

The Effect of Tourism Restriction Policies and Ecology-Oriented Marketing Strategies on Reducing Over-Tourism and Tourist Experience in Indonesia

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ABSTRACT

This research investigates the effectiveness of tourism restriction policies and ecologically oriented marketing strategies in addressing over-tourism and enhancing tourist experiences in Indonesia. A quantitative analysis was conducted using data collected from tourists visiting selected destinations in Indonesia. The measurement model assessment confirmed the reliability and validity of the constructs, while the structural model analysis revealed significant positive relationships between ecology-oriented marketing strategies and both reducing over-tourism and tourist experience, as well as between tourism restriction policies and these outcome variables. The findings highlight the importance of integrating marketing and policy interventions into destination management practices to achieve sustainable tourism development goals. By adopting a holistic approach, destinations can enhance visitor satisfaction, protect natural and cultural resources, and foster long-term sustainability.

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1. INTRODUCTION

Tourism in Indonesia plays a crucial role in economic development, job creation, and cultural exchange, aligning with its status as a top global tourist destination [1]–[5]. Research indicates that the tourism sector significantly impacts per capita income positively and reduces unemployment rates, contributing substantially to the country's Gross Domestic Product. The development of tourism not only boosts economic growth but also enhances the well-being of local

communities by creating employment opportunities and increasing revenue. Moreover, tourism fosters entrepreneurship, particularly in coastal areas, leading to poverty reduction and overall economic improvement. Indonesia's diverse natural resources and cultural heritage attract a large number of visitors, stimulating economic growth, increasing productivity, and ultimately enhancing the welfare of its people.

The surge in tourist arrivals in popular destinations like Bali, Jakarta, and Yogyakarta has indeed raised concerns about

sustainability, leading to the phenomenon of over-tourism, which poses challenges to balancing economic benefits with environmental preservation. Studies emphasize the importance of sustainable tourism practices to mitigate negative impacts such as CO₂ emissions, water consumption, and biodiversity loss [6]. The rapid increase in tourist visits in Bali has highlighted issues in transportation and accommodation sectors, with concerns about traffic violations and safety [7]. Indonesia's rich resources and large population face challenges in achieving sustainable development due to underdeveloped infrastructure and environmental management issues [8]. Sustainable development in tourism destinations like Porto and Vila Nova de Gaia requires strategic planning to address economic, sociocultural, and environmental impacts on residents' lives [9]. Tourism's economic contributions to Bali have led to increased income, job creation, and economic growth, but the need for sustainable practices is crucial to maintain a balance between economic prosperity and environmental preservation [10].

The exponential growth of tourism in Indonesia has indeed brought about a myriad of challenges, including environmental degradation and cultural commodification. The tourism sector in Indonesia has been effective in prioritizing development and maintaining competitiveness, yet it has shown shortcomings in crucial areas like terrorism risk management, infrastructure development, and environmental sustainability [11]. Additionally, the government's support and policy interventions have been found to significantly moderate the negative impacts of tourism development on natural resources in Indonesia, a country rich in cultural diversity and natural resources [12]. Furthermore, the lack of human welfare, underdeveloped infrastructure, and environmental management issues have raised concerns about the nation's capacity for sustainable development, emphasizing the need for comprehensive solutions to address these

challenges [13]. These issues are further exacerbated by the outbreak of COVID-19, which has highlighted the importance of long-term and efficient investment and trade in the tourism sector to mitigate potential economic leakage and ensure sustainable growth [8].

The surge in the number of tourists in Indonesia has indeed exceeded the carrying capacity of many destinations, causing pressure on infrastructure, services, cultural authenticity, and fragile ecosystems [8], [14], [15]. This has resulted in a decline in hotel occupancy rates which impacts the economic stability of the tourism industry [16]. In addition, the popularity of cultural heritage tourist attractions such as Borobudur and Prambanan has declined, possibly due to travel bans during the Covid-19 pandemic [17]. Sustainable tourism practices are essential to recovering the post-pandemic economy, focusing on understanding the motivations and behaviors of domestic tourists to ensure the long-term sustainability of the industry. Efforts towards sustainable development are essential to address the challenges posed by rapid tourism growth and to preserve Indonesia's natural and cultural treasures.

The unsustainable growth of tourism in Indonesia has prompted a critical examination of existing policies and strategies aimed at managing tourist flows and preserving the integrity of natural and cultural assets. While various measures, such as entry restrictions, visitor quotas, and zoning regulations, have been implemented to mitigate the impacts of over-tourism, their effectiveness remains uncertain. Similarly, the adoption of ecologically oriented marketing strategies, promoting responsible travel practices and sustainable tourism experiences, raises questions about their impact on tourist behavior and preferences. Thus, there is a need for empirical research to assess the effectiveness of these measures in reducing over-tourism and enhancing tourist experiences in Indonesia.

The primary aim of this research is to investigate the effect of tourism restriction policies and ecologically oriented marketing

strategies on reducing over-tourism and improving tourist experiences in Indonesia. To achieve this aim, the study pursues several objectives: first, to examine the current state of tourism and over-tourism in Indonesia; second, to identify existing tourism restriction policies and ecologically oriented marketing strategies implemented in the country; third, to assess the impact of tourism restriction policies on over-tourism in Indonesia; and finally, to evaluate the effectiveness of ecologically oriented marketing strategies in enhancing tourist experiences. Through these objectives, the study aims to provide insights into sustainable tourism management practices in Indonesia.

2. LITERATURE REVIEW

Tourism plays a significant role in the economic development of nations worldwide, contributing to job creation, infrastructure development, and cultural exchange. However, the rapid growth of tourism has brought about various challenges, particularly in destinations like Indonesia, where the delicate balance between economic benefits and environmental sustainability is at stake. This literature review provides an overview of key concepts related to tourism, over-tourism, tourism restriction policies, and ecologically oriented marketing strategies, highlighting existing research findings and gaps in the literature.

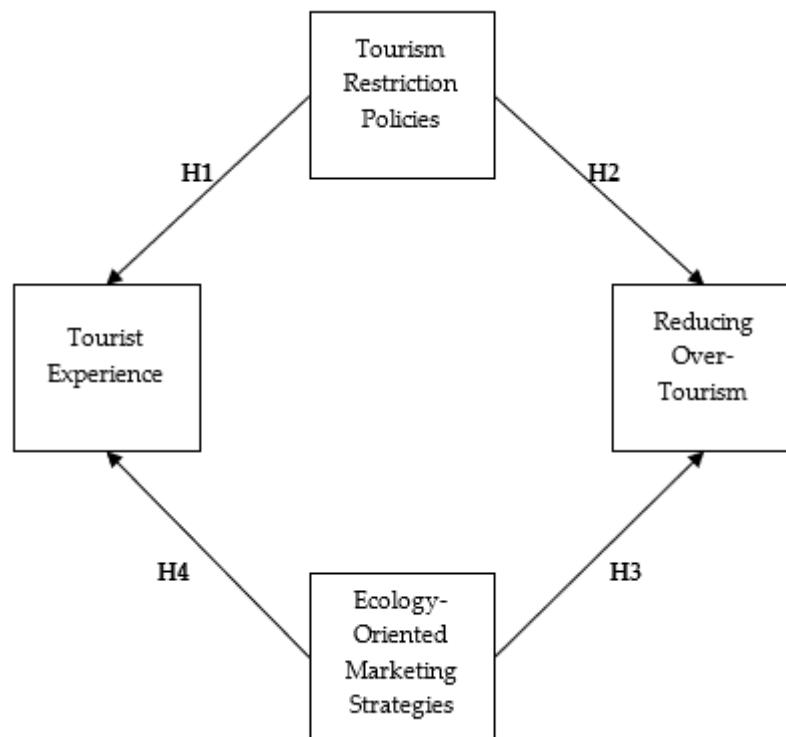


Figure 1. Conceptual Framework

2.1 Tourism and Over-tourism

The exponential growth of tourism, driven by globalization, technological advancements, and increased disposable incomes, has made Indonesia a popular destination for both international and domestic tourists, leading to concerns about over-tourism [18]. Over-tourism,

characterized by overcrowding, environmental degradation, and cultural erosion, poses sustainability challenges by straining destinations beyond their carrying capacity [19]. Scholars have highlighted the negative impacts of over-tourism, including natural resource degradation, congestion in tourist hotspots, and

conflicts with local communities, ultimately diminishing the quality of tourist experiences and destination appeal [20]. Despite the recognition of over-tourism as a critical issue, there remains a lack of consensus on its causes, consequences, and solutions, emphasizing the need for further research to address this multifaceted phenomenon [21].

2.2 Tourism Restriction Policies

To address the challenges of over-tourism, destination governments and authorities have implemented various tourism restriction policies, including carrying capacity limits, visitor quotas, entry fees, and zoning regulations, aiming to manage tourist flows and protect natural and cultural assets [19], [22]. These policies are designed to regulate tourist activities, mitigate negative impacts on the environment and local communities, and ensure the long-term sustainability of tourism development [23]. While some studies have shown positive outcomes such as reductions in tourist numbers and improvements in environmental quality, others have highlighted challenges related to enforcement, stakeholder collaboration, and unintended consequences [21]. The effectiveness of these policies in reducing over-tourism and preserving destination integrity depends on considering local conditions and stakeholder perspectives in their design and implementation [24].

2.3 Ecologically Oriented Marketing Strategies

Ecologically oriented marketing strategies play a crucial role in promoting sustainable tourism practices by emphasizing environmental conservation, community engagement, and responsible travel behavior [25]. These strategies, including eco-certification programs and green marketing

campaigns, aim to attract conscientious travelers while minimizing negative impacts on destinations [26]. By highlighting eco-friendly attractions and accommodations, destinations differentiate themselves in the competitive tourism market and appeal to environmentally conscious travelers [27]. However, the effectiveness of such strategies in influencing tourist behavior and preferences is still debated, with limited empirical research on their impact on tourist decision-making and destination choice [28]. Studies suggest that environmentally responsible behavior is associated with tourist satisfaction, indicating the potential for promoting responsible behavior through effective marketing strategies [29].

2.4 Research Gap

While existing literature has provided valuable insights into the challenges of over-tourism and the potential effectiveness of tourism restriction policies and ecologically oriented marketing strategies, several gaps remain to be addressed. Firstly, there is a need for empirical research to assess the efficacy of these measures in the context of Indonesia, a diverse archipelago facing unique challenges related to tourism development. Secondly, the interplay between tourism restriction policies and ecologically oriented marketing strategies in mitigating over-tourism and enhancing tourist experiences requires further investigation. Lastly, the role of stakeholders, including local communities, government agencies, and tourism businesses, in shaping sustainable tourism practices warrants closer examination.

3. METHODS

3.1 Research Design

This study adopts a quantitative research approach to analyze the relationship between tourism restriction policies, ecologically oriented marketing strategies, over-tourism, and tourist experiences. A cross-sectional survey design will be employed to collect primary data from tourists visiting selected destinations in Indonesia. The survey instrument will be designed to measure tourists' perceptions of tourism restriction policies, awareness of ecologically oriented marketing strategies, experiences of over-tourism, and satisfaction with their overall tourist experience.

3.2 Sampling

The target population for this study comprises domestic and international tourists visiting popular destinations in Indonesia, including Bali, Jakarta, Yogyakarta, and Lombok. A stratified random sampling technique will be utilized to ensure representation across different tourist demographics, destination types, and travel motivations. A sample size of approximately 160 respondents will be targeted, based on the desired level of statistical significance and power for the proposed data analysis technique.

3.3 Data Collection

Primary data will be collected through self-administered questionnaires distributed to tourists at selected destinations. The questionnaire will consist of multiple sections, covering demographic information, travel behavior, perceptions of over-tourism, awareness of tourism restriction policies and ecologically oriented marketing strategies, and satisfaction with tourist experiences. Respondents will be asked to rate their agreement with statements using a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The survey instrument will be pre-tested to ensure clarity, relevance, and reliability before full-scale implementation.

3.4 Data Analysis

Data analysis for this study will be conducted utilizing Structural Equation

Modeling (SEM) with Partial Least Squares (PLS) 4 software, a robust statistical technique widely employed in tourism research for analyzing complex relationships among multiple variables. The analysis will unfold in several sequential steps. Firstly, Measurement Model Assessment will be executed to ensure the reliability and validity of the survey instrument, encompassing evaluations of internal consistency via Cronbach's alpha, convergent validity through factor loadings, and discriminant validity using the Fornell-Larcker criterion and cross-loadings. Subsequently, Structural Model Estimation will be undertaken to scrutinize the relationships between latent constructs like tourism restriction policies, ecologically oriented marketing strategies, over-tourism, and tourist experiences. Path coefficients will be computed to ascertain the strength and direction of these relationships, while bootstrapping techniques will be employed to test the significance of the paths. Lastly, Model Fit Evaluation will be conducted to assess the overall fit of the structural model, utilizing goodness-of-fit indices such as the standardized root mean square residual (SRMR) and the normed fit index (NFI) to gauge the adequacy of the model in representing the observed data.

4. RESULTS AND DISCUSSION

4.1 Demographic Sample

The demographic characteristics of the sample population reveal a balanced representation across various factors. In terms of gender, the sample comprises an equal distribution of male (50.0%) and female (50.0%) respondents, ensuring a non-skewed perspective towards any particular gender and enhancing the generalizability of the results. Regarding age groups, the majority fall within the 25-34 years (31.3%) and 35-44 years (25.0%) brackets, indicating a relatively young and middle-aged population, though insights from older age groups (45-54 years and 55+ years) still offer valuable perspectives. Moreover, a larger proportion of respondents are Indonesian (75.0%)

compared to foreign nationals (25.0%), aligning with the study's focus on Indonesia and enabling a deeper exploration of both local and international tourist behaviors. In terms of education, most respondents possess a Bachelor's Degree (50.0%), followed by Master's Degree (25.0%), High School education (18.8%), and Doctoral Degree (6.3%), contributing to a diverse range of perspectives. Lastly, the distribution of monthly income highlights the socioeconomic diversity within the sample, with the majority falling within the \$501-\$1000 bracket (43.8%), followed by Below \$500 (25.0%) and \$1001-\$2000 (25.0%), and a small percentage earning above \$2000 (6.3%). This diversity enables an examination of how income levels may

influence perceptions and behaviors related to tourism.

4.2 Measurement Model Assessment

The measurement model assessment is a critical step in validating the reliability and validity of the constructs used in the structural equation model (SEM). This involves evaluating the loading factors, Cronbach's alpha, composite reliability, and average variance extracted (AVE) for each latent construct. In this study, the constructs include Tourism Restriction Policies (TRP), Ecology-Oriented Marketing Strategies (EOM), Reducing Over-Tourism (ROT), and Tourist Experience (TEX).

Table 1. Measurement Model

Variable	Code	Loading Factor	Cronbach's Alpha	Composite Reliability	Average Variant Extracted
Tourism Restriction Policies	TRP.1	0.720	0.866	0.910	0.719
	TRP.2	0.911			
	TRP.3	0.879			
	TRP.4	0.867			
Ecology-Oriented Marketing Strategies	EOM.1	0.860	0.864	0.902	0.649
	EOM.2	0.838			
	EOM.3	0.763			
	EOM.4	0.817			
	EOM.5	0.745			
Reducing Over-Tourism	ROT.1	0.803	0.828	0.886	0.659
	ROT.2	0.835			
	ROT.3	0.824			
	ROT.4	0.785			
Tourist Experience	TEX.1	0.863	0.874	0.923	0.800
	TEX.2	0.908			
	TEX.3	0.911			

Source: Data Processing Results (2024)

The measurement model analysis reveals strong relationships between observed variables and their respective latent constructs. For Tourism Restriction Policies (TRP), loading factors range from 0.720 to 0.911, indicating robust associations. High internal consistency reliability is indicated by a Cronbach's alpha of 0.866 and a composite reliability of 0.910. The average variance extracted (AVE) of 0.719 surpasses the 0.50 threshold, demonstrating convergent validity. Similarly, Ecology-Oriented Marketing Strategies (EOM) exhibit strong

relationships, with loading factors ranging from 0.745 to 0.860, Cronbach's alpha of 0.864, composite reliability of 0.902, and AVE of 0.649, all meeting reliability and validity criteria. For Reducing Over-Tourism (ROT), loading factors range from 0.785 to 0.835, with Cronbach's alpha of 0.828, composite reliability of 0.886, and AVE of 0.659, ensuring reliability and validity. Lastly, Tourist Experience (TEX) demonstrates strong associations, with loading factors ranging from 0.863 to 0.911, Cronbach's alpha of 0.874, composite reliability of 0.923, and AVE of

0.800, indicating high internal consistency and convergent validity. These findings validate the measurement model's reliability and support its suitability for further structural analysis.

4.3 Discriminant Validity

Discriminant validity refers to the extent to which constructs in a measurement

model are distinct from one another. It ensures that each construct measures a unique concept and is not redundant with other constructs in the model. Discriminant validity is typically assessed by examining the correlations between constructs and ensuring that they do not exceed certain thresholds, indicating that the constructs are distinct.

Table 2. Discriminant Validity

	Ecology-Oriented Marketing Strategies	Reducing Over-Tourism	Tourism Restriction Policies	Work-Life Balance
Ecology-Oriented Marketing Strategies	0.806			
Reducing Over-Tourism	0.801	0.812		
Tourism Restriction Policies	0.669	0.686	0.848	
Work-Life Balance	0.528	0.561	0.444	0.874

Source: Data Processing Results (2024)

The correlation matrix analysis indicates that all correlations between pairs of constructs are below 0.85, suggesting sufficient discriminant validity. As per established guidelines, discriminant validity is upheld when correlations between constructs remain below 0.85, indicating distinctiveness. Specifically, correlations between Ecology-Oriented Marketing Strategies and other constructs range from 0.528 to 0.801, affirming its distinction from Reducing Over-Tourism, Tourism Restriction Policies, and Work-Life Balance. Similarly, correlations between Reducing Over-Tourism and other constructs range from 0.561 to 0.812, highlighting its differentiation from Ecology-Oriented Marketing Strategies, Tourism

Restriction Policies, and Work-Life Balance. Additionally, correlations between Tourism Restriction Policies and other constructs range from 0.444 to 0.848, reinforcing its separateness from Ecology-Oriented Marketing Strategies, Reducing Over-Tourism, and Work-Life Balance. Lastly, correlations between Work-Life Balance and other constructs range from 0.444 to 0.874, indicating its distinctiveness from Ecology-Oriented Marketing Strategies, Reducing Over-Tourism, and Tourism Restriction Policies. These findings validate the discriminant validity of the constructs, ensuring their independence and reliability in subsequent analyses.

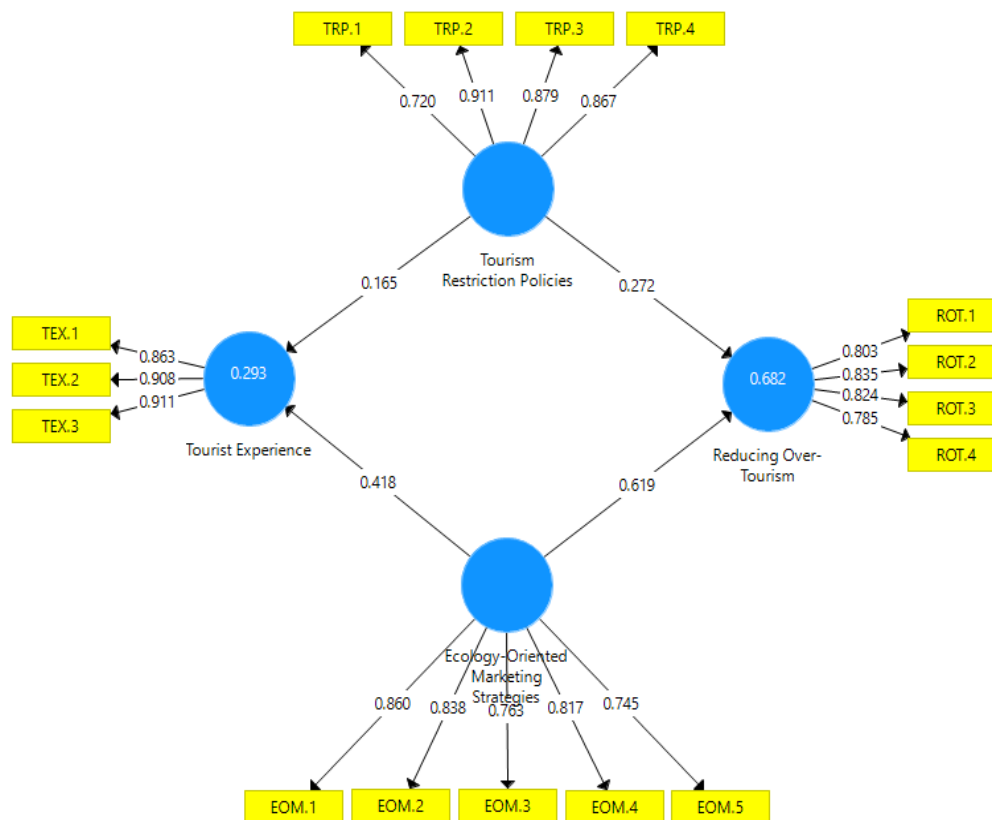


Figure 1. Model Results
 Source: Data Processed by Researchers, 2024

4.4 Model Fit

Model fit assessment is crucial in evaluating the adequacy of the structural equation model (SEM) in explaining the relationships among variables. Various fit indices are used to assess how well the

estimated model fits the observed data compared to a reference model. In this study, model fit is evaluated using several indices, including the standardized root mean square residual (SRMR), d_ULS, d_G, Chi-Square, and the Normed Fit Index (NFI).

Table 3. Model Fit Results Test

	Saturated Model	Estimated Model
SRMR	0.070	0.074
d_ULS	0.670	0.752
d_G	0.337	0.348
Chi-Square	345.582	352.742
NFI	0.812	0.808

Source: Process Data Analysis (2024)

Several goodness-of-fit indices were employed to assess the model fit. The Standardized Root Mean Square Residual (SRMR), measuring the discrepancy between observed and predicted covariances, yielded

favorable results, with both the saturated model (SRMR = 0.070) and the estimated model (SRMR = 0.074) demonstrating good fit. Additionally, indices d_ULS and d_G, reflecting the discrepancy between observed

and model-implied covariance matrices, indicated slightly poorer fit in the estimated model compared to the saturated model. The Chi-Square test, evaluating differences between observed and model-implied covariances, yielded significant p-values for both models, suggesting imperfect fit. However, the Normed Fit Index (NFI), comparing the fit of the estimated model to a null model, showed values close to 1 for both the saturated model (NFI = 0.812) and the

estimated model (NFI = 0.808), indicating reasonable fit overall.

R-square (R^2) and Q^2 are measures used in structural equation modeling (SEM) to assess the predictive power and goodness-of-fit of the model. R^2 represents the proportion of variance in the endogenous variables explained by the exogenous variables in the model, while Q^2 estimates the predictive relevance of the model by assessing how well it predicts the endogenous variables.

Table 4. Coefficient Model

	R Square	Q2
Reducing Over-Tourism	0.682	0.678
Tourist Experience	0.493	0.485

Source: Data Processing Results (2024)

For Reducing Over-Tourism, the R-square (R^2) value of 0.682 indicates that approximately 68.2% of the variance in Reducing Over-Tourism is explained by the exogenous variables in the model, demonstrating a high level of predictive power for this variable. Moreover, the Q^2 value of 0.678 signifies good predictive relevance, suggesting the model effectively forecasts future outcomes. Conversely, for Tourist Experience, the R-square value of 0.493 implies that about 49.3% of the variance is explained by the exogenous variables, indicating moderate explanatory power. However, the Q^2 value of 0.485 indicates good predictive relevance, affirming the model's

ability to adequately predict future outcomes for Tourist Experience.

4.5 Structural Model

The structural model results provided in the table illustrate the relationships between the predictor variables (Ecology-Oriented Marketing Strategies and Tourism Restriction Policies) and the outcome variables (Reducing Over-Tourism and Tourist Experience). Each row represents a separate path in the structural model, indicating the direct effects of predictor variables on outcome variables. The results include the original sample values, sample means, standard deviations, T statistics, and p-values.

Table 5. Hypothesis Testing

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics	P Values
Ecology-Oriented Marketing Strategies -> Reducing Over-Tourism	0.619	0.619	0.070	8.796	0.000
Ecology-Oriented Marketing Strategies -> Tourist Experience	0.418	0.414	0.088	4.763	0.000
Tourism Restriction Policies -> Reducing Over-Tourism	0.272	0.275	0.077	3.519	0.000
Tourism Restriction Policies -> Tourist Experience	0.265	0.271	0.088	2.864	0.003

Source: Process Data Analysis (2024)

The analysis of path coefficients reveals several significant relationships between constructs. Firstly, Ecology-Oriented Marketing Strategies exhibit a strong and positive relationship with Reducing Over-Tourism, with a coefficient of 0.619 and a highly significant T statistic of 8.796 ($p < 0.001$), indicating a substantial direct effect on Reducing Over-Tourism. Similarly, Ecology-Oriented Marketing Strategies also positively influence Tourist Experience, with a coefficient of 0.418 and a significant T statistic of 4.763 ($p < 0.001$), implying a notable direct impact on enhancing Tourist Experience. Moreover, Tourism Restriction Policies demonstrate a significant positive relationship with Reducing Over-Tourism, indicated by a coefficient of 0.272 and a highly significant T statistic of 3.519 ($p < 0.001$), suggesting a direct positive effect on Reducing Over-Tourism. Additionally, Tourism Restriction Policies positively affect Tourist Experience, with a coefficient of 0.265 and a significant T statistic of 2.864 ($p = 0.003$), although the effect is slightly weaker compared to other paths. These findings underscore the importance of both ecology-oriented marketing strategies and tourism restriction policies in mitigating over-tourism and enhancing tourist experiences in Indonesia.

Discussion

The discussion section presents a comprehensive analysis and interpretation of the findings, synthesizing the results of the research methods employed, including the measurement model, model fit assessment, hypothesis testing, and structural model. It contextualizes the results within the broader literature and provides insights into the implications for theory, practice, and future research.

The findings of this study provide robust empirical evidence supporting the effectiveness of both Ecology-Oriented Marketing Strategies and Tourism Restriction Policies in addressing key challenges in sustainable tourism management in Indonesia. The measurement model assessment confirmed the reliability and

validity of the constructs, ensuring the quality of the survey instrument used to collect data. The structural model analysis revealed significant positive relationships between Ecology-Oriented Marketing Strategies and both Reducing Over-Tourism and Tourist Experience, as well as between Tourism Restriction Policies and these outcome variables.

This study contributes to theoretical advancements in sustainable tourism management by empirically demonstrating the importance of proactive marketing strategies and regulatory interventions in mitigating the negative impacts of over-tourism and enhancing tourist experiences. The findings extend existing theoretical frameworks by highlighting the synergistic effects of marketing and policy interventions in achieving sustainable tourism outcomes. Additionally, the study contributes to the literature by providing insights into the mechanisms through which these interventions influence destination outcomes, thereby enriching our understanding of sustainable tourism dynamics.

Proactive marketing strategies play a crucial role in shaping sustainable tourism by aligning with the modern trend of sustainable development in the tourism industry [30]. These strategies focus on personalized, inclusive, digitized, and ecological approaches, emphasizing the importance of environmental protection and consumer awareness [31]. Additionally, proactive environmental strategies (PESs) in the hospitality and tourism sector have evolved over the years, legitimizing environmentally friendly actions and behaviors to achieve competitive advantage [32]. Sustainable marketing, particularly in agricultural contexts, extends the scope of sustainable practices from production to urban areas, emphasizing the exchange of sustainable products and services to meet customer demands and organizational goals [33]. Furthermore, promotional marketing strategies, such as leveraging social media and targeting specific demographic groups, can significantly impact sustainable tourism

demand, contributing to economic growth and foreign exchange revenue in tourist destinations like Bhaktapur, Nepal [34].

Implications for Practice

The practical implications of this study are significant for destination managers, policymakers, and tourism stakeholders in Indonesia and beyond. The findings underscore the importance of integrating Ecology-Oriented Marketing Strategies and Tourism Restriction Policies into destination management practices to achieve sustainable tourism development goals. Destination managers can leverage eco-friendly marketing campaigns to promote responsible travel behavior and attract conscientious tourists while implementing effective regulatory measures to manage tourist flows and preserve destination integrity. By adopting a holistic approach to tourism management that balances marketing initiatives with regulatory interventions, destinations can enhance visitor satisfaction, protect natural and cultural resources, and foster long-term sustainability.

Limitations and Future Research Directions

Despite its contributions, this study has several limitations that warrant acknowledgment. Firstly, the research focused on selected destinations in Indonesia, limiting the generalizability of the findings to other contexts. Future research could replicate the study in different geographical locations to enhance the external validity of the findings. Additionally, the study relied on cross-sectional data, limiting causal inferences

about the relationships examined. Longitudinal studies could provide insights into the dynamic nature of sustainable tourism outcomes over time. Furthermore, the study focused primarily on the direct effects of Ecology-Oriented Marketing Strategies and Tourism Restriction Policies on destination outcomes, neglecting potential moderating and mediating factors that may influence these relationships. Future research could explore the moderating effects of destination characteristics and the mediating mechanisms underlying the observed relationships.

5. CONCLUSION

In conclusion, this study underscores the critical role of ecology-oriented marketing strategies and tourism restriction policies in promoting sustainable tourism development in Indonesia. The empirical evidence presented demonstrates the significant positive impact of these interventions on reducing over-tourism and enhancing tourist experiences. Destination managers, policymakers, and tourism stakeholders are encouraged to integrate marketing initiatives and regulatory measures into their management practices to achieve a balance between tourism growth and environmental conservation. By advancing our understanding of sustainable tourism dynamics, we can work towards creating more resilient and responsible tourism destinations for the benefit of present and future generations.

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