

Optimizing Tourism Supply Chain: Improving Service Quality and Tourist Loyalty

Improving Service
Quality and Tourist
Loyalty

Nurita Andriani

Universitas Trunojoyo Madura; Bangkalan, Indonesia
E-Mail: nurita.andriani@trunojoyo.ac.id

Miftahul Jannah

Universitas Trunojoyo Madura; Bangkalan, Indonesia
E-Mail: miftahul.jannah@trunojoyo.ac.id

Nurul Ilyana Muhd Adnan

Universitas Kebangsaan Malaysia; Selangor, Malaysia
E-Mail: ilyana_adnan@ukm.edu.my

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ABSTRACT

Tourism supply chains are essential in delivering services to consumers and supporting destination competitiveness. This study examines the effect of service quality of tourism supply chain on tourist satisfaction and loyalty. Using a quantitative design with purposive sampling, data were collected from 150 respondents aged 17 years and above who had traveled through a travel agency. The data were analyzed with Partial Least Squares–Structural Equation Modeling. The results show that service quality of tourism supply chain has a significant positive effect on both satisfaction and loyalty. However, satisfaction does not influence loyalty and does not mediate the relationship between service quality of tourism supply chain and loyalty. These findings indicate that service quality plays a more direct role in shaping tourist loyalty, while satisfaction alone may not ensure repeat visits. The study contributes to tourism supply chain research and suggests that destination managers should prioritize improving service quality integration to strengthen tourist loyalty.

Keywords: Service Quality, Supply Chain Management, Tourism Supply Chain, Tourist Loyalty, Tourist Satisfaction.

ABSTRAK

Rantai pasokan pariwisata sangat penting dalam memberikan layanan kepada konsumen dan mendukung daya saing destinasi. Studi ini mengkaji pengaruh kualitas layanan rantai pasokan pariwisata terhadap kepuasan dan loyalitas wisatawan. Menggunakan desain kuantitatif dengan purposive sampling, data dikumpulkan dari 150 responden berusia 17 tahun ke atas yang telah bepergian melalui agen perjalanan. Data dianalisis dengan Partial Least Squares–Structural Equation Modeling. Hasilnya menunjukkan bahwa kualitas layanan rantai pasokan pariwisata memiliki efek positif yang signifikan terhadap kepuasan dan loyalitas. Namun, kepuasan tidak memengaruhi loyalitas dan tidak memediasi hubungan antara kualitas layanan rantai pasokan pariwisata dan loyalitas. Temuan ini menunjukkan bahwa kualitas layanan memainkan peran yang lebih langsung dalam membentuk loyalitas wisatawan, sementara kepuasan saja mungkin tidak menjamin kunjungan berulang. Studi ini berkontribusi pada penelitian rantai pasokan pariwisata dan menyarankan bahwa manajer destinasi harus memprioritaskan peningkatan integrasi kualitas layanan untuk memperkuat loyalitas wisatawan.

Kata kunci: Kualitas Layanan, Manajemen Rantai Pasok, Rantai Pasok Pariwisata, Loyalitas Wisatawan, Kepuasan Wisatawan.

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INTRODUCTION

The tourism sector in Sumenep Regency has experienced a strong recovery following the COVID-19 pandemic and has become a key contributor to regional economic development. In 2022, tourist arrivals increased by 600% from the previous year, reaching 1,057,434 visitors (Syafriyani & Qamariah, 2023). Situated at the eastern end of Madura Island, Sumenep offers a diverse range of destinations, with marine tourism as its core attraction. Popular sites such as Gili Labak, Gili Genting, Sembilan Beach, Lombang Beach, Slopeng Beach, and Gili Iyang reinforce the regency's unique appeal to domestic and international tourists. This notable rise in tourism activity is expected to contribute positively to regional economic growth and the Gross Domestic Product (Alfiah, 2019; Chan, 2024).

Despite this growth, the tourism sector in Sumenep continues to face several critical challenges. Limited access to information, inadequate infrastructure, insufficient transportation and accommodation, and a shortage of supporting facilities such as commercial centers and souvenir shops often hinder visitor experiences and operational effectiveness (Zhang et al., 2009). These constraints reflect weaknesses in the tourism supply chain, which plays a central role in determining the balance, sustainability, and competitiveness of tourism destinations (Di Vaio & Varriale, 2020). A tourism supply chain encompasses interconnected activities, including identifying customer needs, forecasting inputs, and managing logistics, all of which aim to integrate processes and deliver value to consumers efficiently (Fagan, 2024). Moreover, supply chain management objectives have expanded to include financial coordination between buyers and suppliers, which contributes to value creation and operational sustainability (Kusumawardani & Sedyono, 2016; Leuschner et al., 2023).

Supporting Fagan's (2024) perspective, supply chain processes such as demand forecasting, logistics coordination, and resource management are essential for enhancing competitiveness, meeting customer demand, and reinforcing inter-business collaboration. In the tourism context, an effective supply chain improves service quality, optimizes resource allocation, and enhances customer experiences (Rusko et al., 2009; Zhao & Hou, 2022). Service quality is particularly crucial, as it shapes customer perceptions, prevents service failures, and reflects the effectiveness of interactions between service providers and visitors (Oh & Kim, 2017). High service quality also helps tourism firms better understand customer needs, while tourist satisfaction and loyalty remain core goals for long-term organizational success (Pratama et al., 2024; Sumarni, 2024; Jannah & Pranjoto, 2025). However, Cheunkamon et al. (2023) report inconsistencies regarding the influence of supply chain service quality on tourism destinations. To address these issues, supply chain strategies are increasingly applied to improve coordination across related sectors and respond to shifting tourist expectations (Messori & Volo, 2025).

Existing research reveals notable gaps, particularly concerning the accuracy of indicators used to measure service quality within the tourism supply chain. Earlier studies tend to emphasize performance efficiency. For instance, Nasoontorn et al. (2023) used the performance Supply Chain Operations Reference (SCOR) model focusing on internal and external customers; Nguyen et al. (2025) applied the tourism supply chain management performance model covering booking, pre-travel, on-travel, and post-travel stages; while Wurjaningrum and Adienya (2024) utilized the SCOR model and Analytic Hierarchy Process (AHP) to examine planning, sourcing, production, delivery, return, and enabling activities. Although these models enhance operational performance, they pay limited attention to service quality from the customer's viewpoint. Since tourism sustainability increasingly depends on understanding customer needs and preferences, there remains a shortage of studies linking service quality in supply chain management to tourist satisfaction and loyalty (Vo et al., 2020). This gap is critical, especially as tourism supply chains become more integrated into services such as food provision, accommodation, travel, product purchasing, and visitor flow management (Wang et al., 2022; Chiwaridzo, 2024).

To address these limitations, the present study evaluates the tourism supply chain through its service dimensions from the tourist perspective. It aligns service indicators proposed by Palang and Tippayawong (2019) including Order Process Management (OPM), Supplier Relationship Management (SRM), Service Performance Management (SPM), Capacity and Resources Management (CARM), Customer Relationship Management (CRM), Demand Management (DM), Information and Technology Management (ITM), and Supply Chain Finance Management (SCFM) with the factor structures identified by Cheunkamon et al. (2023), which highlight CRM, OPM, SPM, Capacity and Resource Management (CAP), DM, ITM, and Sustainability Management (SM). Building on these frameworks, this study includes SRM as a key dimension emphasized in both studies, enabling a more comprehensive evaluation of Service Quality of Tourism Supply Chain Management (SQTSC) from the customer perspective.

However, despite the rapid growth of tourism in Sumenep, unresolved supply chain issues ranging from infrastructure limitations, limited information access, and inadequate facilities to inconsistent service delivery suggest that the existing system may not effectively meet tourist needs or support sustainable destination competitiveness. These conditions highlight the need to examine how service quality within the tourism supply chain influences tourist satisfaction and loyalty. This study seeks to answer whether SQTSC affects tourist satisfaction, whether SQTSC influences tourist loyalty, and whether tourist satisfaction serves as a mediating factor in the relationship between SQTSC and tourist loyalty.

LITERATURE REVIEW & HYPOTHESIS DEVELOPMENT

Service Quality of Tourism Supply Chain Management and Tourist Satisfaction

The process of integrating various businesses with different functions and organizations is called supply chain management. This perspective strongly emphasizes the importance of collaboration among all partners involved, from suppliers and manufacturers to retailers, to create an integrated and efficient operating system (Mishra et al., 2018). Supply chain management's core principles center on reducing uncertainty to improve service delivery, with the goal of a company excelling strategically (Al-Hakim & Singh, 2009). Therefore, decision-making in supply chain management faces the challenges of high complexity, a combination of continuous and separate processes, and integrated and interdependent operations (Ivanov et al., 2012; Rolf et al., 2023).

Providing high-quality services is a key factor for a sustainable, competitive tourism market (Mai et al., 2020). Parasuraman et al. (1990) developed the Service Quality (SERVQUAL) concept, which encompasses five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Meanwhile, tourism services are different. Tourism has specific service characteristics: intangible, heterogeneous and service provided (Wang et al., 2022). The existence of a supply chain has the primary purpose of determining tourism supply chain operations by considering specific service characteristics (Zailani et al., 2015). Tourism supply chain management aims to reduce cost, increase satisfaction and customer value, and achieve distinct advantages. Comprehensive tourism supply chain management encompasses various areas, including accommodation, transportation, restaurants, food supplies, and other essential services that support tourism activities at a particular destination (Zhang et al., 2009).

H1: Service quality of tourism supply chain management has a positive effect on tourist satisfaction.

The Effect Service Quality and Tourist Satisfaction on Tourist Loyalty

Tourist satisfaction reflects the extent to which visitors' expectations are fulfilled or surpassed during their travel experiences. It is widely acknowledged as a direct consequence of high-quality service within tourism supply chains (Oh & Kim, 2017). Empirical studies demonstrate that improvements in the service quality of tourism supply chain significantly enhance levels of tourist satisfaction (Hussain et al., 2023). As such,

measuring satisfaction is essential for assessing how effectively services align with tourists' needs and shape their perceptions of destinations (Jin et al., 2015). Dragan et al. (2015) claim the tourism supply chain has an important role in service collaboration to improve service quality and tourist satisfaction. When consumers travel, experiencing products or services at a destination is a primary characteristic of the tourism supply chain (Zhao & Hou, 2022). Service quality can also increase tourist loyalty (Handayani et al., 2025; Hidayat et al., 2025).

Tourist loyalty, on the other hand, represents a long-term strategic objective for tourism businesses, expressed through repeat visitation and positive word-of-mouth recommendations. Traditionally, satisfaction has been regarded as a primary determinant of loyalty (Casaló et al., 2008; Kotler & Keller, 2016). However, research suggests that satisfaction does not always lead directly to loyalty, particularly among novelty-seeking tourists who prefer exploring new destinations despite being satisfied with previous experiences (Effendi et al., 2019; Nyan et al., 2020).

H2: Service quality of tourism supply chain management has a positive effect on tourist loyalty.

H3: Tourist satisfaction has a positive effect on tourist loyalty.

Tourist Satisfaction as a Mediator

In this regard, a strong service quality of tourism supply chain can foster loyalty independently, highlighting its pivotal role in creating sustained tourist engagement even in the absence of satisfaction as a mediating factor (Wantara & Irawati, 2021). Providing high-quality services is a key factor for a sustainable, competitive tourism market (Mai et al., 2020). Parasuraman et al. (1990) developed the SERVQUAL concept, which encompasses five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. Meanwhile, tourism services are different. Tourism has specific service characteristics: intangible, heterogeneous, and perishable (Wang et al., 2022). The existence of a supply chain is primarily intended to determine tourism supply chain operations by considering specific service characteristics (Zailani et al., 2015). Furthermore, the tourism supply chain plays a crucial role in service collaboration to improve service quality and tourist satisfaction (Dragan et al., 2015; Mahjudin et al., 2025; Olfebri et al., 2025). Service quality can also increase tourist loyalty (Handayani et al., 2025; Hidayat et al., 2025).

Tourist satisfaction mediates the relationship between service quality of tourism supply chain and loyalty by converting high-quality service delivery into repeat visits and positive recommendations (Jin et al., 2015; Hussain et al., 2023). While service quality of tourism supply chain can directly influence loyalty, satisfaction strengthens this effect by enhancing tourists' perceived value and emotional attachment to destinations (Casaló et al., 2008; Kotler & Keller, 2016). Effective coordination across accommodations, transportation, restaurants, and other tourism services ensures consistent quality, which reinforces satisfaction and fosters long-term loyalty (Rusko et al., 2009; Cheunkamon et al., 2023; Nguyen et al., 2025). By emphasizing both direct and mediated pathways, tourism managers can design supply chains that not only deliver excellent service but also sustain tourist engagement and competitive advantage (Zhang et al., 2009; Zhao & Hou, 2022).

H4: Tourist satisfaction mediates service quality of tourism supply chain management and tourist loyalty.

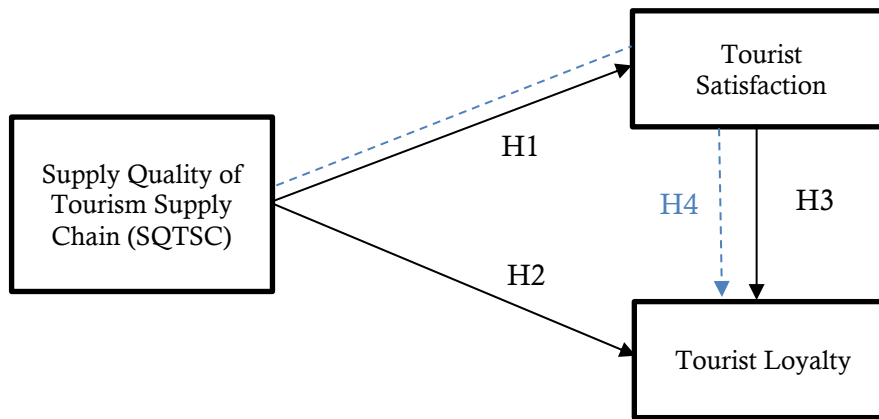


Figure 1. Research Framework

Figure 1 presents the research framework linking service quality of tourism supply chain, tourist satisfaction, and tourist loyalty. Service quality of tourism supply chain acts as the independent variable, directly influencing both satisfaction (H1) and loyalty (H3). Tourist satisfaction, as a mediating variable, is hypothesized to affect loyalty (H2) and to mediate the relationship between service quality of tourism supply chain and loyalty (H4). This framework highlights the pivotal role of service quality in shaping tourist experiences and fostering long-term loyalty.

RESEARCH METHODS

This study employed a quantitative research design with a survey approach to investigate the influence of service quality of tourism supply chain on tourist satisfaction and loyalty. The research population consisted of tourists who had visited Gili Gending Pantai Sembilan, Sumenep, while the sample was determined through purposive sampling with the criteria that respondents must be at least 17 years old and had traveled using a travel agency. A total of 150 valid responses were collected using structured questionnaires distributed both online and offline. The questionnaire adopted a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5), and the items were adapted from established instruments: service quality of tourism supply chain indicators from Palang and Tippayawong (2019), Cheunkamon et al. (2023), satisfaction items from Jin et al. (2015), and loyalty items from Rahman et al. (2020). The research variables consisted of service quality of tourism supply chain as the independent variable, tourist satisfaction as the mediating variable, and tourist loyalty as the dependent variable. To analyze the data, this study applied Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) method, which included outer model testing (convergent validity, discriminant validity, and reliability) and inner model testing (path coefficients, t-statistics, and R-squared). All statistical analyses were carried out using SmartPLS 3.2.8, supported by Microsoft Excel for preliminary data processing. This methodological design allowed for rigorous testing of both direct and indirect relationships between service quality, satisfaction, and loyalty in the tourism supply chain context.

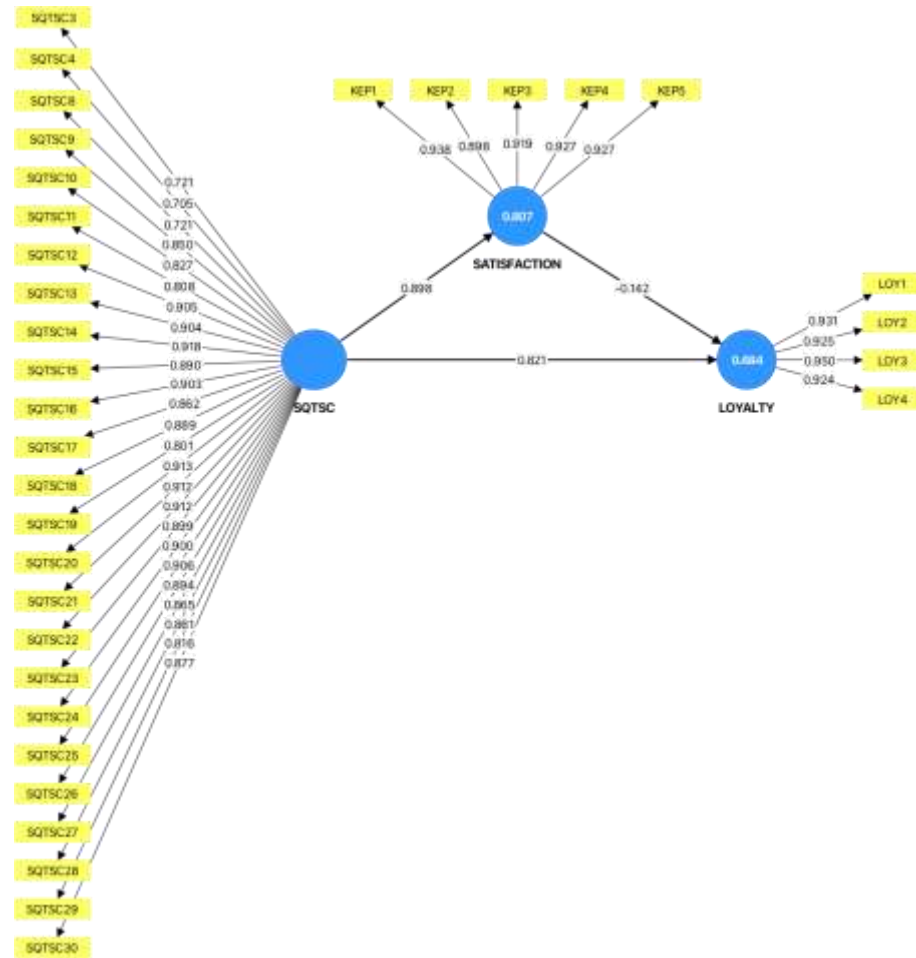


Figure 2. Model Partial Least Squares Structural Equation Modeling (PLS-SEM)

Figure 2 presents the research framework that illustrates the relationship among service quality of tourism supply chain, tourist satisfaction, and tourist loyalty. In this model, service quality of tourism supply chain functions as the independent variable, measured through several key dimensions such as CRM, OPM, SPM, CARM, DM, SRM, ITM, and SM.

RESULTS

Based on the results of the respondent data analysis in Table 1, it was found that the majority of respondents fell within the productive age range. The 31–40 age group dominated, accounting for 52% (78 people), followed by the 21–30 age group at 28% (42 people). This indicates that Gili Gending Pantai Sembilan tourism is very popular with adult tourists who are in their productive years. In terms of gender, visitors are predominantly women, comprising 69% (103 people), compared to men at 31% (47 people). Meanwhile, based on educational level, the majority of respondents were high school/vocational school graduates with a percentage of 36% (54 people), followed by elementary school graduates (21.3%) and junior high school graduates (16%). Only 14.7% were college graduates, while the other 12% had not attended school. This indicates that Gili Gending Pantai Sembilan tourism attracts tourists from various educational levels, with a dominance of the secondary education group.

Table 1. Descriptive Analysis

Characteristic	Descriptive	Frequency	Percentage	Total
Age	>50	5	3.3	100%
	41-50	24	16	
	31-40	78	52	
	21-30	42	28	
	17-20	1	0.7	
Gender	Man	47	31	100%
	Woman	103	69	
Education	Not in school yet	18	12	100%
	Elementary School	32	21.3	
	Junior high School	24	16	
	Senior High School	54	36	
	Graduate	22	14.7	

Table 2 shows the results of the outer loading of the service quality of tourism supply chain, tourist satisfaction, and tourist loyalty variables. Table 2 shows that five indicators were removed from the SQTSC indicator, namely SQTSC 1, 2, 5, 6, and 7 (CRM 1, 2, and OPM 5, 6, and 7). Meanwhile, the indicator on the tourist loyalty variable was also removed in the five indicators, because the resulting outer loading value was less than 0.7.

Table 2. Outer Model Analysis

Indicator	Outer Loading	AVE	Cronbach's Alpha	Composite Reliability (CR)
SQTSC3	0.721			
SQTSC4	0.705			
SQTSC8	0.721			
SQTSC9	0.850			
SQTSC10	0.827			
SQTSC11	0.808			
SQTSC12	0.905			
SQTSC13	0.904			
SQTSC14	0.918			
SQTSC15	0.890	0.850	0.950	0.951
SQTSC16	0.903			
SQTSC17	0.862			
SQTSC18	0.889			
SQTSC19	0.801			
SQTSC20	0.913			
SQTSC21	0.912			
SQTSC22	0.912			
SQTSC23	0.899			
SQTSC24	0.900			
SQTSC25	0.906			
SQTSC26	0.894			
SQTSC27	0.865			
SQTSC28	0.861			
SQTSC29	0.816			
SQTSC30	0.877			
SAT1	0.938			
SAT2	0.898	0.869	0.956	0.957
SAT3	0.919			
SAT4	0.927			
SAT5	0.927			
LOY1	0.931			
LOY2	0.925	0.741	0.985	0.986
LOY3	0.950			
LOY4	0.924			

Meanwhile, Table 2 also displays the Average Variance Extracted (AVE) value; the AVE must be greater than 0.5 (Hamid & Anwar, 2019). Based on the calculation results, the AVE score for all constructs ranges 0.741 to 0.986. This value is well above the

minimum threshold of 0.50, indicating that all indicators exhibit excellent convergent validity. Furthermore, Table 2 also shows that the α score for each construct is above 0.70, indicating that each indicator within the construct has excellent internal consistency.

According to Hamid and Anwar (2019) A Cronbach's Alpha value ≥ 0.70 meets acceptable reliability criteria. The α score for the SQTSC is 0.950, satisfaction is 0.956, and loyalty is 0.985. Thus, all constructs in this study can be declared reliable based on the Cronbach's Alpha test. Furthermore, the CR test also strengthen the reliability findings. All constructs showed CR values above 0.70, with most even exceeding 0.90. The SQTSC variable was 0.951, satisfaction was 0.957, and loyalty was 0.986. CR values above 0.70 indicate that the latent variables have good internal reliability and that their indicators consistently reflect the constructs being measured.

Table 3. R-square Test

Variable	R-Square
Tourist Satisfaction	0.807
Tourist Loyalty	0.484

Based on Table 3, the R-square score for the Satisfaction variable is 0.807. This means that the independent variables in the model can explain 80.7% of the variance in Satisfaction. This value is considered very high, allowing the model to make a strong prediction of respondent satisfaction. The remaining 19.3% is attributed to factors outside the model. Furthermore, the R-square value for the Loyalty variable is 0.484. This means that the variables in the model can explain 48.4% of the variance in Loyalty, while the remaining 51.6% is influenced by other factors not included in the study. This value indicates that the model is sufficiently strong to moderate the explanation of respondent loyalty.

Table 4. Hypotheses Test

Variable	Original Sample	T-Statistic	P-Value	Effect	Significance
SQTSC → Tourist Satisfaction	0.898	52.907	0.000	Direct Positive Effect	Significant
SQTSC → Tourist Loyalty	0.821	6.106	0.000	Direct Positive Effect	Significant
Tourist Satisfaction → Tourist Loyalty	-0.142	1.002	0.316	Indirect Effect	Not Significant
SQTSC → Tourist Satisfaction → Tourist Loyalty	-0.128	1.000	0.317	Indirect Effect	Not Significant

Table 4 presents the results of both direct and indirect tests. The findings indicate that SQTSC has a significant positive effect on tourist satisfaction. The correlation coefficient between SQTSC and satisfaction is 0.898, with a t-statistic of 52.907 ($p < 0.001$), demonstrating a strong positive impact. This implies that improving service quality at every stage of the tourism supply chain, including at travel agencies, is essential. Consequently, it is likely that H1 will be accepted, and thus, H1 is accepted. This outcome aligns with the theoretical perspective that high service quality positively correlates with increased customer satisfaction (Hussain et al., 2023).

Table 4 shows that SQTSC has a significant positive direct effect on tourist loyalty. The path coefficient from SQTSC and tourist loyalty is 0.821 with a t-statistic of 6.106 ($p < 0.001$). Therefore, H2 is accepted. This suggests that high-quality supply chain service can substantially increase tourist loyalty. These results align with research findings from Wantara and Irawati (2021). Although service quality has a strong influence, an unexpected result was found in the relationship between satisfaction and loyalty. The path coefficient from Satisfaction to Loyalty was negative (-0.142) and statistically insignificant ($t = 1.002$; $p = 0.316$). This means that tourist satisfaction does not affect loyalty. Therefore, H3 is rejected. Theoretically, this finding does not align with the general framework of tourism marketing. Generally, tourist satisfaction is crucial to the formation

of loyalty. Tourists who are satisfied with their experiences are more likely to return to the same destination and recommend it to others (Casaló et al., 2008; Kotler & Keller, 2016). However, at Sembilan Beach and Gili Labak Island, satisfaction alone appears insufficient to drive tourist loyalty. Additionally, satisfaction does not mediate Satisfaction with SQTSC and tourist loyalty, leading to the rejection of Hypothesis 4 (H4) (coefficient: -0.128; $t = 1.000$; $p = 0.317$).

DISCUSSION

The analysis shows that Service Quality of Tourism Supply Chain (SQTSC) significantly influences tourist satisfaction and loyalty. The path coefficient of SQTSC on satisfaction is 0.898 with a t -value of 52.907 ($p < 0.001$), indicating a strong positive relationship. Likewise, SQTSC directly affects loyalty with a coefficient of 0.821 ($t = 6.106$; $p < 0.001$). In contrast, satisfaction's effect on loyalty is not significant (coefficient = -0.142; $t = 1.002$; $p = 0.316$), and mediation by satisfaction is also non-significant (coefficient = -0.128; $t = 1.000$; $p = 0.317$). This suggests that in the context of Gili Genting Pantai Sembilan, SQTSC exerts a dominant direct effect on loyalty, overshadowing the mediating role of satisfaction.

These results partially align with prior research emphasizing satisfaction as a key determinant of loyalty. Casaló et al. (2008), Jin et al. (2015) and Widodo and Andjarwati (2025) demonstrated that satisfaction mediates the relationship between service quality and loyalty. However, the present findings diverge, showing that SQTSC alone can sustain loyalty. This phenomenon is consistent with observations in the mobile telecommunications industry in Ghana, where service quality influenced loyalty independently of satisfaction (Nyan et al., 2020).

A possible explanation lies in tourist behavior. Many contemporary tourists are novelty-seeking and prefer exploring new destinations even when satisfied with previous experiences (Rittichainuwat et al., 2003; Effendi et al., 2019). At Gili Genting Pantai Sembilan, visitors often demonstrate once-in-a-lifetime or exploratory travel patterns, enjoying the destination but intending to seek other experiences in the future. Similar patterns were observed in prior studies of tourism supply chains, where satisfaction alone did not ensure repeat visitation due to tourists' desire for novelty (Zhang et al., 2009; Dragan et al., 2015; Sukati et al., 2020).

Comparisons with other tourism supply chain studies reinforce the importance of integrated service delivery. Cheunkamon et al. (2023) and Palang and Tippayawong (2019) highlight that coordinated supply chain operations across accommodation, transportation, and support services enhance loyalty. Zailani et al. (2015) similarly found that operational efficiency and reliability across the tourism supply chain directly affect tourist retention. Research in Vietnam and Madura also shows that strong supply chain management strategies can directly drive loyalty without requiring satisfaction as a mediator (Mai et al., 2020; Wantara & Irawati, 2021). These studies suggest that in complex tourism contexts, the effectiveness of the supply chain itself may be sufficient to secure loyalty.

The findings further contrast with traditional service quality models, such as SERVQUAL, which propose a linear pathway from service quality to satisfaction and then loyalty (Parasuraman et al., 1990). In practice, the integrated nature of tourism supply chains enables direct effects on loyalty, consistent with observations by Zhao and Hou (2022) and Wang et al. (2022), who emphasize coordination and service quality across multiple nodes as critical for sustaining tourist engagement.

The results indicate that in destinations with exploratory tourists, SQTSC has a direct and dominant effect on loyalty. Satisfaction remains an important outcome of high service quality, but its role as a mediator can be overshadowed when the supply chain is efficiently integrated and service quality is perceived as excellent. These findings reinforce the strategic role of tourism supply chain management in shaping loyalty and provide empirical support for focusing on operational integration and service excellence to retain visitors (Dragan et al., 2015; Cheunkamon et al., 2023).

This study demonstrates that SQTSC can directly influence tourist loyalty without being mediated by satisfaction, challenging the traditional linear model of service quality, satisfaction, and loyalty. This finding contributes to the understanding of loyalty mechanisms in tourism supply chain management, showing that superior service quality alone can generate strong tourist attachment. Destination managers should prioritize delivering high-quality services across all supply chain components, accommodation, transportation, food, and attractions, rather than focusing solely on satisfaction. Additionally, future strategies could incorporate factors such as destination image, trust, and tourists' novelty-seeking tendencies to further strengthen loyalty.

CONCLUSION

This study demonstrates that SQTSC has a significant and direct influence on both tourist satisfaction and loyalty. Interestingly, satisfaction does not mediate the relationship between SQTSC and loyalty, indicating that high-quality services alone are sufficient to foster loyalty, particularly among tourists with novelty-seeking tendencies who may prefer exploring new destinations despite being satisfied. These findings challenge the traditional linear model of service quality, satisfaction, and loyalty, providing new theoretical insights into the mechanisms of tourist loyalty within tourism supply chain management. By highlighting the direct role of SQTSC, this study extends understanding of how integrated and coordinated supply chain operations, including accommodation, transportation, food services, and attractions, can generate sustained tourist engagement.

From a practical perspective, the results suggest that destination managers should prioritize consistent service excellence across all components of the tourism experience rather than focusing solely on satisfaction metrics. Ensuring high-quality service delivery throughout the supply chain can strengthen loyalty even when satisfaction alone is not sufficient to encourage repeat visitation. However, this study has limitations. Its cross-sectional design captures only a single point in time, and the focus on a single beach destination limits generalizability. Future research could adopt longitudinal designs to examine changes in tourist perceptions and behavior over time and investigate other types of destinations, such as cultural or urban tourism. Additionally, future studies could incorporate factors such as destination image, trust, and novelty-seeking behavior as potential mediators or moderators to more comprehensively explain tourist loyalty. Addressing these areas would further clarify the complex dynamics between service quality, satisfaction, and loyalty in tourism supply chains.

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