

## Revisiting Gunung Anyar Mangrove Ecotourism: How Satisfaction Mediates Accessibility, Facilities, and Destination Image

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**ABSTRACT** Indonesia holds substantial potential in sustainable coastal ecotourism development, including urban mangrove tourism such as Gunung Anyar Mangrove Ecotourism in Surabaya. Despite increasing visitor numbers, the destination still faces challenges in facilities and destination image. This study aims to examine the effect of accessibility, facilities, and destination image on revisit intention, with visitor satisfaction as a mediating variable. A quantitative approach was applied using Partial Least Squares Structural Equation Modeling (PLS-SEM) via WarpPLS 8.0. The results reveal that facilities and destination image significantly influence revisit intention both directly and indirectly through satisfaction. In contrast, accessibility shows a positive but statistically insignificant effect. These findings highlight the importance of enhancing facilities and destination image to improve satisfaction and visitor loyalty. This study contributes to the body of knowledge on tourist behavior in the context of sustainable urban mangrove ecotourism.

**Keywords:** Accessibility; destination image; facilities; mangrove ecotourism satisfaction; PLS-SEM; revisit intention

### INTRODUCTION

Indonesia is one of the leading tourism destinations in the Southeast Asia region with a significant contribution to the growth of the national Gross Domestic Product (GDP) (Ahmad et al., 2019; Aini, 2024). As an archipelago with a vast coastline, Indonesia has great potential in the development of coastal resource-based tourism, especially marine and mangrove ecotourism (Dinda et al., 2019; Lukman et al., 2022; Prihadi et al., 2018). Ecotourism, as a form of sustainable tourism, not only supports environmental conservation, but is also able to provide aesthetic and economic benefits if managed holistically and participatory based (Abidin et al., 2023; Mufid, 2019)

Surabaya City is one of the urban areas in Indonesia that has potential mangrove forest areas, especially in the Surabaya East Coast (Pamurbaya) area, which includes Wonorejo, Keputih, Sukolilo, and Gunung Anyar areas (Fistingrum & Harini, 2021; Prasetyo, 2021; Rijal et al., 2020). One of the ecotourism destinations that has developed in this region is Gunung Anyar Mangrove Ecotourism, which since 2016 has functioned as an alternative to environmental tourism in urban areas. This area was later developed into the Surabaya Mangrove Botanical Garden (KRM), which covers the Gunung Anyar and Medokan Sawah areas with an area of 32,761 m<sup>2</sup> (Angjo et al., 2022).

Until mid-2024, KRM recorded the number of visits reaching 43,000 people, with an average monthly visit of 6,000 visitors (Dinas Kominfo Jatim, 2024). This high number of visits indicates the high public interest in mangrove ecotourism. However, the increase in visits has not been fully matched by the provision of adequate facilities, good infrastructure conditions, and a strong destination image. Limitations in terms of security posts, educational facilities, inappropriate main road conditions during the rainy season, and the lack of signage are considered to affect the level of visitor satisfaction and the desire to make repeat visits (Kristianto & Koswara, 2021; Sugijama et al., 2024).

Accessibility, facilities, and destination image are crucial elements in improving the competitiveness of tourism destinations, and contribute directly to tourist satisfaction and loyalty (Ginting & Sasmita, 2018; Mandic et al., 2018; Porto et al., 2018). A number of previous studies have proven a positive and significant relationship between these variables and repeat visitation interest in various contexts, including cultural tourism, medical tourism, hospitality services, and leisure services (Biswas et al., 2020; Cham et al., 2020; Phi et al., 2022; Sugijama et al., 2023). However, studies on the relationship between accessibility, facilities, destination image, visitor satisfaction, and interest in repeat visits in the context of urban mangrove ecotourism are still very limited, especially in the Gunung Anyar area, Surabaya.

This research is important considering that visitor satisfaction acts as a major determinant in shaping tourist loyalty and revisit behavior (Juliana et al., 2024; Masriah et al., 2024; Siregar & Tresnasari, 2024; Torabi et al., 2022), which ultimately supports the goal of sustainable tourism development. For this reason, this study aims to analyze the effect of accessibility, facilities, and destination image on repeat visit interest with visitor satisfaction as a mediating variable. Theoretically, this study is based on the Theory of Reasoned Action (TRA) developed by Fishbein & Ajzen (1975), which states that individual behavioral intentions are influenced by attitudes toward behavior and subjective norms. In this context, interest in revisiting is seen as a form of behavioral intention that can be influenced by perceptions of accessibility, facilities, destination image, and satisfaction with the visit experience. Indicators used to measure accessibility include information access, road access, and trip endpoints (Hapsara & Ahmadi, 2022; Soekadijo, 1996). Indicators of tourism facilities include accommodation, supporting facilities, and additional services (Ginting & Sasmita, 2018). Meanwhile, destination image is usually measured through the dimensions of cognitive image, unique image, and affective image (Dewi & Abidin, 2021; Qu et al., 2011). Visitor satisfaction is often evaluat-

ed based on fulfilment, pleasure, and ambivalence (Libre *et al.*, 2022; Zeithaml *et al.*, 2017), while revisit intention is indicated by the likelihood of revisiting in the near future, the perceived likelihood of returning, and the desire to visit more often (Abubakar *et al.*, 2017; Chrismardani & Arief, 2022).

## MATERIALS AND METHODS

### Research materials

In tourism, five key interrelated concepts are central: accessibility, facilities, destination image, visitor satisfaction, and revisit intention. Accessibility refers to the ease with which tourists can reach a destination, encompassing infrastructure, transportation, signage, and route options (Biswas *et al.*, 2020; Kuklina *et al.*, 2022; Sugjama *et al.*, 2023). Good accessibility is reflected in the availability of various transport modes and travel route alternatives. Facilities include amenities that enhance visitor comfort, such as parking, public utilities, and educational tools (Castro *et al.*, 2017; Mandic *et al.*, 2018; Sugjama *et al.*, 2024). According to Heriani *et al.* (2020), tourism facilities are the tools and equipment used to fulfil visitors' needs during their stay at a destination and significantly influence a destination's performance. As tourism demand increases, facilities must continually evolve to match visitors' expectations. These elements shape the overall tourist experience and contribute to the destination image, defined as tourists' mental representation, feelings, and knowledge about a place (Ginting & Sasmita, 2018; Libre *et al.*, 2022; Rosli *et al.*, 2023). In ecotourism contexts like Mangrove Ecotourism Gunung Anyar, a positive image that integrates environmental preservation and ecological education enhances satisfaction and reinforces revisit intentions. Visitor satisfaction acts as a mediating variable linking accessibility, facilities, and destination image to behavioural outcomes (Aries-ta *et al.*, 2020; Siregar & Tresnasari, 2024; Torabi *et al.*, 2022).

This study also incorporates the perspective of tourist consumer behaviour, which includes the decision-making process in selecting, experiencing, and evaluating a destination. Psychological factors such as motivation, perception, and previous experience play a pivotal role. In ecotourism, motivations for recreation and education, combined with perceived accessibility, facility adequacy, and destination image, directly affect revisit intention. Satisfaction is formed through travel interactions that generate emotional responses toward specific destinations (Juliana *et al.*, 2024; Masriah *et al.*, 2024; Ulfy *et al.*, 2021). Theoretically, it reflects the individual's perception of fulfilment or dissatisfaction resulting from the alignment between expectations and outcomes (Karyatun *et al.*, 2023; Syakier & Hanafiah, 2021). Revisit intention is considered an extension of satisfaction, where positive travel experiences encourage return vis-

its and recommendations (Khasawneh & Alfandi, 2019; Rismawati & Sitepu, 2021; Sugjama *et al.*, 2024; Viet *et al.*, 2020). Understanding these driving factors is essential for tourism managers, as retaining existing visitors is more efficient and cost-effective than acquiring new ones (Abubakar *et al.*, 2017). This study proposes ten hypotheses to examine the structural relationships among accessibility, facilities, destination image, visitor satisfaction, and revisit intention in the context of Gunung Anyar Mangrove Ecotourism:

H1: Accessibility has a positive and significant effect on visitor satisfaction.

H2: Facilities have a positive and significant effect on visitor satisfaction.

H3: Destination image has a positive and significant effect on visitor satisfaction.

H4: Accessibility has a positive and significant effect on revisit intention.

H5: Facilities have a positive and significant effect on revisit intention.

H6: Destination image has a positive and significant effect on revisit intention.

H7: Visitor satisfaction has a positive and significant effect on revisit intention.

H8: Visitor satisfaction mediates the relationship between accessibility and revisit intention.

H9: Visitor satisfaction mediates the relationship between facilities and revisit intention.

H10: Visitor satisfaction mediates the relationship between destination image and revisit intention.

### Methods

#### Place and time

The research was conducted from 15 December 2024 to 31 January 2025, at the Mangrove Botanical Garden Area in Gunung Anyar, Surabaya. The site is in Gunung Anyar Tambak Subdistrict, Gunung Anyar District, Surabaya City, East Java Province. This location was selected because the Mangrove Botanical Garden in Gunung Anyar serves not only as a prominent ecotourism destination in Surabaya and its surrounding urban areas, but also holds the distinction of being the only mangrove botanical garden in Indonesia, enhancing its uniqueness and ecological significance.

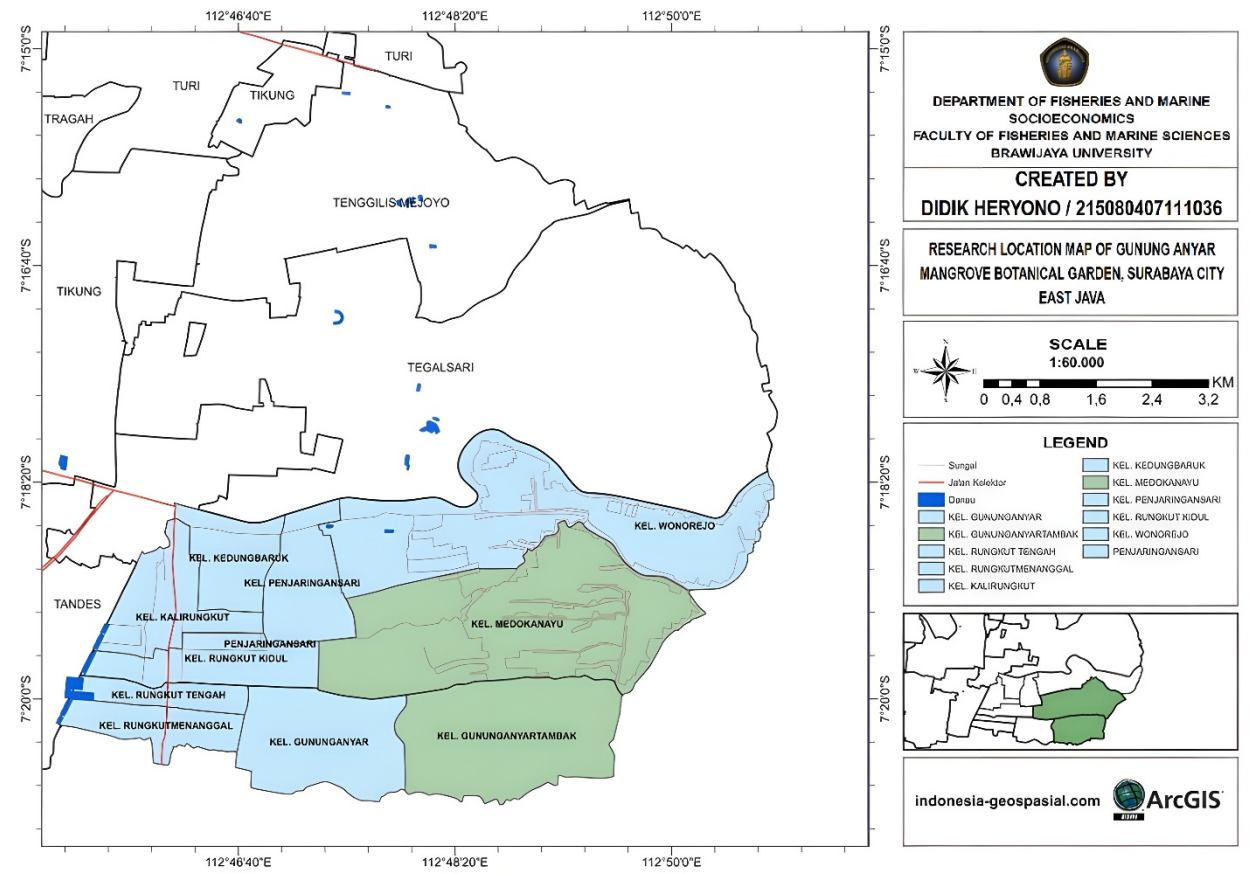


Figure 1. Mangrove Botanical Garden Gunung Anyar Map.

**Research design**

This study employs a quantitative approach to examine the influence of accessibility, facilities, and destination image on revisit intention, with visitor satisfaction as a mediating variable (Sundari et al., 2024). Utilizing an explanatory research design, data were collected through structured questionnaires and analysed using Structural Equation Modelling (SEM) to assess both direct and indirect relationships (Solimun et al., 2017). The target population consists of visitors to the Mangrove Ecotourism of Gunung Anyar, with samples selected via incidental sampling (Hardani et al., 2020). Variables were measured using a Likert scale of 1-5, allowing for the objective quantification of respondents' perceptions. This approach aims to generate empirical insights into the key determinants of revisit intention within the context of sustainable ecotourism.

**Work procedures**

The study utilized a combination of data collection methods including non-participant observation, structured interviews, closed-ended questionnaires, and documentation. Interviews gathered insights into visitors' experiences and perceptions, while questionnaires distributed both offline and online collected standardized responses from 150 visitors. The questionnaires used a Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), which allowed quantification of respondents' attitudes and experiences. Observation was conducted without the involvement of the researcher to objectively capture on-site conditions at Gunung Anyar Mangrove Ecotourism. Documentation supported the analysis through relevant written and visual sources. Together, these methods ensure comprehensive and reliable data to examine the

impact of accessibility, amenities, and destination image on revisit intentions, with visitor satisfaction as a mediating factor.

**Statistical analysis**

The analytical model used in this research is based on a statistical framework that, as described by Solimun et al. (2017), transforms complex research problems into simplified statistical concepts. This study employs Partial Least Squares Structural Equation Modelling or PLS SEM, a technique designed to assess intricate relationships among latent variables, focusing on prediction and explanation of variance in target variables (Hair & Alamer, 2022). Data analysis was conducted using WarpPLS, a software developed by Kock (2015), which is suitable for both small and large samples and does not require normal distribution assumptions. Despite its flexibility, WarpPLS has a limitation in handling missing data which should not exceed 15 percent of total observations or 5 percent for each indicator (Solimun et al., 2017).

In the context of this study, which focuses on tourist revisit intention at Mangrove Ecotourism Gunung Anyar in Surabaya, the use of SEM WarpPLS is especially relevant given the multidimensional nature of the research variables accessibility, facilities, destination image, visitor satisfaction, and behavioural intention. The approach is particularly well suited for examining how accessibility, facilities, and destination image influence visitor satisfaction and revisit intention in a natural and dynamic tourism setting like Mangrove Ecotourism Gunung Anyar.

## RESULTS AND DISCUSSION

### Site profile

Surabaya, the capital of East Java Province, is Indonesia's second-largest metropolitan area after Jakarta, located between 07°09'–07°21' S and 112°36'–112°54' E. It serves as a major hub for commerce, industry, and education. Among its key ecotourism developments is the Gunung Anyar Mangrove Ecotourism Area (KRMGA), situated in Gunung Anyar Tambak Village, encompassing 32,761 m<sup>2</sup>. The site is divided into two zones: a natural conservation area along the Kebonagung River and an eco-friendly tourism area. Surrounded by productive fishponds managed by residents, the site integrates tourism and local livelihoods. Accessibility is supported by direct routes, public transportation, and on-site parking. With an entry fee of IDR 5,000 and affordable amenities, the destination caters to lower-income visitors while promoting sustainable tourism experiences.

### Sample profile

The demographic characteristics of the 150 respondents offer a snapshot of the typical visitors to Gunung Anyar Mangrove Ecotourism. The majority were female, ac-

counting for 57.3 percent, and most were between the ages of 17 and 25, which reflects the strong interest of younger visitors. Educational background shows that 52.7 percent had completed at least senior high school, and 34 percent identified as students. This group likely has limited purchasing power, supported by income and expenditure data where over 40 percent earned and spent less than IDR 2 million per month, indicating a preference for low-cost tourism.

In terms of occupation, aside from students, respondents included private sector employees, housewives, entrepreneurs, and a small proportion of civil servants. First-time visitors made up 54.7 percent of the sample, while only a few had visited more than twice, suggesting that revisit rates remain relatively low. Most respondents learned about the destination through informal sources such as family and friends, while social media also played an important role. These findings suggest that youth-oriented, affordable, and digitally promoted experiences could enhance revisit potential and support long-term destination development.

**Table 1.** Sample profile.

Characteristic	Result	Number (People)	Percentage (%)
Region of Origin	Surabaya	97	64.7
	Sidoarjo	26	17.3
	Mojokerto	14	9.3
	Other cities	13	8.7
Gender	Female	86	57.3
	Male	64	42.7
Age	17-25 years	71	47.3
	26-35 years	53	35.3
	36-45 years	12	8
	> 45 years	14	9.3
Education level	Senior High School or Equivalent	79	52.7
	Bachelor's degree/diploma	71	47.3
Occupation	Student	51	34
	Private Employee	44	29.3
	Housewife	23	15.3
	Entrepreneur	20	13.3
	Civil Servant/TNI/POLRI	7	4.7
	Other	5	1.1
Monthly income	< IDR 2,000,000	62	41.3
	IDR 2,000,000 - IDR 4,999,999/month	34	22.7
	IDR 5,000,000 - IDR 7,999,999/month	38	25.3
	> IDR 8,000,000/month	16	10.7
Monthly Expenditure	< IDR 2.000.000	77	51.3
	IDR 2,000,000 - IDR 4,999,999/month	53	35.3
	IDR 5,000,000 - IDR 7,999,999/month	18	12
	> IDR 8,000,000/month	2	1.3

Visit Frequency	1 Time	82	54.7
	2 Times	56	37.3
	3 Times	11	7.3
	> 3 Times	1	0.7
Source of information	Family/Friends/Relatives	84	56
	Social Media	66	44

**Structural model and the effect of variables**

The collected research data underwent both validity and reliability testing to ensure data quality. Subsequently,

following the steps of the Structural Equation Modelling (SEM) using WarpPLS, the analysis produced the following outcomes:

**Evaluation of the measurement model (outer model)**

**Table 2.** Results of validity and reliability tests

Test	Parameter	Rule of Thumb	Result
Validity	Factor Loading value	> 0.3 is considered acceptable	Valid
	Average Variance Extracted (AVE)	>0.5 is considered acceptable However, if < 0,5 does not cause a concern, it is acceptable	Valid
Reliability	Composite Reliability Coefficients	> 0.7 is considered reliable	Reliable
	Cronbach's Alpha Coefficients	>0.6 is considered reliable	Reliable

**Evaluation of the structural model (Inner model)**

Before proceeding to the interpretation of the hypothesis testing results, the model fit was assessed. As presented in [Table 3](#), all criteria met the requirements for Goodness

of Fit. According to [Solimun et al. \(2017\)](#), this evaluation acts as a benchmark to verify whether the structural relationships between latent variables conform to theoretical assumption.

**Table 3.** Model fit and Quality Indices

Model Fit and Quality Indices	Fit Criteria	Analysis Results	Remark
Average Path coefficients (APC)	P-value <0,05	0.253, P<0.001	Significant
Average R-squared (ARS)	P-value <0,05	0.556, P<0.001	Significant
Average Adjusted R-squared (AARS)	P-value <0,05	0.546, P<0.001	Significant
Average Block VIF (AVIF)	acceptable if <= 5, ideally <= 3.3	2.206	Ideal
Average Full Collinearity VIF (AFVIF)	acceptable if <= 5, ideally <=3.3	2.377	Ideal
Tenenhaus GoF (GoF)	small >= 0.1, medium >= 0.25, large >= 0.36	0.556	Large
Simpson's Paradox Ratio (SPR)	acceptable if >= 0.7, ideally <= 1	1.000	Ideal
R-squared Contribution Ratio (RSCR)	acceptable if >= 0.9, ideally = 1	1.000	Ideal
Statistical Suppression Ratio (SSR)	acceptable if >= 0.7, ideally = 1	1.000	Ideal
Nonlinear Bivariate Causality Direction Ratio (NLBCDR)	acceptable if >= 0.7, ideally = 1	1.000	Ideal

**R<sup>2</sup> value**

The coefficient of determination (R<sup>2</sup>) serves as an indicator of the extent to which variations in the dependent variable can be explained by the independent variables. As presented in [Table 4](#), the resulting R<sup>2</sup> value falls within the moderate category, consistent with the classification

proposed by [Wijaya et al. \(2022\)](#), wherein values ≥ 0.67 indicate *substantial* explanatory power, values ≥ 0.33 are considered *moderate*, and those ≥ 0.19 are regarded as *weak*.

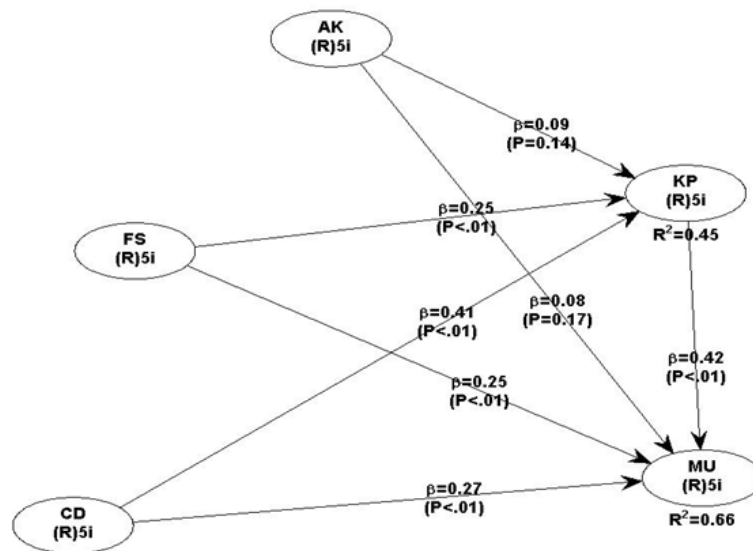
**Table 4.** R<sup>2</sup> Value.

Variable	R <sup>2</sup>	Interpretation
Visitor Satisfaction (Y1)	0.452	Moderate
Revisit Intention (Y2)	0.660	Moderate

**Hypotesis testing**

In WarpPLS analysis, hypothesis testing was conducted using t-tests, with the p-value serving as the primary indicator of statistical significance. According to Solimun

*et al.* (2017), results are classified as weakly significant when p-value < 0.10 (α = 10%), significant when p-value < 0.05 (α = 5%), and highly significant when p-value < 0.01 (α = 1%).



**Figure 2.** Research Result Model (Description: AK = Accessibility, FS = Facilities, CD = Destination Image, KP = Visitor Satisfaction, MU = Revisit Intention).

This study employs two types of hypothesis testing: direct and indirect effects. The direct path assesses the influence of independent variables on the dependent variable, while the indirect path examines the mediating role

of visitor satisfaction in linking exogenous constructs to revisit intention. This dual approach offers a more comprehensive understanding of the structural relationships within the proposed model.

**Table 5.** Direct, indirect, and priority of effect effectiveness between variables.

Type of Variable			Direct Effect	Indirect Effect	Total Effect	Priority of Effect Effectiveness	
P	M	R	β (p-value)	β (p-value)	β (p-value)	KP	MU
AK	-	KP	0.087 (0.139)	-	0.087 (0.139)	3	-
FS	-	KP	0.252 (<0.001)	-	0.252 (<0.001)	2	-
CD	-	KP	0.414 (<0.001)	-	0.414 (<0.001)	1	-
KP	-	MU	0.422 (<0.001)	-	0.422 (<0.001)	-	2
AK	-	MU	0.078 (0.166)	-	0.115 (0.075)	-	4
		KP		0.037 (0.261)			
FS	-	MU	0.247 (<0.001)	-	0.354 (<0.001)	-	3
		KP		0.107 (0.030)			
CD	-	MU	0.273 (<0.001)	-	0.448 (<0.001)	-	1
		KP		0.175 (<0.001)			

The effectiveness of inter-variable relationships in the model indicates differing priorities of influence on visitor satisfaction (KP) and revisit intention (MU). Overall, destination image (CD) exerts the most dominant influence on both dependent variables, both directly and indirectly via mediation. Significant direct effects on revisit intention were observed from destination image ( $\beta = 0.414$ ;  $p < 0.001$ ), facilities ( $\beta = 0.252$ ;  $p < 0.001$ ), and visitor satisfaction ( $\beta = 0.422$ ;  $p < 0.001$ ). Indirect effects through visitor satisfaction were also significant for facilities ( $\beta = 0.107$ ;  $p = 0.030$ ) and destination image ( $\beta = 0.175$ ;  $p < 0.001$ ). Table 5 confirms that all significant paths meet the criteria ( $p < 0.05$ ) and present substantial effect sizes, reinforcing their practical implications. The prioritization of effects on revisit intention is as follows: 1) Direct effect of visitor satisfaction, 2) Direct effect of destination image, 3) Direct effect of facilities, 4) Indirect effect of destination image via visitor satisfaction, and 5) Indirect effect of facilities via visitor satisfaction.

Regarding visitor satisfaction, significant direct effects were found from destination image ( $\beta = 0.273$ ;  $p < 0.001$ ) and facilities ( $\beta = 0.247$ ;  $p < 0.001$ ), while accessibility showed no significant influence ( $\beta = 0.087$ ;  $p = 0.139$ ). In terms of total effects, destination image ( $\beta = 0.448$ ;  $p < 0.001$ ) and facilities ( $\beta = 0.354$ ;  $p < 0.001$ ) had the strongest impact on revisit intention. These findings suggest that enhancing the perceived image of the destination and improving service facilities should be prioritized to strengthen tourist loyalty at Mangrove Ecotourism Gunung Anyar.

### Discussion

The findings of this study demonstrate that destination image and the quality of tourism facilities constitute the most salient predictors of visitor satisfaction and revisit intention within the context of urban mangrove ecotourism. This finding aligns with previous research by [Amalia et al. \(2023\)](#), [Masriah et al. \(2024\)](#), and [Rismawati & Sitepu \(2021\)](#), who assert that affective perceptions, environmental uniqueness, and functional service attributes jointly contribute to shaping tourist attitudes and behavioral outcomes. Conversely, the role of accessibility was statistically insignificant in both direct and mediated pathways, which diverges from studies by [Sugijama et al. \(2024\)](#) and [Biswas et al. \(2020\)](#). This discrepancy may be attributed to the spatial and infrastructural context of Gunung Anyar, where accessibility is relatively established and therefore perceived as normative rather than exceptional. These results further corroborate the assumptions of the Theory of Reasoned Action ([Fishbein & Ajzen, 1975](#)), wherein behavioral intentions are constructed from evaluative experiences and normative beliefs.

The mediating role of satisfaction in this study not only reinforces its strategic value but also underscores its multidimensional nature as a psychological construct that bridges perception and behavior. Satisfaction, as conceptualized in service quality and tourism literature, reflects the emotional evaluation of overall experience based on expectation-performance alignment. The empirical evidence suggests that when tourists perceive the destination as environmentally authentic and functionally accommodating, they are more likely to form favorable judgments that translate into future behavioral intentions, including revisit and recommendation behaviors. Consequently, destination management should not limit

its efforts to physical infrastructure upgrades alone but must embrace a more holistic visitor experience design, which integrates ecological storytelling, participatory interpretation, and affective engagement.

Given the predominance of young, budget-conscious, and first-time visitors, tourism planners are encouraged to develop strategies that foster emotional attachment and cognitive resonance through low-cost yet high-impact interventions. These may include interactive conservation programs, volunteer-based mangrove planting initiatives, augmented reality experiences for ecological education, and co-creation of digital content that empowers visitors as ambassadors of sustainable tourism. Additionally, leveraging social media platforms to promote peer-based storytelling can amplify destination image and enhance trust among potential visitors. Beyond economic outcomes, such measures contribute to social inclusivity and environmental awareness, reinforcing the role of urban ecotourism as a transformative platform for sustainability education. Therefore, the strategic emphasis should not only lie in increasing revisit frequency but also in cultivating a visitor identity that aligns with long-term ecological stewardship and civic responsibility.

## CONCLUSION AND RECOMMENDATION

### Conclusion

This study confirms that facilities and destination image significantly influence visitor satisfaction and revisit intention at the Gunung Anyar Mangrove Ecotourism, both directly and indirectly through visitor satisfaction as a mediating variable. These findings emphasize the strategic role of facility management and destination image enhancement in shaping positive tourist experiences and fostering visitor loyalty. Conversely, accessibility, while showing a positive but statistically insignificant effect, remains essential as a supporting factor that enhances travel convenience and contributes to destination competitiveness. Visitor satisfaction emerges as a key mediator that strengthens the link between tourists' perceptions of the destination and their intention to revisit.

### Recommendation

This study recommends improving facilities and destination image through infrastructure maintenance, added amenities, digital promotion, and conservation-based educational programs to enhance visitor satisfaction and revisit intention. Staff training and tour package diversification are also key to enriching visitor experience. Future research should include variables such as motivation, service quality, and socio-cultural factors, expand respondent coverage, apply mixed methods, and conduct longitudinal and comparative studies for a more comprehensive understanding of tourist behavior.

## AUTHORS' CONTRIBUTION

DH: Conceptualized the study, collected and analyzed the data, and drafted the manuscript. ZA: Supervised the research process and proofread the manuscript. Both authors revised and approved the final version.

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## REFERENCES

- Abidin, Z., F.E. Nuryani, D.K. Saputra, M. Fattah, N. Harahab & A. Kusumawati. 2023. Mangrove potential assessment for determining ecotourism attraction and strengthening destination branding and marketing: "Gunung Pithing Mangrove Conservation", Indonesia. *Geojournal of Tourism and Geosites*. 47 (2): 388-396. <https://doi.org/10.30892/gtg.47204-1036>
- Abubakar, A.M., M. Ilkan & R.M. Al-tal. 2017. Journal of hospitality and tourism management eWOM, revisit intention, destination trust and gender. *Journal of Hospitality and Tourism Management*. 31: 220-227. <https://doi.org/10.1016/j.jhtm.2016.12.005>
- Ahmad, F., M. Umar, L. Su & A. Rauf. 2019. Taking the bad with the good: The nexus between tourism and environmental degradation in the lower middle-income Southeast Asian economies. *Journal of Cleaner Production*. 233: 1240-1249. <https://doi.org/10.1016/j.jclepro.2019.06.138>
- Aini, Y.N. 2024. Sustainable Tourism in Southeast Asia: Balancing economic growth, employment, and carbon emissions through evidence-based strategies. *Jurnal Kepariwisata Indonesia*. 18: 157-174. <https://doi.org/10.47608/jki.v18i12024.157>
- Amalia, R., N. Wibisono, M. Elliot-white, P.N. Bandung & U. Kingdom. 2023. Increasing tourist revisit intention in garut tourist attractions: The role of destination image and tourist satisfaction. *Journal of Marketing Innovation*. 3 (2): 130-147.
- Angjo, M.H., E. Renjana, L.W. Ningrum, E.R. Firdiana & R. Irawanto. 2022. Inventory of plants in the Mangrove Botanic Garden of Gunung Anyar and their potential as medicinal plants. *Jurnal Penelitian Kehutanan Wallacea*. 11 (1): 53-70. <https://doi.org/10.18330/jwallacea.2022.vol11iss1pp53-70>
- Ariesta, D., E. Sukotjo & N.R. Suleman. 2020. The Effect of attraction, accessibility and facilities on destination images and its impact on revisit intention in the marine tourism of The Wakatobi Regency. *International Journal of Scientific & Technology Research*. 9 (3): 6605-6613.
- Biswas, C., H. Omar & J.Z.R.R. Rashid. 2020. The impact of tourist attraction and accessibility on tourists' satisfaction: The moderating role of tourists' age. *GeoJournal of Tourism and Geosites*. 32 (4): 1-7. <https://doi.org/10.30892/gtg.3>
- Castro, J.C., M. Quisimalin, C. De. Pablos, V. Gancino & J. Jerez. 2017. Tourism marketing: Measuring tourist satisfaction. 280-308. <https://doi.org/10.4236/jssm.2017.103023>
- Cham, T., Y. Lim, B. Sia, J. Cheah & H. Ting. 2020. Medical tourism destination image and its relationship with the intention to revisit: A study of Chinese medical tourists in Malaysia. *Journal of China Tourism Research*. 1-29. <https://doi.org/10.1080/19388160.2020.1734514>
- Chrismardani, Y & M. Arief. 2022. Halal destination image, electronic word of mouth (e-WOM), and revisit intention at tourist destinations in Sumenep Regency. *Quantitative Economics and Management Studies*. 3 (6): 834-841. <https://doi.org/10.35877/454ri.qems1100>
- Dewi, A.N & Z. Abidin. 2021. Analysis of the relationship of service quality, motivation and destination image to destination loyalty: A case study of Wonorejo Mangrove Ecotourism in Surabaya, East Java. *Journal of Aquaculture and Fish Health*. 10 (1), 46. <https://doi.org/10.20473/jafh.v10i1.19922>
- Dinda, N., S. Suadi & L. Sahubawa. 2019. Rehabilitation of mangrove ecosystem through community-based project and the current economic value: A case study of rehabilitation project in Lubuk Kertang Village, Langkat Regency, North Sumatera. *Jurnal Perikanan Universitas Gadjah Mada*. 20 (2): 71. <https://doi.org/10.22146/jfs.34067>
- Fishbein, M & I. Ajzen. 1975. *Belief, Attitude, Intention and Behavior an Introduction to Theory and Research*. Addison-Wesley Publishing Company.
- Fistiningrum, W & R. Harini. 2021. The impacts of mangrove ecotourism management on the socio-economic conditions of people in Kulonprogo Regency. *IOP Conf. Series: Earth and Environmental Science*. 683: 1-11. <https://doi.org/10.1088/1755-1315/683/1/012116>
- Ginting, N & A. Sasmita. 2018. Developing tourism facilities based on geotourism in Silalahi Village, Geopark Toba Caldera. *IOP Conference Series: Earth and Environmental Science*. 125: 012163. <https://doi.org/10.1088/1755-1315/125/1/012163>
- Hair, J & A. Alamer. 2022. Research methods in applied linguistics partial least squares structural equation modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*. 1: 1-16.
- Hapsara, O & A. Ahmadi. 2022. Analisis keputusan berkunjung melalui minat berkunjung: citra destinasi dan aksesibilitas pada Geopark Merangin Jambi. *Jurnal Manajemen Terapan Dan Keuangan*. 11(1): 64-76. <https://doi.org/10.22437/jmk.v11i01.14802>
- Hardani, H., N.H. Auliya, H. Andriani, R.A. Fardani, J. Ustiawaty, E.F. Utami, D.J. Sukmana & R.R. Istiqomah. 2020. *Buku Metode Penelitian Kualitatif & Kuantitatif*. 1st ed., Issue March). CV. Pustaka Ilmu Group Yogyakarta.
- Heriani, H., M. Baiquni, D. Wijono & Y.A. Widyarningsih. 2020. Developing syariah tourism in Aceh: Potencies and challenges. *E-Journal of Tourism*. 5 (2): 112-121. <https://doi.org/10.24922/eot.v5i2.42717>
- Juliana, J., A.N. Syiva, R. Rida, E. Permana, R.M. Zulfikar, A. Muhammad & I. Qudratof. 2024. Revisit intention muslim tourists to halal tourism in Yogyakarta: Analysis of facilities, promotion, electronic word of mouth, and religiosity. *Review Of Islamic Economics and Finance*. 7 (1): 1-22. <https://doi.org/10.17509/rief.v1i1.66961>
- Karyatun, S., T. Yuliantini, E. Tama & P. Saratian. 2023. Towards the best model good corporate governance and knowledge management to improve performance. *Jurnal Riset Bisnis Dan Manajemen*. 16 (2): 236-245. <https://orcid.org/0000-0001-9295-2647>
- Khasawneh, M.S & A.M. Alfandi. 2019. Determining behaviour intentions from the overall destination image and risk perception. *Tourism and Hospitality Management*. 25 (2): 355-375. <https://doi.org/10.20867/thm.25.2.6>
- Kock, N. 2015. Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of E-Collaboration*. 11 (4): 1-10. <https://doi.org/10.4018/ijec.2015100101>
- Kominfo. 2024. Hingga Pertengahan 2024, Pengunjung Kebun Raya Mangrove Surabaya Tembus 43 Ribu Orang. *Kominfo. Jatimprov.Go.Id*. <https://kominfo.jatimprov.go.id/berita/hingga-pertengahan-2024-pengunjung-kebun-raya-mangrove-surabaya-tembus-43-ribu-orang>
- Kristianto, D.H & A.Y. Koswara. 2021. Arahan pengembangan kawasan ekowisata mangrove Gunung Anyar Surabaya. *Jurnal Teknik ITS*. 10 (2): <https://doi.org/10.12962/j23373539.v10i2.67017>
- Kuklina, M., D. Dirin, V. Filippova, A. Sawinova, A. Trufanov, N. Krasnoshtanova, V. Bogdanov, D. Kobylkin, A. Fedorova, A. Itegelova & E. Batotsyrenov. 2022. Transport accessibility and tourism development prospects of indigenous communities of

- Siberia. 1-31. <https://doi.org/10.3390/su14031750>
- Libre, A., A. Manalo & G.S. Laksito. 2022. Factors influencing philippines tourist' revisit intention: The role and effect of destination image, tourist experience, perceived value, and tourist satisfaction. 3 (1): 1-12. <https://doi.org/10.46336/ijqrm.v3i1.260>
- Lukman, K.M., Y. Uchiyama, J.M.D. Quevedo & R. Kohsaka. 2022. Tourism impacts on small island ecosystems: Public perceptions from Karimunjawa Island, Indonesia. *Journal of Coastal Conservation*. 26 (3). <https://doi.org/10.1007/s11852-022-00852-9>
- Mandic, A., Z. Mrnjavac & L. Kordic. 2018. Tourism infrastructure, recreational facilities and tourism development. *Tourism and Hospitality Management*, 24 (1). <https://doi.org/10.20867/thm.24.1.12>
- Masriah, I., R. Inggadjaya & A.T. Mumin. 2024. The influence of tourism facilities and attractions on revisit intentions with visitor satisfaction as an intervening variable (A study on Kampung AEWO Mulyaharja Bogor. *International Journal of Applied Sciences in Tourism and Events*, 8 (2): 109-124. <https://doi.org/10.31940/ijaste.v8i2.109-124>
- Mufid, M. 2019. Fikih ekowisata berbasis maqasid al-syariah: Studi pengelolaan wisata alam hutan mangrove di Wonorejo Kota Surabaya. *Al-Manāhij: Jurnal Kajian Hukum Islam*. 8 (1): 5-10. <https://doi.org/10.24090/mnh.v0i1.2213>
- Phi, H.O.D., T.Q. Ngo, T. Huynh, T.H.I. Phuong & N.N. Linh. 2022. Effects of destination image on revisit intention: The intermediate role of satisfaction & words of mouth (Empirical Evidence in Ho Chi Minh City, Vietnam). *Studies of Applied Economics*. 40 (1): 1-15. <https://doi.org/10.25115/eea.v40i1.5747>
- Porto, N., A.C. Rucci & M. Ciaschi. 2018. Tourism accessibility competitiveness. A regional approach for Latin American countries. *Journal of Regional Research*. 42: 75-92.
- Prasetyo, K. 2021. The detection of environmental degradation in mangroves area: Case in the Surabaya Coast. *Journal of Hunan University Natural Sciences*, March. <http://jonuns.com/index.php/journal/article/view/532%0Ahttp://www.jonuns.com/index.php/journal/article/download/532/529>
- Qu, H., L.H. Kim & H.H. Im. 2011. A model of destination branding: Integrating the concepts of the branding and destination image. *Tourism Managemen*. 32 (3): 465-476. <https://doi.org/10.1016/j.tourman.2010.03.014>
- Rijal, S., F.A. Zainal & M.Z. Badollahi. 2020. Potensi hutan mangrove sebagai daya tarik wisata (Studi kasus pada Hutan Mangrove Idaman Kec. Tarawang, Kab. Jeneponto, Prov. Sulawesi Selatan). *PUSAKA (Journal of Tourism, Hospitality, Travel and Business Event)*. 2 (2): 153-159. <https://doi.org/10.33649/pusaka.v2i2.59>
- Rismawati, R & E.S. Sitepu. 2021. The influence of service quality, destination image, and memorable experience on revisit intention with intervening variables of tourist satisfaction. *International Journal of Applied Sciences in Tourism and Events*. 5 (1): 77-87. <https://dx.doi.org/10.31940/ijaste.v5i1.2097>
- Rosli, N.A., Z. Zainuddin, M.Y. Yusliza, Z. Muhammad & J. Saputra. 2023. Investigating the effect of destination image on revisit intention through tourist satisfaction in Laguna Redang Island Resort, Terengganu. *International Journal of Advanced and Applied Sciences*. 10 (6): 17-27. <https://doi.org/10.21833/ijaas.2023.06.003>.
- Siregar, S.R & R. Tresnasari. 2024. The Influence of Tourist Satisfaction against the Intention to Revisit of the Indonesian Tourist to Malaysia. *Jurnal Ilmiah Manajemen*. 14 (2): 382-400. [https://dx.doi.org/10.22441/jurnal\\_mix.2024.v14i2.006](https://dx.doi.org/10.22441/jurnal_mix.2024.v14i2.006)
- Soekadijo, R.G. 1996. *Anatomi pariwisata: Memahami pariwisata sebagai "system linkage"*. Gramedia Pustaka Utama.
- Solimun, S. A.A.R. Fernandes & N. Nurjannah. 2017. *Metode Statistika Multivariat Pemodelan Persamaan Struktural (SEM) Pendekatan WarpPLS (2nd ed.)*. UB Press.
- Sugijama, A.G., D. Suhartanto, C.Y. Lu, I.W. Rediyasa, R.P. Sulaeman & F.M. Renalda. 2024. Tourist satisfaction and revisit intention: the role of attraction, accessibility, and facilities of water park tourism. *GeoJournal of Tourism and Geosites*. 52 (1): 257-266. <https://doi.org/10.30892/gtg.52125-1202>
- Sugijama, A.G., E. Wigati, R.O.P. Rini & E. Wigati. 2023. Investigating the essence of recreational accessibility and its effects on satisfaction, memories, and loyalty of City Park Visitors. *African Journal of Hospitality, Tourism and Leisure*. 12 (4): 1524-1541. <https://doi.org/10.46222/ajhtl.19770720.447>
- Sundari, U.Y., A.A.T. Panudju, A.W. Nugraha, F. Purba, Y. Erlina, N. Nurbaiti, S.Y. Kalalinggi, A. Afifah, S. Suheria, G. Elsandika, R.Y. Setiawan, L. Alfiani & Z. Perez. 2024. *Metodologi penelitian (Suhardi (ed.); 1st ed., Issue February)*. CV. Gita Lentera.
- Syakier, W.A & M.H. Hanafiah. 2021. Tour guide performances, tourist satisfaction and behavioural intentions: A study on tours in Kuala Lumpur City Centre. *Journal of Quality Assurance in Hospitality & Tourism*. 1-18. <https://doi.org/10.1080/1528008X.2021.1891599>
- Torabi, Z.A., A.A. Shalbfian, Z. Allam, Z. Ghaderi, B. Murgante & A.R. Khavarian-gamsir. 2022. Enhancing memorable experiences, tourist satisfaction, and revisit intention through smart tourism technologies. 1-18. <https://doi.org/10.3390/su14052721>
- Ulfy, M.A., A. Haque, W. Karim, S. Hossin & N. Huda. 2021. Tourists' behavioral intention to visit halal tourism destination: An empirical study on muslim tourists in Malaysia. *International Fellowship Journal of Interdisciplinary Research*. 1 (1): 1-18. <https://doi.org/10.5281/zenodo.4459649>
- Viet, B.N., H.P. Dang & H.H. Nguyen. 2020. Revisit intention and satisfaction: The role of destination image, perceived risk, and cultural contact Revisit intention and satisfaction. *Cogent Business & Management*. 7 (1): 1-20. <https://doi.org/10.1080/23311975.2020.1796249>
- Wijaya, I.S., D. Sandra, K. Khairuldi, E.A. Winanto & S. Sharipuddin. 2022. Tingkat kesuksesan e-learning edmodo sebagai sistem pembelajaran online selama pandemi covid 19 adopsi model DeLone&Mclean. *Jurnal Sisfokom (Sistem Informasi Dan Komputer)*. 11 (3): 297-303. <https://doi.org/10.32736/sisfokom.v11i3.1333>
- Zeithaml, V.A., M.J. Bitner & D.D. Gremler. 2017. *Services Marketing: Integrating Customer Focus Across the Firm (Seventh Ed)*. McGraw-Hill Education.