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Quality of service of accommodation establishments as a factor in tourism competitiveness

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Abstract

This study examines the quality of service provided by accommodation establishments as a factor in tourism's competitiveness. The new application of the concept of quality is determined by the customer's perception, interests, and expectations, and quality is a competitive factor that will lead to full customer satisfaction. The purpose of the study was to determine the service quality of lodging establishments based on guests' perceptions of tangible elements such as reliability, responsiveness, safety, and empathy as factors of tourism competitiveness in northern Peru. The study had a quantitative approach with a descriptive, non-experimental, cross-sectional design. A non-probabilistic convenience and intentional sampling method was chosen, in which 14 lodging establishments participated. The modified SERVPERF service quality measurement scale was used. The tangible element dimension is perceived from the establishment's facilities and the staff's appearance. Reliability with the promise of service at the established time and the predisposition to solve problems. Responsiveness is perceived in terms of speed of service and the ability to respond to customer needs. Security is perceived in terms of trust, discretion, and respect for guests' privacy, as well as in the transactions they carry out. Finally, empathy in the personalization of service and friendliness. The results show positive perceptions in the five dimensions of the SERVPERF model, concluding that the level of service quality is regular in lodging establishments based on the guest's perception. An important fact to consider is that between 20% and 30% of the respondents' answers are neutral, showing aspects to be improved, such as the use of attractive materials, personalized attention, and guest satisfaction.

Keywords: Competitiveness, Guest, Hotels, Service quality, SERVPERF.

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Transparency: The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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1. Introduction

Currently, companies are operating in a changing and very competitive environment. Therefore, they seek to increase their advantages to last in the market, such as delivering quality in their services [1] demonstrating the existence of a certain degree of concern for achieving business excellence [2]. The tourism industry drives employment, the economy, growth, and development, but it also faces challenges such as structure, processes, products and services, social change, global competition, creative resources, and technology sustainability, among others. These problems lead to a loss of competitiveness, creativity, skill, and leadership, affecting socioeconomic development or, failing that, organizational performance [3].

In this sense, the concept of quality has evolved to become a management system, which has brought good results for the industry. However, its definition is not absolute, and in general, it has an intrinsic origin [4]. It is also considered a business strategy, which involves the level of commitment of the entire human team, the established goals, and the entire continuous improvement process [5].

To estimate the quality of the service provided, the criteria established by the clients must be considered, based on the needs they present, the expectations of the service, and the attention received, among others [6]. This statement is strengthened by Oliver [7] who mentions that the perception of the service affects the user's behavior and is considered an antecedent to satisfying their needs. However, the perception will depend on the level of interest that the company has in continuously improving [8].

However, it is worth noting that current AI-based customer service shows that chatbots are becoming the most widely used technology to improve efficiency and reduce customer service costs, with the tourism, hospitality, finance, and public service industries being the most likely to use this technology for customer service [9]. Therefore, artificial intelligence has the potential to be an invaluable tool to improve the customer experience and raise the quality of customer service. However, it is important to keep in mind that technology cannot completely replace human interaction, and customer service must be designed from the user's perspective in order to ensure their satisfaction.

Furthermore, it is likely that the quality of the service is related to the inequality that exists between what the client expects to receive from the service and the perception he or she has after receiving said service [10]. Based on this, three concepts of quality can be distinguished: programmed quality, which refers to what the company intended to provide; expected quality, which is what the client expects to receive from the service; and perceived quality, which is the comparison between what you appreciated receiving from the service and your expectations of the service [11]. So, it can be stated that quality is a key aspect when providing a service [2]. Since its implementation will have a positive impact on the improvement of the business brand, the level of efficiency, and customer satisfaction [12]. Furthermore, each dimension must be applied for this purpose [13].

On the other hand, López, et al. [14] found that quality is one of the characteristics that consumers evaluate when making purchasing decisions, which conditions the strategies of companies towards the products or services that the market needs thus giving them a reputation that can be considered an intangible resource that allows them to improve their competitive position and influence their cost structure and efficiency in the allocation of resources, as well as fully develop their capabilities in coherence with the analytical structure of the Industrial Organization Theory.

That being so, for González and Aranda [15]. Quality is subject to the ethics, values, and beliefs that the organization's workers have, which means a great commitment to offering efficient services. It is essential to correctly lead your performance [16]. In addition, there are different models that function as tools to evaluate the quality of the service according to the customer's perception, such as the SERVQUAL and SERVPERF models [17].

Therefore, the need arises to answer the question: What is the level of quality of service of lodging establishments from the perception of guests as a factor of tourism competitiveness? For this reason, the study aimed to determine the quality of service of lodging establishments based on the guests' perceptions of the tangible elements of reliability, responsiveness, security, and empathy as a factor in the tourist competitiveness of the province of Sullana, Peru.

2. Literature Review

One of the most important characteristics that customers value when deciding whether to choose any service is quality [10] which is renowned as a fundamental factor to take into account within organizations [15]. Likewise, Zeithaml, et al. [17] affirm that quality could be considered an advantage for companies, resulting in a higher level of customer loyalty, service recommendations, reduction of complaints, and reduced costs, among others. So, if the customer evaluates that the service is quality, their behavior will be an indication of whether they are going to continue being part of the target, if they are going to spend less on their purchases, or if they will change companies.

In 1990, the perception of quality underwent a change due to globalization, resulting in the search for excellence in business, and this gave way to total quality, which is based on business management aimed at improving service in a more spacious vision. In addition, Reeves and Bednar [18] consider that the definition of quality has evolved based on 4 fundamental aspects, quality as excellence, value, adjustment to specifications, and strategic management [15].

For Deming [19] it is the client who defines quality based on their needs, from which analyzing the behavior, preferences, and needs of the target audience is attributable to management. The above agrees with Chiou and Droge [20] who mention that quality refers to the comments made by the client according to their perception of certain tangible and intangible characteristics of the service.

For Vergara and Quesada [21] quality refers to the degree of satisfaction that guests have when perceiving the different services that the establishment has to offer. They also define it as the outcome of the client's evaluation and communication to the business [22]. This statement is supported by the study by Henao [23] who mentions that quality arises from making

a comparison between the expectations that were had at the beginning of the service and the final perception. In short, it can be understood that quality is the standard of the characteristics that have been established to provide a service, which generates satisfaction in the company's target [24]. On the contrary, Palm, et al. [25] mention that it is common to establish a relationship between quality and standardization, but they add that in this way, innovation is left aside by focusing on everything being homogeneous.

Within this framework, if the company generates customer satisfaction, quality is technical, and when customer service is provided with quality, it is subjective [26]. Demonstrating the level of customer demand when choosing a service; therefore, there is a trend for quality [27]. Even as Aznar, et al. [1] mention there is internal and external quality within organizations with internal quality being understood as all the efficient processes carried out by the company, validated through certifications, and external quality, which basically refers to the customer's perception of the service. This can be very subjective and related to the experience that the guest has in the hotel establishment.

It should be noted that, in companies related to services, there are certain moments that are key when being in contact with the client. Therefore, the minimum error in the provision of the service can be generalized by the client [28]. Therefore, the search for information prior to purchasing a tourist product is very important, because the services present certain particularities, such as inseparability, which means that the tourist must go to the place where the service is produced. so that said service can be carried out; intangibility, since they are based on experiences and not on a physical attribute; and finally, heterogeneity which is related to variations when providing a service, in this case, tourism.

Furthermore, by providing experiences, the hotel sector becomes a source of insecurity for its target audience; given that knowing the qualities of tourist services is a complicated task, which generates uncertainty in relation to the fulfillment of said provision. In this way, quality certifications help reduce the insecurity that the client has, and companies related to this sector are increasingly trying to obtain numerous quality certificates for that purpose. However, it is the (International Organization for Standardization) ISO 9000 certification that shows a positive reaction compared to other quality certifications [27]. On the other hand, García, et al. [29] report that it has not been possible to establish an obvious difference regarding the customer's attitude towards the hotel establishment when comparing companies with tourism quality certifications and those without.

Currently, there are different models that function as tools to evaluate the quality of the service, such as the European Foundation for Quality Management (EFQM), Malcolm Baldrige, ISO 9001, among others [30]. The SERVQUAL model is the most used, Zeithaml, et al. [17] have as dimensions: Tangible elements: appearance of collaborators, physical facilities, and materials. Reliability: the company's ability to deliver the promised service. Responsiveness: willingness to help and provide speed of service. Safety: oriented to the prevention of dangers, risks, truthfulness, courtesy, trust and knowledge of collaborators. Customer empathy: understand and care about the well-being of customers, offering personalized attention.

On the other hand, the SERVPERF model, also called in English Service Performance, is a methodology that was born as a criticism of the SERVQUAL model, since it presents some discussions regarding the validity of its dimensions and its forecasting capacity, so it cannot be considered the most appropriate method to evaluate the quality of service. In this sense, the SERVPERF model uses the same items, in this case 22, and the same dimensions as the SERVQUAL model, but it is only oriented based on perceptions and excludes the client's expectations, with the aim of approaching their satisfaction [31].

3. Methodology

3.1. Population, Sample and Sampling

The study population consisted of guests from 14 lodging establishments in the province of Sullana. From this population, a representative and definitive sample was estimated by opting for simple random probability sampling [32] for an infinite population, with a sample size of 385 guests.

3.2. Methods, Techniques and Instruments

The study used a quantitative approach. It corresponds to the descriptive type of research, with a non-experimental cross-sectional design [33]. The data collection technique was a survey, and the instrument was a questionnaire. To evaluate the quality of service, the modified SERVPERF model was used, through a questionnaire of 22 questions framed in 5 dimensions, such as tangible elements, reliability, responsiveness, security, and empathy; using the Likert rating scale, taking into account that it is a method where both positive and negative information is obtained according to the guest's perception. With respect to data processing, the SPSS statistical program was used.

Likewise, the project complies with the ethical standards established in the Code of Ethics of the Universidad Nacional de Frontera. Therefore, given the nature of the research, informed consent was requested from all participants, which was placed in the first section of the instrument. In addition, some of the variables showed a non-parametric distribution, and a relationship study was subsequently carried out. First, an association rule was established between sex and the questions of the modified SERVPERF questionnaire, using the Mann-Whitney U test, and likewise, it was also associated with the reason for travel of the guests of lodging establishments in the province of Sullana, using the Kruskal-Wallis test to measure the incidence that may exist between sex, reason for travel, and quality of service.

4. Results

The survey was carried out using the SERVPERF model to measure the quality of service of the hotel establishments in the province of Sullana, considering a five-level Likert scale (Table 1).

Figure 1 illustrates the five dimensions of the SERVPERF (Service Performance) model.

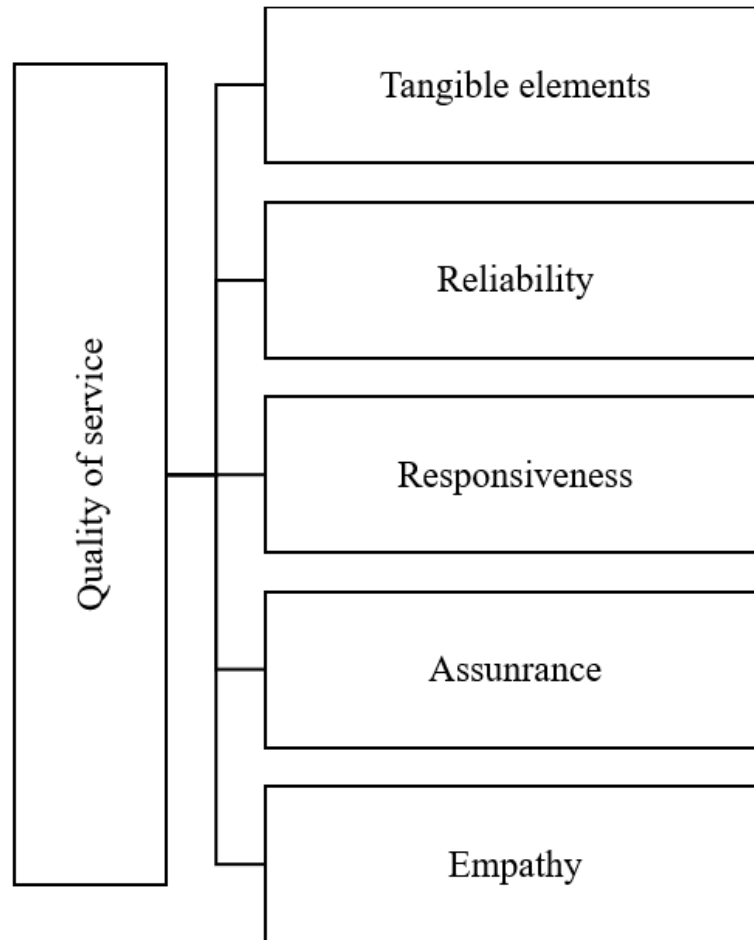


Figure 1. SERVPERF model.

Table 1. Criteria according to level of assessment on Likert scale.

Rating level	Criteria
Low level (1)	Strongly disagree
Low level (2)	Disagree
Medium level (3)	Neither agree, nor disagree
High level (4)	Agree
High level (5)	Strongly agree

It is necessary to mention that the survey was made up of both female and male sexes and that they had stayed in some of the hotel establishments in the province of Sullana mentioned (Table 2), having an age between 18 and 70 years, which they came from. from different places in Peru, highlighting Lima, Piura, Chiclayo, and Trujillo. Furthermore, the reason they traveled the most was for work and business.

Table 2. Name of the hotel establishments in the province of Sullana.

Hotels	
Coco's suite	Viajero
Crucero	JYC
La Siesta	El Churre
El silencio	Casa Mendoza
Imperial	La Plaza
Real	El parque
Hiltons	El Chira

Below are the results obtained based on our research objectives:

Table 3.
Appearance of facilities and equipment (In percentages%).

Rating scale	The hotel establishment has modern-looking equipment.	The physical facilities are visually attractive.
Strongly disagree	1	0
Disagree	2	3
Neither agree, nor disagree	14	Eleven
Agree	70	70
Strongly agree	13	16

Note: Data collected by guests of hotel establishments.

4.1. Tangible Elements

Table 3 shows that 70% of those surveyed agree that hotel establishments have attractive and modern facilities and equipment. However, 3% and 2%, respectively, disagree. Therefore, it can be noted that the majority of participants have a good perception of the appearance of the physical facilities and modern equipment in the establishments.

Table 4.
Appearance of staff and service materials (In percentages %).

Rating scale	The employees have a neat appearance.	The material elements related to the service are visually attractive.
Strongly disagree	0	1
Disagree	2	5
Neither agree, nor disagree	14	33
Agree	71	51
Strongly agree	13	10

Note: Data collected by guests of hotel establishments.

Table 4 shows that more than half of the respondents (61% and 84%) completely agree and agree that the material elements used, such as brochures, account statements, etc., and the neat appearance of the employees, respectively, are visually attractive. While 33% state that they neither agree nor disagree that the material elements are visually attractive, at the same time, 14% mention that they do not have a clear vision of the neat appearance of the employees. Therefore, it is evident that the appearance of the staff and the materials used to offer the service are attractive to customers.

Table 5.
Fulfillment of what was promised with the service (In percentages %).

Rating scale	The hotel establishment fulfills what it promises to do in a certain time.	The hotel establishment performs the service right the first time.	The hotel establishment concludes the service within the promised time.
Strongly disagree	0	0	0
Disagree	5	4	2
Neither agree, nor disagree	13	13	8
Agree	73	68	79
Strongly agree	9	15	11

Note: Data collected by guests of hotel establishments.

4.2. Reliability

Table 5 shows that more than 60% of the participants agree that hotel establishments deliver the service they promise within the established time and do it right the first time. Therefore, it can be deduced that the hotel establishment satisfies customers with the services offered because it fulfills its functions efficiently when serving them.

Table 6.
Problem resolution (In percentages %).

Rating scale	The hotel establishment shows a sincere interest in solving the client's problems.	The hotel establishment insists on maintaining error-free records.
Strongly disagree	0	0
Disagree	2	2
Neither agree, nor disagree	13	43
Agree	75	48
Strongly agree	10	7

Note: Data collected by guests of hotel establishments.

Table 6 shows that 75% of those surveyed agree that the hotel establishment shows interest in solving customer problems, likewise, 48% mention that they insist on maintaining error-free records. Furthermore, it is noteworthy that the

participants are neutral when answering this question, so it follows that they may know or have no interest in answering it, given that 43% neither agree nor disagree if the hotel insists on maintaining error-free records.

Table 7.
Accurate communication and fast service (In percentages %).

Rating scale	Employees inform customers when the service will be completed.	Employees offer fast service to their customers.
Strongly disagree	0	0
Disagree	2	1
Neither agree, nor disagree	8	12
Agree	78	75
Strongly agree	12	12

Note: Data collected by guests of hotel establishments.

4.3. Answer's Capacity

Table 7 shows that 90% of the participants affirm that employees communicate when the service will be completed in the hotel accommodation, and likewise, 87% express that employees offer quick service to their clients. Being an important factor in the responsiveness of workers to the needs of clients and is evident in the efficiency of the service within the organization.

Table 8.
Staff predisposition (In percentages %).

Rating scale	The employees are always willing.	Employees are never too busy to answer customer questions.
Strongly disagree	0	0
Disagree	2	2
Neither agree, nor disagree	8	Eleven
Agree	79	77
Strongly agree	Eleven	10

Note: Data collected by guests of hotel establishments.

Table 8 shows that more than 80% of respondents affirm that employees are always willing to respond to customers' needs and questions. Deducing that the majority of guests who have stayed in some of the hotel establishments in the province of Sullana state that the staff is willing to satisfy their wishes and is attentive to any need.

Table 9.
Trust in transactions and behavior (In percentages %).

Rating scale	As a client of the hotel establishment, they feel safe in their transactions with the organization.	The hotel establishment has employees who act with discretion and respect the privacy of the customer.	The behavior of employees conveys confidence to their customers.
Strongly disagree	0	0	0
Disagree	4	1	2
Neither agree, nor disagree	12	12	10
Agree	70	68	73
Strongly agree	14	19	15

Note: Data collected by guests of hotel establishments.

4.4. Assurance

Table 9 shows that more than 80% of respondents affirm that the employees of the hotel establishment transmit trust, act with discretion, and respect the privacy of their clients, and 84% of participants feel safe in the transactions that use the organization. In such a way, the behavior and attention of employees and the security of operations within the organization are optimal for customers.

Table 10.
Kindness and sufficient knowledge (In percentages %).

Rating scale	In the hotel establishment, employees have enough knowledge to answer your questions as a customer.	In the hotel establishment the employees are always friendly to customers.
Strongly disagree	0	0
Disagree	3	2
Neither agree, nor disagree	17	9
Agree	71	72
Strongly agree	9	17

Note: Data collected by guests of hotel establishments.

Table 10 shows that 72% of the participants agree that the employees of the hotel establishment are always friendly to customers, in turn, 71% mention that the employees have enough knowledge to answer the customers' questions. Considering that employees offer a service suitable to meet the needs and concerns of the client and highlighting the kindness with which they do so.

Table 11.
Personalized attention (In percentages %).

Rating scale	The hotel establishment gives you individualized attention.	The hotel establishment has employees who offer personalized attention.
Strongly disagree	0	0
Disagree	5	4
Neither agree, nor disagree	30	32
Agree	54	51
Strongly agree	11	13

Note: Data collected by guests of hotel establishments.

4.5. Empathy

Table 11 shows that more than 50% of those surveyed express that personalized and individualized attention is provided in the hotel establishment. However, there are 32% and 30%, respectively, who neither agree nor disagree, that is, they are neutral when answering this question. Concluding that the organization's employees care about offering personalized attention to each guest, listening, and providing solutions to their constant needs, on the contrary, there is a certain percentage who are indifferent about it, and prefer to be on the sidelines.

Table 12.
Understanding of client interests (In percentages %).

Rating scale	The hotel establishment cares about the best interests of you as a client.	Employees understand the specific needs of you as a customer.
Strongly disagree	0	0
Disagree	2	2
Neither agree, nor disagree	17	21
Agree	70	67
Strongly agree	11	10

Note: Data collected by guests of hotel establishments.

Table 12 shows that more than 70% of participants testify that hotel establishment employees understand and care about the needs and interests of customers. In other words, workers are empathetic with customers because they understand their needs and desires, offering quality service.

In addition to this, the results obtained through the application of descriptive statistics are detailed below:

Table 13.
Descriptive statistics for the tangible elements dimension.

Item	Half	Desv. deviation
The hotel establishment has modern-looking equipment.	3.94	0.632
The physical facilities of the hotel establishment are visually attractive.	3.98	0.651
The employees of the hotel establishment have a neat appearance.	3.94	0.618
In the hotel establishment, material elements related to the service (Brochures, account statements, etc.) are visually attractive.	3.63	0.764

Note: Data collected by guests of hotel establishments.

Table 13 shows that, regarding the question "The hotel establishment has modern-looking equipment" (M=3.98), the result that is closest to the response alternative "agree". It is followed by "The hotel establishment has modern-looking equipment" (M=3.94) and "The employees of the hotel establishment have a neat appearance." (M=3.94). On the contrary, the question referring to "In the hotel establishment, the material elements related to the service (brochures, account statements, etc.) are visually attractive" is less relevant. (M=3.63).

Table 14.
Descriptive statistics of the reliability dimension.

Item	Half	Desv. deviation
When the hotel establishment promises to do something in a certain time, they do it.	3.86	0.627
When the customer has a problem, the hotel establishment shows a sincere interest in solving it.	3.95	0.540
The hotel establishment performs the service right the first time.	3.95	0.661
The hotel establishment concludes the service within the promised time.	3.99	0.503
The hotel establishment insists on maintaining error-free records.	3.60	0.651

Note: Data collected by guests of hotel establishments.

In Table 14, it can be seen that in the question referring to “The hotel establishment concludes the service within the promised time.” (M=3.99), is the result that is closest to the response “okay,” followed by “When the customer has a problem, the hotel establishment shows a sincere interest in solving it.” (M=3.95), “The hotel establishment provides the service well the first time.” (M=3.95) and when the hotel establishment promises to do something in a certain time, they do it.” (M=3.86). On the contrary, the response referring to “The hotel establishment insists on maintaining error-free records” is less relevant. (M=3.60).

Table 15.
Descriptive statistics of the responsiveness dimension.

Item	Half	Desv. deviation
Within the hotel establishment, its employees inform clients when the service will be completed.	3.99	0.540
Within the hotel establishment, employees offer quick service to their customers.	3.98	0.535
Inside the hotel establishment, the employees are always ready.	3.99	0.523
Inside the hotel establishment, employees are never too busy to answer customers' questions.	3.95	0.559

Note: Data collected by guests of hotel establishments.

In Table 15, it can be seen that the questions refer to “Within the hotel establishment, its employees inform customers when the service will be completed.” and within the hotel establishment, the employees are always willing.” (M= 3.99), are the results that are closest to the answer “Okay.” It is followed by “Within the hotel establishment, employees offer quick service to their customers.” (M= 3.98) and “Within the hotel establishment, employees are never too busy to answer customers' questions.” (M= 3.95).

Table 16.
Descriptive statistics of the security dimension.

Item	Half	Desv. deviation
As a customer of the hotel establishment, they feel safe in their transactions with the organization.	3.93	0.654
The hotel establishment has employees who act with discretion and respect your privacy as a customer.	4.04	0.605
The behavior of the hotel establishment's employees conveys confidence to its customers.	4.01	0.582
Within the hotel establishment, employees have enough knowledge to answer your questions as a customer.	3.85	0.608

Note: Data collected by guests of hotel establishments.

Table 16 shows that in the question referring to “The hotel establishment has employees who act with discretion and respect your privacy as a customer.” (M=4.04), is the result that is closest to the answer “Agree.” It is followed by “The behavior of the hotel establishment's employees transmits confidence to its customers.” (4.01), “As a customer of the hotel establishment, you feel safe in your transactions with the organization.” (M= 3.93) and “Within the hotel establishment, employees have sufficient knowledge to answer your questions as a customer.” (M=3.85).

Table 17.
Descriptive statistics of the empathy dimension.

Item	Half	Desv. deviation
The hotel establishment gives you as a client individualized attention.	3.72	0.718
Inside the hotel establishment, employees are always friendly to customers.	4.05	0.573
The hotel establishment has employees who offer personalized attention to their clients.	3.72	0.731
The hotel establishment has the best interests of you as a customer at heart.	3.89	0.589
Hotel establishment employees understand the specific needs of you as a customer.	3.85	0.605

Note: Data collected by guests of hotel establishments.

Table 17 shows that in the question referring to “Within the hotel establishment, employees are always friendly to customers.” (M= 4.05), is the result that is closest to the answer “Agree.” It is followed by “The hotel establishment has the best interests of you as a customer at heart.” (M= 3.89) and “The employees of the hotel establishment understand the specific needs of you as a customer.” (M=3.85). On the contrary, the response referring to “The hotel establishment gives you as a customer individualized attention” is less relevant. and “The hotel establishment has employees who offer personalized attention to its clients.” (M=3.72).

Regarding the application of inferential statistics, it can be mentioned that an association was made between the questions of the questionnaire measuring perceptual quality and the sex variable using the Mann-Whitney U test, resulting in only the questions regarding “The hotel establishment insists on maintaining error-free records.” and “Within the hotel establishment, employees offer quick service to their customers” being significant. That is, there are differences between the questions in question and gender.

Likewise, an association was also made between the questions of the questionnaire and the reason for travel of the guests of lodging establishments in the province of Sullana using the Kruskal-Wallis test, obtaining the following data:

Table 18.
Kruskal-Wallis test to see differences depending on the reason for travel.

Dimension	Item	p	Reason	Next.
Tangible elements	The hotel establishment has modern-looking equipment.	0.039	Work and business-leisure and vacations	0.021
			Religious-leisure and vacations	0.005
	The physical facilities of the hotel establishment are visually attractive.	0.013	Religious-leisure and vacations	0.003
			Work and business-leisure and vacations	0.005
	In the hotel establishment, material elements related to the service (Brochures, account statements, etc.) are visually attractive.	0.023	Health-leisure and vacations	0.015
			Health-other	0.016
Reliability	When the hotel establishment promises to do something in a certain time, they do it.	0.047	Religious-other	0.018
			Religious-leisure and vacations	0.005
	The hotel establishment performs the service right the first time.	0.001	Religious-leisure and vacations	0.004
			Work and business-leisure and vacations	0.001
	The hotel establishment concludes the service within the promised time.	0.007	Religious-leisure and vacations	0.034
			Work and business-leisure and vacations	0.001
	The hotel establishment insists on maintaining error-free records.	0.001	Health-other	0.015
			Work and business-leisure and vacations	0.001
Security	The hotel establishment has employees who act with discretion and respect your privacy as a customer.	0.009	Work and business-leisure and vacations	0.003
			Work and business-visiting friends and relatives	0.023
	The behavior of the hotel establishment's employees conveys confidence to its customers.	0.003	Work and business-leisure and vacations	0.001
			Work and business-visiting friends and relatives	0.012
	Within the hotel establishment, employees have enough knowledge to answer your questions as a customer.	0.025	Religious-leisure and vacations	0.007
			Religious-visiting friends and relatives	0.014
Empathy	Inside the hotel establishment, employees are always friendly to customers.	0.046	Work and business-leisure and vacations	0.005
	The hotel establishment has employees who offer personalized attention to their clients.	0.027	Work and business-leisure and vacations	0.006
	The hotel establishment has the best interests of you as a customer at heart.	0.029	Religious-visiting friends and relatives	0.012
			Religious-leisure and vacations	0.006
	Hotel establishment employees understand the specific needs of you as a customer.	0.000	Religious-leisure and vacations	0.004
		0.000	Work and business-leisure and vacations	0.000

Note: Data collected by guests of hotel establishments.

In Table 18, it can be seen that, with respect to the Tangible Elements dimension, the questions referring to “The hotel establishment has modern-looking equipment.” (P=.039), “The physical facilities of the hotel establishment are visually attractive.” (P=.013) and “In the hotel establishment, the material elements related to the service (brochures, account statements, etc.) are visually attractive.” (P=.023), present significant differences between the question in question and the guest's reason for travel. Specifically, with respect to the first question, differences have been determined in the distributions of the Work and Business sample associated with Leisure and Vacations and in the Religious sample associated with Leisure and Vacations. For the second question, we have the distributions of the sample of Religious associated with Leisure and Vacations and of Work and business associated with Leisure and Vacations. Regarding the third question, we have the distributions of the sample of Health associated with Leisure and Vacations and Health associated with Others. Regarding the Reliability dimension, it can be observed that, regarding the question “When the hotel establishment promises to do something in a certain time, they do it.” (P=.047), “The hotel establishment performs the

service well the first time.” (P=.001), “The hotel establishment concludes the service within the promised time.” (P=.007) and “The hotel establishment insists on maintaining error-free records.” (P=.001). They present significant differences between the question in question and the guest's reason for travel, specifically for the first question we have the distributions of the sample of Religious associated with Others and of Religious associated with Leisure and Vacations. For the second question, the samples of Religious associated with Leisure and Vacations and Work and business associated with Leisure and Vacations. Regarding the third question, there is Religious associated with Leisure and Vacations and Work and business associated with Leisure and Vacations. Finally, regarding the fourth question, we have Health associated with Others and Work and business associated with Leisure and Vacations.

In relation to the Responsiveness dimension, all questions were non-significant. However, for the Security dimension, it has been determined that in the questions “The hotel establishment has employees who act with discretion and respect your privacy as a customer.”(P=.009), “The behavior of the hotel establishment's employees conveys confidence to their customers.” (P=.003) and “Within the hotel establishment, employees have enough knowledge to answer your questions as a customer.” (P=.025) if there are significant differences. Particularly for the first question, the distribution of the sample of Work and business associated with Leisure and Vacations and Work and business associated with Visiting friends and relatives is taken into account. For the second question, Work and business associated with Leisure and Vacation and Work and business associated with Visiting friends and relatives. As for the third question, we have Religious associated with Leisure and Vacations and Religious associated with Visiting friends and relatives.

Finally, regarding the Empathy dimension, in the questions referring to “Within the hotel establishment, employees are always friendly to customers.” (P=.046), “The hotel establishment has employees who offer personalized attention to their clients.” (P=.027), “The hotel establishment cares about the best interests of you as a customer.” (P=.029) and “The employees of the hotel establishment understand the specific needs of you as a customer.” (P=.000); There are significant differences and precisely for the first question we have the distribution of the sample Work and business associated with Leisure and Vacations, for the second we have Work and business associated with Leisure and Vacations, for the third Religious associated with Visiting friends and Relatives and Religious associated with Leisure and Vacations. Finally, regarding the fourth question, there is Religious associated with Leisure and Vacations and Work and Business associated with Leisure and Vacations.

5. Discussion

Based on the results obtained in this research, with respect to the first specific objective, which was to measure and analyze the quality of service of lodging establishments from the perception of guests according to the dimension of tangible elements for improving competitiveness in the sector, tourism of the province of Sullana; It was found that 70% of those surveyed stated that hotel establishments have modern-looking equipment and have visually attractive facilities; Regarding whether employees have a neat appearance, 71% of the participants stated, while 51% expressed that the material elements related to the service (brochures, account statements, etc.) are visually attractive to the customer. These data are related to the results of the research by [Attallah \[34\]](#) who in his research work aimed to explore the perceptions of international tourists about the quality of services provided by three of the main tourist establishments in Egypt, such as airlines, hotels and travel agencies, based on the Service -Performance model and among the results obtained, it is evident that the sample of five-star Egyptian hotels provides very good quality of service in all the attributes of the tangibility dimension, which were referring to the attractive appearance of the hotel, the environment, the cleanliness of the rooms, the furniture, the equipment, and the facilities. On the contrary, in the research by [Yilmaz \[35\]](#) it was obtained that the lowest scores are in the tangibility dimension, according to the perceptions of the respondents, this includes the appearance of the physical facilities, employees, and materials related to the service and schedules. of hotel operations.

The second objective of the study was to measure and analyze the quality of service of lodging establishments from the perception of guests according to the reliability dimension to improve competitiveness in the tourism sector of the province of Sullana. Where it was evidenced that more than 70% of the hotel establishments in Sullana fulfill what they promise to do in the agreed time and perform the service well the first time it is offered; Furthermore, 75% of the participants mention that hotel establishments show a sincere interest in solving the problems; Likewise, 48% insist on maintaining error-free records. In relation to this, guests claim to be satisfied with the reliability conveyed by the hotel's service, because it is evident that the employees are sincere, precise, punctual, and consistent when offering the service, in addition to complying with what was requested.

Regarding the third specific objective, which refers to measuring and analyzing the quality of service of lodging establishments from the perception of guests according to the responsiveness dimension, to improve competitiveness in the tourism sector of the province of Sullana? It can be inferred that 78% of guests affirm that employees inform clients when the service will be completed; while 75% express that employees offer quick service to their customers; Likewise, more than 70% of participants mention that employees are willing to respond to their clients' needs and respond to any concerns. In relation to what was obtained by [Yilmaz \[35\]](#) regarding the dimension of response capacity, it states that the respondents had very good perceptions regarding the provision of services, because the employees had the capacity and willingness to help the guests, and each time they offered fast and efficient service.

In accordance with the fourth objective of the study, which refers to measuring and analyzing the quality of service of lodging establishments from the perception of guests according to the security dimension, to improve competitiveness in the tourism sector of the province of Sullana? It was found that 70% of those surveyed feel safe in the transactions carried out by hotel establishments; 68% infer that they have employees who act with discretion and respect customer privacy; and 73% of participants affirm that the behavior of employees conveys confidence to their customers. In addition, more than

70% of guests confirm that employees are friendly and have enough knowledge to answer customer questions. Based on this, we agree with the position of Attallah [34] who indicated that tourists felt safe and protected during their stay at the hotel, likewise, they perceived that the hotel staff was polite, courteous, and had adequate skills to carry out the tasks, requested services, and were well informed to respond to queries.

The last specific objective was to measure and analyze the quality of service of lodging establishments based on the perceptions of guests according to the empathy dimension to improve competitiveness in the tourism sector of the province of Sullana. Among the results obtained, it was possible to mention that 54.7% of hotel establishments provide individualized customer service; 72.7% of hotel establishments, are always friendly to customers; 51.6% of hotel establishments have employees who offer personalized attention to their clients; 70.6% of hotel establishments have the customer's best interests at heart and 67.7% of hotel establishments understand the specific needs of the customer. On the other hand, the Al Khattab and Aldehayyat [36] results of the research found that empathy was the most important dimension when predicting the overall evaluation of service quality by hotel guests, since the perception scores were lower.

Finally, in accordance with the general objective of the study, which was to determine the quality of service of lodging establishments from the guests' perception of the tangible elements, reliability, responsiveness, security and empathy for the improvement of competitiveness in the tourism sector of the province of Sullana? Based on the results obtained, it can be inferred that in the population of lodging establishments there are positive perceptions in the five dimensions, therefore, it can be stated that the overall quality of the service is good; since the guests stated that they agreed with the 22 premises presented in the SERVPERF questionnaire. This agrees with Attallah [34] who mentions that the average scores of the respondents in all the attributes of the five dimensions of SERVPERF were higher than 4.4. In relation to the above, Izquierdo, et al. [37] mention that the attention provided by the staff must be improved, as well as the perception of the operation and organization of the services provided in the hotel service in Quevedo, Ecuador. Since, the existing quality in 2/3 star hotels is medium-low. In turn Al Khattab and Aldehayyat [36] according to customer perception, the three, four and five-star hotels in Aqaba and Petra must improve their services in all dimensions of service quality.

6. Conclusions

Specifically, in the dimension of tangible elements, it can be seen that the hotel establishments in the province of Sullana have equipment and physical facilities that are visually modern and attractive, the collaborators have a neat appearance and the material elements related to the service (brochures, statements of account, etc.) are visually attractive.

Regarding the dimension of reliability, the establishments comply with what they promise to do in a set time, and the first time they offer the service, they do it correctly. In addition, they show interest when solving a customer's problem, which leads to maintaining error-free records.

Likewise, referring to the responsiveness dimension, it can be inferred that employees communicate to customers when the service will be completed, offer quick service to their customers, and are always willing to respond to customer concerns.

Regarding the security dimension, customers state that they feel safe in their transactions with the organization. These establishments have employees who transmit trust, since they act with discretion and respect their privacy, and have sufficient knowledge to answer the questions they ask.

Referring to the last dimension of empathy, hotel establishments provide individualized and personalized attention to the client, the collaborators are always friendly, concerned, and understand the client's needs, in order to satisfy them.

Finally, based on the guests' statements, positive perceptions are evident in the five dimensions of the SERVPERF model. For this reason, we can conclude that the quality of the service of the lodging establishments in the province of Sullana is regular. However, respondents in 20% to 33% of responses have chosen to be neutral regarding whether the hotel uses attractive material elements, whether the service is personalized and individual, and whether employees understand guests' needs.

Overall, these findings provide valuable information for public policy makers, hotel entrepreneurs, hotel managers, and municipal authorities involved in the management of service quality in lodging establishments in Sullana, Piura, Peru.

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