



## THE PERCEPTIONS OF THE DUSUN TATANA COMMUNITY REGARDING THE DEVELOPMENT OF CULTURAL TOURISM IN KUALA PENYU, SABAH.

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### Abstract

This study investigates into the perceptions of the Dusun Tatana community regarding the development of cultural tourism in Kuala Penyu, Sabah, with a primary objective of understanding the intricate dynamics between community attachment, involvement, and the evolution of cultural tourism. In an exploration involving 230 respondents, this research utilizes Partial Least Squares Structural Equation Modeling (PLSSEM) as the methodology to unravel the nuanced relationships within the context of this unique community. The findings of the study bring to light the significant influence of both community attachment and involvement on the development of cultural tourism in Kuala Penyu. As residents are the primary stakeholders impacted by tourism activities, their perceptions and participation play a pivotal role in shaping the trajectory of cultural tourism in the region. The study uncovers that a strong sense of community attachment, where residents emotionally connect with their surroundings and share a common journey of life, contributes positively to the development of cultural tourism. Furthermore, the study emphasizes the crucial role of community involvement in fostering successful cultural tourism. Meaningful representation, decision-making, and collaboration within the community are identified as essential components for sustainable growth and development. The results underscore that community-led initiatives, such as guided tours, cultural seminars, and traditional festivities, not only enhance visitor experiences but also contribute significantly to the immersive and authentic cultural development of the destination. This research holds practical implications for policymakers, tourism developers, and community leaders involved in cultural tourism initiatives. Understanding the perceptions of the Dusun Tatana community provides valuable insights for the strategic planning and implementation of cultural tourism projects in Kuala Penyu. Additionally, academically, this study contributes to the existing literature by shedding light on the intricate relationships between community dynamics and the development of cultural tourism. It adds depth to the understanding of the sociocultural impacts within the specific context of the Dusun Tatana community, offering a nuanced perspective for future research in the broader field of cultural tourism development.

*Keywords:* Cultural Tourism ; Cultural tourism development ; Community attachment ; Community involvement ; Sociocultural impacts ; Dusun Tatana community

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## 1. Introduction

Cultural tourism, as a multifaceted phenomenon, stands at the crossroads of heritage preservation, economic development, and community engagement (McCool et al., 1994, Uslu et al., 2023). Thus, community attachment, a concept rooted in individuals' emotional bonds and connections to their community, becomes a crucial lens through which to understand the dynamics of cultural tourism development (Morales et al., 2018).

In tandem with community attachment, community involvement emerges as a key determinant in the symbiotic relationship between residents and cultural tourism development (Olya et al., 2018, Uslu et al., 2023). Contrary to expectations, Tsoudis (2001) found the heightened social recognition and power in major tourist destinations may lead to an increase in conflicts and criminal activities. This phenomenon can be attributed to various factors, such as the concentration of wealth and resources in tourist hotspots, which can exacerbate social inequalities and foster tensions among local communities and visitors. Tourism plays an important role for economic development in this regard (Yusoh et al., 2022). Additionally, the influx of tourists can strain local infrastructure and resources, leading to conflicts over access and distribution. Furthermore, the presence of large numbers of tourists can create opportunities for criminal activities, such as theft, fraud, and human trafficking.

The level of participation, involvement, and collaboration among the community members can significantly shape the trajectory and sustainability of cultural tourism initiatives (Community Engagement in Tourism Development, 2023). Understanding the factors that drive or hinder community involvement is essential for crafting strategies that harness the positive aspects of cultural tourism while respecting and enhancing the local way of life.

As for Dusun Tatana residents of Kuala Penyu, their attachment to the land, cultural practices, and communal ties forms an integral part of their identity. In the serene landscapes of Kuala Penyu, Sabah, Malaysia. The Dusun Tatana community finds itself at the heart of the evolving narrative of cultural tourism development. The increasing recognition of the Dusun Tatana people's unique cultural heritage and the burgeoning interest in Kuala Penyu as a cultural tourism destination. As cultural tourism gains prominence globally, destinations like Kuala Penyu become focal points for exploration, attracting visitors eager to immerse themselves in the authentic traditions of indigenous communities. Against this setting, understanding how the Dusun Tatana community perceives and navigates the ongoing cultural tourism development is paramount.

Drawing from the literature discussed earlier regarding community perceptions, it is evident that the comprehensive exploration of the overarching concept of Community Attachment Theory (CAT) remains lacking in the specific context of the Dusun Tatana community in Kuala Penyu, Sabah. A noticeable gap exists in the current body of literature, particularly concerning the examination of CAT within communities and its underlying components, including attachment, involvement, sociocultural impacts, and the development of cultural tourism.

The Malaysian government has been instrumental in establishing a legislative and institutional framework to promote sustainable tourism. This article includes a research study that examines the effectiveness of tourist development in a cultural-social approach in Sabah, Malaysia.

## 2. Literature Review

### 2.1. Kuala Penyu as Cultural Tourism Destination in Sabah

Cultural tourism involves exploring and experiencing the cultural aspects of a destination, encompassing activities like visits to heritage sites, museums, and participation in local traditions (Richards, 2008; Seyfi et al., 2020). McKercher and du Cros (2020) define cultural tourism from a marketing perspective as the transformation of a destination's cultural heritage into consumable products for tourists, emphasizing its role in creating valuable cultural experiences. For the Dusun Tatana community in Kuala Penyu, Sabah, understanding cultural tourism's multifaceted definition is crucial for evaluating their perceptions regarding its development in the region.

Cultural tourism is intricately linked to specific locations, with cultural districts serving as regions fostering synergies between enterprises and individuals, based on culture and human interactions (Placenti, 2011). It is not just a subset of tourism; the UNWTO defines it as the movement of individuals to cultural attractions in different countries, highlighting its diverse nature (Du Cros et al., 2020; Greg, 1996). The benefits of cultural tourism extend beyond economic gains, contributing to societal cohesion and local cultural development (Amin, 2020). Studies by Wu et al. and Manzoor et al. support the notion that, when properly managed, tourism can enhance socioeconomic indicators and quality of life in poor nations, aligning with Sabah's emphasis on sustainable tourism development (Rasool et al., 2021; Kristensen & Mosgaard, 2020). Recognizing these aspects is essential for assessing how the Dusun Tatana community perceives the development of cultural tourism, shedding light on potential impacts in Kuala Penyu, Sabah.

## *2.2. Community Attachment*

Community attachment, described as the extent of social integration and people's feelings for their community, plays a crucial role in understanding attitudes towards tourism (McCool & Martin, 1994; Li et al., 2021). Kasarda and Janowitz (1974) view a community as a social organization with ecological, institutional, and normative components. Sociologists, including Brehm et al. (2004), Escalera-Reyes (2020) and Matarrita-Cascante et al. (2010), define community attachment as a strong sense of belonging and favorable feelings towards one's community. This emotional connection influences residents' perceptions and behavior towards their surroundings, making it a vital factor in the success of sustainable tourism development (Eslami et al., 2023; López et al., 2018; Mathew & Sreejesh, 2017). Understanding the community attachment of the Dusun Tatana community in Kuala Penyu, Sabah, is crucial for evaluating their perceptions regarding the development of cultural tourism in the region.

Various measures, such as length of residency and place attachment, have been used to study the association between attachment and attitudes towards tourism (Isa et al., 2020; Man Cheng et al., 2022; Hadinejad et al., 2019). Community attachment can differ based on factors like society size, social class, environmental quality, and perceptions, with social offerings and openness being key contributors (Eslami et al., 2019; Kang & Perdue, 2020; Lee, 2013; Nicholas et al., 2009). The emotional and behavioral dimensions of community attachment are intertwined, and understanding these dynamics is essential in the context (Escalera-Reyes, 2020) of the Dusun Tatana community's perceptions of cultural tourism development in Kuala Penyu, Sabah. This understanding can provide insights into how community attachment influences the acceptance or resistance towards cultural tourism initiatives in the region.

## *2.3. Community Involvement*

When considering the involvement of local communities in tourism, it is crucial to pinpoint which communities can actively engage in tourism activities. According to Argyrou and Hummels (2019), a community is a group of people with mutually recognized interests in the resources of a specific area, not just those residing there. This emphasizes the importance of involving communities living in or near wildlife areas in tourism activities. Engaging the local community in decision-making not only builds trust in the tourism industry but also enhances service delivery and promotes shared goals and community participation (Hacker et al., 2019).

Community participation in tourism is vital for preserving local culture, tradition, indigenous knowledge, and the environment. Active involvement in decision-making, meaningful representation, and collaboration are essential for successful tourism development. The success of tourism development relies heavily on the cooperation and goodwill of the local community, leading to sustainable development and bringing economic, environmental, and cultural benefits (Aref, 2011; Hussain & Kodialbail, 2023; Wondirad & Ewnetu, 2019).

Understanding this dynamic is particularly relevant for the Dusun Tatana community in Kuala Penyu, Sabah, as their perceptions regarding the development of cultural tourism can provide valuable insights into the impact of

community involvement in this specific context (Ramkissoon, 2023). Community-based tourism projects and small-scale businesses can improve residents' quality of life, but the challenge lies in maintaining a balance between commercial success and preserving the community's character. This balance is crucial for the holistic development of cultural tourism in the region (Jani, 2018; Nugroho & Numata, 2020).

#### *2.4. Sociocultural Impacts*

Tourism has a profound influence on society, culture, economy, and ecology, with developing countries particularly reliant on tourism experiencing significant impacts (Baloch et al., 2023; Crandall, 1994). Cohen (1984) highlights the importance of studying the social effects of tourism, especially in nations with established tourism sectors. However, the sociocultural impacts of tourism in industrialised countries remain underexplored, creating a notable research gap (Crandall, 1994; Dupre, 2019). This study seeks to address this gap by examining the sociocultural implications of tourism within the Dusun Tatana community in Sabah, offering insights from an indigenous perspective on cultural tourism development in Kuala Penyu.

Sociocultural impacts also refer to the ways in which cultural, social, and behavioural patterns of individuals and communities are shaped by globalisation (Yolles, 2019), modernization (Yang et al., 2019), and interactions (Chirkov, 2020) with external cultures. These impacts can result in both positive and negative changes, such as shifts in traditions, social structures, and community values (Axon, 2020; Zhuang et al., 2019). For Amankwah-Amoah et al. (2021), exposure to new technologies can lead to the adoption of new lifestyles, but may also erode traditional practices and beliefs. The challenge lies in balancing the preservation of indigenous customs and traditions with the influences of modernity (Herzog, 2021), as with the Dusun Tatana community. Segal (2019) identified sociocultural impacts such as increasing migration, improved access to education, and economic shifts, which present both opportunities and challenges in maintaining cultural identity while adapting to new social and economic dynamics.

#### *2.5. Cultural Tourism Development*

Cultural tourism development plays a significant role in promoting local heritage, fostering economic growth, and providing a platform for communities to share their unique traditions and practices with the broader world (Tahiri et al., 2022). Du Cros (2020) found that the development of cultural tourism also encompasses the creation of experiences that emphasise a destination's cultural assets, such as historical landmarks, indigenous customs, festivals, and crafts. For communities such as the Dusun Tatana in Kuala Penyu, Sabah, cultural tourism offers opportunities to preserve their cultural identity while engaging with external visitors. By developing cultural tourism initiatives, the Dusun Tatana people can showcase their rich traditions, such as traditional dances, agricultural practices, and handicrafts, which could foster pride and cultural sustainability. However, the development of cultural tourism also comes with challenges, including the potential for cultural commodification, where traditional practices may be altered to meet the expectations of tourists (Daly et al., 2021). Additionally, there is the risk of overcrowding and environmental degradation (Du Cros, 2020). As highlighted by scholars such as Chong and Balasingam (2019), there is a need for careful planning and community involvement in the tourism development process to ensure that cultural authenticity is maintained while benefiting from tourism's economic potential. For the Dusun Tatana, balancing tradition with the pressures of modernity and tourism development will be key to sustaining both their cultural heritage and economic growth.

### 3. Methodology

The study focused on respondents aged 18 years and older, encompassing Dusun Tatana community in Kuala Penyu. Data for this study were gathered between November to December 2023, covering both weekdays and weekends. A survey employing a quantitative approach, utilizing a questionnaire, was conducted to gather data from the Dusun Tatana community. The questionnaire was adapted from tools employed in prior studies on resident perceptions (Andereck et al., 2005; Latip et al., 2018; Látková and Vogt, 2012; Nunkoo & Ramkissoon, 2012; Rasoolimanesh et al., 2015), with modifications made to suit the research context and ensure appropriateness for Dusun Tatana community as a respondent. Three numerators, who were undergraduate students, were trained and assigned to distribute the questionnaire survey in Kuala Penyu. The numerators received a briefing on the sampling method, questionnaire content, and research objectives. A total of 230 questionnaires were returned and deemed valid for analysis. Figure 1 shows estimation posits that this study minimum sample size was 138 comprising Dusun Tatana community in Kuala Penyu aged 18 and above.

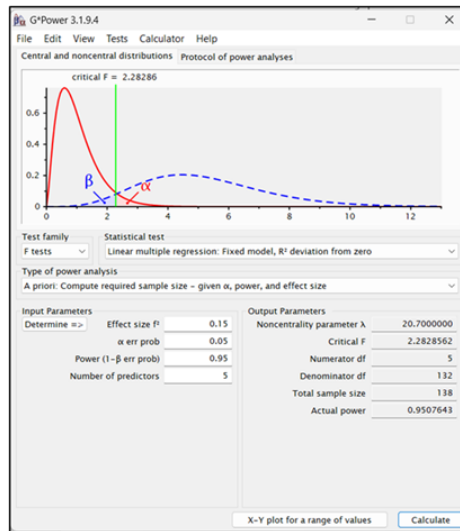


Figure 1: Power analysis for a framework model  
Source: G\*Power 3.1.9.4

### 4. Findings

#### 4.1. Respondents

A total of 230 surveys were distributed, completed, and returned, resulting in a 100% response rate. The respondents' ages varied from 18 to 51 years and above, with the majority (49.1%) falling between 18 and 30. Regarding marital status, most respondents were married (53.5%), followed closely by single individuals (46.5%). In terms of education, the largest group (41.7%) identified as undergraduates, followed by diploma holders (27.8%), high school graduates (15.7%), and postgraduate students (14.8%). Table 1 shows that most of the native community in Kuala Penyu was Dusun Tatana (97.0%), with a small percentage (3.0%) not belonging to the Dusun Tatana community.

Table 1: Descriptive Analysis

No	Demographic	Frequencies	Percentage (%)
1	<b>Gender</b>		
	Male	110	47.8
	Female	120	52.2
2	<b>Age (year)</b>		
	18 - 30	113	49.1
	31 - 40	77	33.
	41 - 50	30	13.0
	51 and above	10	4.3
3	<b>Marital Status</b>		
	Married	123	53.5
	Single	107	46.5
4	<b>Level of Education</b>		
	High School Certification	36	15.7
	Diploma	64	27.8
	Undergraduate	96	41.7
	Postgraduate	34	14.8
5	<b>Native of Community</b>		
	Yes	225	97.0
	No	5	3.0

#### 4.2. Reflective Measurement Model

The assessment of the measurement model serves the purpose of confirming the validity and reliability of the items within the constructs. This involves determining four essential parameters: (i) the reliability of the indicators, (ii) the internal consistency reliability, (iii) the convergent validity, and (iv) the discriminant validity, all of which are crucial for evaluating a reflective measurement model. Figure 2 and Table 2 below provide a visual and tabular representation of the outer loading scores, composite reliability, convergent reliability, and Cronbach Alpha, which are used to assess the reflective measurement model.

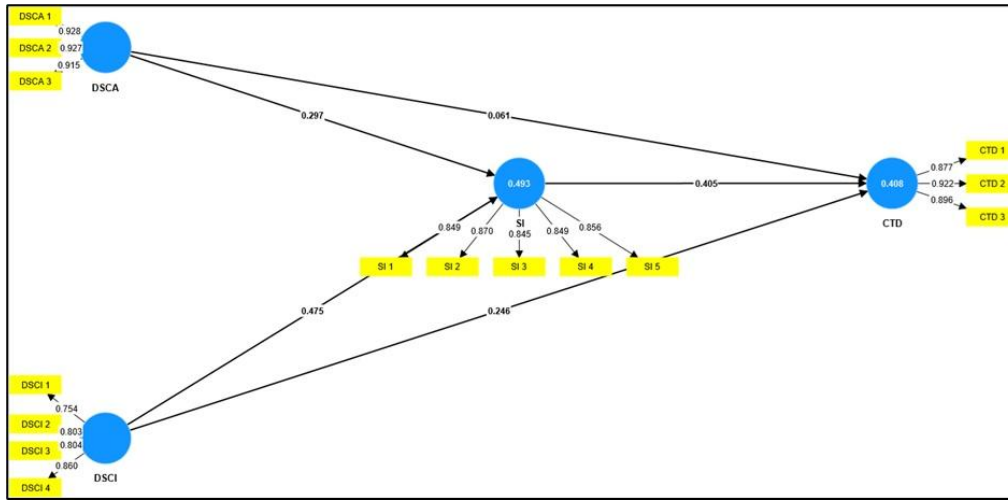


Figure 2: The Reflective Measurement Model

Table 1: The Reflective Measurement Model

Construct	Items	Outer Loading	Composite reliability (rho_a)	AVE	Cronbach Alpha
Dusun Tatana Community Attachment (DSCA)	DSCA 1	0.928	0.921	0.853	0.914
	DSCA 2	0.927			
	DSCA 3	0.915			
Dusun Tatana Community Involvement (DSCI)	DSCI 1	0.754	0.824	0.650	0.820
	DSCI 2	0.803			
	DSCI 3	0.804			
	DSCI 4	0.860			
Sociocultural Impacts (SI)	SI 1	0.849	0.908	0.730	0.907
	SI 2	0.870			
	SI 3	0.845			
	SI 4	0.849			
	SI 5	0.856			
Cultural Tourism Development (CTD)	CTD 1	0.877	0.882	0.807	0.881
	CTD 2	0.922			
	CTD 3	0.896			

Table 2 demonstrates that the loading indicator scores fall within the range of 0.754 to 0.928, surpassing the recommended threshold. All loading indicators are deemed suitable and align with the desired level of reliability. The composite reliability values for the four constructs in this study range from 0.824 to 0.921, exceeding the acceptable threshold of 0.70. This signifies that the internal consistency of the items in each construct is adequate for this study. Additionally, the AVE values in this study are found to be between 0.650 and 0.853, which surpass the 0.5 threshold, indicating a satisfactory level of convergent validity.

In Table 3, the Heterotrait-Monotrait Ratio of Correlations (HTMT) is utilized to verify the discriminant validity of the model. It is suggested that the threshold value should be set at a lower level, around 0.85 or 0.90, especially when constructs are conceptually distinct, to be more conservative (Henseler et al., 2014). Since the HTMT values in this study are below 0.90, there are no issues with collinearity among the latent constructs.

Table 3: Discriminant Validity (HTMT)

	CTD	DSCA	DSCI	SI
CTD	-			
DSCA	0.506	-		
DSCI	0.649	0.726	-	
SI	0.673	0.655	0.766	-

#### 4.3. Structural Model

After establishing a consistent and precise measurement model, the analysis proceeded to assess the linear connections, both causal and covariance, between the exogenous (independent) and endogenous (dependent) latent variables. This phase aimed to empirically test all hypotheses presented in this thesis to address the research questions. As outlined by Hair et al. (2022) and Götz et al. (2010), evaluation of the Partial Least Squares Structural Equation Modeling (PLS-SEM) (Q2) involved criteria such as the coefficient of determination (R<sup>2</sup>), path coefficient estimation ( $\beta$ ), effect size (f<sup>2</sup>), and prediction relevance. The presented Table 4 outlines the results of a PLS-SEM analysis, examining the relationships between latent variables in the model. Each row corresponds to a specific hypothesis, denoted as H1 through H5, and provides key information about the estimated path coefficients ( $\beta$ ), their standard deviations (SD), t-statistics, p-values, effect sizes (f<sup>2</sup>), coefficients of determination (R<sup>2</sup>), predictive relevance (Q<sup>2</sup>), and the overall results.



Table 4: Path Coefficient

	Path Analysis	$\beta$	SD	T-Statistics	P-Values	$f^2$	R <sup>2</sup>	Q <sup>2</sup>	Results
H <sub>1</sub>	DSCA -> SI	2.968	0.100	2.968	0.003	0.105			Significant
							0.493	0.000	
H <sub>2</sub>	DSCI -> SI	0.047	0.092	5.183	0.000	0.268			Significant
H <sub>3</sub>	SI -> CTD	0.040	0.098	4.114	0.000	0.140			Significant
H <sub>4</sub>	DSCA -> SI -> CTD	0.120	0.050	2.400	0.016	0.003	0.408	0.352	Significant
H <sub>5</sub>	DSCI -> SI -> CTD	0.192	0.064	3.007	0.003	0.048			Significant

## 5. Discussions

All hypotheses, H<sub>1</sub> through H<sub>5</sub>, are found to be significant with p-values below the conventional threshold of 0.05. Notably, H<sub>2</sub> exhibits the highest effect size ( $f^2 = 0.268$ ), suggesting a substantial impact of DSCI on SI. Furthermore, H<sub>3</sub>, representing the relationship between SI and CTD, demonstrates the highest predictive relevance ( $Q^2 = 0.352$ ), indicating that the model effectively predicts the CTD variable. Paths involving sequential relationships (H<sub>4</sub> and H<sub>5</sub>) are also statistically significant, providing additional insights into the combined effects of the latent variables. Overall, these findings underscore the robustness of the specified paths in the model and contribute valuable information to understanding the interplay among DSCA, DSCI, SI, and CTD in the context of the analysed system. Further consideration should be given to theoretical implications and the potential multicollinearity of variables involved in multiple paths.

The H1 asserting the significant effect of attachment on perceived sociocultural impacts holds relevance when applied to the Dusun Tatana community in Kuala Penyu in the context of cultural tourism development. In this community, individuals may form strong emotional and psychological bonds with their cultural practices and heritage, given the rich traditions and unique cultural elements that characterize the Dusun Tatana way of life. As evident in cultural tourism development, where the preservation and showcasing of local traditions play a pivotal role, the degree of attachment individuals has to their cultural identity may significantly influence their perceptions of sociocultural impacts. For instance, individuals deeply attached to the Dusun Tatana community may be more sensitive to changes brought about by tourism-related activities, recognizing both the positive and negative sociocultural impacts on their heritage. These emotional connections can shape their perspectives, making the sociocultural changes more salient and influencing their participation with cultural tourism initiatives (Eslami, 2019; Hummon, 1992; Latip, 2018). Understanding the intricate relationship between attachment and perceived sociocultural impacts is crucial for developing sustainable cultural tourism strategies that respect and enhance the local community's cultural identity and heritage (Blešić, 2022; Niu & Chen, 2022).

H<sub>2</sub> positing that involvement has a significant effect on the perceived sociocultural impacts implies an anticipation of a meaningful association between community level of participation and their perceptions of sociocultural impacts within a particular context. In the case of the Dusun Tatana community in Kuala Penyu, this hypothesis gains significance, especially concerning cultural tourism development. Involvement, which may encompass active participation, contribution, or interaction with cultural activities, is pivotal in the context of a community deeply rooted in its traditions. Members of the Dusun Tatana community, actively involved in cultural practices, may exhibit heightened sensitivity to the sociocultural changes brought about by tourism initiatives. Their active participation can potentially influence the way they perceive these impacts, allowing for a more nuanced understanding of the complex dynamics between involvement and sociocultural effects. Recognizing and substantiating this hypothesis is vital for tailoring cultural tourism strategies that not only cater to the preferences and values of the Dusun Tatana community but also actively involve them in the decision-making processes surrounding tourism development (Kurniawan et al., 2023). Understanding the interplay between involvement and perceived sociocultural impacts can contribute to the formulation of sustainable cultural tourism practices that respect and preserve the unique cultural identity of the community (Latip, 2018; Mishra et al., 2019). Understanding the interplay between involvement and perceived sociocultural impacts can contribute to the formulation of sustainable cultural tourism practices that respect and preserve the unique cultural identity of the Dusun Tatana community (Zhuang et al., 2019).

H<sub>3</sub>, asserting that the perceived sociocultural impacts of cultural tourism have a significant effect on Dusun Tatana community development, suggests an intricate relationship between the community's perceptions of sociocultural impacts and its overall developmental trajectory. Within the context of the Dusun Tatana community in Kuala Penyu, this hypothesis gains relevance in the backdrop of cultural tourism initiatives. The community's perception of the sociocultural impacts resulting from tourism activities can play a pivotal role in shaping its developmental pathways. Positive perceptions, such as the preservation of cultural heritage and economic benefits, may contribute to community cohesion and empowerment. Conversely, negative impacts, such as cultural commodification or environmental degradation, could hinder development prospects. Understanding and validating this hypothesis is crucial for crafting cultural tourism strategies that not only align with the aspirations of the Dusun Tatana community but also contribute positively to its overall development (Peters et al., 2019; Zhuang et al., 2019). By acknowledging and addressing the perceived sociocultural impacts, cultural tourism planners can foster sustainable development that respects the values and aspirations of the Dusun Tatana community (Alisa & Ridho, 2020).

As in H<sub>4</sub>, proposing that positive sociocultural impacts mediate the relationship between community attachment and cultural tourism development, suggests a nuanced mechanism through which the emotional ties individuals have with their community may influence the broader impacts of cultural tourism. In the specific case of the Dusun Tatana community in Kuala Penyu, this hypothesis becomes particularly relevant as it introduces the idea that the strength of community attachment may channel through positive sociocultural impacts, ultimately shaping the trajectory of cultural tourism development. Strong emotional connections to the Dusun Tatana community may foster a supportive environment for cultural tourism initiatives, leading to positive outcomes such as enhanced community pride, increased cultural preservation, and improved well-being. Understanding and validating this hypothesis is vital for cultural tourism planners aiming to foster sustainable development that respects and leverages community attachment within the Dusun Tatana context (Li et al., 2022). By recognizing the mediating role of positive sociocultural impacts, tourism strategies can be tailored to enhance community well-being and ensure the preservation of the unique cultural identity of the Dusun Tatana community (Alisa & Ridho, 2020; Jaafar et al., 2015).

H<sub>5</sub>, suggesting that positive sociocultural impacts mediate the relationship between community involvement and cultural tourism development, introduces a dynamic pathway through which the active participation of the Dusun Tatana community in cultural tourism may influence the overall developmental outcomes. In the context of Kuala Penyu, this hypothesis implies that the positive sociocultural impacts resulting from community involvement play a crucial role in shaping the broader effects of cultural tourism. Actively participate community members may

contribute to the creation of positive experiences for tourists, fostering a deeper appreciation for the Dusun Tatana culture and heritage. These positive impacts, in turn, can mediate the relationship between community involvement and the sustainable development of cultural tourism. Understanding and substantiating this hypothesis is essential for cultural tourism planners, as it emphasizes the importance of fostering positive interactions and collaborations between the Dusun Tatana community and tourists (Li et al., 2022). By acknowledging the mediating role of positive sociocultural impacts, tourism strategies can be designed to amplify the benefits of community involvement, ensuring a more inclusive and mutually beneficial cultural tourism development in Kuala Penyu (Alamineh, 2023; Ottaviani et al., 2024).

## **6. Limitations and Future Research**

Despite the informative results, it is crucial to acknowledge some limitations of the study. Firstly, the findings are contingent on the assumptions and simplifications inherent in the PLS-SEM approach. Researchers should be cautious in generalizing the results, considering the specific context and characteristics of the sample under investigation. Additionally, the cross-sectional nature of the data might limit the establishment of causal relationships between variables. Future research endeavors could incorporate longitudinal designs to explore temporal dynamics and causality further. Furthermore, the study might benefit from an exploration of potential moderating or mediating variables that could enhance the model's explanatory power. These considerations can contribute to a more comprehensive and nuanced understanding of the underlying relationships in the analyzed system.

## **7. Conclusions**

In conclusion, the study's findings support the significance of community attachment and involvement in shaping perceptions of sociocultural impacts in the Dusun Tatana community, particularly in the context of cultural tourism development. The first hypothesis emphasises the emotional and psychological bonds individuals form with their cultural practices, highlighting the sensitivity of community members to changes brought about by tourism-related activities. This understanding is crucial for developing sustainable cultural tourism strategies that respect and enhance the local community's cultural identity and heritage. The second hypothesis underscores the importance of community involvement in influencing perceptions of sociocultural impacts, emphasizing the need for strategies that actively engage the Dusun Tatana community in decision-making processes surrounding tourism development. The third hypothesis links perceived sociocultural impacts to overall community development, emphasizing the role of positive perceptions in fostering cohesion and empowerment. The fourth and fifth hypotheses introduce mediating mechanisms, suggesting that positive sociocultural impacts may mediate the relationship between community attachment and involvement, respectively, and cultural tourism development. These insights contribute to the formulation of more inclusive and mutually beneficial cultural tourism practices in Kuala Penyu.

However, it is crucial to acknowledge some limitations in the study. The results are subject to the assumptions and simplifications inherent in the PLS-SEM approach, and caution should be exercised in generalizing findings to other contexts. The cross-sectional nature of the data limits the establishment of causal relationships between variables, prompting the need for future research with longitudinal designs. Exploring potential moderating or mediating variables could enhance the model's explanatory power, providing a more comprehensive understanding of the underlying relationships in the analyzed system. These considerations will contribute to the refinement and expansion of knowledge in the field of cultural tourism development in the Dusun Tatana community and beyond.

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## References

- Agüera, F. O., Castellanos-Verdugo, M., Guzmán, J. A. A., Cobeña, M., & Oviedo-García, M. Á. (2020). The mediating effects of community support for sustainable tourism, community attachment, involvement, and environmental attitudes. *Journal of Hospitality & Tourism Research*, *46*(7), 1298–1321. <https://doi.org/10.1177/1096348020980126>
- Alamineh, G. A., Hussein, J. W., Mulu, Y. E., & Tadesse, B. (2023). The negative cultural impact of tourism and its implication on sustainable development in Amhara Regional State. *Cogent Arts & Humanities*, *10*(1), 2224597. <https://doi.org/10.1080/23311983.2023.2224597>
- Alisa, F., & Ridho, Z. (2020). Sustainable cultural tourism development: A strategic for revenue generation in local communities. *Journal of Economic and Tropical Life Science*, *4*(2), 47-56. <https://doi.org/10.21428/e61c265e.f512dbd8>
- Aman, J., Abbas, J., Mahmood, S., Nurunnabi, M., & Bano, S. (2019). The influence of Islamic religiosity on the perceived socio-cultural impact of sustainable tourism development in Pakistan: A structural equation modeling approach. *Sustainability*, *11*(11), 3039. <https://doi.org/10.3390/su11113039>
- Amankwah-Amoah, J., Khan, Z., Wood, G., & Knight, G. (2021). COVID-19 and digitalization: The great acceleration. *Journal of Business Research*, *136*, 602-611. <https://doi.org/10.1016/j.jbusres.2021.08.011>
- Amin, S. (2020). Diversity, tourism, and economic development: A global perspective. *Tourism Analysis*, *25*(1), 21–41. <https://doi.org/10.3727/108354220x15758301241602>
- Axon, S. (2020). The socio-cultural dimensions of community-based sustainability: Implications for transformational change. *Journal of Cleaner Production*, *266*, 121933. <https://doi.org/10.1016/j.jclepro.2020.121933>
- Baldigo, B. P., & Lawrence, G. B. (2000). Composition of fish communities in relation to stream acidification and habitat in the Neversink River, New York. *Transactions of the American Fisheries Society*, *129*(1), 60–76. [https://doi.org/10.1577/1548-8659\(2000\)129](https://doi.org/10.1577/1548-8659(2000)129)
- Baloch, Q. B., Shah, S. N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., & Khan, A. U. (2023). Impact of tourism development upon environmental sustainability: A suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, *30*(3), 5917-5930. <https://doi.org/10.1007/s11356-022-22496-w>
- Blešić, I., Pivac, T., Kovačić, S., Cimbajević, M., Lukić, T., Bubalo Živković, M., & Bjelajac, D. (2022). Place attachment, cultural involvement, and residents' attitudes towards tourism development: The case of Novi Sad, the European Capital of Culture 2022. *Sustainability*, *14*(15), 9103. <https://doi.org/10.3390/su14159103>
- Bousquet, F., Quinn, T., Jankowski, F., Mathevet, R., Barreteau, O., & Dhénain, S. (2022). Attachements et changement dans un monde en transformation. In Éditions Quae eBooks. <https://doi.org/10.35690/978-2-7592-3350-2>
- Chirkov, V. (2020). An introduction to the theory of sociocultural models. *Asian Journal of Social Psychology*, *23*(2), 143-162.
- Chong, K. Y., & Balasingam, A. S. (2019). Tourism sustainability: Economic benefits and strategies for preservation and conservation of heritage sites in Southeast Asia. *Tourism Review*, *74*(2), 268-279. <https://doi.org/10.1108/tr-11-2017-0182>
- Cole, S. (2007). Beyond authenticity and commodification. *Annals of Tourism Research*, *34*(4), 943–960. <https://doi.org/10.1016/j.annals.2007.05.004>
- Cole, S. (2017). Water worries: An intersectional feminist political ecology of tourism and water in Labuan Bajo, Indonesia. *Annals of Tourism Research*, *67*, 14–24. <https://doi.org/10.1016/j.annals.2017.07.018>
- Daly, P., Dias, A. L., & Patuleia, M. (2021). The impacts of tourism on cultural identity in Lisbon's historic neighborhoods. *Journal of Ethnic and Cultural Studies*, *8*(1), 1-25. <https://doi.org/10.29333/ejecs/516>
- De Carvalho, J. V., Rocha, Á., Liberato, P., & Peña, A. (2020). Advances in tourism, technology and systems: Selected papers from ICOTTS20, Volume 1. Springer Nature.
- Destination Management. (2023, October 3). Community engagement in tourism development. *LinkedIn*. <https://www.linkedin.com/pulse/community-engagement-tourism-development-patrick-wisdom/>
- Du Cros, H., & McKercher, B. (2020). *Cultural tourism*. Routledge.

- Dupre, K. (2019). Trends and gaps in place-making in the context of urban development and tourism: 25 years of literature review. *Journal of Place Management and Development*, 12(1), 102-120. <https://doi.org/10.1108/jpmd-07-2017-0072>
- Erbaş, R. (2022). *Global problems in sexual offenses*. Rowman & Littlefield.
- Eslami, S., Khalifah, Z., Mardani, A., Streimikiene, D., & Han, H. (2019). Community attachment, tourism impacts, quality of life, and residents' support for sustainable tourism development. *Journal of Travel & Tourism Marketing*, 36(9), 1061-1079. <https://doi.org/10.1080/10548408.2019.1689224>
- Geremew, Y. M., Alemayehu, H. B., & Meskele, A. T. (2017). Tourism marketing challenges and new tourism product development potentials: Practices from the Amhara National Regional State World Heritage Sites. *Journal of Hospitality Management and Tourism*, 8(1), 1–13. <https://doi.org/10.5897/jhmt2016.0206>
- Hummon, D. M. (1992). Community attachment. In *Place Attachment: Human Behavior and Environment*, 12. [https://doi.org/10.1007/978-1-4684-8753-4\\_12](https://doi.org/10.1007/978-1-4684-8753-4_12)
- Hacker, J., Johnson, M. P., Saunders, C., & Thayer, A. L. (2019). Trust in virtual teams: A multidisciplinary review and integration. *Australasian Journal of Information Systems*, 23. <https://doi.org/10.3127/ajis.v23i0.1757>
- Herzog, T. (2021). Immemorial (and native) customs in early modernity: Europe and the Americas. *Comparative Legal History*, 9(1), 3-55. <https://doi.org/10.1080/2049677x.2021.1908930>
- Hussain, C. M., & Kodialbail, V. S. (2023). *Concept of zero liquid discharge: Innovations and advances for sustainable wastewater management*. Elsevier.
- Ide, T., & Tubi, A. (2019). Education and environmental peacebuilding: Insights from three projects in Israel and Palestine. *Annals of the American Association of Geographers*, 110(1), 1–17. <https://doi.org/10.1080/24694452.2019.1613954>
- Jaafar, M., Rasoolimanesh, S. M., & Ismail, S. (2017). Perceived sociocultural impacts of tourism and community participation: A case study of Langkawi Island. *Tourism and Hospitality Research*, 17(2), 123-134. <https://doi.org/10.1177/1467358415610373>
- Jennings, G., & Nickerson, N. P. (2006). *Quality tourism experiences*. Routledge.
- Johnson, D. S., Acott, T. G., Stacey, N., & Urquhart, J. (2017). *Social wellbeing and the values of small-scale fisheries*. Springer.
- Kristensen, H. S., & Mosgaard, M. (2020). A review of micro level indicators for a circular economy – moving away from the three dimensions of sustainability? *Journal of Cleaner Production*, 243, 118531. <https://doi.org/10.1016/j.jclepro.2019.118531>
- Kurniawan, J., Rahman, R., & Hilman, C. (2023). The role of the community in community-based education. *Jurnal Pendidikan Dan Hukum Islam*, 9(2), 96-106. <https://doi.org/10.55849/attasyrih.v9i2.168>
- Latip, N. A., Rasoolimanesh, S. M., Jaafar, M., Marzuki, A., & Umar, M. U. (2018). Indigenous residents' perceptions towards tourism development: A case of Sabah, Malaysia. *Journal of Place Management and Development*, 11(4), 391-410. <https://doi.org/10.1108/JPMD-09-2017-0086>
- Li, J., Pan, L., & Hu, Y. (2021). Cultural involvement and attitudes toward tourism: Examining serial mediation effects of residents' spiritual wellbeing and place attachment. *Journal of Destination Marketing & Management*, 20, 100601. <https://doi.org/10.1016/j.jdmm.2021.100601>
- Li, X., Abbas, J., Dongling, W., Baig, N. U. A., & Zhang, R. (2022). From cultural tourism to social entrepreneurship: Role of social value creation for environmental sustainability. *Frontiers in Psychology*, 13, 925768. <https://doi.org/10.3389/fpsyg.2022.925768>
- Manzello, S. L., Bianchi, R., Gollner, M. J., Gorham, D. J., McAllister, S., Pastor, E., Planas, E., Reszka, P., & Suzuki, S. (2018). Summary of workshop large outdoor fires and the built environment. *Fire Safety Journal*, 100, 76–92. <https://doi.org/10.1016/j.firesaf.2018.07.002>
- Manzo, L. C., & Devine-Wright, P. (2020). *Place attachment: Advances in theory, methods, and applications*. Routledge.
- Manzoor, F., Wei, L., Asif, M., Haq, M. Z. U., & Rehman, H. U. (2019). The contribution of sustainable tourism to economic growth and employment in Pakistan. *International Journal of Environmental Research and Public Health*, 16(19), 3785. <https://doi.org/10.3390/ijerph16193785>
- Matarrita-Cascante, D., Brennan, M. A., & Luloff, A. E. (2010). Community agency and sustainable tourism development: The case of La Fortuna, Costa Rica. *Journal of Sustainable Tourism*, 18(6), 735–756. <https://doi.org/10.1080/09669581003653526>
- McCool, S. F., & Martin, S. R. (1994). Community attachment and attitudes toward tourism development. *Journal of Travel Research*, 32(3), 29-34. <https://doi.org/10.1177/00472875940320>
- Mishra, P., Bhatnagar, J., Gupta, R., & Wadsworth, S. M. (2019). How work–family enrichment influences innovative work behavior: Role of psychological capital and supervisory support. *Journal of Management & Organization*, 25(1), 58-80. <https://doi.org/10.1017/jmo.2017.23>

- Morales, P. C., Agüera, F. O., López-Guzmán, T., & Cuadra, S. M. (2018). Community attachment and support for sustainable tourism development through the attitudes of the local population: A case study in Puerto Plata, Dominican Republic. *Mediterranean Journal of Social Sciences*, 9(2), 173. <https://doi.org/10.2478/20180037>
- Nadda, V., Tyagi, P. K., Rubina, M. V., & Tyagi, P. (2023). Sustainable development goal advancement through digital innovation in the service sector. IGI Global.
- Niu, H. J., & Chen, M. J. (2022). Exploring the co-creation value of residents to tourists from the perspective of place attachment and economic benefits. *Frontiers in Psychology*, 13, 877365. <https://doi.org/10.3389/fpsyg.2022.877365>
- Ohridska-Olson, R. V. (2015). Cultural tourism: Definitions and typology – A research note. *Social Science Research Network*. [https://papers.ssrn.com/sol3/Delivery.cfm/SSRN\\_ID3318843\\_code1543075.pdf?abstractid=3318843&mirid=1](https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID3318843_code1543075.pdf?abstractid=3318843&mirid=1)
- Olya, H. G., Alipour, H., & Gavilyan, Y. (2018). Different voices from community groups to support sustainable tourism development at Iranian World Heritage Sites: Evidence from Bisotun. *Journal of Sustainable Tourism*, 26(10), 1728-1748. <https://doi.org/10.1080/09669582.2018.1511718>
- Organization, W. T. (2012). *Tourism and intangible cultural heritage*.
- Ottaviani, D., De Luca, C., & Åberg, H. E. (2024). Achieving the SDGs through cultural tourism: Evidence from practice in the TEXTOUR project. *European Journal of Cultural Management and Policy*, 14, 12238. <https://doi.org/10.3389/ejcmp.2024.12238>
- Panzer, E. (2022). *Cultural heritage and territorial identity: Synergies and development impact on European regions*. Springer Nature.
- Poser, N. (2008). *Economic, environmental & socio-cultural impacts of tourism: An analysis from Mexico*. GRIN Verlag.
- Poudel, J. (2017). Socio-cultural impact in tourism: A case study of Sauraha, Nepal. *Journal of Advanced Academic Research*, 1(2), 47–55. <https://doi.org/10.3126/jjaar.v1i2.16588>
- Peters, M., Chan, C. S., & Legerer, A. (2018). Local perception of impact-attitudes-actions towards tourism development in the Urlaubsregion Murtal in Austria. *Sustainability*, 10(7), 2360. <https://doi.org/10.3390/su10072360>
- Ramkissoon, H. (2023). *Handbook on tourism and behaviour change*. Edward Elgar Publishing.
- Ramos, H. (2016). Assessing the tangible and intangible benefits of tourism: Perceptions of economic, social, and cultural impacts in Labrador's Battle Harbour Historic District. *Island Studies Journal*, 11(1), 209–226. <https://doi.org/10.24043/isj.344>
- Rasool, H., Maqbool, S., & Tarique. (2021). The relationship between tourism and economic growth among BRICS countries: A panel cointegration analysis. *Future Business Journal*, 7(1). <https://doi.org/10.1186/s43093-020-00048-3>
- Richards, G. (2008). The impact of culture on tourism. In *OECD eBooks*. <https://doi.org/10.1787/9789264040731-en>
- Sabah nurtures rural tourism with the help of local communities. (2022, May 3). Retrieved March 3, 2024, from <https://bimp-eaga.asia/article/sabah-nurtures-rural-tourism-help-local-communities>
- Segal, U. A. (2019). Globalization, migration, and ethnicity. *Public Health*, 172, 135-142. <https://doi.org/10.1016/j.puhe.2019.04.011>
- Shahzalal, M. (2016). Positive and negative impacts of tourism on culture: A critical review of examples from the contemporary literature. *Journal of Tourism, Hospitality and Sports*, 20, 30–34. <https://iiste.org/Journals/index.php/JTHS/article/download/31719/32993>
- Stainton, H. (2023, September 1). 13 social impacts of tourism + explanations + examples. *Tourism Teacher*. <https://tourismteacher.com/social-impacts-of-tourism/>
- Stout, M., & Harrist, A. W. (2020). *Building community and family resilience: Research, policy, and programs*. Springer Nature.
- Stylidis, D., Biran, A., Sit, K., & Szivás, E. (2014). Residents' support for tourism development: The role of residents
- Tavakoli, R., & Wijesinghe, S. N. (2019). The evolution of the web and netnography in tourism: A systematic review. *Tourism Management Perspectives*, 29, 48–55. <https://doi.org/10.1016/j.tmp.2018.10.008>
- Tiebout, C. M. (1956). A pure theory of local expenditures. *Journal of Political Economy*, 64(5), 416–424. <https://doi.org/10.1086/257839>
- Uslu, F., Yayla, O., Guven, Y., Ergun, G. S., Demir, E., Erol, S., & Gozen, E. (2023). The perception of cultural authenticity, destination attachment, and support for cultural heritage tourism development by local people: The moderator role of cultural sustainability. *Sustainability*, 15(22), 15794. <https://doi.org/10.3390/su152215794>
- Uzzell, D., Pol, E., & Badenas, D. (2002). Place identification, social cohesion, and environmental sustainability. *Environment and Behavior*, 34(1), 26–53. <https://doi.org/10.1177/0013916502034001003>
- Venturini, B. (2023, November 23). Sustainability in tourism: The socio-cultural lens. *EHL Insights*. <https://hospitalityinsights.ehl.edu/sustainability-tourism>
- Woosnam, K. M., & Ribeiro, M. A. (2023). Theoretical advancement in social impacts assessment of tourism research. *Taylor & Francis*.

- Ying, W., & Jin, X. (2019). Event-based destination marketing: The role of mega-events. *Event Management*, 23(1), 109–118. <https://doi.org/10.3727/152599518x15378845225384>
- Yang, K. S., & Bond, M. H. (2019). Will societal modernization eventually eliminate cross-cultural psychological differences? *Research in Personality Transformation and Modernity*, 10, 111.
- Yolles, M. (2019). The socio-cultural dynamics of development: Part 1 development, growth, and globalization. *Kybernetes*, 49(7), 1813-1836. <https://doi.org/10.1108/k-02-2019-0083>
- Zhuang, X., Yao, Y., & Li, J. (2019). Sociocultural impacts of tourism on residents of world cultural heritage sites in China. *Sustainability*, 11(3), 840. <https://doi.org/10.3390/su11030840>

### Authors' Biographies



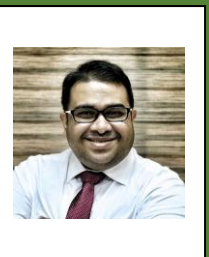
**Tressy Belly** is a PhD candidate and researcher specialising in tourism management, with a strong focus on sustainable and ecotourism practices. She holds a Bachelor of Science (Hons.) in Tourism Management, earned in 2019, and a Master's in Tourism Management, completed in 2022, both from Universiti Teknologi MARA (UiTM), Malaysia. Tressy's doctoral research explores ecotourism participation intentions, specifically in the context of the Tunku Abdul Rahman Park (TARP) islands in Sabah. She is currently working as a research assistant at UiTM Malaysia.



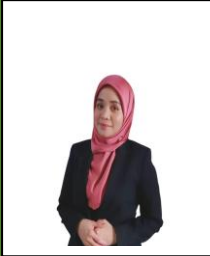
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