The Impact of the Quality of Tourism Services on the Tourism Product in Algeria – A Case Study

MOSBAH SMAIL [1], Dr. Ben ali Miloud [2]

[1] University of Ghardaia, Laboratory of Administrative development to Lift up the Economic Companies, Algeria. Email: mosbah.smail@univ-ghardaia.edu.dz

[2] University of Ghardaia, Laboratory of Applied Studies in Financial and Accounting Sciences, Algeria. Email: Benali.miloud@univ-ghardaia.edu.dz

Abstract:

The study aims to identify the impact of the quality of tourism services through a model consisting of the dimensions of technical quality and functional quality and their effect on the tourism product. To address the research problem, the descriptive approach was adopted, whereby a theoretical framework was presented to define the study variables. A questionnaire was distributed to a sample of 30 customers of Ben Hamouda Hotel, and the hypotheses were tested using the Statistical Package for the Social Sciences (SPSS). The study concluded that there is a statistically significant effect of the quality of tourism services, in all its dimensions, on the tourism product in Algeria.

Keywords: Tourism Services, Tourism Product, Tourism Rentability

Introduction:

Tourism services constitute one of the most important fundamental elements in the tourism industry due to the satisfaction and loyalty they provide to tourists. With the development and increase of tourists' desires, tourists no longer search only for the tourist destination, but rather for integration between the available components and the services offered at the destination. Tourism services include technical quality, which refers to the quality of what tourists or customers actually receive, and functional quality, which refers to the manner in which the service is provided. Based on the above, the following hypothesis is proposed:

What is the effect of the quality of tourism institutions' services on the promotion of the tourism product?

To answer the above problem, the following questions can be raised:

• Is there a statistically significant effect of the quality of tourism institutions' services on the tourism product in Algeria at a significance level of 5%?

• Is there a statistically significant effect of the technical quality dimension on the tourism product in Algeria at a significance level of 5%?

• Is there a statistically significant effect of the functional quality dimension on the tourism product in Algeria at a significance level of 5%?

• Is there a statistically significant effect of the tangibility dimension on the tourism product in Algeria at a significance level of 5%?

• Is there a statistically significant effect of the responsiveness dimension on the tourism product in Algeria at a significance level of 5%?

• Is there a statistically significant effect of the reliability dimension on the tourism product in Algeria at a significance level of 5%?

• Is there a statistically significant effect of the empathy dimension on the tourism product in Algeria at a significance level of 5%?

• Is there a statistically significant effect of the security dimension on the tourism product in Algeria at a significance level of 5%?

Study Hypotheses:

• There is a statistically significant effect of the quality of tourism institutions' services on the tourism product in Algeria at a significance level of 5%.

• There is a statistically significant effect of the technical quality dimension on the tourism product in Algeria at a significance level of 5%.

• There is a statistically significant effect of the functional quality dimension on the tourism product in Algeria at a significance level of 5%.

• There is a statistically significant effect of the tangibility dimension on the tourism product in Algeria at a significance level of 5%.

• There is a statistically significant effect of the responsiveness dimension on the tourism product in Algeria at a significance level of 5%.

• There is a statistically significant effect of the reliability dimension on the tourism product in Algeria at a significance level of 5%.

• There is a statistically significant effect of the empathy dimension on the tourism product in Algeria at a significance level of 5%.

• There is a statistically significant effect of the security dimension on the tourism product in Algeria at a significance level of 5%.

Importance of the Study:

The importance of this study stems from the importance of the quality of tourism institutions' services in influencing the tourism product and the extent of attracting local and foreign tourists toward it.

Operational Definitions:

Quality of tourism services: represents the difference between customers' expectations and what they actually receive in terms of service.

Technical quality: expresses the quality of what is actually received and is important in evaluating the level of service as a result of interaction with it (Mehdi, Fariz, & Meysam, 2013, p. 494).

Functional quality: refers to the process through which the service is provided to customers or tourists (Harizi & Bounouira,

2022, p. 699). Functional quality consists of the Parasuraman model, which addresses quality through five dimensions, as follows:

Tangibility: represented in the external and internal appearance of the tourism institution (Marati, 2019, p. 133).

Reliability: refers to the extent of the tourism institution's ability to fulfill its announced promises to customers, at the agreed time, and to maintain error-free records (Meziani & Achour, 2016, p. 167).

Responsiveness: this dimension includes four variables that measure the institution's concern with informing its customers of the service delivery time, the keenness of its employees to provide immediate services, their constant willingness to assist customers, and the employees' lack of preoccupation that would prevent immediate response to customers' requests (Mahmoudi, 2016, p. 344).

Empathy: this dimension refers to the extent of individual attention and care provided by the tourism institution toward its customers (Baghdad, 2022, p. 168).

Security: the security element constitutes the degree of respect for customers' privacy, ensuring data confidentiality, and the absence of any risk in the services provided that may harm the customer (Omari, 2021, p. 270).

Tourism product: represents an integrated set of tourism attraction elements, which is a mixture of natural conditions (geographical, environmental, climatic) and human, religious, archaeological, and civilizational components, in addition to tourism services and facilities such as public utilities available in the country (Rizqi, 2022, p. 47).

Study Methodology:

Through this section, the study is applied in the field, as the Statistical Package for the Social Sciences (SPSS) was used in the data processing process. This study was conducted on a sample of customers of Ben Hamouda Hotel, where 30 questionnaires were distributed to collect the necessary data.

Study Instrument:

The questionnaire was used as the main tool for collecting the necessary data to address the topic, which is divided as follows:

First axis: relates to the independent variable, the quality of tourism institutions' services, which is divided into functional quality and technical quality.

1-First dimension: Technical quality.

2- Second dimension: Functional quality, which includes the dimensions of tangibility, responsiveness, reliability, empathy, and security.

Third axis: relates to the dependent variable, the tourism product in Algeria.

2.5. Cronbach's Alpha Coefficient:

Table No. (01): Results of Cronbach's Alpha Test

Dimension	Number of Items	Reliability Value
Quality of tourism services	27	0.620
Orientation toward desert tourism	07	0.800

Source: Prepared by the researcher based on SPSS outputs.

From the above table, we note that the Cronbach's alpha values for the study axes ranged between (0.620–0.800), which are greater than 60%, indicating that the study instrument has high reliability.

3.5. Construct Validity:

Construct validity is considered one of the measures of instrument validity, as it measures the extent to which the instrument achieves the objectives it seeks to reach and shows the extent of the relationship between each study axis and the total score of the questionnaire items.

Internal validity of the technical quality dimension:

Table No. (01): Results of internal consistency for the items of the university environment axis

Items	Correlation Coefficient Value	SIG	Note
Technical quality 01	0.641	0.000	Significant – Acceptable
02	0.556	0.000	Significant – Acceptable
03	0.650	0.000	Significant – Acceptable
04	0.568	0.000	Significant – Acceptable
05	0.246	0.191	Significant – Acceptable
06	0.559	0.000	Significant – Acceptable

Source: Prepared by the researcher based on SPSS outputs.

Table No. 02 shows the values of Pearson correlation coefficients between the item and the technical quality dimension, which range overall between (0.246–0.650) and are significant at the 5% significance level. This means that the items are strongly correlated with the axis to which they belong.

Internal validity of the sub-dimensions of functional quality:

Internal validity of the tangibility dimension:

Table No. (03): Results of internal consistency for the items of the university environment axis

Items	Correlation Coefficient Value	SIG	Note
Tangibility 01	0.660	0.000	Significant – Acceptable
02	0.690	0.000	Significant – Acceptable
03	0.567	0.000	Significant – Acceptable
04	0.583	0.000	Significant – Acceptable

Source: Prepared by the researcher based on SPSS outputs.

Table No. 02 shows the values of Pearson correlation coefficients between the item and the tangibility dimension, which range overall between (0.567–0.690) and are significant at the 5% significance level. This means that the

items are strongly correlated with the axis to which they belong.

Internal validity of the responsiveness dimension:

Table No. (04): Results of internal consistency for the items of the responsiveness dimension

Axis	Items	Correlation Coefficient Value	SIG	Note
Responsiveness	05	0.933	0.000	Significant – Acceptable
	06	0.927	0.000	Significant – Acceptable
	07	0.859	0.000	Significant – Acceptable
	08	0.847	0.000	Significant – Acceptable

Source: Prepared by the researcher based on SPSS outputs.

Table No. 03 shows the values of Pearson correlation coefficients between the item and the responsiveness dimension, which range overall between (0.847–0.933) and are significant at the 5% significance level. This means that the items are strongly correlated with the axis to which they belong.

Internal validity of the reliability dimension:

Table No. (05): Results of internal consistency for the items of the reliability dimension

Axis	Items	Correlation Coefficient Value	SIG	Note
Reliability	09	0.849	0.000	Significant – Acceptable
	10	0.916	0.000	Significant – Acceptable
	11	0.851	0.000	Significant – Acceptable
	12	0.900	0.000	Significant – Acceptable

Source: Prepared by the researcher based on SPSS outputs.

Table No. 03 shows the values of Pearson correlation coefficients between the item and the reliability dimension, which range overall between (0.849–0.916) and are significant at the 5% significance level. This means that the items are strongly correlated with the axis to which they belong.

Internal validity of the empathy dimension:

Table No. (06): Results of internal consistency for the items of the empathy dimension

Axis	Items	Correlation Coefficient Value	SIG	Note
Empathy	12	0.768	0.000	Significant – Acceptable
	14	0.701	0.000	Significant – Acceptable
	15	0.737	0.000	Significant – Acceptable
	16	0.552	0.000	Significant – Acceptable

Source: Prepared by the researcher based on SPSS outputs.

Table No. 04 shows the values of Pearson correlation coefficients between the item and the empathy dimension, which range overall between (0.552–0.768) and are significant at the 5% significance level. This means that the items are strongly correlated with the axis to which they belong.

Internal validity of the security dimension:

Table No. (07): Results of internal consistency for the items of the security dimension

Axis	Items	Correlation Coefficient Value	SIG	Note
Security	17	0.819	0.000	Significant – Acceptable
	18	0.854	0.000	Significant – Acceptable
	19	0.913	0.000	Significant – Acceptable
	20	0.852	0.000	Significant – Acceptable

Source: Prepared by the researcher based on SPSS outputs.

Table No. 05 shows the values of Pearson correlation coefficients between the item and the security dimension, which range overall between (0.819–0.913) and are significant at the 5% significance level. This means that the items are strongly correlated with the axis to which they belong.

Hypothesis Testing:

Testing the main hypothesis:

• Is there a statistically significant effect of the quality of tourism institutions' services on the tourism product in Algeria at a significance level of 5%?

1- H0: There is no statistically significant effect of the quality of tourism institutions' services on the tourism product in Algeria at a significance level of 5%.

2- H1: There is a statistically significant effect of the quality of tourism institutions' services on the tourism product in Algeria at a significance level of 5%.

Table No. (09): Results of hypothesis testing

Table (09): Results of Hypothesis Testing

Significance of the Relationship Between Variables			Significance of the Effect of Coefficients Between Variables			
Overall significance of the regression model (ANOVA)	Sig.	Correlation coefficient (R)	Coefficient of determination (R²)	Regression line model coefficients	B	T
Calculated F value						
22.797	0.000	0.793	0.628	Constant (B0)	-4.041	-3.164
				B1	1.926	7.745

Source: Prepared by the researcher based on SPSS outputs.

Correlation coefficient: Its value reached 0.793, which is a positive and strong value. This means that the relationship between the

quality of tourism services and the tourism product in Algeria is strong and direct; that is, the higher the quality of tourism services, the higher the level of the tourism product in Algeria.

Significance of the relationship between the two variables: Based on the previous table, the calculated F value reached 22.797, which is greater than the tabulated value, and the probability value SIG = 0.000 associated with the F value is less than the 5% significance level. This indicates the significance of the simple linear regression representing the relationship between the quality of tourism services and the tourism product in Algeria. Accordingly, the null hypothesis "There is no statistically significant effect of the quality of tourism institutions' services on the tourism product in Algeria at a significance level of 5%" is rejected, and the alternative hypothesis "There is a statistically significant effect of the quality of tourism institutions' services on the tourism product in Algeria at a significance level of 5%" is accepted.

Interpretation of the coefficient of determination (R²) (explanatory power): The value of the coefficient of determination reached 0.628, which indicates that the quality of tourism institutions' services under study explains 62.8% of the tourism product in Algeria, indicating strong explanatory power between the two variables.

Interpretation of the regression coefficient value (degree and significance of the effect coefficient): From the previous table, the regression coefficient value for the first axis (quality of tourism institutions' services) reached B = 1.926, which has a significant effect because the probability value SIG = 0.027 is less than the 5% significance level, and the T-test value of 7.745 associated with the 5% significance level is greater than the tabulated value. The value of coefficient B1 explains that if the quality of tourism institutions' services improves by one unit, this leads to an increase in the level of the tourism product in Algeria by 1.926.

Testing the main dimension hypotheses:

Testing the first hypothesis:

• Is there a statistically significant effect of the technical quality dimension on the tourism product in Algeria at a significance level of 5%?

3- H0: There is no statistically significant effect of the technical quality dimension on the tourism product in Algeria at a significance level of 5%.

4- H1: There is a statistically significant effect of the technical quality dimension on the tourism product in Algeria at a significance level of 5%.

Table No. (10): Results of hypothesis testing

Table (10): Results of Hypothesis Testing

Significance of the Relationship Between Variables	Significance of the Effect of Coefficients Between Variables
Overall significance of the regression model (ANOVA)	**Regression line model coefficients**
Calculated F value	Sig. value
8.111	0.008

Source: Prepared by the researcher based on SPSS outputs.

Correlation Coefficient

Its value reached **0.474**, which is a positive and moderate value. This indicates that the relationship between **technical quality** and the **tourism product in Algeria** is a **moderate and positive relationship**, meaning that whenever the level of technical quality increases, the level of quality of the tourism product in Algeria increases.

Significance of the Relationship Between the Two Variables

Based on the previous table, the calculated **F value** reached **8.111**, which is greater than the tabulated value, and the associated probability value **SIG = 0.008** is less than the significance level of **5%**. This indicates the significance of the simple linear regression representing the relationship between technical quality and the tourism product in Algeria. Accordingly, we reject the null hypothesis:

"There is no statistically significant effect of technical quality on the tourism product in Algeria at a 5% significance level,"
and accept the alternative hypothesis:
"There is a statistically significant effect of technical quality on the tourism product in Algeria at a 5% significance level."

Interpretation of the Coefficient of Determination (R^2)

The value of the coefficient of determination reached **0.225**, which indicates that technical quality explains **22.5%** of the tourism product in Algeria, reflecting a **weak explanatory power** between the two variables.

Interpretation of the Regression Coefficient (Degree and Significance of the Effect)

From the previous table, the regression coefficient for the technical quality dimension reached **B = 0.484**, and it is statistically significant since the probability value **SIG = 0.008** is less than the 5% significance level, and the calculated **T value = 2.848** is greater than the tabulated value. The value of coefficient **B1** indicates that if the level of technical quality improves by one unit, this leads to an increase in the level of the tourism product in Algeria by **0.484**.

Testing the Second Hypothesis

• Is there a statistically significant effect of **functional service quality** on the tourism product in Algeria at a 5% significance level?

H0: There is no statistically significant effect of functional quality on the tourism product in Algeria at a 5% significance level.

H1: There is a statistically significant effect of functional quality on the tourism product in Algeria at a 5% significance level.

Table (11): Results of Hypothesis Testing

Overall significance of the regression model (ANOVA)	Correlation coefficient	Coefficient of determination	Regression line model coefficients
F value	Sig.	R	R^2
58.303	0.000	0.717	0.515

Source: Prepared by the researcher based on SPSS outputs.

Correlation Coefficient

Its value reached **0.515**, which is positive and moderate. This means that the relationship between **functional quality** and the **tourism product in Algeria** is a moderate and positive relationship; that is, the higher the quality of tourism services, the higher the level of quality of the tourism product in Algeria.

Significance of the Relationship Between the Variables

The calculated **F value** reached **58.303**, which is greater than the tabulated value, and the probability value **SIG = 0.000** is less than the 5% significance level. This indicates the significance of the simple linear regression representing the relationship between functional quality and the tourism product in Algeria. Accordingly, we reject the null hypothesis and accept the alternative hypothesis that there is a statistically significant effect of functional quality on the tourism product in Algeria at a 5% significance level.

Interpretation of the Coefficient of Determination (R^2)

The coefficient of determination reached **0.717**, indicating that functional quality explains **71.7%** of the tourism product in Algeria, which reflects a **strong explanatory power** between the two variables.

Interpretation of the Regression Coefficient

The regression coefficient for functional quality reached **B = 0.627**, which is statistically significant since **SIG = 0.000** is less than 5%, and **T = 7.636** is greater than the tabulated value. This means that an improvement of functional quality by one unit leads to an increase in the tourism product in Algeria by **0.627**.

Testing the Sub-Hypotheses of the Functional Quality Dimension

First Sub-Hypothesis: Tangibility

• Is there a statistically significant effect of the **tangibility dimension** on the tourism product in Algeria at a 5% significance level?

H0: There is no statistically significant effect of the tangibility dimension on the tourism product in Algeria at a 5% significance level.

H1: There is a statistically significant effect of the tangibility dimension on the tourism product in Algeria at a 5% significance level.

Table (12): Results of Hypothesis Testing

F value	Sig.	R	R²	Coefficients	B	T	Sig.
23.456	0.000	0.547	0.299	Constant B0	1.640	2.982	0.004
				Independent variable B1	0.641	4.843	0.000

Source: Prepared by the researcher based on SPSS outputs.

Correlation Coefficient

Its value reached **0.547**, which is positive and moderate, indicating a moderate and positive relationship between the tangibility dimension and the tourism product in Algeria.

Significance of the Relationship

The calculated **F value** reached **23.456**, with **SIG = 0.000**, which is less than 5%, indicating the significance of the regression model.

Coefficient of Determination

$R^2 = 0.299$, meaning that the tangibility dimension explains **29.9%** of the tourism product in Algeria.

Regression Coefficient Interpretation

The regression coefficient reached **B = 0.641**, which is statistically significant. This means that improving tangibility by one unit increases the tourism product in Algeria by **0.641**.

Second Sub-Hypothesis: Responsiveness

• Is there a statistically significant effect of the **responsiveness dimension** on the tourism product in Algeria at a 5% significance level?

H0: No statistically significant effect.

H1: A statistically significant effect exists.

Table (13): Results of Hypothesis Testing

F value	Sig.	R	R²	Coefficients	B	T	Sig.
41.268	0.000	0.655	0.429	Constant B0	1.903	5.063	0.000
				Independent variable B1	0.554	6.424	0.000

Source: Prepared by the researcher based on SPSS outputs.

Correlation Coefficient

R = 0.655, a strong positive relationship between responsiveness and the tourism product in Algeria.

Coefficient of Determination

$R^2 = 0.429$, meaning responsiveness explains **42.9%** of the tourism product.

Regression Coefficient

B = 0.554, statistically significant, meaning a one-unit increase in responsiveness raises the tourism product by **0.554**.

Third Sub-Hypothesis: Reliability

• Is there a statistically significant effect of the **reliability dimension** on the tourism product in Algeria at a 5% significance level?

Table (14): Results of Hypothesis Testing

F value	Sig.	R	R²	Coefficients	B	T	Sig.
20.752	0.000	0.274	0.523	Constant B0	2.015	4.008	0.000
				Independent variable B1	0.510	4.555	0.000

Source: Prepared by the researcher based on SPSS outputs.

Interpretation

The relationship is **weak but positive**, while reliability explains **52.3%** of the tourism product. A one-unit improvement in reliability increases the tourism product by **0.510**.

Fourth Sub-Hypothesis: Empathy

Table (15): Results of Hypothesis Testing

F value	Sig.	R	R²	Coefficients	B	T	Sig.
65.618	0.000	0.733	0.544	Constant B0	1.088	2.732	0.008
				Independent variable B1	0.784	8.101	0.000

Empathy shows a **strong positive relationship**, explaining **54.4%** of the tourism product. A one-unit increase raises the tourism product by **0.784**.

Fifth Sub-Hypothesis: Security

Table (16): Results of Hypothesis Testing

F value	Sig.	R	R²	Coefficients	B	T	Sig.
32.141	0.000	0.607	0.369	Constant B0	1.232	2.269	0.027
				Independent variable B1	0.698	5.669	0.000

Security explains **36.9%** of the tourism product, and a one-unit increase raises it by **0.698**.

Conclusion

The quality of tourism services reflects the extent to which services meet tourists' needs and expectations or exceed them. It includes **technical quality**, which represents the actual service received, and **functional quality**, which refers to how the service is delivered, including tangibility, reliability, responsiveness, security, and empathy.

Recommendations

• The necessity of continuously measuring the quality of tourism services due to evolving tourist preferences.
• Paying attention to tangibility by enhancing the external and internal appearance of tourism institutions.
• Focusing on responsiveness by continuously responding to tourists' inquiries and needs.
• Expanding the technical and functional quality model in measuring tourism services.

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