

Article: Review

Service quality management and customer satisfaction at Sécil Marítima, Soyo Terminal**Gestão da qualidade dos serviços e satisfação dos clientes na empresa sécil marítima, terminal do Soyo**¹Miguel Paulo Mazailua Júnior  .¹ Faculty of Economics, 11 de Novembro University, Cabinda, Angola*Corresponding author: Miguel Paulo Mazailua Júnior 

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ABSTRACT

Service quality management is relevant to customer satisfaction and organizational performance. In maritime passenger transport, safety, reliability, punctuality, customer service, and comfort are particularly important. This study analyses the relationship between service quality management and customer satisfaction at SÉCIL Marítima, Soyo Terminal. A mixed-method, applied approach using a case study design was adopted. Data were collected from a convenience sample of 50 customers through SERVQUAL-based questionnaires, complemented by interviews with managers and documentary analysis. Quantitative data were analysed using descriptive statistics and qualitative data through content analysis. The findings showed that safety achieved the highest satisfaction level (95%) and the smallest gap (-0.1), while responsiveness presented the largest difference between expectations and perceptions (-1.1). Punctuality, customer service, empathy, and tangibles also showed gaps. It is concluded that perceived service quality is relevant to customer satisfaction, with safety as the main strength and responsiveness, punctuality, and customer service requiring greater attention.

Keywords: Service quality management; service quality; customer satisfaction; SERVQUAL; maritime transport.

RESUMEN

A gestão da qualidade dos serviços constitui um factor relevante para a satisfação dos clientes e o desempenho das organizações. No transporte marítimo de passageiros, aspectos como segurança, confiabilidade, pontualidade, atendimento e conforto assumem particular importância. O presente estudo analisa a relação entre a gestão da qualidade dos serviços e a satisfação dos clientes da SÉCIL Marítima, Terminal do Soyo. Adoptou-se uma abordagem mista, de natureza aplicada, recorrendo ao estudo de caso. Os dados foram recolhidos junto de uma amostra de 50 clientes, seleccionados por conveniência, mediante questionários baseados no modelo SERVQUAL, complementados por entrevistas com gestores e análise documental. Os dados quantitativos foram tratados por estatística descritiva e os qualitativos por análise de conteúdo. Os resultados evidenciaram que a segurança apresentou o maior nível de satisfação (95%) e o menor gap (-0,1), enquanto a capacidade de resposta registou a maior diferença entre expectativas e percepções (-1,1). A pontualidade, o atendimento, a empatia e os aspectos tangíveis também apresentaram lacunas. Conclui-se que a qualidade percebida constitui um elemento relevante para a satisfação dos clientes, destacando-se a segurança como principal ponto forte e a capacidade de resposta, a pontualidade e o atendimento como áreas que requerem maior atenção.

Palabras clave: Gestão da qualidade; qualidade dos serviços; satisfação dos clientes; SERVQUAL; transporte marítimo.

INTRODUCTION

In the case of SÉCIL Marítima, it is pertinent to know how customers evaluate the quality of service and to what extent expectations are close to the perceptions observed. Thus, the research question is: What is the relationship between the management of the quality of services and the satisfaction of the customers of SÉCIL Marítima, Terminal do Soyo? The general objective is to analyze the relationship between the management of the quality of services and the satisfaction of the customers of SÉCIL Marítima, Terminal do Soyo. As specific objectives, it is intended to identify the most favorably evaluated dimensions of quality, describe the level of satisfaction, compare expectations and perceptions through SERVQUAL and propose improvement measures consistent with the results.

The SERVQUAL model is the central reference of the present study for comparing expectations and perceptions in the dimensions of tangibility, reliability, responsiveness, security and empathy (2). The literature also differentiates between perceived quality and satisfaction, indicating that they are related but not equivalent constructs (3). In addition, the physical environment in which the service is provided can influence the customer's evaluation, an aspect that is especially relevant in maritime transport, in which facilities, vessels, comfort and waiting conditions are part of the experience (4).

In the transport sector, recent studies confirm that perceived quality must be analysed in a multidimensional way. In ferry transport, perceived safety and quality of service were related to passenger image, satisfaction, and loyalty (5). In public transport, the evaluation of the quality dimensions showed that reliability, responsiveness and service conditions remain relevant for satisfaction (6). In logistics services, the integration of SERVQUAL with behavioral variables also evidenced the importance of reliability and perceived performance in the choice of provider (7).

Other studies carried out with Angolan samples or services reinforce the need to interpret quality in its organizational context. The validation of a professional development scale with participants from Brazil and Angola highlighted the importance of examining the stability and validity of the measures used (8). The evaluation of the implementation of maternal and child services in Angola showed that reach, adoption, implementation and maintenance depend on concrete conditions of operation of the services (9). In a rural hospital setting, a quality improvement intervention was associated with better follow-up results, demonstrating that service organization and dedicated personnel can change the experience and continuity of care (10).

Recent literature in Angola shows that the analysis of quality and satisfaction is not limited to transport. Studies in Angolan higher education institutions have identified relevant differences in perceived quality and demonstrated the usefulness of multidimensional instruments to guide improvements (11). The cultural adaptation of a questionnaire on satisfaction with pharmaceutical services to the Angolan context also showed the importance of ensuring semantic equivalence, clarity of the items, and cultural adequacy of the instruments before interpreting the results (12). In health units, evidence on humanized care, prioritization, and access to services reinforces that

communication, trust, organization, and responsiveness are important components of the user experience(13,14,15).

The quality of services is a relevant factor in the experience of transport users, because technical and relational attributes influence the way the passenger evaluates the service received. A recent systematic review on passenger transport shows that safety, reliability, responsiveness, comfort, information and physical conditions appear recurrently in quality evaluation models (1). In the Angolan context, the evaluation of passengers at Huambo Airport showed that service, comfort, ease of use and operational aspects participate in the formation of satisfaction, reinforcing the relevance of studying the perceived quality of mobility services in the country (16).

LITERATURE REVIEW

- Service quality management

The quality management of services comprises the set of practices aimed at bringing the performance effectively offered closer to the needs, expectations and evaluation criteria of users. In services, quality depends not only on the final result, but also on the way the process is executed, the speed of the response, the confidence transmitted, the communication and the physical conditions in which the provision takes place. This characteristic is particularly important in activities with direct contact between customers and employees, in which each interaction can contribute to a positive or negative evaluation.

Studies carried out in Angolan institutions show that the perception of quality is sensitive to institutional conditions, the availability of resources and the organization of care (11,12). In health services, communication, humanization of care and access conditions also appear as relevant components of the user experience (13,15). Thus, quality management requires continuous monitoring of the attributes valued by customers, identification of service gaps and definition of improvement measures consistent with the operational reality. In the case of SÉCIL Marítima, this perspective allows for the simultaneous consideration of technical indicators, such as safety and regularity, and relational indicators, such as service, empathy and responsiveness, avoiding reducing quality to a single aspect of the operation.

- Quality of services in the maritime transport sector

In passenger transport, the quality of service results from the combination of safety, regularity, reliability, comfort, information, accessibility and interaction with employees. A recent systematic review on quality assessment in passenger transport showed that different modes of transport use multidimensional sets of attributes and that the choice of instrument should consider the particularities of the operational context (1).

In maritime passenger transport, this requirement becomes especially relevant because the experience includes not only the displacement, but also the purchase or validation of the service, the waiting, the boarding, the condition of the vessel, the information provided and the response to delays or changes. Studies on ferry services indicate that perceived safety and quality of service relate

to service image, satisfaction and loyalty of passengers (5). Other studies in river transport identify safety, reliability, comfort and responsiveness among the factors used to assess perceived quality (17).

These results show that the passenger forms his evaluation from various moments of the experience. Therefore, a technically safe operation can coexist with less favorable evaluations in punctuality, service or comfort. For SÉCIL Maritima, the multidimensional approach is appropriate because it allows it to distinguish the well-evaluated attributes from those in which the expectations of the customers are not yet fully met.

- Customer satisfaction

Customer satisfaction corresponds to an overall evaluation produced after the experience with a service and is related to the comparison between what the user expected and what he perceived during the service. Although perceived quality and satisfaction are related concepts, they should not be treated as equivalent, as quality assessment can focus on specific attributes of the service, while satisfaction represents a more comprehensive assessment of the experience (3). In the transport sector, satisfaction can result from the combination of operational performance, safety, punctuality, comfort, ease of use, service and information.

In the Angolan context, research carried out with users of Huambo Airport demonstrated the relevance of analysing concrete attributes of the passenger experience to understand their levels of satisfaction (16). In Angolan higher education institutions, comparative studies also show that users' perceptions can vary between specific dimensions of service delivery, allowing the identification of priority areas for intervention (11).

In health, evidence regarding access to and organization of services in Luanda reinforces that the user experience is conditioned by institutional and operational factors (15). Thus, satisfaction at the Soyo Terminal should be interpreted as a contextual evaluation of customers, related to perceived quality, without assuming statistical causality. This distinction is important because the present study uses descriptive statistics and, therefore, identifies evaluation patterns and differences between expectations and perceptions, but does not test causal relationships between the variables.

- SERVQUAL model and evaluation of the quality of services

SERVQUAL compares customer expectations and perceptions across five dimensions: tangibility, reliability, responsiveness, safety, and empathy (2). Tangibility refers to the visible physical elements of the service, such as facilities, equipment, and presentation; reliability is associated with the ability to provide the service consistently and as promised; responsiveness is related to availability and speed of service; safety involves trust, competence and reduced risk perception; and empathy is about attention and individualized treatment. The logic of the model consists of identifying the distance between what the customer expects and what he perceives he has received. In the present study, this difference is expressed by the gap $G = P - E$, where negative values indicate a perception lower than the expectation.

Despite its classical origin, SERVQUAL continues to be used as a diagnostic structure, especially when the items are adapted to the characteristics of the sector analyzed. The literature warns, however, that perceived quality and satisfaction should be interpreted as related but distinct constructs (3). In addition, the physical environment participates in the experience of the service, because facilities, equipment and conditions of permanence influence the evaluation of the user (4). In maritime transport, this reading is particularly useful, as it allows you to evaluate operational and relational aspects separately and to locate more precisely the dimensions in which the experience deviates from expectations.

- Recent applications of SERVQUAL in transportation

Recent applications of SERVQUAL and related models in transportation confirm the usefulness of decomposing the passenger experience into specific dimensions. In ferry services, Della and Rachmanullah used the quality perspective to identify gaps that could guide improvement priorities (18). Sourav et al. quantified quality factors in inland waterway passenger transport and highlighted attributes related to safety, reliability, comfort and operational response (17). In public road transport, the adaptation of SERVQUAL allowed us to compare expectations and perceptions and identify dimensions with greater need for improvement (19).

The same logic was used in the evaluation of university public transport, showing that the instrument can support diagnoses in different mobility contexts (20). Other recent studies expand this discussion by relating SERVQUAL dimensions with satisfaction and loyalty in maritime transport and logistics (21), as well as by examining the quality of service in rail transport (22). On coastal routes, the assessment of perceived quality has also been used to understand passenger satisfaction (23).

Studies on maritime traffic services add that perceived quality may also have an impact on the institutional image of the provider (24). Although the contexts, samples, and instruments are not identical, these studies converge in demonstrating that global assessment can hide important differences between dimensions. For the Soyo Terminal, the comparison between expectations and perceptions offers, therefore, a descriptive basis for recognizing priorities without attributing to the instrument a causal capacity that the study design does not have.

- Relationship between perceived quality and satisfaction in the Angolan context

The relationship between perceived quality and satisfaction is especially relevant in the Angolan context, where different sectors have been analysed from the perspective of quality, access, modernisation and user experience. At Huambo Airport, passenger evaluation evidenced the usefulness of observing specific attributes of the service to understand satisfaction in a national transport infrastructure (16). In higher education institutions in Angola, the application of multidimensional instruments has identified differences in perceived quality and areas for improvement (11).

The cultural adaptation of a pharmaceutical service satisfaction questionnaire for Angola also showed that instruments developed in other contexts should ensure clarity, semantic equivalence and cultural adequacy before interpreting the results (12). Other Angolan studies, in areas such as intensive care,

access to primary care, professional development, and implementation of health programs, reinforce the importance of concrete operating conditions and the validity of the measures used (13,15,8).

In banking, Sarmiento and Azevedo analysed clients of Banco de Poupança e Crédito, in Luanda, using dimensions associated with SERVQUAL to examine quality and satisfaction (25). In public services, Munzamba and Araújo found that the perception of users of the SIAC network in Luanda varies according to different components of the service (26). Together, this evidence shows that the perceived quality in Angola should be studied in a contextualized way, considering resources, processes, communication and user characteristics. Such a framework supports the descriptive application of SERVQUAL to SÉCIL Marítima and favors a prudent interpretation of the gaps found.

METHOD

The present research adopted a methodological approach compatible with the objectives of the study, seeking to analyze the relationship between the management of the quality of services and the satisfaction of the customers of SÉCIL Marítima, Terminal do Soyo. The study combined a quantitative component, based on the questionnaire applied to customers, and a qualitative component, based on interviews with managers, allowing the description of perception patterns and interpretation of areas of improvement without attributing causality to the observed relationships.

Type of research

As for the nature, the research is characterized as applied, as it seeks to produce useful knowledge for the diagnosis and improvement of the quality management of SÉCIL Marítima's services. As for the objectives, the study assumes a descriptive and analytical character, since it characterizes the perceptions of the participants, compares expectations and perceptions and interprets the patterns found, without making causal inference.

The quantitative component was oriented towards the description of customer responses and the calculation of SERVQUAL gaps. The qualitative component was used to contextualize the results through interviews with managers, allowing the identification of convergences and operational priorities associated with the dimensions evaluated.

As for the approach to the problem, a mixed approach was adopted, integrating quantitative data from the questionnaire and qualitative data obtained in the interviews. The integration occurred in the interpretative phase, comparing the patterns of the clients' responses with the emerging categories of the interviews conducted with the managers.

As for the technical procedures, the case study was used, as it allows a contextualized analysis of the reality of SÉCIL Marítima, Soyo Terminal, relating the evaluation of customers with management and operation information obtained from the managers.

Population and sample

The research population consists of customers who use SÉCIL Marítima's maritime passenger transport services on the route between Soyo and Cabinda, as well as managers involved in the administration and operationalization of the services.

The sample was composed of fifty (50) customers, selected through non-probabilistic convenience sampling, considering the availability and accessibility of users during the data collection period. To complement the quantitative information, three (11) managers were also interviewed, intentionally selected according to their participation in the management and operationalization of the services.

The option for convenience sampling was due to the conditions of access to the participants and the characteristics of the collection context. For this reason, the results are interpreted as descriptive evidence of the sample studied and not as representative estimates of all the company's customers.

Data collection techniques and tools

Data collection was carried out using different techniques, allowing the triangulation of the information obtained.

Structured questionnaires were applied to customers, adapted to the context of maritime transport based on the five dimensions of SERVQUAL: tangibility, reliability, responsiveness, safety and empathy (2). The adaptation sought to relate the items to the concrete characteristics of the passenger service.

The questionnaire was structured in five blocks corresponding to the dimensions of the SERVQUAL model: tangibility, reliability, responsiveness, safety and empathy, bringing together items of expectation and perception adapted to maritime passenger transport. The answers were recorded on a five-point Likert scale, from 1 to 5. For each dimension, the gap was calculated by the difference between perception and expectation, using the formula $G = P - E$, where P represents the client's perception and E the expectation.

Semi-structured interviews were also conducted with managers of SÉCIL Marítima, allowing to understand the quality management practices adopted by the organization and the aspects related to customer satisfaction.

Data collection procedures

The questionnaires were applied in person to customers at the Soyo Terminal, after authorization from the company's management, during the month of July 2026.

The selection of participants was based on convenience, and customers who were available at the site during the period defined for the collection were invited to participate. Before completing the questionnaires, the participants were informed about the objectives of the research and the academic nature of the participation.

The interviews were conducted individually with the organization's managers, with the consent of the participants. During the interviews, notes were taken and, later, the information was organized and transcribed for analysis.

Throughout the investigation process, the principles of voluntary participation, anonymity and confidentiality were observed. The information collected was used exclusively for academic purposes and analysed in aggregate form.

Data processing and analysis

The quantitative data were organized and analyzed using IBM SPSS Statistics. Descriptive statistical procedures were used, namely frequencies, percentages, averages and tables.

For the analysis of the SERVQUAL results, the averages of expectations and perceptions in each dimension were calculated, and the gap was subsequently determined through the difference between perception and expectation. Negative values indicated that the perception of customers was below expectations.

The qualitative data from the interviews were analyzed through thematic content analysis. The process included the organization of the responses, the identification of units of meaning and their grouping into categories related to quality management and customer satisfaction.

The integration of quantitative and qualitative results was performed in the final interpretation. As the quantitative analysis was essentially descriptive, the results allow us to identify patterns, levels of satisfaction and differences between expectations and perceptions, but do not demonstrate causality or statistically significant influence between service quality and satisfaction.

Justification for the methodology

The use of the case study is justified by the need to understand the quality of service in a specific organizational and operational context. The combination of the SERVQUAL questionnaire with interviews allowed us to simultaneously observe the perception of customers and the perspective of management, strengthening the interpretation of the areas of greater approximation or distance between expectations and perceptions.

Limitations of the research

The main limitations of the research relate to the size of the sample, the use of non-probability convenience sampling and the fact that the study focuses on a single shipping company, all of which limit the generalisation of the results to other organisations and contexts.

This limitation is compatible with the contextual nature of the case study. The results provide useful evidence to understand the specific reality of SÉCIL Marítima, but its transfer to other organizations or routes should be carried out with caution.

RESULTS

This section presents the results obtained from the questionnaires applied to 50 customers of SÉCIL Marítima, Terminal do Soyo/Cabinda and the interviews carried out with the company's managers. The analysis seeks to characterize the perception of customers about the quality of the services provided and to identify the aspects that are related to their satisfaction, considering the dimensions evaluated by the SERVQUAL model.

For the presentation of the quantitative results, the responses of the 50 clients were considered, using descriptive statistics, namely frequencies, percentages and averages. In the evaluation of expectations and perceptions, a five-point Likert scale was used, in which 1 corresponded to "strongly

disagree" and 5 to "strongly agree". The SERVQUAL gap was obtained by the difference between the mean perception and the mean expectation (Gap = Perception – Expectation). Thus, negative values indicate that the perception of customers was below their expectations.

General satisfaction indicators

Table 1. SÉCIL Marítima's customer satisfaction indicators

Indicator	Percentage of satisfaction
Security	95%
Punctuality	60%
Service	65%
Comfort	68%

Source: Prepared by the authors, 2026.

To calculate the percentage of satisfaction presented in Table 1, the positive options of the scale used in the questionnaire were considered as satisfaction responses, corresponding to levels 4 ("satisfied") and 5 ("very satisfied"). The percentage presented corresponds, therefore, to the proportion of customers who selected one of these two categories in each indicator evaluated.

The results show that safety was the indicator with the highest level of satisfaction, reaching 95%. This result reveals a favorable perception of customers regarding the safety of the trips made by SÉCIL Marítima.

On the other hand, punctuality presented 60% satisfaction, while service registered 65% and comfort 68%. These results reveal differences in the evaluation of the attributes of the service, with punctuality and service being the indicators with the lowest percentages of satisfaction among those considered.

The results suggest, therefore, that safety is an aspect particularly well evaluated by customers, while punctuality, service and comfort present greater margins for improvement.

Expectations versus perceptions: application of SERVQUAL

Table 2. Comparison between customer expectations and perceptions according to SERVQUAL dimensions

SERVQUAL Dimension	Average expectation	Average perception	Gap
Reliability	4,5	4,0	-0,5
Responsiveness	4,3	3,2	-1,1
Security	4,6	4,5	-0,1
Empathy	4,2	3,5	-0,7
Tangibility	4,4	3,7	-0,7

Source: Prepared by the authors, 2026.

The means presented in Table 2 were calculated based on the answers obtained on the five-point Likert scale, used to measure the expectations and perceptions of customers in relation to the five

dimensions of SERVQUAL. The gap was calculated by the difference between the average perception and the average expectation, using the formula:

Gap = Average perception – Average expectation.

Thus, negative values represent situations in which the perception of the service was below the customer's expectations, while values close to zero indicate greater proximity between what was expected and what was perceived.

The biggest difference was observed in the responsiveness dimension, with a gap of -1.1, followed by the empathy and tangibility dimensions, both with a gap of -0.7. Reliability had a gap of -0.5, while security had the smallest gap, of -0.1.

The data indicate, therefore, that the perception of customers was below expectations in all dimensions evaluated. However, the difference was smaller in the safety dimension, revealing greater proximity between expectations and perceptions in this attribute.

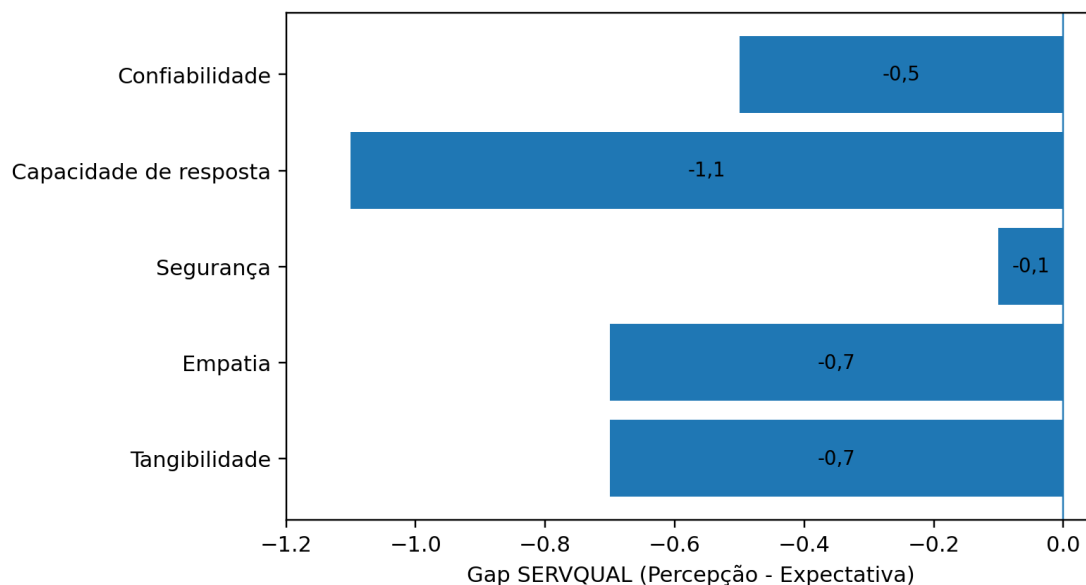


Figure 1. Gaps between expectations and perceptions according to the dimensions of SERVQUAL

Source: Prepared by the authors, based on the results of Table 2, 2026.

Satisfaction by age group

For the purposes of analysis, the participants were grouped into three age groups: young people (18–29 years), adults (30–59 years) and elderly (60 years or older).

Table 3. Distribution of customer satisfaction by age group

Age group	Number of participants	% of satisfied	Main points mentioned
Youth (18–29 years)	20	60%	Bureaucracy and comfort
Adults (30–59 years)	20	65%	Delays in service and delays

Age group	Number of participants	% of satisfied	Main points mentioned
Seniors (60 years and older)	10	80%	Security and compliance with schedules

Source: Prepared by the authors, 2026.

The results indicate differences in satisfaction levels between age groups. Among young people, 60% of the participants expressed satisfaction, with the main observations related to bureaucracy and comfort. In the group of adults, 65% presented satisfaction responses, highlighting references to delays in care and delays. Among the elderly, the highest percentage of satisfaction was verified, corresponding to 80%, although difficulties related to meeting the schedules were also pointed out.

It is important to clarify that references to the need for digital solutions were considered only when mentioned by the participants in the item/question of the questionnaire related to modernization and ease of access to services. Thus, this question is not presented as a general conclusion about the company, but as a perception expressed by the participants.

Managers' perceptions

The interviews carried out with the managers allowed us to complement the data obtained from the clients. The content analysis of the interviews made it possible to organize the information into categories related to the main aspects of service quality management.

Table 4. Emerging categories from the interviews with managers

Category	Summary of evidence presented by managers
Operational safety	Recognition of safety as a priority in the provision of the service and as an aspect associated with passenger confidence.
Punctuality and operation	Reference to the need to improve compliance with timetables and the organization of operational procedures.
Administrative proceedings	Identification of the need to simplify and modernize procedures related to customer service.
Maintenance	Recognition of the importance of preventive maintenance of vessels to ensure the continuity and quality of service.
Employee training	Need to reinforce the training of employees, especially in the areas of customer service and relationship.

Source: Prepared by the authors, based on the interviews conducted, 2026.

The analysis of the interviews shows that managers recognize operational safety as one of the main aspects of service delivery. At the same time, concerns were identified related to compliance with

schedules, the organization of administrative processes, the preventive maintenance of vessels and the continuous training of employees.

The qualitative data thus converge with part of the results obtained through the questionnaires, particularly with regard to punctuality, service and the need to improve the service delivery processes.

DISCUSSION

The results obtained allow us to discuss the quality of the services of SÉCIL Marítima – Terminal do Soyo/Cabinda from the expectations and perceptions expressed by the customers. In general, there was a more favorable evaluation of safety, while responsiveness, punctuality, service and some aspects related to comfort showed greater need for improvement. Considering that the analysis performed was predominantly descriptive, the results are interpreted as evidence of the participants' perception, not allowing to establish, by themselves, a causal or statistically significant relationship between quality of services and satisfaction.

Safety as a better evaluated aspect

Security had the highest level of satisfaction, with 95%, and also registered the smallest gap between expectation and perception (-0.1). This result indicates a high proximity between what customers expected and what they perceived regarding travel safety.

This finding is consistent with the literature on quality in transport services, in which safety is a particularly relevant attribute for passenger confidence and experience. The proximity between expectation and perception observed in this study suggests that, in this domain, the provision of the service is relatively aligned with what customers expect. Recent studies in maritime and airport transport reinforce the centrality of safety for the evaluation of passengers (1,16,5).

This result is also close to the evidence presented by recent studies on perceived quality in transport services, which highlight safety and operational reliability among the attributes most valued by users. In the context of SÉCIL Marítima, safety can therefore be considered one of the main positive points identified in the perception of customers.

Punctuality and reliability of service

Punctuality presented a level of satisfaction of 60%, lower than that observed in safety. In the evaluation by SERVQUAL, the reliability dimension registered a gap of -0.5, indicating that the perception of customers was below their expectations.

This result suggests that compliance with the schedules is one of the aspects that deserve greater attention in the provision of the service. Reliability, in the context of transport, is directly related to the ability to fulfill what was promised to the customer, including schedules, regularity and consistency of service.

The evidence obtained is compatible with recent empirical studies carried out in the transport sector, in which punctuality and reliability appear associated with the evaluation of the passenger

experience. Thus, although the data of this research do not allow us to affirm a causal relationship with satisfaction, they show that compliance with schedules represents a relevant element of the perception of SÉCIL Marítima's customers. Similar results are observed in studies of ferry, public transportation, and logistics services, in which punctuality, reliability, and regularity influence the evaluation of the experience (5,6,7).

Responsiveness and service

The dimension that presented the greatest difference between expectations and perceptions was responsiveness, with a gap of -1.1. The service, considered as a general indicator, also presented a relatively low level of satisfaction, of 65%.

These results indicate that customers expected greater speed and efficiency in the provision of service. The observed difference in responsiveness is particularly important because it represents the largest gap identified among the five dimensions assessed by SERVQUAL.

The literature on quality of services has also highlighted responsiveness as an important component of the customer experience. More recent studies that have applied SERVQUAL in different transportation and service services reinforce that speed, employee availability and efficient resolution of requests are relevant elements in the evaluation of perceived quality. Recent literature confirms that speed, availability and efficient response to requests are relevant components of perceived quality (6,7,18).

In the present study, the interviews conducted with the managers also pointed to the need to improve administrative procedures and continuous training of employees. This convergence between customer and manager data reinforces the relevance of considering customer service as a priority area for improvement.

Empathy and relationship with customers

The empathy dimension presented a gap of -0.7, revealing that the customers' perception was below expectations regarding individualized attention and relationships during the provision of the service.

This result is consistent with the distinction between perceived quality and satisfaction and with the importance of the way the service is delivered to the user (3). The Angolan evidence also highlights communication, trust, and individualized attention as relevant components of the user experience (12,13,14).

The evidence obtained suggests that, although travel safety is well evaluated, there is room to improve the relational component of the service. Communication with passengers, the availability of staff and attention to the specific needs of users can be important elements in improving the overall service experience.

Tangible aspects and comfort

The tangible aspects showed a gap of -0.7, while the general comfort indicator registered 68% satisfaction. These results indicate that the physical conditions perceived by the clients did not fully correspond to their expectations.

Tangible aspects include facilities, equipment, appearance of vessels and physical conditions of the service delivery environment. The literature on the service environment demonstrates that physical conditions can influence customer perceptions and behaviors (4). Recent studies in transportation also maintain comfort and tangible aspects among the relevant attributes of quality (1,18,17).

In the case analyzed, the participants' references to maintenance and comfort, together with the information obtained in the interviews, indicate that the improvement of physical conditions may constitute a relevant area for the improvement of perceived quality.

Differences in perception according to age group

The results also revealed differences in satisfaction levels between the age groups considered. Young people were 60% satisfied, adults 65% and the elderly 80%.

The observed differences suggest that different customer segments may attribute different importance to service attributes. Young people showed greater attention to aspects related to bureaucracy and comfort, while adults highlighted above all slowness and delays. Among the elderly, safety appeared as a particularly valued aspect.

These results are close to the service marketing literature, which recognizes that expectations and perceptions can vary according to the characteristics of different customer segments. However, given the descriptive nature of the analysis, these differences should be interpreted as trends observed in the sample, not allowing us to conclude that age statistically determines the level of satisfaction. Studies conducted in Angola also show that characteristics of users and the institutional context can produce different evaluations of quality and satisfaction (16,11,12).

Comparison with previous studies

The results found converge with previous studies on service quality and customer satisfaction. The greater proximity between expectations and perceptions in the safety dimension and the greater gap in response capacity are compatible with investigations that identify safety, reliability and speed of service as relevant dimensions in the evaluation of transport services.

In the Angolan context, studies in airports, public services, health, education and organizations show that trust, responsiveness, communication and efficiency are relevant components of service evaluation (16,11,12).

On the other hand, the results of this research must be interpreted considering the specificities of maritime passenger transport between Soyo and Cabinda. Safety is of particular importance in this context, while punctuality, responsiveness and comfort are presented as dimensions in which the difference between expectations and perceptions was more evident. The use of context-adapted instruments should be accompanied by sufficient documentation on validity and application, as shown by recent studies conducted in Angola (11,12,8).

Implications of the results for management

The results allow us to identify some implications for the management of SÉCIL Marítima. The first is related to the need to preserve the observed safety performance, maintaining the procedures that contribute to passenger confidence.

The second concerns the dimensions that presented the greatest gaps, especially responsiveness, empathy and tangible aspects. In this context, the results point to the relevance of improving service procedures, strengthening employee training, improving communication with passengers and systematically monitoring compliance with schedules.

These are implications arising from the interpretation of the results, not directly observed results. Their transformation into concrete intervention measures should be defined by the company in accordance with its operational, financial and institutional conditions.

CONCLUSIONS

The objective of this study was to analyze the relationship between the management of the quality of services and the satisfaction of the customers of SÉCIL Marítima, Terminal do Soyo. Based on the data collected from 50 customers and the interviews conducted with three managers, it was possible to identify the main aspects related to the perception of quality and user satisfaction.

The results showed that safety is the main strength, with 95% of satisfaction and the smallest gap of SERVQUAL (-0.1). On the other hand, responsiveness presented the largest difference between expectations and perceptions (-1.1), with opportunities for improvement in punctuality, service, empathy and tangible aspects. The interviews reinforced the need to pay attention to compliance with schedules, the organization of processes, maintenance and training of employees.

Thus, the results indicate a descriptive relationship between the perceived quality of services and customer satisfaction. However, as this is a predominantly descriptive analysis, it is not possible to affirm causality or statistically significant influence between the variables.

From a practical point of view, it is recommended to preserve the levels of safety and improve the dimensions that presented the greatest gaps, especially the capacity to respond, punctuality and service.

The study contributes to the knowledge about the quality of services in maritime passenger transport in Angola, particularly on the Soyo-Cabinda connection. The main limitations are related to the sample of 50 clients, selected by convenience, and to the study of a single organization, restricting the generalization of the results.

For future investigations, it is recommended to carry out studies with larger samples, involving other companies and modes of transport, as well as the use of inferential techniques to deepen the relationship between quality of services and customer satisfaction.

BIBLIOGRAPHIC REFERENCES

1. Mikuličić JŽ, Kolanović I, Jugović A, Brnos D. Evaluation of service quality in passenger transport with a focus on liner maritime passenger transport—A systematic review. *Sustainability*. 2024; 16(3):1125. <https://doi.org/10.3390/su16031125>.
2. Parasuraman A, Zeithaml VA, Berry LL. SERVQUAL: a multiple-item scale for measuring consumer perceptions of service quality. *J Retailing*. 1988; 64(1):12-40. <https://zenodo.org/records/14579730>.
3. Cronin JJ Jr, Taylor SA. Measuring service quality: a reexamination and extension. *J Mark*. 1992; 56(3):55-68. <https://doi.org/10.1177/002224299205600304>.
4. Bitner MJ. Servicescapes: the impact of physical surroundings on customers and employees. *J Mark*. 1992; 56(2):57-71. <https://doi.org/10.1177/002224299205600205>.
5. Hanafiah MH, Asyraf MA. Effects of post-pandemic perceived safety and security and service quality on ferry service's image, satisfaction, and loyalty. *Anatolia*. 2023; 34(2):280-284. <https://doi.org/10.1080/13032917.2022.2059532>.
6. Chuenyindee T, Ong AKS, Ramos JP, Prasetyo YT, Nadlifatin R, Kurata YB, et al. Public utility vehicle service quality and customer satisfaction in the Philippines during the COVID-19 pandemic. *Utilities Policy*. 2022;75:101336. <https://doi.org/10.1016/j.jup.2022.101336>.
7. German JD, Redi AANP, Prasetyo YT, Persada SF, Ong AKS, Young MN, et al. Choosing a package carrier during COVID-19 pandemic: an integration of pro-environmental planned behavior theory and service quality (SERVQUAL). *J Clean Prod*. 2022;346:131123. <https://doi.org/10.1016/j.jclepro.2022.131123>.
8. Mourão L, Tavares SM, Sandall H. Professional development short scale: measurement invariance, stability, and validity in Brazil and Angola. *Front Psychol*. 2022;13:841768. <https://doi.org/10.3389/fpsyg.2022.841768>.
9. Aoki A, Mochida K, Kuramata M, Sadamori T, Bhandari AKC, Freitas HR, et al. The RE-AIM framework-based evaluation of the implementation of the Maternal and Child Health Handbook program in Angola: a mixed methods study. *BMC Health Serv Res*. 2022;22:1071. <https://doi.org/10.1186/s12913-022-08454-9>.
10. Pietravalle A, Baraldi A, Scilipoti M, Cavallin F, Lonardi M, Tshikamb IM, et al. Influence of a quality improvement intervention on rehabilitation outcomes of children (6-24 months) with acute malnutrition: a retrospective study in rural Angola. *BMC Pediatr*. 2022;22:532. <https://doi.org/10.1186/s12887-022-03585-8>.
11. Rolo A, Saraiva M, Leandro G, Nogueiro T, Alves R. A comparative study of service quality in Portuguese and Angolan higher education institutions. In: Reis J, et al., editors. *Driving Quality Management and Sustainability in VUCA Environments*. Cham: Springer; 2024. p.199-208. https://doi.org/10.1007/978-3-031-52723-4_16.
12. Chimbuco BN, Pita JR, Martinez EZ, dos Santos CB, Ekundi-Valentim E. Cultural adaptation of the pharmacy services questionnaire (PSQ) to the context of Angola. *BMC Prim Care*. 2025;26:213. <https://doi.org/10.1186/s12875-025-02912-z>.
13. Sili EM, Nascimento ERP, Malfussi LBH, Hermida PMV, Souza AIJ, Lazzari DD, et al. Humanized care in the Intensive Care Unit: discourse of Angolan nursing professionals. *Rev Bras Enferm*. 2023; 76(2):e20220474. <https://doi.org/10.1590/0034-7167-2022-0474>.

14. Pinho M, Borges AP. Healthcare professionals' attitudes concerning prioritisation decisions: a quali-quantitative analysis in Angola. *Glob Bus Econ Rev.* 2021; 24(2):128-146. <https://doi.org/10.1504/GBER.2021.113120>.
15. de Carvalho Maquengo AS, Bastos AM, Santana MS. Factors influencing access to primary health care in Luanda, Angola. *BMC Health Serv Res.* 2025;25:250. <https://doi.org/10.1186/s12913-024-12120-7>.
16. Relógio AT, Tavares FO. An evaluation of passenger satisfaction among users of Huambo Airport in Angola. *Urban Sci.* 2023; 7(2):57. <https://doi.org/10.3390/urbansci7020057>.
17. Sourav MMI, Abeer AA, Bhuiyan AH. Quantifications of service quality factors using the relative importance index method for passenger ferry service in Bangladesh. *Discov Civ Eng.* 2024;1:7. <https://doi.org/10.1007/s44290-024-00008-8>.
18. Della RH, Rachmanullah AF. Passenger satisfaction perspective on ferry service quality: a case study of Merak-Bakauheni Ferry Port. *Cantilever.* 2021; 10(1). <https://doi.org/10.35139/cantilever.v10i1.80>.
19. Menezes LJR, Silva DWP, Nascimento IR, Lucena BRD, Martins HS. Assessment of the quality of public road transport services using the adapted SERVQUAL method. *Navus.* 2022;12:1-12. <https://doi.org/10.22279/navus.2022.v12.p01-12.1691>.
20. Lima PRF, Ramalho LA, Santos IRD, Oliveira TP, Lima Júnior GS. Evaluation of the quality of the university public transport service in a city in Ceará using the SERVQUAL tool. *Braz J Prod Eng.* 2025; 11(2). <https://doi.org/10.47456/bjpe.v11i2.48055>.
21. Tjendana Y, Pranitasari D. Determinants of SERVQUAL dimensions on customer satisfaction and loyalty in maritime transportation and logistics services. *J Ecoment Glob.* 2024; 9(3):227-240. <https://doi.org/10.36982/jeg.v9i3.5179>.
22. Yasin MY, Abayneh M. The effect of service quality on customer satisfaction in railway transport service in Ethio-Djibouti. *Glob J Bus Econ Manag Curr Issues.* 2023; 13(2):161-176. <https://doi.org/10.18844/gjbem.v13i2.8096>.
23. Sitzimis I. Service quality and passenger satisfaction on the coastal routes of Southwest Crete. *Trans Marit Sci.* 2024; 13(2). <https://doi.org/10.7225/toms.v13.n02.014>.
24. Özdemir AD, Kuleyin B. Effects of perceived service quality of vessel traffic services on the corporate image: a study on the Turkish Straits. *Dokuz Eylül Univ Marit Fac J.* 2023; 15(2):142-165. <https://doi.org/10.18613/deudfd.1028857>.
25. Sarmento EM, Azevedo SC. The quality of service and customer satisfaction: a study of the customers of Banco de Poupança e Crédito - Luanda (Angola). Lisbon: ISEG/CEsA; 2023. <http://hdl.handle.net/10400.5/27742>.
26. Munzamba PA, Araújo JF. The quality in the provision of public services in Angola: the perception of users of the SIAC network in Luanda. *Perspectives J Polit Sci.* 2021;24:41-55. <https://doi.org/10.21814/perspectivas.3354>.

ETHICAL CONSIDERATIONS

Data collection was carried out after authorization from the management of SÉCIL Marítima. Before completing the questionnaire and conducting the interviews, the participants were informed about the objectives of the study, the voluntary nature of participation and the academic use of the information, and informed consent was obtained. Anonymity and confidentiality of the data were

ensured. An opinion or code of approval of the ethics committee was not located in the available research materials; For this reason, no formal ethical approval is declared without documentary support.

STATEMENT ON THE USE OF ARTIFICIAL INTELLIGENCE (AI)

The authors state that the generative artificial intelligence tool ChatGPT was used exclusively for the translation into English and the linguistic revision of the manuscript. The tool did not contribute to the study design, the design of the research, the data collection, the statistical analysis, the interpretation of the results or the formulation of the conclusions. The authors assume full responsibility for the originality, accuracy, integrity, and scientific validity of the content presented in this manuscript.

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AUTHOR CONTRIBUTION

Miguel Paulo Mazailua Júnior: conceptualization, methodology, research, data curation, formal analysis, use of software, visualization, project administration, writing of the original version, revision and editing of the manuscript.