +90 212 311 7516; E-mail: [bengi.ozcivan@bilgi.edu.tr](mailto:bengi.ozcivan@bilgi.edu.tr)

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## Abstract

In today's competitive environment, analytical models should be specialized by sector. With this point of view, the HOLSAT model is developed especially for the tourism sector. In this research, new components are added to the HOLSAT model in light of the SERVQUAL approach. After collecting the data with an online survey, SEM was used to investigate the effects of dimensions of SERVQUAL on HOLSAT. Statistical analyses showed that transportation is affected by reliability, physical assets is affected by tangibles and assurance, accommodation is affected by tangibles and assurance, ability to solve problems is affected by reliability and responsiveness, social life is affected by tangibles and assurance, and heritage and culture is affected by reliability. With this research, a new customer satisfaction model is developed for tourism managers and a new approach is developed for researchers.

**Keywords:** SERVQUAL; HOLSAT; Tourism

## Introduction

Hotels do not only sell 'accommodation' and tourism agencies do not only sell 'road trips'; they sell a complete 'holiday' package. The process that affects holiday satisfaction starts with exiting home and ends with returning back home. In order to measure and optimize the satisfaction from a holiday, the entire process should be analyzed step by step. The tourism agencies that hotels work with or the hotels that an agency suggests to its customers directly affect the holiday satisfaction level.

The holiday satisfaction model (HOLSAT) was first mentioned in a Cuba hotel research [1]. Although HOLSAT takes SERVQUAL as a base, the relationship between them was not investigated in the literature. Since quality (QUAL) is one of the most effective factors of satisfaction (SAT), the relationship between these two constructs should be researched, discussed, and applied for an effective satisfaction optimization.

Accordingly, this research aimed to determine the parameters that have an effect on holiday satisfaction. The relationship between the dimensions of the customer satisfaction model specialized for the tourism sector, HOLSAT, and the dimensions of the service quality model, SERVQUAL, are compared in this research.

Thus, in the present study, a different point of view is tried to be given to researchers and implementers by using a 22-item based SERVQUAL model to measure the quality. The results provide a new approach for the tourism managers who want to increase customer satisfaction level and for academicians who are studying tourism marketing and customer satisfaction.

## Effects of HOLSAT on SERVQUAL

HOLSAT is the theoretical model that includes the constructs of physical resort and facilities, ambiance, restaurants, bars, shops and nightlife, transfers, heritage and culture, and accommodation [1]. SERVQUAL has the constructs of reliability, assurance, responsiveness, empathy and tangibles [2]. Throughout this study, new categories are developed for HOLSAT and brief discussions of HOLSAT and SERVQUAL are followed by a presentation of models, definitions, and descriptions for each of the constructs contained in the model, and the theoretical and empirical support for each of the hypotheses incorporated in the model.

## Service and satisfaction

Since service is intangible and does not have any boundaries when applied, it becomes difficult to define what service is and to optimize customer satisfaction in service systems. Different from product marketing, the needs and wants of customers are uncertain and flexible in service marketing.

Service is defined as an act or performance, and although it is tied to a tangible product, it is intangible [3]. Service is totally produced by humanistic values, so drawing a border for service and understanding it globally become difficult. In addition to this, it is also nearly impossible to be understood in the same manner by everyone. In such an environment, companies try to produce a service which is perceived as the same by all of the potential and existing customers and the perception is expected to overlap with the expectation of the customers. This is exactly why an atmosphere of competition exists. After all these evaluations, service can be defined as the non-storable, intangible, valuable and beneficial product that is produced to meet the needs and wants of the customer.

Satisfaction occurs within the scope of the customer's own values as a decision after an experience the customer has had. The relationship

between a customer and a company has five steps [4]: Acquisition, retention, decay, quit, reacquire.

To be able to keep the customer in the first two stages is equal to being able to create the satisfaction in the competitive environment that has changing expectations and conditions. Customer satisfaction requires being continuous. If a customer is satisfied about a service once, he or she will return. For instance, a customer might pay more for a hotel just because of being familiar with the hotel and this loyalty translates into the hotel earning more money [5]. Loyalty is directly related to the service quality.

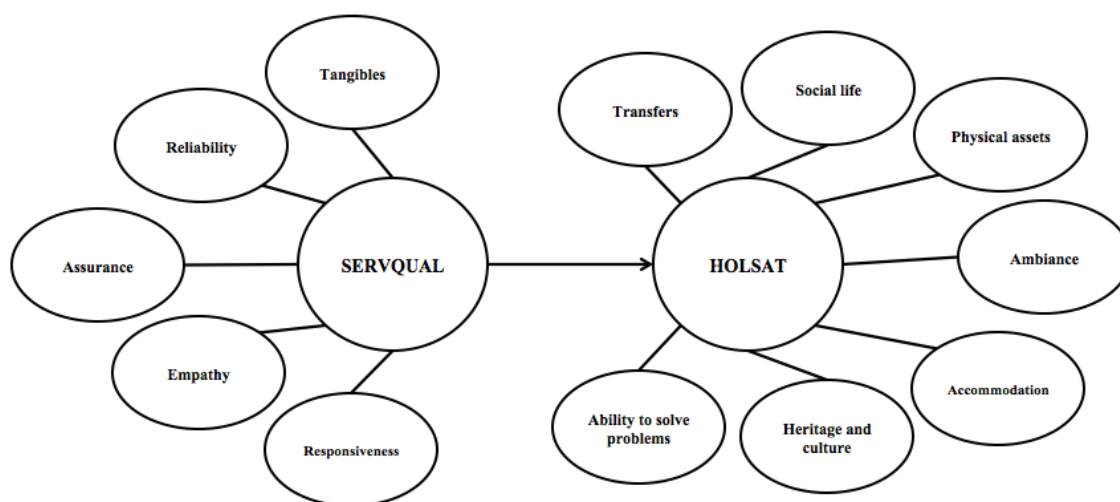
In product marketing, the expectations and needs of customers are more predictable because of the correlation to technology. However, customers also need service satisfaction because after-sales behavior is also a service system component. Service satisfaction is the instant satisfaction or dissatisfaction after a service experience and evaluation of all of the service members [6,7].

### Proposed model

Lowelock and Wright [3] added time dimension to the difference between service quality and customer satisfaction by defining them respectively as a customer's long-term objective evaluation about the service of a company and as a customer's short-term emotional reaction to the service of a company. The relationship between the

customer and the company starts with the company's service to the customer, and then the customer forms a series of photo images about the company's service quality level in his mind that forms the customer's perception of the company [8]. Service quality is closely related to how the expectation and the perception overlap.

The complication of the standardization of the service arises from the intangible characteristic of it. Parallel with service, satisfaction is also intangible because the customer satisfaction level is affected the experiences that include both positive emotional and behavioral elements [9]. Since these two nonphysical constructs are both critical for service marketing context, in both academic and sectorial meaning, the relationship between them should be investigated in detail. SERVQUAL model is not enough to measure the level of satisfaction in tourism sector. Each service experience differs from other service areas because of the implementation process and customer expectations. In order to determine the level of satisfaction in holiday, the entire process, beginning from the transportation phase and ending with turning back home, should be considered. Hence, the consideration of HOLSAT combined with SERVQUAL provides the ability to analyze the customer satisfaction level precisely. In this study, the relationship between HOLSAT and SERVQUAL is researched and the effects of the SERVQUAL components on the HOLSAT components are investigated (Figure 1).



**Figure 1:** The research model.

### Constructs

**SERVQUAL:** SERVQUAL is a measurement model including five components and 22 subcomponents [2]. The components are tangibles, reliability, responsiveness, assurance and empathy. The formulization of each subcomponents:

Service Quality ( $Q$ ) = Perception ( $P$ ) - Expectation ( $E$ ) The results of this formula are:

- If expectation exceeds perception, the quality is low.
- If expectation and perception are equal, there is quality.
- If perception exceeds expectation, the quality is perfect [10].

With this formula, quality can be found by the arithmetic mean of the differences of all subcomponents. These components and subcomponents are developed for the general service concept, but should be specialized for each sector and service area.

Tourists do not make a decision based on only one separate element, but multi-dimensional decisions are made during the holiday planning process [11]. Different researchers developed different scales to examine the quality of service in hotels. Knutson et al. [12] took five dimensions of SERVQUAL as a guide and developed LODGSERV. Another scale was developed by Oberoi and Hales [13] and their findings showed that perceived service quality can be classified as "tangibles" and "intangibles."

**HOLSAT, holiday satisfaction:** Although it is possible for a customer to continue to stay at a hotel with a low satisfaction level because he could not find a better one [14], expectations should be met at a maximum with a high quality standard due to the competitive nature of tourism sector. A high quality level provides word-of-mouth recommendation and loyalty by creating satisfaction [15] which is closely related to the free time they have after touristic activities [16,17] and the destination [18], although tourism service is perceived to be include only the hotel. As competition becomes more fierce and customers become more aware of hotels each day, hotel organizations should make their service level equal to the expectations [19] and the vacationers should be satisfied by not only the hotel but also the other factors.

HOLSAT (Holiday Satisfaction) is a model that is developed by using SERVQUAL as a base. The 22 components of the SERVQUAL model guided the HOLSAT about what should be asked in a satisfaction survey and how it can be adapted to the tourism sector.

The first research that mentioned HOLSAT [1] scale included the following categories: the physical resort and facilities, ambiance, restaurants, bars, shops and nightlife, transfers, heritage and culture, and accommodation. Another research conducted by Truong and Foster [18] also mentions HOLSAT with an adopted questionnaire for Vietnam. The questions are classified in five areas: attractions, activities, amenities, accommodation, and accessibility.

In a research made in the Turkish hotel industry, seven different components were developed in order to measure service quality in Turkish four- and five-star hotels [20]: courtesy and competence of the personnel, communication and transactions, tangibles, knowing and understanding the customer, accuracy and speed of service, solutions to problems, accuracy of the hotel reservations.

In another research [21], diversity/fun, freedom of choice, honesty, accessibility, service orientation, aesthetics and security are mentioned as tourism quality measurement components.

## Hypotheses

In this article, it is researched which changes should be made in service in order to increase satisfaction in tourism sector. The theoretical model (Figure 1) incorporates thirty five hypotheses. Generally, it indicates that each HOLSAT dimension is positively affected by each SERVQUAL dimension. Therefore, we hypothesize the following.

H1: HOLSAT Transportation component is positively related to SERVQUAL components.

H2: HOLSAT Ability to solve problems component is positively related to SERVQUAL components.

H3: HOLSAT Accommodation component is positively related to SERVQUAL components.

H4: HOLSAT Physical assets component is positively related to SERVQUAL components.

H5: HOLSAT Ambiance component is positively related to SERVQUAL components.

H6: HOLSAT Social life component is positively related to SERVQUAL components.

H7: HOLSAT Heritage and culture component is positively related to SERVQUAL components.

## Methodology

### Sample

This research considers the entire holiday process, so the participants of the survey were chosen from people who had bought a holiday from a tourism agent. The researchers reached 700 people, but only 139 of them fit the research criteria.

All ages, monthly income levels, education levels and the holiday destination were targeted because the research aimed at getting a general insight of holiday satisfaction. Table 1 presents the distribution of the respondents by age, income level, education level and destination.

| Criterion                   | Number of respondents | %      | Cumulative % |
|-----------------------------|-----------------------|--------|--------------|
| Age interval                |                       |        |              |
| 18-25                       | 25                    | 17.80% | 17.80%       |
| 25-35                       | 48                    | 35.20% | 53.0%        |
| 35-50                       | 38                    | 28.10% | 81.10%       |
| 50>                         | 28                    | 18.90% | 100.0%       |
| Income interval (EUR)       |                       |        |              |
| <1000                       | 26                    | 18.70% | 18.70%       |
| 1000-3000                   | 53                    | 38.10% | 56.80%       |
| 3000-6000                   | 43                    | 30.90% | 87.80%       |
| 6000>                       | 17                    | 12.20% | 100.00%      |
| Education level             |                       |        |              |
| Undergraduate               | 33                    | 23.70% | 23.70%       |
| Graduate                    | 78                    | 56.10% | 79.90%       |
| Postgraduate                | 28                    | 20.10% | 100.00%      |
| Destination                 |                       |        |              |
| Aegean                      | 67                    | 48.20% | 48.20%       |
| Mediterranean               | 56                    | 40.30% | 88.50%       |
| Central Anatolia            | 7                     | 5.00%  | 93.50%       |
| East and Southeast Anatolia | 4                     | 2.90%  | 96.40%       |
| Black Sea                   | 5                     | 3.60%  | 100.00%      |

**Table 1:** Characteristics of the sample.

### Measurement of constructs

In this research, the classification of the questions was made in light of the models developed in previous literature [1,12,13,18,20,21]. Localization is important in measuring tourism quality, as it was implied in the research about Vietnam [18], so the general experiences of Turkish tourists are considered. New seven HOLSAT components are as follows: Transportation, physical assets, accommodation, and ability to solve problems, social life, ambiance, heritage and culture.

The survey has three parts including demographic questions, expectations, and perceptions. The questionnaire is divided into two groups: expectation and performance. Each HOLSAT and SERVQUAL question is designed to measure the expectation before the holiday and the performance after the holiday. Expectation questions are placed after demographic questions. The participant in the survey first evaluated the expectation, then the performance. In the third part, the same questions were asked in the form of performance perception. In this part, the service perception is measured. The difference between the performance and expectation values gives the satisfaction. The dimensions and example questions are given in appendix (Appendix-1).

The study focused on the contribution of the variables of HOLSAT and SERVQUAL. For this study, we found the people who bought a full holiday package that included the process that begins with the transportation from the home and ends with the return back home. A questionnaire was prepared based on the current literature for SERVQUAL and the authors' personal experience of HOLSAT. The questionnaire covered five variables for SERVQUAL and seven variables for HOLSAT. A five-point Likert rating scale (5-strongly agree, 1-strongly disagree) was used for the measurement of variables. An online survey was used as the data collection method.

## Statistical analysis

In the data, the expectations and performance were valued. The difference between the expectation and performance were found

(Quality=Performance – Expectation). New values became the main data for the analysis.

All measurement scales were appraised for unidimensionality, reliability, validity and for common method bias. Variables as well as descriptive statistics and correlations were computed. A path analysis was completed and direct and indirect effects determined. A traditional path analysis approach [22] was adopted rather than a more robust structural equation modeling approach because of the relatively small sample size. Hair et al. [23] argue that sample sizes from 150 to 400 are generally suitable for structural equation modeling analysis with sample size varying according to the complexity of the model and the number of parameters to be estimated.

In this research, the 12 measurement scales included 57 total measurement items. Since this large number of item needs was too big in comparison to the sample size, for this reason, the traditional approach to path analysis was the better suited method for analysis.

## Results

Measurement scale assessment. Unidimensionality, reliability, convergent validity, and discriminant validity were used to measure scale assessment. There are specific measures that can be calculated to determine unidimensionality.

| Reliability, dimensionality, and convergent validity assessment results |               |          |         |       |       |       |        |       |        |       |
|-------------------------------------------------------------------------|---------------|----------|---------|-------|-------|-------|--------|-------|--------|-------|
| Scale                                                                   | Cronbach alfa | Cmin /df | P-value | CFI   | GFI   | AGFI  | SRMR   | RMSEA | PCLOSE | NFI   |
| Tangibles                                                               | 0.65          | 0.436    | 0.509   | 1.00  | 0.998 | 0.984 | 0.0108 | 0.000 | 0.577  | 0.996 |
| Reliability                                                             | 0.89          | 0.662    | 0.618   | 1.00  | 0.992 | 0.971 | 0.0142 | 0.000 | 0.751  | 0.994 |
| Responsiveness                                                          | 0.80          | 1.186    | 0.305   | 0.998 | 0.991 | 0.957 | 0.0226 | 0.037 | 0.422  | 0.987 |
| Assurance                                                               | 0.88          | 2.331    | 0.097   | 0.992 | 0.984 | 0.920 | 0.0221 | 0.098 | 0.177  | 0.987 |
| Empathy                                                                 | 0.80          | 1.708    | 0.145   | 0.989 | 0.981 | 0.930 | 0.0281 | 0.072 | 0.281  | 0.974 |
| Transportation                                                          | 0.68          | 1.999    | 0.112   | 0.983 | 0.983 | 0.917 | 0.0391 | 0.085 | 0.216  | 0.968 |
| Physical assets                                                         | 0.69          | 1.627    | 0.197   | 0.985 | 0.988 | 0.939 | 0.0319 | 0.067 | 0.303  | 0.965 |
| Accommodation                                                           | 0.70          | 1.167    | 0.322   | 0.993 | 0.984 | 0.951 | 0.0342 | 0.035 | 0.509  | 0.953 |
| Ability to solve problems                                               | 0.85          | 0.043    | 0.835   | 1.00  | 1.00  | 0.998 | 0.0026 | 0.000 | 0.861  | 1.00  |
| Social life                                                             | 0.80          | 1.838    | 0.118   | 0.984 | 0.979 | 0.921 | 0.0318 | 0.078 | 0.243  | 0.966 |
| Ambiance                                                                | 0.71          | 0.5778   | 0.447   | 1.00  | 0.998 | .979  | 0.0155 | 0.000 | 0.520  | 0.994 |
| Heritage and culture                                                    | 0.74          | 1.999    | 0.112   | 0.983 | 0.983 | 0.917 | 0.0391 | 0.085 | 0.216  | 0.968 |

**Table 2:** Reliability, dimensionality, and convergent validity assessment results.

Table 2 displays the results of the assessments for unidimensionality, reliability and convergent validity of the study scales. Each of these multi-dimensional scales was first subjected to confirmatory factor analysis to demonstrate the factors. Some items in each of the scales were necessarily removed. All scales met the criteria supporting claims of unidimensionality.

Cronbach's alpha values are found in order to indicate the reliability levels. Cronbach's coefficient alpha values for all study scales exceeded the 0.60 level recommended by Hair, Jr., Tatham, and Black [24] to indicate sufficient reliability. All study scales exhibited convergent validity with normed-fit index (NFI) values greater than 0.90 [25]. The assessment for discriminant validity required a chi square difference test for each pair of scales, with a statistically significant difference in

chi square to indicate validity [26]. All possible pairs of the study scales were applied to the chi square difference test and each pairing had a statistically significant difference.

### Common method bias

When data for the independent and dependent variables are collected from single informants, common method bias may lead to inflated estimates of the relationships between the variables [27]. As Podsakoff and Organ [27] recommend, Harman's one-factor test was used post hoc to examine the extent of the potential bias. As prescribed by Harman's test, all variables were entered into a principal components factor analysis. According to them, substantial common method variance is signaled by the emergence of either a single factor or one "general" factor that explains a majority of the total variance. Results of the factor analysis (maximum likelihood, varimax rotation) of all items revealed 13 factors with eigen values greater than one, which combined to account for 30 percent of the total variance. While the first factor accounted for 16 percent of the total variance, it did not account for a majority of the variance. Based upon these results of Harman's one-factor test, common method bias were not considered significant [27]. PCA Analysis. The PCA technique was applied and a principal component loading matrix was formed for each original factor in order to form new variables uncorrelated to them. As an example, transportation is analyzed below. The number of questions was reduced to one factor when the principle component analysis was applied. The principal component loading matrix for transportation is shown in Table 3.

| Variable                                                | Factor |
|---------------------------------------------------------|--------|
|                                                         | 1      |
| The regularity and modernity of the airport/bus station | 0.717  |
| The comfort level of the transportation                 | 0.695  |
| The level of the service (food etc.) during the voyage  | 0.630  |
| The 24-hour accessibility to local transportation       | 0.375  |

**Table 3:** Principal component loading matrix for transportation.

| Criterion               | Predictors  | Unstandardized coefficients |         | Standardized coefficients | R <sup>2</sup> | 1-R <sup>2</sup> | VIF   |
|-------------------------|-------------|-----------------------------|---------|---------------------------|----------------|------------------|-------|
| 1. Transportation       | Reliability | 0.217                       | (0.075) | 0.241                     | 0.058          | 0.942            | 1.000 |
| 2. Physical assets      | Assurance   | 0.213                       | (0.078) | 0.240                     | 0.115          | 0.885            | 1.252 |
|                         | Tangibles   | 0.209                       | (0.083) | 0.222                     | 0.154          | 0.846            | 1.252 |
| 3. Social Life          | Assurance   | 0.292                       | (0.082) | 0.305                     | 0.165          | 0.835            | 1.252 |
|                         | Tangibles   | 0.227                       | (0.087) | 0.224                     | 0.205          | 0.795            | 1.252 |
| 4. Ambiance             | Tangibles   | 0.265                       | (0.081) | 0.278                     | 0.161          | 0.839            | 1.252 |
|                         | Assurance   | 0.247                       | (0.076) | 0.275                     | 0.222          | 0.778            | 1.252 |
| 5. Heritage and Culture | Reliability | 0.277                       | (0.076) | 0.296                     | 0.087          | 0.913            | 1.000 |
| 6. Accommodation        | Assurance   | 0.432                       | (0.072) | 0.473                     | 0.307          | 0.693            | 1.252 |
|                         | Tangibles   | 0.175                       | (0.076) | 0.181                     | 0.333          | 0.667            | 1.252 |

A similar analysis was made for the SERVQUAL and HOLSAT components and the summary variables are presented in Table 4.

| Basic Definitions         | New Components            |
|---------------------------|---------------------------|
| Transfers                 | Transfers                 |
| Accommodation             | Accommodation             |
| Heritage and Culture      | Heritage and Culture      |
| Ability to solve problems | Ability to solve problems |
| Physical assets           | Physical assets           |
| Social life               | Social life               |
| Ambiance                  | Ambiance                  |
| Tangibles                 | Tangibles                 |
| Reliability               | Reliability               |
| Responsiveness            | Responsiveness            |
| Assurance                 | Assurance                 |
| Empathy                   | Empathy                   |

**Table 4:** New components after principal component analysis was applied.

### Regression analysis results

Regression analysis was applied after the principal component analysis (PCA), for investigating the statistical relationships and the influences of the SERVQUAL components to HOLSAT components. As a result of the regression analysis, the research reveals that most of the tourists regard some SERVQUAL components as significantly important and these are in common with some HOLSAT components. If companies wish to have sustainable customer satisfaction, they should pay special attention to these components. The interpretations and regression tables of these variables are described in Table 5.

|                              |                |       |         |       |       |       |       |
|------------------------------|----------------|-------|---------|-------|-------|-------|-------|
| 7. Ability to Solve Problems | Reliability    | 0.524 | (0.069) | 0.530 | 0.647 | 0.353 | 2.240 |
|                              | Responsiveness | 0.328 | (0.071) | 0.368 | 0.708 | 0.292 | 2.240 |

**Table 5:** Regressions coefficients.

As shown in Table 5, the HOLSAT components are affected by one or more SERVQUAL components. Transportation is affected by reliability, physical assets is affected by tangibles and assurance, accommodation is affected by tangibles and assurance, ability to solve problems is affected by responsiveness and reliability, social life is affected by tangibles and assurance, ambiance is affected by tangibles and assurance, and heritage and culture is affected by reliability. The

touristic organizations should increase these parts of service quality if they wish to increase customer satisfaction.

## Discussion

In Table 6, a summary of the results of research hypothesis can be seen.

| SERVQUAL /HOLSAT          | Tangibles | Reliability | Assurance | Empathy | Responsiveness |
|---------------------------|-----------|-------------|-----------|---------|----------------|
| Transfers                 | -         | +           | -         | -       | -              |
| Physical assets           | +         | -           | +         | -       | -              |
| Social life               | +         | -           | +         | -       | -              |
| Ambiance                  | +         | -           | +         | -       | -              |
| Accommodation             | +         | -           | +         | -       | -              |
| Heritage and Culture      | -         | +           | -         | -       | -              |
| Ability to solve problems | -         | +           | -         | -       | +              |

**Table 6:** Summary of the results of research hypothesis.

## Transportation

One of the outcomes of this research is that “reliability” is an important factor that has an effect on transportation (model  $R^2=0.058$ ) as indicated in Table 5.

The transportation phase is the beginning of a holiday. The service process is inseparable because the customer is physically and psychologically involved in the entire holiday process. For instance, a customer visits a spa and relaxes during a massage, so the service cannot be separated into pieces [28]. If a tourist begins a holiday badly, the entire holiday will be affected by this bad feeling. Tourism agencies should be aware of the importance of transportation.

After the analysis, it has been found that the SERVQUAL component that affects the HOLSAT 'transportation' component is 'reliability' ( $\beta=0.217$ ;  $t=2,905$ ;  $\text{sig.}=0.004$ ;  $R^2=0.058$ ). It means that a person going on holiday is inspired by a trusted service on a bus or plane. According to a tourist, a road trip is acceptable when reliability exists. In the HOLSAT concept, it is critical to have a passenger who trusts, believes, and feels safe during the transportation phase.

## Physical assets

Assurance (model  $R^2=0.115$ ) and tangibles (model  $R^2=0.154$ ) were perceived as having a positive impact on physical assets as can be seen in Table 5. The analysis showed that the hotel organizations should pay particular attention to these two components so they can have guests who are satisfied with the physical assets.

Assurance ( $\beta=0.213$ ;  $t=2,715$ ;  $\text{sig.}=0.007$ ;  $R^2=0.115$ ) and tangibles ( $\beta=0.209$ ;  $t=2,510$ ;  $\text{sig.}=0.013$ ;  $R^2=0.154$ ) have an impact on satisfaction with physical assets. The questions and the measurement criteria are completely different for these two components. It can be said that the measured performance is parallel but the sub dimensions are not the same. Finding an influence of tangibles on physical assets is the kind of proof that demonstrates the relevant results of this research.

## Accommodation

Accommodation is the basic performance criteria of a holiday that tourists mainly pay attention to the rooms they stay in. The significance of 'assurance' (model  $R^2=0.307$ ) and 'tangibles' (model  $R^2=0.333$ ) on 'accommodation' is another outcome of this research that can be seen in Table 5.

There are two main factors that have an effect on the HOLSAT accommodation component. The first and most critical one is 'assurance' ( $\beta=0.432$ ;  $t=6,032$ ;  $\text{sig.}=0$ ;  $R^2=0.307$ ). The less effective one is 'tangibles' ( $\beta=0.175$ ;  $t=2,307$ ;  $\text{sig.}=0.023$ ;  $R^2=0.333$ ). Satisfaction from accommodation is closely related to a sense of safety. Tangibles also have a positive effect on satisfaction with accommodation because of the visual impression with the hotel.

## Ability to solve problems

In the service sector, an employee's behavior mainly shapes the customers' perception of the brand as the “brand is humanized” by the frontline staff [29]. The provider's positive and understanding behavior, and courtesy influences the customer's satisfaction level [30]. For

example, a recommendation from a waiter about what to drink could increase satisfaction if the customer does not clearly indicate his/her choice, while it can decrease satisfaction if the customer is sure about their beverage choice [31]. Using employees as brand ambassadors is the best way to reach and satisfy the customer.

There are two different SERVQUAL component effects on the HOLSAT 'ability to solve problems'. 'Reliability' ( $\beta=0.524$ ;  $t=7.642$ ;  $\text{sig.}=0$ ;  $R\text{-square}=0.647$ ) and 'responsiveness' ( $\beta=0.378$ ;  $t=5.308$ ;  $\text{sig.}=0$ ;  $R\text{-square}=0.708$ ) have nearly the same effect as shown in Table 5.

## Social life

Social life includes nightlife, bars, and animation activities at the facility. These are the measurement criteria for the performance of social life at a hotel. Assurance (Model  $R^2=0.165$ ) and tangibles (model  $R^2=0.205$ ) are important predictors of social life as shown in Table 5.

Especially at multi star hotels, the time spent at the facility is an important performance indicator from the visitor's point of view. The motivation to pay high prices to a hotel is closely related to not only the rooms but also the social opportunities.

Assurance ( $\beta=0.292$ ;  $t=3.567$ ;  $\text{sig.}=0$ ;  $R\text{-square}=0.165$ ) and tangibles ( $\beta=0.227$ ;  $t=2.615$ ;  $\text{sig.}=0.01$ ;  $R\text{-square}=0.205$ ) have an effect on the satisfaction with social life at a hotel.

## Ambiance

Ambiance questions are about the general soul of the facility and the destination, including the climate. This dimension is closely related to the visitors' feelings. When a consumer enters a shop, café, or hotel, an invisible force wraps around him/her. This invisible force can be called the atmosphere or the ambiance. Many of the decisions about the brand are made under the influence of the ambiance. In the research, the results showed that tangibles ( $\beta=0.265$ ;  $t=3.281$ ;  $\text{sig.}=0.001$ ;  $R\text{-square}=0.161$ ) and assurance ( $\beta=0.247$ ;  $t=3.250$ ;  $\text{sig.}=0.001$ ;  $R\text{-square}=0.222$ ) have an impact on the satisfaction with ambiance.

## Heritage and culture

Destination image is defined as 'the sum of beliefs, ideas and impressions that a person has of a destination' [32]. As noted in the Stabler model, image is affected by perceptions, experiences, media, education, socio-economic characteristics, motivations, psychological characteristics, hearsay and tourist marketing [33]. One of the most critical properties of HOLSAT is to measure the holiday experience by measuring not only the hotel itself but also the destination where the hotel is at Truong [18]. The "heritage and culture" component shows that satisfaction is also correlated to the destination. In this model, it can be easily seen that cultural dimensions such as socio-economic characteristics, education and perception are effective when evaluating a destination. The individual culture and culture of the destination are strictly linked to each other because the perception of the destination culture is changed by the individual one. After all these evaluations, it can be said that heritage and culture has a big effect on image.

The HOLSAT 'heritage and culture' component is affected by 'reliability' ( $\beta=0.277$ ;  $t=3.623$ ;  $\text{sig.}=0$ ;  $R\text{-square}=0.087$ ).

## Conclusion

The aim of this research was to understand which of the HOLSAT components are affected by which of the SERVQUAL components. The

findings provide a new approach for the tourism managers who want to increase the customer satisfaction level and for academicians who are studying tourism marketing and customer satisfaction.

The service quality of transportation not only has the quantitative characteristics of frequency, distance to the bus stop or airport, and travel time; but also the qualitative characteristics such as comfort, cleanliness on board, safety, and driver kindness [34]. It was found that reducing waiting times, improving the comfort level during the journey, introducing informational campaigns and strengthening the busiest lines are the major factors that can increase the usage of public transport [35]. These factors can also be applied for intercity transportation. In this study, transportation has been found to have a significant factor of reliability. The satisfaction from transportation is mainly about the road, the weather, and the service offered on route. Road and weather conditions are beyond the company's power, however the service is directly related with the company's quality dimensions. The vehicle (bus or plane), the price, and personal interest are the critical factors for a transportation company in order to have satisfied customers. In a service marketing context, the consumers' feeling of trust is a major factor on satisfaction. In the SERVQUAL questionnaire, reliability questions are mainly about the trust a consumer has of the company. The questions are generally about the promise of the company. For instance, "If a company promises to do something, it should do it on time" is one of the questions and it measures the performance accuracy of the company. Transportation has a critical role of being accurate about the service. For example, the safety of a trip is the one of the most important quality dimensions of a transportation company. A company promises to transport its passengers safely and on time to where they want to go, the passengers trust them to do so, pay the fee, arrange their holiday according to the transportation and have them carry their "lives". Because of this reality, finding the effect of reliability on transportation is not a surprise.

Tangibles and assurance are emphasized as important determinants of accommodation. The time spent in the rooms and the facilities of the room are the main factors of satisfaction with accommodation. In a range of 38 items, cleanliness is found to be the first and the comfort provided in the room is found to be the third most important criteria of a hotel [36]. In forums and websites, the main rating criteria of a hotel is the quality of the rooms. This means that a hotel should increase the quality limits of its accommodation in order to have good word of mouth. In addition to this, accommodation criteria is the only one crucial to both large and small scale hotels. At all levels in the tourism sector, properties of the rooms are the main and the most important component of the entire organization. The physical appearance of the room creates the first impression. The tangibles component includes all the physical assets of the facility. In the research, it is clear that tangibles are closely related to the satisfaction level. In addition to this, assurance is found to affect satisfaction with regards to accommodation. Even if the rooms have modern and luxurious furniture, if a guest does not feel safe, he/she will not feel satisfied. Parallel to this, a customer does not choose a hotel that is not clean but safe.

One of the important components of HOLSAT is the ability to solve problems that was found to be affected by reliability and responsiveness in this research. The "ability to solve problems" actually measures the performance of the employee at all levels. The customer generally sees the bottom level employee, so this component is critical for waiters and reception staff. However, the entire organization should have the culture and ability of being solution oriented. The most

important role belongs to people in experience-oriented services [37]. The perceived service quality is positively or negatively affected by the employees' behavioral and attitudinal responses [38]. Although the "ability to solve problems" is a person-related component for a company, reliability is shown as a contributor to this HOLSAT dimension. Reliability which refers to the service delivery continuance and accuracy of the service, is positively related to customer satisfaction [39]. In the service sector, the employee is the company's representative. The consumer sees the employee as the company itself. Reliability is both a company- and employee-related factor. When a guest has a problem with something inside the hotel, he/she will be positively affected by a solution to said problem. If the solution comes quickly, the customer is satisfied at a higher level. The responsiveness to a problem is directly related to the knowledge level of the employee. For example, if a customer complains about the staple foods, the waiter should say that the date controls are always made by the kitchen. Surely, the food should be changed with another in order to satisfy the customer, but providing information will impress the customer positively. In addition to this, to be satisfied, the customer has to trust the waiter. The component of assurance is defined as the level of feeling safe by the guests. If the customer does not feel safe about the given answers, the responsiveness or the level of knowledge are meaningless. These two components of HOLSAT and one component of SERVQUAL cannot be considered separately.

The perceived destination image directly affects the perceived value and service quality, which are the main dimensions of overall tourist satisfaction [40]. Another interesting outcome of this research is the dimension of reliability that has a direct effect on satisfaction from destinations which are called "Heritage and Culture" in the HOLSAT model. A tourism destination is defined as "a package of tourism facilities and services, which like any other consumer product, is composed of a number of multi-dimensional attributes" [41]. The research showed that a reliable destination increases holiday satisfaction. For instance, a luxurious hotel in an area with high crime will not be a good choice for a wealthy guest. The heritage and culture dimension of HOLSAT includes the entire area where the hotel is located in. Even if the holiday is full board and the customer never aims to walk around the hotel, the destination's being a "hotel destination" is a positive effect for a guest. A feeling of safety makes the hotel more cost worthy from a customer's perspective. Reliability measures the difference between the promise and reality of the performance. When a customer chooses a hotel to stay in, safety is one of the main criteria for doing so. Thus the chosen hotel is accepted as a safe one.

Another finding of the research is the effect of tangibles and assurance on the satisfaction with physical assets. The vacationers are asked about the accuracy of the beach, sport areas, pool and the appearance of the facility. The SERVQUAL dimension of "tangibles" is parallel to the HOLSAT dimension of "physical assets". The other effective dimension of HOLSAT is "assurance." Assurance measures the level of the vacationers' trust in the organization. Before vacationers come to a hotel, they investigate the properties of the facility from different sources such as websites and brochures. An expectation is developed while the research is being made. If a tourist does not expect too much, everything will be all right [1]. However, if the expectation level is less, the chance of being preferred decreases for the hotel. According to SERVQUAL, the behavior of the staff should give a feeling of trust. In the "physical assets" context, the beach, sport area, pool and the outlook of the facility can be considered as the elements that provide this trust. For instance, a customer who sees clean and

bright water in the pool feels safe and jumps into that water without a second thought. From this point of view, the tool that gives the sense of confidence is not from any person, but the facility itself.

Social life is one of the most important factors in deciding where to go on a holiday. The time spent outside the hotel is as critical as the time spent inside the hotel. The questions about social life incorporate both points of view. The qualification of the animations, restaurants and bars in the facility and the museums and the nightlife at the destination are asked to the participants in order to evaluate the satisfaction level with the social life. Assurance and tangibles are again found to be the most effective couple in the results. The social areas, such as restaurants and bars, are commonly perceived as acceptable when the minimum physical conditions are met. The tangibles dimension affects the perceived quality of the social facilities. Assurance is mainly about the contact point staff and their ability to give feeling of trust. The other crucial factors about them are the kindness and level of knowledge. In a restaurant, for instance, the consumer should be relaxed about spending his/her time effectively. This is only possible when the consumer feels that he/she is in the right and safe place.

When a consumer enters a market, the smell, colors or sound attract him/her and these catalyze the process of having a distinct thought about the market. In hotels, the ambiance is made up of the entire buildings, the staff, and the social facilities. In this research, tangibles and assurance were found to have an impact on satisfaction from ambiance. Tangibles such as rooms, furniture, and offices give a general thought about the organization. The tangibles dimension mainly measures the general concept of the brand. In the questions, perceptions of the materials such as brochures that are used for the service are measured, for instance. These are the elements of the general theme of the hotel. Ambiance is made up of that theme also. Assurance is another power that can be used to increase the satisfaction from ambiance. The personal behaviors give a feeling of trust to the vacationers. Ambiance is generally about the invisible and intangible things including the "feelings". Assurance gives that feeling directly whereas tangibles give it indirectly.

Tourism is known as one of the challenging sectors for the satisfaction process. Customer satisfaction is continuously measured especially in corporate and global hotels. This research can be considered as a guide for the quality and satisfaction measurements. Holiday satisfaction, HOLSAT, is not only about the satisfaction with a facility, but the entire holiday process.

Addition to CRM applications which focus on building long term relationships after transactions [42,43] and which are generally used as a tool of mass information processing, proposed model can be considered by managers as a specialized guide that shows the effects of service quality on customer perceptions of holiday satisfaction.

## Limitations of the Study

One of the limitations of this research is that this research did not consider the capacity of the hotels. Vacationers expect different benefits from various ratings of hotels. If a hotel is a three-star, the visitor does not expect excellent social life amenities from the hotel. However, if it is an assertive five-star hotel, it is expected to have everything in great condition. This limitation may be overcome by applying the research to the participants who had spent their holidays at hotels with various star ratings. A similar difference in perspective is

valid between the types of hotels. The expectation and performance criteria in business hotels are not equal with the holiday resorts.

## Future Research

The HOLSAT model may be modified in accordance with business hotels in order to improve a new business holiday satisfaction model. Additionally, the data used in this research may be analyzed from a demographic point of view. Different age levels, genders, income levels may yield interesting results. Similarly, analysis of different holiday destinations may result in various significant findings. In Turkey, the northern and eastern regions are chosen as cultural holiday destinations, which are mainly visited because of their cultural, historical, and natural assets; while the southern and western regions are chosen as touristic holiday destinations, which are mainly visited on summer season in order to have a sea and sun vacation. In order to address this issue, a comparison between the attributes of the destinations or regions can be made.

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