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An Evaluation of Airport Services Quality: A Case Study of Berniq Airport in Benghazi, Libya

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تقييم جودة خدمات المطارات: دراسة حالة مطار البرنيق في بنغازي، ليبيا

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Abstract:
This study was conducted to investigate passenger satisfaction with the airport services provided at Berniq Airlines in Libya. Utilizing a quantitative approach, the research collected data through a structured questionnaire administered to 106 passengers. The analysis focused on key service dimensions such as check-in process, security screening, luggage handling, waiting areas, cleanliness, staff support, and food services. To analyze the data, statistical tools such as the Wilcoxon and Mann-Whitney U tests were employed. These tests were used to assess overall satisfaction levels and to identify any statistically significant differences based on demographic variables like gender and age. The results revealed a generally high level of passenger satisfaction, Furthermore, significant statistical variances were noticed across different demographic groups. The internal consistency and reliability of the survey instrument were confirmed through Cronbach's alpha analysis, with scores ranging from 0.73 to 0.88. Based on the findings, several recommendations were proposed to enhance service quality. These include implementing targeted improvements in underperforming areas and the adoption of continuous quality monitoring practices. The study highlights the importance of passenger-centered service strategies in strengthening airport performance and reputation.

Keywords: Passenger Satisfaction, Check-In Process, Security Screening, Luggage Handling, Airport Services.

الملخص
تهدف هذه الدراسة إلى قياس رضا المسافرين عن الخدمات المقدمة في مطار شركة البرنيق للطيران في ليبيا. اعتمدت الدراسة على المنهج الكمي، حيث تم جمع البيانات من خلال استبيان مُنظم وُزّع على 106 مسافرين. وركز التحليل على أبعاد رئيسية مثل إجراءات تسجيل الدخول، الفحص الأمني، نقل الأمتعة، مناطق الانتظار، النظافة العامة، دعم الموظفين، وخدمات الطعام والشراب. قد استُخدمت أدوات إحصائية متقدمة، مثل اختباري "ويلكوكسون" و"مان-ويتني يو"، لقياس مستوى الرضا العام وتحديد ما إذا كانت هناك فروق ذات دلالة إحصائية تعزى إلى متغيرات ديموغرافية مثل الجنس والفئات العمرية. أظهرت النتائج وجود مستوى عام مرتفع من الرضا بين المسافرين، مع وجود فروقات معنوية إحصائيًا بين الفئات الديموغرافية. كما أكدت نتائج التحليل الداخلي (كرونباخ ألفا) موثوقية أداة القياس، حيث تراوحت القيم بين 0.73 و0.88 لأداة الاستبيان، مما يعزز مصداقية النتائج. وبناءً على النتائج، تم اقتراح عدد من التوصيات لتحسين جودة الخدمات، مثل تحسين الجوانب ذات الأداء الأقل، وتطبيق آليات متابعة دورية لقياس الجودة. وتبرز الدراسة أهمية تبني استراتيجيات تركز على المسافر لتعزيز أداء المطار وسمعته.

الكلمات المفتاحية: رضا المسافرين، تسجيل الدخول، الفحص الأمني، نقل الأمتعة، خدمات المطار.

Introduction

Passenger satisfaction is considered a key indicator of airport service quality, directly influencing customer loyalty and the competitive image of airports. Recent studies have emphasized that service quality attributes, such as staff behavior, cleanliness, and waiting time, play a critical role in shaping passenger perceptions. Usman et al. (2023) highlight that "service orientation and airport service quality significantly impact passenger satisfaction and airport image." They assert that prioritizing passenger needs and providing high-quality services are essential strategies for airport operators aiming to strengthen satisfaction and improve reputation [1]. In the context of Libyan airports, there is a noticeable gap in empirical research assessing passenger satisfaction and service quality. Given the unique challenges and opportunities within the region, this study aims to evaluate passenger satisfaction at a local airport in Libya. By understanding travelers' perceptions and experiences, the research seeks to provide insights that could inform service improvements and enhance the overall travel experience in the region [1].

Furthermore, another study by Yilmaz (2021) stresses that "any failure in the quality of airport services may reduce passengers' willingness to recommend the airport to others," underscoring the importance of maintaining consistently high standards across all service elements [2]. Mtafya and Mutalemwa (2024) [3], and Nanakishor and Yogamala (2021) [4], emphasize passenger satisfaction as a central measure of airport service effectiveness. Mtafya and Mutalemwa's study, based at Julius Nyerere International Airport, highlights the influence of pre-flight, in-flight, and post-flight services on satisfaction, recommending technological and process-oriented improvements aligned with ISO 9001 principles. Similarly, Nanakishor and Yogamala demonstrate the relevance of SERVPERF dimensions, reliability, assurance, tangibility, empathy, and responsiveness, in shaping service perceptions at Trivandrum Airport.

Cholkongka, (2020) [5] contributes by developing a multidimensional model for airport service quality, validated through structural equation modeling. Her approach uniquely combines expert insights and passenger feedback, offering a practical tool for evaluating and managing service quality. This model, like the earlier studies, reinforces the importance of integrating quality management systems in airport operations for continuous improvement and competitive advantage. In parallel, multiple papers focus on the role and impact of ISO 9001 certification. Rusjan (2010) [6] adopts the Balanced Scorecard (BSC) framework to categorize ISO 9001 benefits across customer, internal process, learning and growth, and financial dimensions. His findings align with those of Psomas et al. (2012) [7], who report that while ISO 9001 significantly enhances operational and service performance in SMEs, its impact on financial outcomes is more indirect. Both studies highlight the need for internal commitment and strategic alignment for successful implementation.

Sampaio et al. (2008) [8] take a more critical stance by reviewing over 100 studies on ISO 9001. They observe that although internal motivation for certification often results in more comprehensive improvements, the benefits tend to decline over time. They also question the long-term financial impact and call for more sector-specific and strategic analysis. This nuanced perspective adds depth to the understanding of ISO 9001's real-world applications and challenges. Moreover, Pabedinskaite and Akstinaite (2014) [9] offer a unique angle by evaluating airport services from the viewpoint of airline stakeholders. Their use of the SERVQUAL model reveals that reliability, responsiveness, and assurance are the most valued dimensions, contrasting slightly with studies centered on passenger perceptions. This insight is valuable for balancing stakeholder expectations in service design.

Across all studies, commonalities include the critical role of management commitment, the need for continuous improvement, and the application of structured evaluation frameworks such as SERVQUAL, SERVPERF, and BSC. However, there are also clear gaps, such as limited research on newer ISO 9001 versions, contextual variations across regions and airport sizes, and a lack of longitudinal data to measure long-term effects of certification and service enhancements.

Material and methods

This study adopts a descriptive-analytical design aimed at evaluating the implementation of quality standards in airports operated by Berniq Airlines in Libya. This design was chosen because it enables a comprehensive understanding of the current situation by collecting data directly from passengers and analyzing it to identify areas for improvement. A quantitative research approach was utilized, focusing on the collection and statistical analysis of numerical data to reach objective conclusions. A structured questionnaire was used as the primary tool for data collection. It was developed to evaluate service quality through five key dimensions:

1. Tangibles: The physical facilities, equipment, and appearance of personnel.
2. Reliability: The ability to perform promised services dependably and accurately.
3. Responsiveness: Willingness to assist customers and provide prompt service.

4. Assurance: The knowledge and courtesy of employees, and their ability to inspire trust.
5. Empathy: Providing personalized attention and care to customers.

The questionnaire items were distributed across these five dimensions and measured using a five-point Likert scale ranging from (1 = Strongly Disagree) to (5 = Strongly Agree).

Study Duration: During the fall and spring semesters 2024-2025,

Sample size: A total of (106) valid responses were obtained.

Procedures for data gathering

The target population consists the all passengers traveling through Berniq Airlines airports, whether for domestic or international flights. Data were collected from passengers at airport terminals during peak travel times to ensure diversity in age, travel frequency, and demographic characteristics [10]. "A common qualitative guideline suggests a respondent-to-item ratio of at least 10:1. For example, a 15-item questionnaire should ideally have 150 respondents to ensure statistical validity. [11]".

Data Analysis Procedures

All necessary information required for the research was entered into Excel software. Descriptive Statistics Used to provide an overview of passenger satisfaction across various service attributes (e.g., cleanliness, waiting time, staff behavior). Measures include mean, standard deviation, and frequency distributions.etc. One-Sample Wilcoxon Test [12] Used to test the main hypothesis by comparing the actual median of passenger satisfaction significantly differs from a specific hypothesized value. Mann-Whitney U Test [13] Used to test the hypothesis by comparing satisfaction levels between two independent groups (male vs. female) and two independent age groups (18-30 vs 31-60). Collected data were analyzed using Excel and Minitab Software17.

Reliability Analysis

The internal consistency of the questionnaire was assessed using Cronbach's Alpha, a widely recognized measure of reliability in survey research. This statistic evaluates how closely related a set of items are as a group. Cronbach's Alpha values range from 0 to 1, with higher values indicating greater reliability. In this study, a threshold of 0.70 was established as the minimum acceptable value for internal consistency. Values in the range of 0.70 to 0.80 are typically deemed good, while those above 0.90 suggest excellent reliability. This indicates that the items within each scale dimension consistently measure the same underlying construct.

Results and discussion

As depicted in the figure1, the proportion of passengers between 18-30 years old with 78.3 of answers are larger than of other proportion of passengers 31-60 years old with 21.7% of answers. Figure 2 shows the proportion of passengers between 18-30 years old with 78.3 of answers are larger than of other proportion of passengers 31-60 years old with 21.7% of answers.

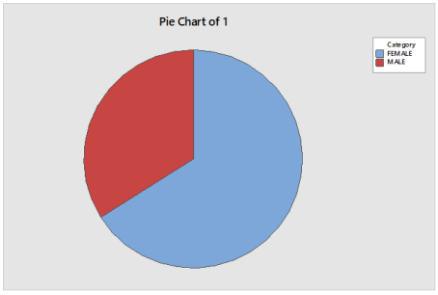

Figure (1): Sample duration by gender

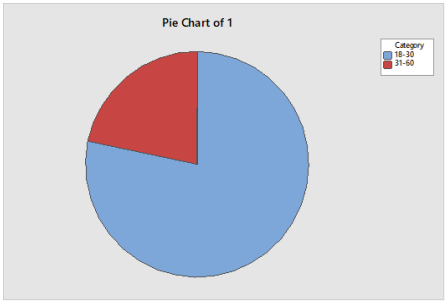

Figure (2): Sample duration by age

Descriptive analysis

The analysis in Table 1 examines the distribution and variations in perceptions of the check-in process based on gender and age. Females have a slightly higher mean score (4.1389) than males (4.1101), indicating a more positive perception among females. Older participants in age range 2 also report a higher mean (4.1870) compared to younger participants in age range 1 (4.1714), suggesting a favorable evaluation among older individuals. Despite these mean differences, the median remains consistent at 4 for all groups, reflecting a balanced distribution of responses. Males and age range 1 show a wider response range (3) than females and age range 2 (2), with standard deviations indicating slightly higher variability for males (0.7545) and age range 1 (0.7152) compared to females (0.6980) and age range 2 (0.7223). Variance is also higher for females (0.4872) and age range 2 (0.5217) than for males (0.5693) and age range 1 (0.5116). Overall, while

females and older participants rate the check-in process more positively, the consistent median suggests a balanced overall response distribution.

Table (1): Analysis of Check-in Process Dimension

	ALL DATA	MALE	FEMALE	Age Group 1	Age Group 2
MEAN	4.1101	4.1389	4.1714	4.1870	4.0870
MEDIAN	4	4	4	4	4
RANGE	4	3	2	3	2
ST, DEV	0.8161	0.7545	0.6980	0.7152	0.7223
MIN	1	2	3	2	3
MAX	5	5	5	5	5
VARIANCE	0.6661	0.5693	0.4872	0.5116	0.5217

Table 2 provides descriptive statistics for the Security Screening Process, highlighting differences based on gender and age. Males have a mean score of 4.278, slightly higher than females at 4.0143, indicating that males may perceive the process more positively. Younger participants in age range 1 also report a higher mean (4.1687) compared to older participants in age range 2 (3.870), suggesting a more favorable perception among the younger group. Despite these mean differences, the median remains consistent at 4 across all categories, indicating a balanced data distribution. All groups share a range of 4, reflecting limited variation in responses. Standard deviations are similar for both genders (males: 1.051, females: 1.0387), while age range 2 has a slightly higher standard deviation (1.128) than age range 1 (1.0188), suggesting broader variability among older participants. The minimum and maximum values are uniform across the board, ranging from 1 to 5. Variance is slightly higher for males (1.105) compared to females (1.0789), and age range 2 has a higher variance (1.271) than age range 1 (1.0380), indicating greater variability among older respondents. In conclusion, while males and younger participants report slightly higher average ratings, the consistent median across all demographics reflects a balanced distribution of responses.

Table (2): Analysis of Security Screening Process Dimension**.**

	ALL DATA	MALE	FEMALE	Age Range 1	Age Range 2
MEAN	3.8491	4.278	4.0143	4.1687	3.870
MEDIAN	4	4	4	4	4
RANGE	4	4	4	4	4
ST, DEV	1.1295	1.051	1.0387	1.0188	1.128
MIN	1	1	1	1	1
MAX	5	5	5	5	5
VARIANCE	1.2757	1.105	1.0789	1.0380	1.271

Table 3 summarizes descriptive statistics for the Luggage Transportation Process, highlighting gender and age differences. Females have a mean score of 3.7143, slightly higher than males at 3.472, indicating a more positive perception among females. Younger participants in age range 1 also report a higher mean (3.6747) compared to older participants in age range 2 (3.478), suggesting more favorable evaluations from the younger group. Despite these mean differences, the median remains consistent at 4 across all categories, reflecting a balanced distribution of responses. The range is uniform at 4 for all groups, indicating limited variation. Males exhibit a higher standard deviation (1.350) than females (1.0186), suggesting greater variability in male responses, while age range 2 shows a higher standard deviation (1.183) compared to age range 1 (1.1335).

Table (3): Analysis of Luggage Transportation Process Dimension

	ALL DATA	MALE	FEMALE	Age Range 1	Age Range 2
MEAN	3.6509	3.472	3.7143	3.6747	3.478
MEDIAN	4	4	4	4	4
RAMGE	4	4	4	4	4
ST, DEV	1.2023	1.350	1.0186	1.1335	1.183
MIN	1	1	1	1	1
MAX	5	5	5	5	5
VARIANCE	1.4456	1.822	1.0376	1.2849	1.400

The minimum and maximum values are consistent across groups, ranging from 1 to 5. Variance is slightly higher for males (1.105) than for females (1.0789), although the difference is minimal. Age

range 2 exhibits a higher variance (1.400) than age range 1 (1.2849), indicating more dispersed responses among older participants. In conclusion, while females and younger participants rate the luggage transportation process more positively, the equal median across categories suggests a stable distribution of responses.

Table 4 presents descriptive statistics for waiting area perceptions by gender and age. Males have a mean rating of 3.7778, slightly higher than females at 3.7714, while younger participants (mean = 3.8434) rate the areas more positively than older ones (mean = 3.652). The median is consistently 4 across all groups, indicating balanced responses. The range is identical at 4, showing limited variability in opinions. Standard deviations are similar for genders, but age range 2 has greater variability. Variance is higher for females than males and for age range 2 compared to age range 1, suggesting more diverse responses among older participants. In conclusion, while males and younger individuals tend to rate the waiting areas more positively, the equal median suggests a balanced overall distribution of responses.

Table (4): Analysis of Waiting Area Dimension

	ALL DATA	**MALE**	**FEMALE**	**Age Range 1**	**Age Range 2**
MEAN	3.4780	3.7778	3.7714	3.8434	3.652
MEDIAN	4	4	4	4	4
RAMGE	4	4	4	4	4
ST, DEV	1.2601	1.0352	1.0048	1.0335	1.096
MIN	1	1	1	1	1
MAX	5	5	5	5	5
VARIANCE	1.5878	1.0717	1.0097	1.0681	1.201

Table 5 presents descriptive statistics for General Facility Cleaning, highlighting differences by gender and age. Males score a mean of 3.7778, slightly higher than females at 3.7714, suggesting a more positive perception among males. Younger participants in age range 1 have a higher mean (3.8434) compared to older participants in age range 2 (3.652), indicating more favorable evaluations from the younger group. Despite these mean differences, the median remains consistent at 4 across all categories, reflecting a balanced data distribution. The range is uniform at 4 for all groups, indicating limited variation. Standard deviations for males (1.051) and females (1.0387) are very similar, suggesting comparable variability, while age range 2 shows slightly higher variability (1.096) than age range 1 (1.0335). The minimum and maximum scores are consistent, ranging from 1 to 5, indicating even distribution. Variance is slightly higher for males (1.0717) compared to females (1.0097), and age range 2 has a higher variance (1.201) than age range 1 (1.0681), suggesting broader response dispersion among older participants.

Table (5): Analysis of General facility Cleaning Dimension

	ALL DATA	MALE	FEMALE	Age Range 1	Age Range 2
MEAN	3.4780	3.7778	3.7714	3,8434	3.652
MEDIAN	4	4	4	4	4
RANGE	4	4	4	4	4
ST, DEV	1.2601	1.0352	1.0048	1.0335	1.096
MIN	1	1	1	1	1
MAX	5	5	5	5	5
VARIANCE	1.5878	1.0717	1.0097	1.0681	1.201

Table 6 details the descriptive statistics for Information and Staff Support, focusing on gender and age differences. Males have a mean score of 3.7778, slightly higher than females at 3.7714, indicating a more positive perception among males. Younger participants in age range 1 report a higher mean (3.8434) compared to older participants in age range 2 (3.652), suggesting more favorable evaluations from the younger group. Despite these mean differences, the median remains constant at 4 across all categories, reflecting a balanced distribution of responses. The range is uniform at 4 for all groups, indicating limited variation. Standard deviations are similar for males (1.0352) and females (1.0048), showing comparable variability, while age range 2 has a slightly higher standard deviation (1.096) than age range 1 (1.0335), indicating greater dispersion among older participants. The minimum and maximum values are consistent, ranging from 1 to 5, confirming even distribution. Variance is slightly higher for males (1.0717) compared to females (1.0097), and age range 2 exhibits higher variance (1.201) than age range 1 (1.0681), suggesting

greater variability among older respondents. In conclusion, while males and younger participants tend to rate support more positively, the equal median across categories indicates a stable distribution of responses.

Table (6): Analysis of Information and staff support Dimension

	ALL DATA	MALE	FEMALE	Age Range 1	Age Range 2
MEAN	3.4780	3.7778	3.7714	3.8434	3.652
MEDIAN	4	4	4	4	4
RANGE	4	4	4	4	4
ST, DEV	1.2601	1.0352	1.0048	1.0335	1.096
MIN	1	1	1	1	1
MAX	5	5	5	5	5
VARIANCE	1.5878	1.0717	1.0097	1.0681	1.201

Table 7 outlines descriptive statistics for Food and Beverage Services, emphasizing gender and age differences. Males have a mean score of 3.7778, slightly higher than females at 3.7714, indicating a more favorable perception among males. Participants in age range 1 report a higher mean (3.8434) than those in age range 2 (3.652), suggesting younger individuals evaluate the services more positively. Despite these mean differences, the median remains consistent at 4 across all categories, reflecting a balanced distribution of responses. The range is uniform at 4 for all groups, indicating limited variation in opinions. Standard deviations are similar for males (1.0352) and females (1.0048), while age range 2 shows slightly higher variability (1.096) compared to age range 1 (1.0335). The minimum and maximum scores are consistent, ranging from 1 to 5, showing even distribution. Variance is slightly higher for males (1.0717) than for females (1.0097), and age range 2 has a higher variance (1.201) compared to age range 1 (1.0681), indicating broader response dispersion among older participants. In conclusion, while males and younger participants rate food and beverage services more positively, the equal median suggests a stable distribution of responses across all groups.

Table (7): Food and Beverage Services Dimension

	ALL DATA	MALE	FEMALE	Age Range 1	Age Range 2
MEAN	3.4780	3.7778	3.7714	3.8434	3.652
MEDIAN	4	4	4	4	4
RANGE	4	4	4	4	4
ST, DEV	1.2601	1.0352	1.0048	1.0335	1.096
MIN	1	1	1	1	1
MAX	5	5	5	5	5
VARIANCE	1.5878	1.0717	1.0097	1.0681	1.201

Hypothesis testing

The nature of data distribution was assessed using P-value test, where the results indicated that the data does not conform to the assumptions of a normal distribution. This result was further supported by histogram as shown in Figure 3, which showed a variance in the data distribution and its lack of conformity with the ideal normal distribution. Based on these observations, the decision was made to use non-parametric analyses as an appropriate alternative. Among the non-parametric tests used were Mann-Whitney test and Wilcoxon test, which are robust tools for analyzing data reliably in cases where the data does not meet the traditional assumptions of parametric analysis.

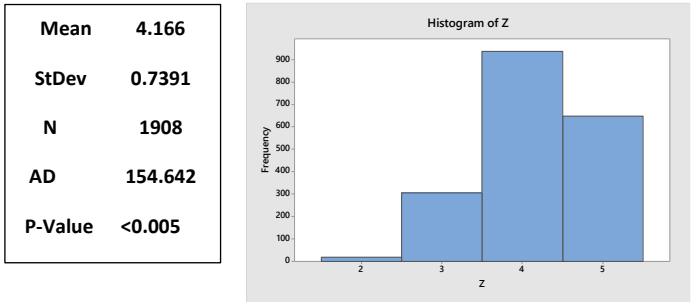

Figure 3: Histogram of Data Distribution

Main Hypothesis test

To determine if there is an overall passenger satisfaction or not, one sample Wilcoxon test was used and the results shows that the P-value =0.000 is much smaller than the accepted significant level α =0.05, as shown in table 8 , based on this, reject the null hypothesis and accept the alternative hypothesis which indicates that strong statistical evidence to suggest that the median passenger satisfaction differs from the hypothesized value. This indicates that passengers, on average, do not have a neutral or expected level of satisfaction.

The result from the one-sample Wilcoxon test indicates a significant deviation from the hypothesized median satisfaction level. This finding warrants further investigation into passenger experience and satisfaction drivers, allowing for targeted improvements and enhanced service delivery.

Table (8): one sample Wilcoxon test results

Sample	N	Median
All Passenger	106	4
Test		
Null hypothesis		H0 : n1=n2 = 0
Alternative hypothesis		H1 : n1≠ n2 ≠ 0
W-value	P-value	Achieved confidence
1827018	<0.0001	95%

Sub Hypothesis Test

Gender Based Hypothesis

The Mann-Whitney test assesses whether there is a statistically significant difference in the distributions of satisfaction scores between males and females. The results in table 9 shows that the P-value =0.000 is much smaller than the accepted significant level α =0.05, indicating there is strong statistical evidence to suggest that there is a significant difference in satisfaction levels between male and female passengers. Based on this, we reject the null hypothesis and accept the alternative hypothesis. This finding should prompt further investigation into the specific nature of these differences and guide actions to enhance overall passenger satisfaction.

Descriptive statistics

Table (9): The Mann-Whitney test results

Sample	N	Median
Male	106	1
Female	106	4
Test		
Null hypothesis		H0: n1=n2 = 0
Alternative hypothesis		H1: n1≠ n2 ≠ 0
W-value	P-value	Achieved confidence
1827018	<0.0001	95%

Age Based Hypothesis

The Mann-Whitney U test can also be employed to assess differences in satisfaction between two independent age groups, similar to the previous analyses. The results in table 10 shows that the P-value =0.000 is much smaller than the accepted significant level α =0.05. Based on this, we reject the null hypothesis and accept the alternative hypothesis, indicating there is strong statistical evidence to suggest a significant difference in satisfaction levels between the two age groups. This finding highlights the need for further exploration into the specific nature of these differences, as well as potential strategies to improve satisfaction levels among the less satisfied group.

Descriptive statistics

Table (10): The Mann-Whitney test results

Sample	N	Median
Age Range 1	1908	1
Age Range 2	1908	4
Test		

Null hypothesis		H0: n1=n2 = 0
Alternative hypothesis		H1: n1≠ n2 ≠ 0
W-value	P-value	Achieved confidence
4547924	<0.0001	95%

Conclusion

The study concluded that there is an overall positive level of passenger satisfaction with the services provided at Berniq Airlines Airport. Key service areas such as check-in, security screening, and staff behavior contributed notably to this satisfaction. The statistical tests also indicated significant differences in satisfaction across gender and age groups, suggesting the need for more personalized service delivery. Additionally, the reliability analysis confirmed that the questionnaire used was internally consistent and valid, supporting the credibility of the findings. These results provide practical insights for airport management to identify strengths and address weaknesses. By focusing on continuous improvement, passenger-centered services, and strategic quality practices, the airport can significantly enhance the travel experience and build a stronger reputation among travelers.

References

[1] Usman, H., Rahmawati, F., & Suhud, U. (2023). The role of service orientation and airport service quality on passenger satisfaction and airport image. Logistics, 7(4), 102.

[2] Yilmaz, A. K. (2021). The role of airport service quality in passengers' recommendation intention: Evidence from online reviews. Case Studies on Transport Policy, 9(4), 1662–1672.

[3] Mtafya, R., & Mutalemwa, D. (2024). Exploring the impact of airport services on passenger satisfaction in Tanzania.

[4] Nanakishor, R., & Yogamala, H. L. (2021). A study on the service quality attributes of airport services with reference to Trivandrum Airport.

[5] Cholkongka, N. (2020). Developing and evaluating an airport service quality model.

[6] Rusjan, B. (2010). Capitalising on ISO 9001 benefits for strategic results.

[7] Psomas, E. L., Angelos, P., & Kafetzopoulos, D. P. (2012). The impact of ISO 9001 effectiveness on the performance of service companies.

[8] Sampaio, P., Saravia, P., & Guimaraes, A. (2008). ISO 9001 certification research: Questions, answers, and approaches.

[9] Pabedinskaite, A., & Akstinaite, V. (2014). Evaluation of the airport service quality.

[10] Liu, X., & Zheng, W. (2021). Study on Passenger Satisfaction about Service Quality at Terminals of Wuhan Tianhe International Airport. Proceedings of the EBIMCS 2021.

[11] Aithal, Architha and Aithal, Sreeraman,30 October 2020, Srinivas College of Pharmacy, Mangalore, India, College of Management Commerce, Srinivas University, Mangalore, India

[12] Gibbons, J.D., 1992. Nonparametric measures of association. Newbury Park, CA: SAGE Publications.

[13] Ruland, F., 2018. The Wilcoxon–Mann–Whitney Test: An Introduction to Nonparametrics. Munich: GRIN Verlag.