Analysis of Service Quality on Tourist Satisfaction and Tourist Loyalty  
Study at Adityawarman Museum

Neffi Sulkaisi¹, Idris²  
¹Universitas Negeri Padang, Padang, Indonesia, neffisulkaisi10@gmail.com  
²Universitas Negeri Padang, Padang, Indonesia, idris_unp@yahoo.co.id  
*Corresponding Author

Abstract
The development of people is not only thinking about eating and drinking, traveling has become a basic need of every person, so that new tourism objects are popping up like epidemics in every country, but those who are able to attract tourists are those who are able to provide quality services in accordance with tourist expectations. This study aims to determine and explain how the influence of service quality on tourist satisfaction and tourist loyalty. This research is quantitative research. The sampling method used was purposive sampling with a sample of 156 tourists who visited the Adityawarman Museum and research instruments in the form of a questionnaire distributed to respondents by chance who had visited the Adityawarman Museum. The results showed that service quality has a significant positive effect on tourist satisfaction and tourist loyalty, tourist satisfaction has a positive effect on tourist loyalty, and indirectly also has a significant positive effect between service quality on tourist loyalty through tourist satisfaction as an intervening variable based on results testing the Structural Equation Model (SEM) with AMOS 23.

Keywords: service quality, tourist satisfaction, tourist loyalty

Introduction
In recent years, the development of the tourism industry has become an increasingly important research and policy topic. According to the United Nations World Tourism Organization (UNWTO) (2018), more and more countries consider tourism as an engine for economic recovery. However, the only way to achieve sustainable tourism development is to give every tourist a satisfying and memorable travel experience (Mossberg, 2007; Walls, Okumus, Wang, & Kwun, 2011). One country that is developing tourism is Indonesia, specifically the city of Padang.

In accordance with regional development goals and the Padang Municipality Master Plan, it has been established that the City of Padang functions as a development center and tourism gateway for West Sumatera. The city of Padang has an advantage in the tourism sector. Padang city has diverse and interesting tourism objects to be developed, such as art tourism, nature tourism, historical and archeological tourism, traditional and cultural tourism which are interesting to visit. One of the attractions in the city of Padang is the Adityawarman Museum, from 2014 to 2019 visitors to the Adityawarman Museum have increased every year.

With the development of lifestyles and tourism objects increasingly touch the daily lives of everyone. Traveling an vacationing has become a priority, so everytime attractions are required to continue to innovate, providing superior quality services to be able to continue to exist amid the emergence of new attractions.

According to Bitner (1990), Dick and Basu (1994) and Oliver (1999), satisfaction from a product or service affects consumer loyalty. Added by Baker and Crompton (2000), defines satisfaction as the emotional state of a tourist after experiencing a trip. Therefore, evaluation of satisfaction in terms of travel experience is a post-consumption process (Fornell, 1992). Then added also by Parasuraman, Zeithaml, and
Berry (1985) service quality is positively related to loyalty because increasing service quality can increase satisfaction and loyalty.

The importance of this research is because of the importance of the tourism industry in Indonesia, especially the city of Padang. The tourism industry plays an important role in the economic growth of the City of Padang and the Adityawarman Museum contributes to the economic growth of the city of Padang through local revenue (PAD). Therefore, it is appropriate for attractions to get special attention from the government related to the quality of the services they offer to tourists.

The purpose of this study is to investigate the effect of service quality on tourist satisfaction and tourist loyalty, the influence of tourist satisfaction on tourist loyalty and the effect of service quality on tourist loyalty that is mediated by tourist satisfaction.

Travelers who like traveling they are looking for are satisfied with the quality of service they receive. Satisfied tourists will become loyal to attractions. The statement is supported by the results of the research the authors do that the quality of service has a positive effect on satisfaction and loyalty and indirectly affects the quality of service on tourist loyalty mediated by tourist satisfaction.

From the background and according to previous experts who stated that service quality has a positive effect on tourist satisfaction and loyalty, (Keshavarz and Ali 2016). The author is interested in conducting this research, but the authors add a mediating variable to measure the indirect effect between services quality on loyalty tourist throughsatisfaction tourist.

Service Quality

Success of a public institution is inseparable from the quality of the services they offer to service users. This becomes a necessity for an agency to pay attention to the services they provide to users of their services. Over the past few decades, the quality of service has attracted a lot of attention from practitioners. Gronroos (1984), defines service quality as a result of the evaluation process, in which the customer compares his expectations with the service he feels while he is actually receiving.

Factors that influence services quality parasuraman (1996), namely (1) personal needs, (2) past experience, (3) word of mount communication (4) external communication. Thus the quality of service produced by the availability of adequate facilities, in addition to the existence of operational activities that have many factors in determining the success of the management of a tourist attraction. Advances in technology and other fields require the tourism office as a tourist attraction manager to provide quality services.

The service quality characteristics according to Kotler (2016), service characteristics include (1) Intangible, (2) Inseparability and (3) Variability. This study uses a service quality approach that is widely used as a reference in marketing research is the SERVQUAL (Service Quality) model. According to Parasuraman 1988, the service quality dimension (SERVQUAL) consists of five dimensions, namely: tangible, reliability, responsiveness, assurance, and empathy.

Tourist Satisfaction

According to Kotler (2016), satisfaction (satisfaction) is the feeling of pleasure or disappointment incurred for comparing the performance of perceived product (result) to their expectations. If performance fails to meet expectations, the customer will be dissatisfied. If the performance is in line with expectations, the customer will be satisfied.

In this study the determinant indicators of satisfaction are (1) the level of consumer or service user expectations, (2) the level of performance provided by the company or service provider, this is in line with research conducted by John Mardhatillah (1977) in serqual.

Tourist Loyalty

If tourist satisfaction concerns what is expressed by tourists, then tourist loyalty is related to what
tourists do. Therefore satisfaction parameters are more subjective, more difficult to quantify, and more difficult to measure than tourist loyalty (Tjiptono, 2016). According to Valle, at el (2006) an indicator of a tourist said to be loyal can be assessed from (1) intention to return (2) willingness to recommended.

The conceptual framework is a temporary conclusion from a theoretical review that reflects the relationship between the variables studied. This is a demand to solve problems in research and formulate hypotheses.

Figure 1 Conceptual Framework

This study investigates the structural relationships among three interrelated constructs: service quality with five dimensions, tourist satisfaction, and tourist loyalty. Based on the literature review, the following hypotheses were formulated:

\[ H1 : \text{Service quality} \text{ has a positive effect on tourist satisfaction} \]
\[ H2 : \text{Service quality} \text{ has a positive effect on tourist loyalty} \]
\[ H3 : \text{Tourist satisfaction} \text{ has a positive effect on tourist loyalty} \]
\[ H4 : \text{Tourist satisfaction} \text{ has mediated influence between service quality and tourist loyalty} \]

Methods

Population and sample

Population is a generalization consisting of objects / subjects that have certain characteristics determined by researchers to be studied and then drawn conclusions, (Sugiyono, 2013: 80). In other words, a population is a group of individuals or objects that have research characteristics.

The sample is part of the population that is considered capable of representing the population. This study uses a non-probability sampling technique with purposeful sampling technique, which uses criteria that have been selected by researchers based on having visited the Adityawarman Museum in Padang. The research instrument used a questionnaire in the form of a statement that was distributed directly or indirectly to tourists by using the Google form. The number of valid questionnaires was 156 respondents. Tourists visiting the Adityawarman Museum are the target population.

This study used a questionnaire as a research instrument, a questionnaire containing bullet points that were distributed directly and online using the Google form, then shared via groups and social media. This research was conducted at the tourist attraction Adityawarman Museum.

Operational Concept

Variables are attributes or properties or values of people, objects or activities that have certain variations that are determined to be studied and drawn conclusions (Sugiyono, 2014). In this study, there is one exogenous variable, one intervening variable and one endogenous variable.

\textit{Services Quality}: Service quality is described as the activities carried out by the manager of attractions to meet the expectations of tourists visiting attractions. Included in this variable are five dimensions namely physical form, trust, responsiveness, assurance and empathy. The indicators of the five dimensions examined in this study are as follows:

\textit{Tangible}: Tangible is defined as the physical form of the object of research. Tributes included in this
dimension are: Condition of cleanliness of Restroom and Musque, condition of building cleanliness, and condition of building and interior of the museum.

Reliability: Trust is the ability to perform promised services reliably and accurately (Parasuraman et al. (1988). While Nguyen & Leblanc (2001), regards reliability as a reputation that can be the most reliable indicator of service quality that can be linked to past experience customers. The attributes included in this dimension are attributes: Facilities and infrastructure facilities available, the amount of the cost of admission, and has a clear standard of information.

Responsiveness: According to Parasuraman et al. (1988), responsiveness is a willingness to help customers and provide fast service Responsiveness tends to have important and positive effects on customer satisfaction (Jun & Cai, 2001; Diaz & Ruiz, 2002; Joseph et al., 2005; Glaveli et al., 2006). The attributes included in this dimension are: Access to the museum is easy, the readiness of officers serving tours, ease of visitors get services, officers quickly t and respond to complaints from visitors.

Assurance: Assurance is knowledge, courtesy, compensation and the ability of company employees to grow the trust of customers to the company. Attributes included in this dimension are: Guaranteed security assurance, Guaranteed accuracy and correctness of information, and Guaranteed hospitality and courtesy of officers.

Empathy: Empathy is giving sincere and individual or personal attention given to customers by trying to understand the desires of consumers. Attributes included in this dimension are: Information centers can be found easily, Availability of suggestion boxes, officers provide the same services to tourists.

Tourist Satisfaction, Satisfaction is described as a form of performance received by consumers in accordance with what they expect. Valle et al (2006) stated that there is an influence of tourist satisfaction as a determinant of tourist loyalty. Jonh Marditillah (1977) suggests several indicators that fall into the satisfaction variable as follows: Expectation level, the level of expectation is the expectation of tourists to get services and Performance level, the level of performance is a reality of service activities provided by service providers to meet the expectations of tourists.

Tourist Loyalty, loyalty shows tourist loyalty in using services. Loyalty of tourists according to Valle, et al (2006), to measure tourist loyalty can be seen the following attributes: Intention to return, every loyal tourist can be measured by the desire of tourists to tourist visit the attraction and willingness to recommend. Loyalty can be measured by the availability of tourists to recommend attractions to other parties.

Design Research
In developing SEM models is the search or development of models that have strong theoretical justifications. A researcher must conduct a series of literature examinations to justify the theoretical model developed. In this research, a model that aims to analyze service quality influences on tourist satisfaction and tourist loyalty will be developed at the Adityawarman Museum. The research design in this study uses the Structural Equation Model (SEM) Test 2 with the following models:

![Figure 2 Structural Equation Model (SEM) of Research](image)
Suitability of the model is evaluated by examining the SEM criteria. The first action is to evaluate whether the data used can meet SEM assumptions namely sample size, normality, outlier, linearity and multi-collinearity and singularity. After that, the researchers tested suitability and tested statistics. Some suitability indexes and cut-off values that are used to test whether the model is accepted or rejected are:

<table>
<thead>
<tr>
<th>Goodness Of Fit Index</th>
<th>Cut-Off Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square Df A 0.05</td>
<td></td>
</tr>
<tr>
<td>Probability</td>
<td>$\geq 0.05$</td>
</tr>
<tr>
<td>RMSEA</td>
<td>$\leq 0.08$</td>
</tr>
<tr>
<td>AGFI</td>
<td>$\geq 0.90$</td>
</tr>
<tr>
<td>TLI</td>
<td>$\geq 0.95$</td>
</tr>
<tr>
<td>CFI</td>
<td>$\geq 0.95$</td>
</tr>
</tbody>
</table>

*Source: Ghozali, 2008*

Causality test is performed to determine the relationship between variables or not the effect of research. This test is done by analyzing the value of Regression Weight, which is the value of the critical ratio (CR) required $\geq 1.96$ and Probability (P) $\leq 0.05$ when the exercise results meet the requirements, the hypothesis is accepted (Ghozali, 2008).

**Results and Discussion**

**Results**

Below are presented the composition of respondents based on gender, age, occupation, income and have visited the Adityawarman Museum. The findings of this study are as follows:

<table>
<thead>
<tr>
<th>Table 2 Characteristics of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respondents</td>
</tr>
<tr>
<td>-------------</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
</tr>
<tr>
<td>Women</td>
</tr>
<tr>
<td>Man</td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>17 – 25 year</td>
</tr>
<tr>
<td>26 – 33 year</td>
</tr>
<tr>
<td>34 – 41 year</td>
</tr>
<tr>
<td>42 – 50 year</td>
</tr>
<tr>
<td>50 year and above</td>
</tr>
<tr>
<td><strong>Job</strong></td>
</tr>
<tr>
<td>Student</td>
</tr>
<tr>
<td>Collage Student</td>
</tr>
<tr>
<td>Enterpreneur</td>
</tr>
<tr>
<td>Governament Employee</td>
</tr>
<tr>
<td>Private Employee</td>
</tr>
<tr>
<td>The Other</td>
</tr>
</tbody>
</table>
Based on the data above, it can be seen that the description of the characteristics of respondents who visited to the Adityawarman museum. From table 1.1 it appears that the most dominant gender groups are male sex with 89 people (57%) and women with 67 people (43%). The most dominant age is 17-23 years as many as 78 people (50%). The status of students is more dominant as many as 70 people (46%). The dominant monthly income is 72 people (46%) and 156 people.

![Figure 3 Full Model - Structural Equating Modeling (SEM) Results The](image)

**Figure 3 Full Model - Structural Equating Modeling (SEM) Results The**

Test of the feasibility of carrying this model in accordance with the data or fit to the data used in the study is as shown in the table below:

<table>
<thead>
<tr>
<th>Goodness Of Fit Indeks</th>
<th>Cut-Off Value</th>
<th>Result Analysis</th>
<th>Evaluation Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square (df=167)</td>
<td>( \leq 212.431 )</td>
<td>200.051</td>
<td>Good</td>
</tr>
<tr>
<td>Probability</td>
<td>( \geq 0.05 )</td>
<td>0.935</td>
<td>Good</td>
</tr>
<tr>
<td>RMSEA</td>
<td>( \leq 0.08 )</td>
<td>0.073</td>
<td>Good</td>
</tr>
<tr>
<td>GFI</td>
<td>( \geq 0.90 )</td>
<td>1.156</td>
<td>Good</td>
</tr>
<tr>
<td>AGFI</td>
<td>( \geq 0.90 )</td>
<td>1.001</td>
<td>Good</td>
</tr>
</tbody>
</table>
The results of data processing analysis show that all constructs used to form a research model, the confirmatory factor analysis process meets the established criteria goodness of fit. The probability value in this analysis shows a value above the significant limit of 0.935 (p > 0.05), this value indicates that there is no difference between the sample covariance matrix and the estimated population covariance matrix.

**Table 4 Kausalitas Test**

<table>
<thead>
<tr>
<th></th>
<th>Estimate</th>
<th>S.E.</th>
<th>C.R.</th>
<th>P</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourist_Satisfaction</td>
<td>&lt;---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services_Quality</td>
<td>.962</td>
<td>.059</td>
<td>16.453</td>
<td>***</td>
<td></td>
</tr>
<tr>
<td>Tourist_Loyalty</td>
<td>&lt;---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tourist_Satisfaction</td>
<td>.296</td>
<td>.157</td>
<td>1.886</td>
<td>.059</td>
<td></td>
</tr>
<tr>
<td>Tourist_Loyalty</td>
<td>&lt;---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Services_Quality</td>
<td>.751</td>
<td>.166</td>
<td>4.534</td>
<td>***</td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Primary data processed, 2019

**Parameter estimated the relationship between services quality and tourist satisfaction obtained by 0.962.**
The study of the relationship between the two variables shows the value of CR = 16.454 with probability = 0.059 (p <0.05). So it can be interpreted that service quality has a positive effect on tourist loyalty, so the better the service received by tourists, the higher the satisfaction of tourists for tourist attractions. Thus hypothesis 1 is accepted because there is a positive correlation between services quality and tourist satisfaction.

**Hypothesis 2**

Parameter estimated the relationship between tourist satisfaction and tourist loyalty obtained by 0.962. The study of the relationship between the two variables shows the value of CR = 1.886 with probability = 0.000 (p <0.05). So it can be interpreted that service quality has a positive effect on tourist satisfaction, so the higher satisfaction is owned by tourists, the higher the loyalty of tourists to attractions. Thus hypothesis 2 is accepted because there is a positive correlation between services quality and tourist loyalty.

**Hypothesis 3**
The estimated parameter relationship between services quality and tourist loyalty is 0.962. The study of the relationship between the two variables shows the value of CR = 4.534 with probability = 0.000 (p <0.05). So it can be interpreted that tourist satisfaction has a positive effect on tourist loyalty, so the higher satisfaction is owned by tourists, the higher the loyalty of tourists to tourist attractions. Thus hypothesis 3 is accepted because there is a positive correlation between tourist satisfaction and tourist loyalty.

**Hypothesis 4**

Parameter estimation on standardized indirect effect shows that there is an indirect effect of service quality on tourist loyalty through tourist satisfaction of 0.318. So it can be interpreted that service quality has a partially positive effect (partial intervening) on tourist loyalty through tourist satisfaction.

**Discussion**
The study concluded that service quality has a significant direct effect on tourist satisfaction, service quality has a significant effect on tourist satisfaction, tourist satisfaction has a significant effect on tourist loyalty. Then for the indirect effect, service quality has an indirect effect on tourist loyalty through tourist satisfaction.

This study agrees with previous views about the role of construction related to service quality (Oliver,
1980; Grönroos, 1984; Keshavarz & Ali, 2015). This highlights the importance of tourist satisfaction in mediating the relationship between service quality and tourist loyalty. By presenting tourist satisfaction as a mediator influence, this study provides a framework for evaluating interactions between service quality (including five dimensions, tangibility, responsiveness, assurance, empathy, and reliability), tourist satisfaction and tourist loyalty in the tourism industry.

Then, Valle, at.el (2006) also states that there are several determinants of tourist loyalty, namely the desire to visit again and recommend to others. This impulse arises when tourists are satisfied with the service they get when visiting a tourist attraction.

Conclusion

The importance of service quality, makes tourists feel satisfied and loyal to attractions. The current study provides a model that aims to provide a better understanding of the role of tourist satisfaction in mediating the relationship between service quality and tourist loyalty in the Adityawarman Museum attraction.

The relationship of the three constructs in the model is presented in Figure 2. The results of the study are as follows; (1) Service quality has a positive effect on tourist satisfaction, (2) Service quality has a positive effect on tourist loyalty, (3) Tourist satisfaction has a positive effect on tourist loyalty, (4) Tourist satisfaction has mediated in the relationship between service quality and tourist loyalty.

Further research can be done by looking at the limitations of this research which can be a source of ideas for future research development. The expansion of research suggested from this study is to add independent variables that affect loyalty to improve service quality. Then besides that the research indicators that can be used in this study can be added to the indicators that are relevant to the research that will be conducted.

References


