

How Heritage Site Destruction and Ritual Practices Shape Tourist Satisfaction and Authenticity Perceptions at Pulau Besar, Melaka

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ABSTRACT

This study examines the connection between perceived authenticity, local spiritual practices, and visitor happiness in historical tourism, focusing on Pulau Besar, Melaka, Malaysia. Considering the moderating influences of religious beliefs and cultural backgrounds, this study aims to investigate how spiritual traditions affect tourists' judgements of authenticity and contentment. The island's appeal as a cultural tourism destination may diminish because of the loss of heritage assets and restrictions on spiritual practices. This research employs a quantitative approach targeting 194 tourists who visited notable tomb sites, including the tombs of *Tok Janggut*, *Tok Putih*, the tomb of *7 Beradik*, and *Nenek Kebayan*, which intersects with the ongoing practice of local spiritual traditions. Statistical analysis was used to investigate the correlations between variables, including partial least squares structural equation modelling (PLS-SEM). The results show that visitors' pleasure is highly influenced by the perceived authenticity of the experience. Although local spiritual rituals improve the feeling of authenticity, their effects differ based on visitors' cultural backgrounds and religious beliefs. The findings also highlight concerns about the degradation of heritage sites, which has a detrimental impact on satisfaction and perceived authenticity. The study's implications highlight the importance of protecting spiritual and cultural heritage during tourism development in the region. Destination managers should implement sustainable tourism strategies that balance modernisation with heritage conservation. By maintaining and promoting authentic local traditions, Pulau Besar can continue to attract and satisfy visitors while ensuring long-term preservation of its culture.

Keywords: Pulau Besar, tourism, heritage site destruction, tourist satisfaction, authenticity

INTRODUCTION

Rapid urbanisation and globalisation pose critical threats to heritage sites worldwide, making the preservation of cultural heritage an urgent issue (Flyen et al., 2023; Shrestha et al., 2024). While protective measures help maintain the cultural and historical legacy of authentic heritage sites, transforming them into tourist destinations, challenges such as war, overtourism, cultural hoarding, and passive maintenance failure continue to accelerate their deterioration (Beirman, 2020; Dudley et al., 2009). This decline compromises historical authenticity and disrupts sustainable development in tourism-dependent local economies.

Pulau Besar Island, located off the coast of Melaka, Malaysia, exemplifies this tension. Known for its natural beauty, historical heritage, and supernatural myths, the island attracts visitors seeking spiritual experiences rather than conventional tourist experiences (Jackson et al., 2023). Pilgrims engage in religious practices such as meditation, prayer, and offerings, driven by folklore that associates the island with holy Islamic figures and supernatural entities. However, the blending of spiritual practices with tourism risks distorting Islamic principles (Bucior, 2020), while excessive commercialization threatens the site's original appeal. Tourism infrastructure, including resorts, transportation, and recreational facilities, enhances accessibility but may overshadow cultural preservation (Boukas & Ioannou, 2020).

Although infrastructure development improves visitor satisfaction, unchecked expansion can degrade sacred

landmarks, prioritizing economic gains over heritage integrity (Timothy & Nyaupane, 2009). The Malaysian government has intervened by demolishing illegal religious structures to reclaim Pulau Besar's reputation as an ecological and cultural destination (Azmi, 2001; Zakaria, 2022). However, the effectiveness of these measures remains uncertain because deeply rooted mystical beliefs may persist despite physical changes (Ismail & Ismail, 2020). Such interventions risk alienating visitors who are drawn to the island's spiritual and historical authenticity.

In response to these challenges, this study follows Waterton and Watson's (2015) recommendations for heritage research by examining how heritage site destruction, local spiritual practices, tourism infrastructure, and economic development shape perceptions of authenticity on Pulau Besar. Additionally, it explores whether authenticity mediates the relationship between these factors and tourist satisfaction, while assessing how religious beliefs and cultural backgrounds moderate the influence of spiritual practices on the authenticity of perceptions. By integrating religious doctrines and cultural orientations into tourist satisfaction theory, the findings offer actionable insights for Pulau Besar's policymakers and tourism administrators (Amissah et al., 2021), ensuring strategies that balance heritage conservation, economic growth, and visitor satisfaction for sustainable long-term sustainability.

Problem Statement

Once renowned for its holy places and profound spiritual meaning, Pulau Besar has undergone a dramatic metamorphosis that has altered its tourism landscape. The island previously attracted visitors seeking religious experiences at sites like *Makam Tok Puteh*, *Makam Tok Janggut*, *Perigi Nenek Kebayan*, and *Makam Tujuh Beradik*, where some engaged in superstitious practices. However, Melaka's religious authorities have demolished these heritage sites to curb non-Islamic activities (Zakaria, 2022; Azmi, 2001). Although this resolved religious concerns, it diminished the island's cultural and historical significance, leaving tourists who once revered its mystical charm feeling disconnected from the past. The integrity of Pulau Besar's cultural heritage and its viability as a tourist destination are now in question. In response, authorities rebranded Pulau Besar as a family friendly destination, prioritising infrastructure such as recreational facilities, landscaped areas, and pedestrian walkways (Ismail & Ismail, 2020). While these developments offer alternative attractions, they erode the island's unique identity. Visitors expecting a spiritual legacy encounter generic amenities instead of cultural vibrancy, leading to dissatisfaction.

The removal of religious structures compromises a site's ability to convey its heritage, fostering a sense of loss and inauthenticity among tourists (Aulet & Vidal, 2018). This shift from a sacred site to a commercialised recreation hub has fundamentally reshaped perceptions of authenticity, encompassing original artefacts (*objective*), socially constructed meanings (*constructive*), personal experiences (*existential*), and staged elements (*postmodern*) (Wang 1999; Zhang et al. 2020). Poorly managed commercialisation risks overshadow genuine cultural elements and exacerbate disillusionment. The disparity between past and present tourist expectations poses critical challenges to the tourism industry. Competing perspectives on development further complicate authenticity: Some welcome modernisation, while others view it as cultural erasure (Feng, 2024). Without balancing infrastructure upgrades and heritage preservation, Pulau Besar risks becoming an undistinguished leisure spot, unable to compete with similar destinations (Ismail & Ismail, 2020). Strategic interventions, such as the adaptive reuse of heritage assets, staff training, and thoughtful pricing, can mitigate these risks (Luekveerawattana, 2024). However, failure to act may irreversibly undermine the cultural tourism appeal of Pulau Besar.

Pulau Besar's transformation from a spiritually significant destination to a commercialised family-oriented resort has created critical tensions between cultural preservation and tourism development. The demolition of heritage sites (Zakaria, 2022; Azmi, 2001) and subsequent infrastructure upgrades (Ismail & Ismail, 2020) have eroded the island's unique identity, leaving visitors dissatisfied with its diminished authenticity (Aulet & Vidal, 2018). This study seeks to address these challenges by investigating (1) how heritage site destruction, local spiritual practices, tourism infrastructure, and economic development collectively shape perceptions of authenticity; (2) the mediating role of authenticity in linking these factors to tourist satisfaction; and (3) whether religious beliefs and cultural backgrounds alter the influence of spiritual practices on authenticity judgment. These questions aim to resolve the island's identity crisis by balancing modernisation with cultural integrity, ensuring Pulau Besar's

sustainable tourism future.

LITERATURE REVIEW

Heritage Site Destruction

The destruction of heritage sites has emerged as a serious global problem that impacts cultural identity and landmarks worldwide. Urbanisation, tourism, and abandonment exert tremendous pressure on many islands, causing the degradation of cultural heritage. For example, the Indonesian island of Bali faces serious problems with its intensive tourist development, which tends to clash with the need to protect its traditions and cultural sites (Hampton and Jeyacheyan, 2018). Similar to what is seen in Pulau Besar, the constant development of resorts and tourist facilities has resulted in the desecration of sacred sites and erosion of traditions.

Research indicates that these significant sites are often severely harmed by environmental degradation, poor management, and inappropriate development (Smith, 2006). According to the United Nations Educational, Scientific, and Cultural Organisation, many of these heritage locations suffer from physical deterioration and diminishing historical values. Consequently, communities that rely on these sites for economic and cultural purposes suffer considerable hardship when their heritage is at risk.

The connection between heritage site destruction and a sense of authenticity is significant for understanding visitor satisfaction. Heritage sites are likely to be viewed as less authentic by visitors when they are destroyed or damaged. As tourists search for authentic experiences related to the area's historical and cultural theme, authenticity matters; they lose their degree of enjoyment if they discover that the destinations do not reflect the culture or history they wish to encounter. Tourists to Pulau Besar, for example, expect to experience lifelike cultural practices at tombs and other sacred sites. They will be disappointed if the sites are altered or disfigured because it will invalidate the integrity of their experiences. Thus, preserving the authenticity of heritage sites is key to ensuring that tourists are satisfied with their visits, making prudent management and conservation crucial in tourism activities.

Local Spiritual Practice

Spiritual practices are a significant source of cultural identity for numerous communities and are a fundamental aspect of heritage tourism. Many sacred sites have long been pilgrim destinations seeking spiritual enlightenment, healing, or blessings. For instance, Bali, Indonesia, is renowned for its local spiritual practices. Local animistic customs and sacrifices have been assimilated into Balinese Hinduism, and they are essential to the religious rituals known as Panca Yadnya, or 'five holy ceremonies'. Similarly, the Greek island of Patmos draws religious travellers because of its connection to St. John the Apostle and provides a genuine experience based on Orthodox Christian customs. Visitors participate in syncretic religious rites, such as the yearly Harvest Festival, which blends African and European elements, on the Caribbean Island of Dominica, which shows a blend of indigenous and Christian spiritual traditions. These illustrations show how regional spiritual customs influence a place's genuineness, improve traveller experiences, and encourage a strong sense of cultural kinship. However, modernization, religious reform, and governmental rules pose problems for many spiritual sites, causing old rites to change or disappear. Tourist impressions may be impacted by this conflict between modernization and preservation, especially when travellers seek genuine spiritual experiences in the region. In addition, Pulau Besar has long been shrouded in magical status, where these are the places that attract pilgrims for ritualistic offerings, prayer, and meditation at *Makam Tok Puteh*, *Makam Tok Janggut*, and *Perigi Nenek Kebayan*. These practices reflect a blend of local spiritual traditions and Islamic influences, forming a unique religious landscape in the region. These traditions have shaped the island's identity and have been a significant factor in its cultural significance, even though religious authorities often describe them as superstitions. Pilgrimages to tombs and sacred sites, such as those on Pulau Besar, are common in Southeast Asia, where devotees seek blessings, spiritual intercession, or fulfillment of vows through ritual offerings and prayers. Such practices are deeply rooted in local culture and are often seen as a way to connect with revered figures or ancestral spirits (Ummah & Bustami, 2024). The tourism industry on the island has been dramatically altered by the prohibitions placed on many of these practices due to increased government and religious authority involvement.

Similar issues have emerged in other regions where religious reform and modernity threaten native spirituality. For example, conservative religious groups often publicly denounce Indigenous rituals as incompatible with their doctrines, labelling them as unorthodox or pagan, which delegitimizes these practices within broader society (Petri & Klocek, 2025). The conflict between modern religious regulations and ancient spirituality frequently leads to the slow extinction of long-standing traditions, as seen in Pulau Besar. Authorities contend that these actions are required to stop un-Islamic behavior. However, they unintentionally cause cultural heritage to deteriorate and communities to become estranged from their customs. The authenticity of visitor experiences and the cultural identity of local populations are impacted when sacred places are destroyed or altered. Many visitors visit places like Pulau Besar hoping to see or participate in unusual spiritual rites to strengthen their feelings of historical ties.

However, when tombs and shrines are destroyed and access to holy places is limited, these tourists find themselves in a different environment than they anticipated. Similar patterns have been observed in Thailand, where cultural tourists are unhappy with the artificial experiences they now receive, as modern Buddhist temple rituals have undermined the traditional aspects that used to characterize them (Asawachai, 2018). Removing historical spiritual markers from Pulau Besar has left a gap between the island's past and present, which will have implications for the island's future potential as a heritage tourism site and for tourist satisfaction.

Indigenous spiritual practices are essential to historic tourism because they enhance cultural authenticity and influence visitor happiness. To preserve the authenticity that visitors desire, carefully managing the balance between modernization and tradition is necessary. Tourist planners must implement sustainable policies that maintain history while meeting the varied expectations of visitors, as religious beliefs and cultural backgrounds also impact how visitors interact with spiritual locations. In this way, places like Pulau Besar can preserve their spiritual and cultural heritage while attracting and satisfying tourists.

Cultural tourism requires the preservation of regional spiritual customs while balancing religious leadership and tourism administration. The loss of authenticity results in dwindling visitor interest and financial losses for local communities that rely on tourism income, as is the case with many heritage sites across the globe. Pulau Besar is at risk of becoming another commercialized tourist destination, losing its historical nature if not adequately prepared. To ensure that sites such as Pulau Besar can continue to attract tourists without threatening their historical and spiritual heritage, sustainable tourism practices that are sensitive to cultural mores and aware of the importance of spiritual heritage are needed (Ismail & Ismail, 2020).

Tourism Infrastructure

Tourism infrastructure is a key element in designing tourist experiences and advancing economic development. Through tourism development, the Maldives has constructed a comprehensive visitor support system that integrates green resort properties with transportation tools and island-wide facilities. Tourism infrastructure in the Maldives combats international tourism appeal and protects the cultural heritage of indigenous Maldivian communities (Duggan et al., 2018). Tourism facilities in Hawaii received considerable financial investments, which built educational centers on Hawaiian culture and sustainable transportation systems (Chock & Bahaire, 2020). The above cases demonstrate how proper tourism infrastructure enables groups to handle competing tourism needs without compromising traditional heritage elements for visitors' satisfaction. Tourism infrastructure determines how effectively and appealingly heritage tourism operates. Infrastructure strengthens visitor engagement while enabling cultural preservation and promoting the local economy. Striking the correct equilibrium between contemporary demands and genuine cultural heritage authenticity is a central requirement. The future evolution of heritage tourism requires stakeholders to develop sustainable infrastructure that safeguards cultural heritage narratives and addresses contemporary tourist needs.

Tourist satisfaction rates depend heavily on how authentic tourists perceive destinations in the tourism industry. The experiences attained by tourists must appear genuine and authentic. Tourists visiting Pulau Besar anticipate genuine cultural practices and historical sites as part of their experience. Points of interest that suffer from damage or poor upkeep by management will make tourists doubt whether their encounter captures genuine local cultural authenticity. Dissatisfaction with the entire experience develops when tourists experience a lack of authenticity. Visitor experiences of cultural sites they perceive as authentic result in a deeper place connection

and enhance their enjoyment of their visit. Such connections create positive assessments, direct others to visit based on positive reviews, and inspire subsequent visits. Preserving authentic cultural heritage is an essential factor that enables tourists to have positive experiences and make enthusiastic recommendations to others.

The association between infrastructure enhancements and authentic heritage remains complicated in simulation analyses (Bruno et al., 2018). Commercial overgrowth has negative impacts, leading tourists to believe that the site's authenticity decreases (Newby, 2013). The provision of contemporary amenities at the site undermines authentic cultural heritage, creating unhappy visitors seeking authentic experiences. Planned improvements that enhance visitor experiences must protect the original cultural authenticity of the site. Tourists are more satisfied when physical facilities enhance the cultural importance of a destination rather than outranking it to achieve cultural authenticity in heritage-destination experiences. A proper balance must be struck between implementing development initiatives and preserving historical sites (Loulanski & Loulanski, 2011).

Economic Development

Tourism economic development refers to the money tourism brings into a community through good jobs, income, and investment. Tourism creates economic progress, but it also creates heritage protection problems at the same time (Hampton, 2005). Companies profiting from cultural practices may turn authentic heritage sites into business assets, losing their original values. Successful economic development helps protect and support cultural heritage sites using proper tourism systems (Timothy & Nyaupane, 2009). Enhanced investment in heritage sites through better preservation techniques combined with improved facilities achieves two goals: improving visitor experiences and strengthening perceptions of authenticity. The growth of local companies, including lodging facilities, dining establishments, and gift stores, is a major economic benefit of tourism on Pulau Besar. Local businesspeople on Pulau Besar have adjusted by providing boat services, guided tours, and cultural goods, further diversifying the island's economy.

Furthermore, local stakeholders may not equally share tourism's economic benefits. Increased tourism benefits investors and business owners, but many local communities struggle to exploit these economic prospects. Land disputes, loss of traditional livelihoods, and economic inequality are frequently caused by the construction of major resorts and commercial establishments (Leeuwen et al., 2020). As corporate interests take precedence over local entrepreneurship, Pulau Besar's development into mass tourism could potentially marginalize conventional service providers and small-scale traders. This can be observed in Bali, where large hotel chains dominate most of the tourism sector, leaving small companies at a disadvantage (Suryawardani et al., 2014). A balanced approach to tourism development is needed to ensure the long-term sustainability of the Pulau Besar economy. Policymakers should prioritize economic measures that encourage community-based tourism and heritage conservation. Pulau Besar may continue to be economically sustainable without losing its cultural heritage by instituting laws that govern commercial enterprises, benefit local enterprises, and provide equitable economic dispensation (Ismail & Ismail, 2020).

Religious Belief

Over a long period, religious beliefs have shaped holiday trends, particularly in destinations where mysticism and spirituality are ingrained. The religious beliefs of people significantly shape both cultural traditions and travel experiences across global destinations, particularly in island tourist locations. Tourists flock to Bali yearly to witness impressive Hindu celebrations alongside the place's distinctive traditions. Visitors from around the world participate in Nyepi celebrations as well as the cultural practice of Nyepi, which stops all island activities to conduct spiritual energy reset. Thousands of tourists flock to Greece, specifically Santorini, to immerse themselves in the Orthodox Christian traditions of its magnificent temples and cultural events. Guests visiting Dominica in the Caribbean can participate in their indigenous Christian syncretic traditions by participating in local ceremonial events such as Harvest Festivals that reveal their spiritual heritage. Tourists find deep satisfaction in authentic cultural experiences, which develop from the religious beliefs that make the islands distinct.

Pulau Besar, a site of profound religious reverence, has had visitors seeking to be blessed, find spiritualism, and experience ghostly sightings. For centuries, spiritual seekers and pilgrims have highly valued sacred sites on the

island, such as *Makam Tok Janggut*, *Makam Tok Puteh*, and *Perigi Nenek Kebayan* (Ismail & Ismail, 2020). However, discussions regarding a balance between religious teachings, historical conservation, and eco-tourism have been set off by losing these sites as part of modernization and attempts to curtail un-Islamic acts. One of the most critical tensions that emerges because of religious belief in Pulau Besar is that between orthodox religiosity and mainstream religious practices. Historically, tourists, particularly members of the Malay-Muslim populace, have participated in spiritual ceremonies such as praying on tombstones, calling upon supernatural assistance, and carrying out mystic rituals.

In contrast to mainstream Islamic teachings, religious authorities have warned that such practices may cross into superstition (*khurafat*) or even *shirk* (associating partners with God), which are considered serious deviations from Islam (Badmus & Adebayo, 2025; Muis et al., 2023). To stop what is seen as *shirk* religious activities from continuing, attempts have been made to demolish these places of worship (Azmi, 2001; Zakaria, 2022). This move alienated some visitors who saw these places as essential to their cultural and spiritual identity. Visitors' perceptions of authenticity strongly affect their satisfaction with their travel experiences. Tourists who visit Pulau Besar desire an authentic experience when they travel to this location. Tourists enjoy their visits more when they encounter cultural activities and historical sites that appear authentic and maintain their genuine states (Reitsamer & Brunner-Sperdin, 2017). According to MacCannell (1973), tourists who discover tampered heritage sites will experience disappointment and lose their connection with authentic local culture. Their decreased satisfaction with the entire trip stems from this feeling of uncertainty. Tourists' belief in genuine locations enables them to form deeper ties with destinations, creating positive emotions and lasting memories (Poria et al., 2006). Intacting genuine cultural heritage is vital because it ensures that tourists enjoy their visits and wish to narrate their experiences to others (Ning, 2017). The relationship between religion and tourism also influences visitors' pleasure. Visitors to Pulau Besar for religious purposes often expect to enjoy the island's ethereal environment and historic background. Specific communities feel let down by the destruction of religious places, as they feel that the island has lost its originality because of their destruction. When religious places are lost, those with deep cultural or spiritual connections feel particularly disappointed. This sense of loss is not just about the physical structures but also about the erasure of shared history and identity (Dewi et al., 2023). This trend has also been reported in other faith tourist destinations, such as Vrindavan and Pushkar, India, where traditional pilgrims are unhappy due to the commercialization of sacred places (Gahalot & Gupta, 2024). The removal of religious historical features in Pulau Besar has led to a decline in tourist attractions for those who once regarded it as a place of pilgrimage compared to a regular tourist attraction.

Cultural Background

Tourist islands worldwide present culturally diverse environments that emerged from individual historical stories and native customs, along with ethnic community mixing. Bali in Indonesia stands out for its Hindu heritage, which presents itself through religious rituals and ceremonies in daily communal life. Visitors fill the annual Odalan festival as it commemorates temple birthdays and features community celebrations through music, dance and colorful temple processions (Sujarwo et al., 2020). Native Hawaiian traditions, including hula dancing, mele (songs), and other customs, provide the Hawaiian Islands with their cultural foundation. The Merrie Monarch Festival celebrates Hawaiian hula together with music while honoring the cultural revival of traditional hula dancing and Hawaiian music performance, so international visitors choose to experience authentic local customs. Dominica in the Caribbean presents visitors with a distinct cultural tapestry composed of three fundamental elements: Indigenous Kalinago (Carib) history, African heritage, and European colonial background. Visitors can experience natural wonders and local cultural tales through the island festivities, including the Waitukubuli National Trail celebrations, which showcase traditional crafts and local folklore (Ramírez et al., 2023).

During their time abroad, tourists depend on authenticity to define their level of satisfaction. Visitors typically pursue authentic experiences when they travel because they want to encounter the real manifestations of local traditions, regional history, and cultural practices. Tourists who witness authentic cultural traditions on Pulau Besar tend to develop emotional bonds, creating satisfying vacation memories. The sense of connection improves their overall enjoyment to the extent that it generates permanent travel memories. Tourists' perceptions of cultural demonstrations depend on whether they appear authentic, commercialized, or inauthentic because of artificial displays. When tourists find that their expectations differ from reality, they typically develop disappointing feelings that cause their satisfaction to decrease. Travellers who detect cultural presentations designed solely for

tourists tend to separate themselves from genuine community traditions. Tourists from varied backgrounds react differently to authentic experiences they encounter during their travels because of their unique experiences and cultural backgrounds. Travellers from traditional practice-based cultures tend to highlight deficiencies in false-representation practices. The sense of fundamental cultural interactions during tourism enhances visitors' satisfaction with their touristic encounters. It is vital to keep cultural practices authentic, as this action defends destination heritage and ensures that consumers leave satisfied while planning to convey their experiences to others.

Perception of Authenticity

Tourists perceive authentic tourism experiences differently worldwide because of their approach to cultural tourism activities. The population of Bali finds genuine spiritual encounters through their participation in traditional festivals such as Odalan, which takes place throughout the destination. Authentic Balinese cultural experiences are recognized by visitors who seek out these genuine expressions to enhance their interest in the area (Ramadhani et al., 2024). Spice Island visitors specifically embrace Jamaican music and reggae dance as authentic expressions of their cultural heritage appears to them. Event participation during Reggae Sumfest allows tourists to interact with residents, enhancing their perception of authenticity (Duncan, 2015). Tourism in the Maldives primarily exists as luxury tourism; thus, authenticity concerns arise when tourists discover staged versions of local culture, which exist only to serve visitors instead of representing actual local cultural practices. Tourists formulate authentic experience perceptions by evaluating the presented materials and considering their anticipated realities and past exposure to cultural phenomena. In addition, according to Wang (1999), two broad perspectives on the conception of authenticity in tourism exist: existential authenticity and objective authenticity. Objective authenticity entails preserving material cultural elements such as historical buildings, traditional houses, and religious sites. This authenticity has been undermined in Pulau Besar by destroying heritage sites and sacred graves, making it challenging for tourists to interact with the island's spiritual and historical history. Similar patterns have been noted in places such as Langzhong, China, where over-commercialization has resulted in the disappearance of traditional features, diminishing the destination's perceived authenticity in the eyes of tourists (Zhang et al., 2021).

The idea of authenticity has also been impacted by the government's attempt to rebrand Pulau Besar as a family-friendly holiday destination. New facilities and infrastructure may attract a broader audience, yet they have rendered the island less linked to its past. As tourism infrastructure expands, the original religious or spiritual functions of heritage sites often diminish. Many sites that were once primarily pilgrimage destinations now attract more recreational tourists than religious devotees, reflecting a global trend in which the sacred is replaced by secular interest (Aulet & Vidal, 2018). When heritage elements are intentionally preserved or reproduced to satisfy tourists' expectations rather than being reflective of real cultural practices, it tends to lead to what researchers call manufactured authenticity (MacCannell, 1973).

Additionally, different tourists have different perceptions of authenticity. The destruction of sacred sites may be seen as a loss of tradition and identity by older generations or individuals with close cultural and religious ties to Pulau Besar. The new facilities and scenery might be appreciated by younger visitors or those unaware of the island's spiritual past, but its ethereal past would not be missed. For this reason, the disparity in the perception of the island can make it even harder to maintain a cohesive tourism experience for every tourist, as disparate perceptions inevitably lead to disparate tourism experiences. A balanced strategy is needed to reinstate and preserve authenticity in Pulau Besar's tourism. Heritage preservation initiatives, such as protecting the island's remaining cultural sites and injecting historical knowledge, can bridge the gap between modernity and authenticity in tourism. Additionally, tourists can gain a more satisfactory and meaningful experience if sustainable tourism efforts consider visitors' expectations and cultural heritage.

Tourists Satisfaction

Tourist satisfaction functions as the dominant performance indicator of destinations while maintaining critical importance for industry development and sustainability. According to Oliver (1980), tourist satisfaction represents the point at which a destination fulfills or surpasses pre-reservation expectations for guest experience throughout their visit. Tourists experience various tangible and intangible elements throughout their journey,

which impacts their assessment of destination performance while fulfilling destination exploration needs. Assessing tourist satisfaction helps determine how travel destinations fulfill their guests' anticipated standards.

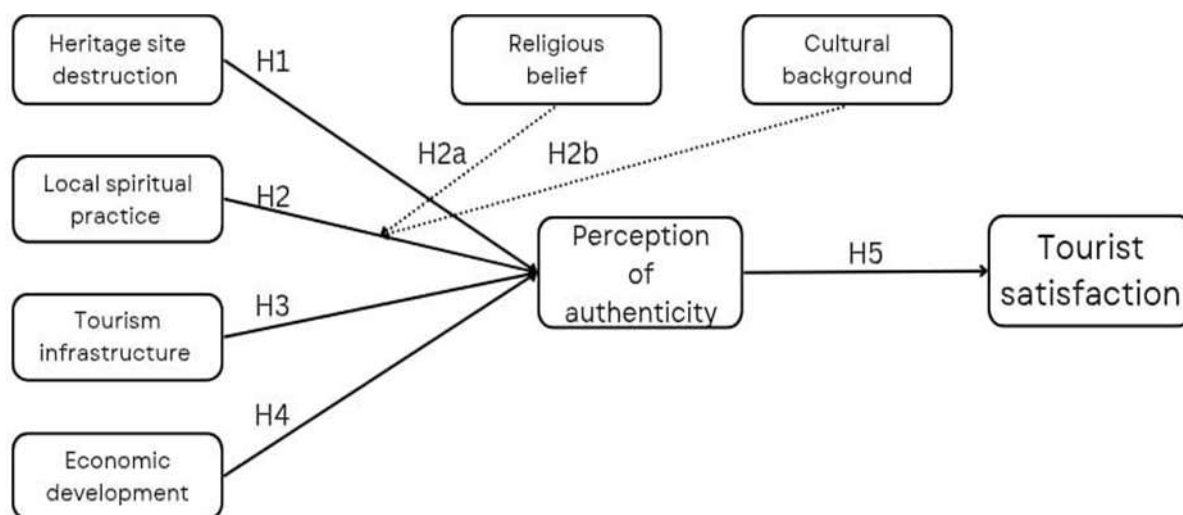
Distinct factors from different islands create varying dimensions of global tourist satisfaction. The Maldives attracts satisfied guests with its clear coastlines, twin resorts, and underwater recreation possibilities, including snorkeling and diving. Visitors depart the Maldives feeling rested and content because of their encounters with nature's splendor and the welcoming actions of native residents. Tourists visiting Santorini, Greece, often point to the beautiful sunsets and traditional buildings as the main satisfaction factors, yet they notice peak season overcrowding as a negative element that hurts their travel experience, leading to dissatisfaction (Pelegriin-Borondo et al., 2020). The satisfaction levels of tourists depend mostly on three separate elements: natural beauty, cultural experiences, and local hospitality.

Authenticity is a key factor affecting visitor satisfaction. Through visits to its former mystical sites (that have been destroyed), such as *Makam Tok Janggut* and *Perigi Nenek Kebayan*, numerous tourists who visited Pulau Besar similarly sought spiritual fulfillment and cultural enrichment. These sites give tourists a feeling of connection to the past and have deep religious and historical values. However, visitors who anticipated experiencing the island's ancient spiritual atmosphere have been disappointed by the loss of these heritage monuments (Rahman and Yusuf, 2020). Comparable patterns have been noted in other heritage-rich areas, such as Thailand's Chiang Mai and Cambodia's old temples, where over-commercialization has caused tourists to become dissatisfied because of the loss of historical authenticity (Zhang et al., 2021). Satisfaction levels among tourists depend heavily on the projected standards. Tourist satisfaction improves as visitors predict certain cultural encounters that successful fulfillment provides. The discovery of changed or staged rituals instead of authentic ones leads to tourist dissatisfaction when their expectations of authentic experiences fail to materialize. Tourist happiness results from a combination of top-notch service quality and pleasant surroundings. Such inferior elements can merge to worsen the sentiments of disappointment. The guaranteed authenticity of cultural practices and high-quality services an essential elements that increase tourists' satisfaction and lower dissatisfaction levels throughout their visit.

Research Framework and Hypotheses Development

Figure 1 presents the study's framework examining how heritage site destruction, local spiritual practices, tourism infrastructure, and economic development influence tourist satisfaction through the mediating role of authenticity perceptions. Religious beliefs and cultural backgrounds moderate the spiritual practices-authenticity relationship. Seven hypotheses test these connections using structural equation modelling.

Figure 1: Proposed research model



The proposed research model as in Figure 1 delineates HSD = Heritage Site Destruction; SP = Local Spiritual Practices; TI = Tourism Infrastructure; ED = Economic Development; PA = Perception of Authenticity; TS = Tourist Satisfaction; RB = Religious Belief; CB = Cultural Background. Solid lines represent direct effects.

Dotted lines represent moderating effects.

H1. Heritage site destruction negatively influences the perception of authenticity.

Tourists believe heritage sites become less authentic when destruction or damage occurs. Physical site destruction diminishes tourists' ability to observe culture and history in its pure form, which they desire when seeking authentic experiences. Investigators have demonstrated how heritage site destruction erodes historic artifacts and community traditional cultural practices, decreasing visitor satisfaction (Zhang et al., 2021; Gao et al., 2020). Visitors who value authentic cultural encounters will turn away from places with damage because they believe their genuine encounters are at risk (Timothy & Boyd, 2006).

H2. Local spiritual practices have a positive influence on the perception of authenticity.

The proposed theory demonstrates that tourist experiences of local spiritual events enhance authenticity evaluations. Participating in traditional rituals leads tourists to discover meaningful cultural connections that increase their touristic pleasure despite damaged heritage sites. Teo et al. (2014) and Su et al. (2024) demonstrate how cultural interactions combined with spiritual activities lead tourists to achieve satisfaction, regardless of the damage to physical sites. These practices help strengthen local place identity and community membership, thus retaining tourism authenticity.

H3. Tourist infrastructure has a positive influence on authenticity perception.

Research has demonstrated that implementing well-built tourist infrastructure systems boosts tourists' experience of authenticity. Through strategic infrastructure development, tourists can create more meaningful connections with cultural sites, allowing them to experience destinations as genuine and authentic. Hair et al. (2017) identified sustainable tourism as requiring genuine cultural engagement and local participation. The combination of suitable infrastructure positively impacts tourism education programs on local heritage, generating better visitor experiences.

H4. Economic development positively impacts perception of authenticity.

Tourism-linked economic development has the potential to improve visitors' perceptions of the authenticity of their experiences. Gopalan et al. (2010) and Beirman (2020) demonstrate the need for cultural preservation to match economic development to protect authenticity of the destination.

H5. Authenticity positively influences tourist satisfaction.

Research has found that tourists feel greater satisfaction if they identify their destinations as genuine. Authentic experiences produce a deeper emotional bond between visitors, creating superior satisfaction levels with their experiences. Current research indicates that tourists evaluate travel satisfaction through their findings of authentic locations that match original sites (Poria et al., 2006; Albert & Hazen, 2010). Tourists who experience authenticity during their vacation find greater pleasure in their travel destinations.

H2a. Religious beliefs moderate the relationship between local spiritual practices and authenticity perception.

The proposed research hypothesis demonstrates that religious beliefs shape tourists' spiritual practices in the context of authenticity. Research shows that tourists who follow similar religious beliefs develop stronger authentic feelings toward local ceremonies (Ayeh et al., 2013; Huang et al., 2010).

H2b. Cultural background moderates the relationship between local spiritual practices and authenticity perception.

This concept proposes that the touristic perception of local spiritual practices relies on each visitor's cultural heritage. People from cultures oriented toward spirituality tend to value local sacred rituals more than those from nonreligious cultural traditions (Zeng & Gerritsen, 2014; Ning, 2017). Specific knowledge of these cultural distinctions enables vacation planners to create customized tourism products that fit different customer needs.

METHODOLOGY

Sample Size

The study gathers data from tourists who have visited or at least passed by the former destroyed tombs: *Tok Putih*, *Tok Janggut*, *7 Beradik*, and *Nenek Kebayan*. Our sampling strategy focused on those who had visited within the last four months to ensure that the participants had direct and current regional knowledge and could answer accurately and with relevance.

The study successfully collected 194 valid responses from tourists who had visited Pulau Besar's heritage sites within the past four months. Although obtaining participant cooperation proved challenging due to visitor reluctance, with data collection completed within approximately one month, this sample size remains statistically adequate for several reasons. The sample size of 194 respondents exceeds the minimum threshold required for Structural Equation Modeling (SEM) and mediation/moderation analyses, which typically demand 10-20 observations per estimated parameter (Kline, 2023), ensuring sufficient statistical power (>0.80) to detect medium-to-large effects (Cohen, 1992). The strict participant criteria requiring respondents to be at least 18 years old and to have recent visitation experience that guaranteed informed and relevant responses while mitigating recall bias (Podsakoff et al., 2012). This sample size is comparable to similar published studies in heritage tourism research that have produced valid findings with samples of 150-200 respondents (Zhang et al., 2020; Boukas & Ioannou, 2020). Despite visitor reluctance during data collection, the sample maintained demographic diversity across age, cultural background, and travel purpose, effectively reducing potential non-response bias (Faul et al., 2009). It is understood that acknowledging larger samples are generally preferable, the combination of 194 responses with robust analytical methods provides adequate statistical power for this study's complex model, and the focused four-week data collection period helped ensure responses reflected current tourist perceptions without seasonal distortions.

To provide context for the subsequent analysis of moderating effects, the sample was predominantly Malaysian nationals (96.4%), with the majority identifying as Muslim (80.4%) and of Malay ethnicity (62.9%). The most common age group was 21-30 years (28.4%), and the primary reason for visiting was reported as religious significance (34.5%). A detailed full demographic breakdown is presented later in the findings section (See Table 2). This demographic profile is crucial for interpreting the moderating effects of cultural background and religious beliefs, as it reflects a sample deeply connected to the local cultural and religious context of Pulau Besar.

Data Collection Method

Implementing an efficient data collection schedule resulted in 6 hours for each survey session. The investigation utilized quantitative techniques to analyze Pulau Besar's visitor satisfaction and perception of authenticity. The study method included intercept surveys with systematic random selection of every fifth visitor from the visitor group in Pulau Besar. Respondents were approached when they passed by the destroyed sacred sites. This approach allowed the study to obtain precise and trustworthy data representative of the visitor population, thus decreasing sample bias.

We distributed questionnaires to all participants who consented to participate in this study. A brief and straightforward questionnaire was implemented to encourage participants to complete the survey. This was done throughout the day, and responses were accumulated from different participants. Intercepting every fifth person ensured that the sample of respondents was random and representative while regulating the data collection flow. A questionnaire aided in systematically capturing all the required information, thereby enabling a more precise analysis. Data collection sessions were staggered over four weeks to obtain sufficient responses for useful insights into the study. The process was repeated to obtain a good dataset that depicts various trends, behaviours, and patterns relevant to this study.

Instrument Development

Our survey comprised seven sections: demographic, heritage site destruction, local spiritual practices, tourism

infrastructure, economic development, perception of authenticity and tourist satisfaction. The demographic section contained ten questions in which the respondents were asked about their demographic characteristics, such as whether they had visited former heritage sites, age, gender, country of origin, religion, ethnicity, occupation, primary reasons for visiting Pulau Besar, frequency of travel to Pulau Besar, and how they first learned about Pulau Besar. The purpose of these questions was to identify their backgrounds. The second part had five groups of questions regarding heritage site destruction, such as negative impact, importance regarding culture, lesser interest, authenticity, and overall impact.

A 5-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree, was used to score the five attributes. All attributes were considered to analyze their opinions regarding heritage site destruction. The local spiritual practices section consisted of four questions: cultural experience, island identity, authenticity and uniqueness. The respondents were requested to score each of the five attributes using a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). These questions aimed to identify whether local spiritual practices affected participants' satisfaction and perceptions. The tourism infrastructure section contained two questions related to new facilities, amenities, and accessibility. The respondents were asked to score each of the five attributes using a 5-point Likert scale ranging from (1) strongly disagree to (5) strongly agree. In addition, the section on economic development contained four sets of questions relating to tourism economic development, authenticity, changes to the sites, and the value of Pulau Besar. The respondents were asked to rate each of the five attributes on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The section on the perception of authenticity contained four questions: authenticity, spiritual practice, cultural significance, and modernization effect.

The respondents were asked to score each of the five attributes using a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5). The last section is tourist satisfaction, which consists of four questions: satisfaction, expectation, recommendation, and experience. The respondents were requested to score each of the five attributes using a 5-point Likert scale ranging from strongly disagreeing (1) to strongly agreeing (5). These questions were used to identify whether tourists were satisfied and their perceptions.

The researcher used the pilot test data to verify the instrument's reliability for this study. The assessment analyzed the stability of the survey questions regarding visitor satisfaction and authenticity perception. Analysts conducted this test to verify that all component items within each survey section measured the same concept. The reliability test successfully eliminated all unreliable questions, which facilitated the optimisation of the instrument for improved measurement quality. The test maintained the quality of question design, so the resulting instrument functioned reliably as a consistent research data collection tool in the main study. After evaluating the research instrument's reliability, the result yielded a Cronbach's alpha value of .899.

Pilot Test

Before beginning all other research activities, a preliminary test was conducted to validate the reliability and accuracy of the research instruments. The pilot test used 20 respondents from the main study population to evaluate the research instrument. The pretest evaluation identified unclear language in the questions, redundant statements, and comprehension issues in the survey. Data extracted from the respondents' interviews led to an updated questionnaire that showed greater effectiveness in measuring visitor satisfaction and authenticity perceptions. The pretest examined the methodological effectiveness of systematic random sampling and participant accessibility. The pilot test results guided modifications to increase research reliability and efficiency, ensuring a seamless research execution process.

Data Analysis

Data analysis was performed using partial least squares structural equation modelling (PLS-SEM). This approach was appropriate for testing the proposed framework to ensure the model's fitness. PLS-SEM is efficient for testing complex relationships involving several independent, dependent, moderating, and mediating variables. This enabled a deep analysis of the measurement and structural parts of the model to evaluate the relationships between the variables and the general effectiveness of the framework. Through PLS-SEM, this research aims to understand how religious beliefs and cultural background affect the perception of authenticity towards tourist

satisfaction when heritage sites are damaged, and spiritual practice, tourism infrastructure, and economic development are added to this analysis. Tourist satisfaction between the perception of authenticity and providing a more comprehensive framework also integrates these moderating factors. PLS-SEM is suitable for this research because it effectively deals with large models that contain multiple moderating factors (Hair et al., 2013).

FINDINGS

Respondent Profile

Using a two-stage process that entailed a test of measurement validity and reliability and testing the hypotheses and structural model, the research used PLS-SEM with the aid of SmartPLS4. Most demographic insights were obtained by analysing respondent profiles. It identified the majority of the tourists to be young people, with quite an even gender division (53.1% males, 46.9% females) and a dominant 21–30 years age range (55%). The results also show that the most common religion was Islam (80.4%) and that 96.4% of visitors were Malaysian citizens. The majority of the respondents (62.9%) were Malay, according to the ethnic distribution, which reflects the demographic make-up of Malaysia. Furthermore, 46.4% of the visitors were working full-time, according to their work status, showing that Pulau Besar is visited by working people. The religious charm of the island is emphasized by noting that 34.5% of the visitors who reported the top reasons for their visits cited religious significance. The majority of the visitors (37.1%), according to the figures, were occasional, implying repeat visits might not be the case. The importance of word-of-mouth in informing tourist attitudes and travel decisions is highlighted by noting that word of mouth (WOM) accounts for 56.7% of all information.

Generally, the survey yielded substantial new data on visitors' profiles, motives, and conduct regarding visits to Pulau Besar. To support the attractiveness of Pulau Besar with complementing activities to cater to changing tourists' ambitions, policymakers and players within the sector could obtain tips for formulating focused campaigns with counterbalancing measures towards religion-driven value, the protection of indigenous culture, and sustainable tourism development.

Table 2. Demographic characteristics (n=194)

Characteristics	Categories	Frequency (f)	Percent (%)
Age	18-20	19	9.8
	21-30	55	28.4
	31-40	42	21.6
	41-50	49	25.3
	51-60	21	10.8
	61 and above	8	4.1
Gender	Male	103	53.1
	Female	91	46.9
Country of origin	Malaysia	187	96.4
	Bangladesh	5	2.6
	India	2	1
Religion	Islam	156	80.4
	Christianity	5	2.6
	Hinduism	26	13.4
	Buddhism	6	3.1
	No religion	1	0.5

Ethnic	Malay	122	62.9
	Chinese	6	3.1
	Indian	58	29.9
	Others	8	4.1
Occupation	Student	43	22.2
	Employes : Full-time	90	46.4
	Employed : Part-time	19	9.8
	Self-employed	27	13.9
	Unemployed	11	5.7
	Retired	4	2.1
Primary reason	Historical interest	54	27.8
	Cultural experience	64	33
	Religious significant	67	34.5
	Others	9	4.6
Frequency of travel	First-time visitor	69	35.6
	2-3 times	72	37.1
	4-5 times	22	11.3
	More than times	31	16
Learn about Pulau	Travel agency	4	2.1
Besar	Social media	53	27.3
	Word of mouth (WOM)	110	56.7
	Travel guidebooks	5	2.6
	Others	22	11.3

Descriptive Analysis

Table 3. Descriptive analysis

Items	Indicator	1	2	3	4	5	Mean
Heritage Site Destruction	HSD						4.026
1. Heritage destruction in Pulau Besar reduced its historical value.	HSD 1	2	7	14	69	102	
2. Removing old tombs lessened the island's cultural significance.	HSD 2	1	9	23	60	101	
3. Demolishing landmarks lowered tourist interest in Pulau Besar.	HSD 3	14	54	28	26	72	
4. Lost heritage made Pulau Besar a less authentic cultural destination.	HSD 4	0	12	18	56	108	
5. Destroying heritage sites worsened the visitor experience.	HSD 5	15	32	30	38	79	

Local Spiritual Practice	SP						4.025
1. Spiritual practices at destroyed sites enrich Pulau Besar's cultural experience.	SP 1	7	23	18	54	92	
2. Local rituals at heritage sites are vital to Pulau Besar's identity.	SP 2	5	19	17	56	97	
3. Incense-burning and rituals add authenticity to the island.	SP 3	21	25	16	50	82	
4. Ongoing spiritual practices make Pulau Besar uniquely distinct among heritage sites.	SP 4	4	12	21	68	89	
Tourism Infrastructure	TI						4.454
1. New facilities in Pulau Besar enhanced my tourist experience.	TI 1	0	8	9	63	114	
2. Better infrastructure increased accessibility while preserving cultural value.	TI 2	0	1	16	72	105	
Economic Development	ED						4.449
1. Tourism-driven economic growth has enhanced Pulau Besar's visitor experience.	ED 1	0	0	10	69	115	
2. Pulau Besar's tourism growth has not compromised its cultural authenticity.	ED 2	1	9	21	49	114	
3. The economic gains from tourism validate changes to heritage sites.	ED 3	0	5	10	64	115	
4. Local economic benefits from tourism add value to Pulau Besar as a cultural destination.	ED4	2	5	16	63	108	
Religious Belief	RB						4.531
1. My religion plays a very important role in my daily life	RB 1	1	0	8	28	157	
2. Religious beliefs should heavily influence how heritage sites are preserved	RB 2	1	5	21	73	94	

Cultural Background	CB						4.363
1. My culture shapes my heritage site experiences	CB 1	1	0	20	79	94	
2. I am very sensitive to local rituals at heritage sites due to my culture	CB2	3	1	25	59	106	
Perception of Authenticity	PA						4.331
1. Pulau Besar feels authentic despite heritage sites destruction.	PA 1	c	18	22	74	79	
2. Pulau Besar is still culturally significant.	PA 2	0	0	8	57	129	
3. Spiritual practices preserve its authenticity	PA 3	1	11	23	56	103	
4. Modernization has not ruined its authenticity.	PA 4	0	13	14	64	103	

Tourist Satisfaction	TS						4.490
1. I am satisfied with my visit to Pulau Besar.	TS 1	0	6	13	71	104	
2. Pulau Besar met my expectation for an authentic cultural experience.	TS 2	0	2	12	70	110	
3. I would recommend Pulau Besar to others	TS 3	1	2	10	54	127	
4. Pulau Besar offers a satisfying cultural-historical experience	TS 4	2	0	11	67	114	

In describing the perceptions of the constructs that included heritage site destruction, local spiritual practices, infrastructure for tourism development, economic advancement, and religious belief, the mean for heritage site destruction recorded 4.026, indicating that the majority of respondents agreed that heritage site destruction is prevalent on Pulau Besar. Among the items, HSD3 and HSD5 received the highest level of agreement from participants regarding damage or neglect at a particular site. Similarly, local spiritual practices yielded a mean of 4.025, reflecting the participants' agreement that spiritual practices contribute to the island's authenticity. However, SP4 displayed slightly lower levels of agreement than the other items, suggesting variations in how visitors perceive certain spiritual practices.

The respondents had the highest mean of 4.454 in terms of tourism infrastructure, indicating strong agreement that Pulau Besar has appropriate infrastructure that satisfies their expectations. Most responses were rated 4 or 5, indicating that accessibility and quality infrastructure were major contributors to their positive experience. The availability of well-maintained roads, dependable ferry services, and easily accessible historical or religious attractions improves convenience for visitors. Guests find more pleasure in visiting destinations that provide high-quality hotels, restaurants, and rest areas, and these excellent facilities lead visitors to stay longer and return to the destination. The high agreement rating for infrastructure quality demonstrates Pulau Besar's tourist readiness to provide efficient visitor service. Positive perceptions depend on ongoing investments to maintain and upgrade infrastructure. Pulau Besar will attract more tourists when sustainability measures are established to protect nature alongside heritage preservation and technological improvements, including online availability and visitor-service operations.

Economic development also received a high mean score of 4.449, signifying that the respondents perceive tourism to be beneficial for Pulau Besar's economic development. Most respondents strongly agreed with statements regarding the economic benefits of tourism activities. The island's financial success depends heavily on tourism activities because they support local enterprises, create employment, and promote community growth and development. Tourism is a fundamental economic driver that produces profits by supporting lodging services, dining establishments, and transportation facilities.

Local residents benefit from tourism when visitors arrive because their presence creates new job opportunities and enhances the prosperity of small businesses, including startups. The establishment of sustainable tourism development requires focus because it protects against profit distribution, which results in environmental damage and commercially excessive practices. A combination of strategic planning measures, responsible tourism policies, and community involvement enables the island to achieve sustainable economic growth and protect its cultural and natural resource.

Religious belief obtained the highest overall mean of 4.531, and religious beliefs were important in determining visitors' perceptions of authenticity. Most respondents strongly agreed that religious elements highly influenced their overall satisfaction with their visit to Pulau Besar. The high agreement rate from respondents shows that visitors draw meaning and authenticity from the religious aspects of the Pulau Besar culture. The island's authenticity is reinforced by its historical religious sites and local rituals, while its spiritual significance enhances visitors' experiences. Visitors heavily depend on authenticity in heritage tourism, making the research findings significant for the industry. This highlights the deep connection between spirituality and cultural heritage in the context of the tourism. Recognizing and preserving these religious elements will enhance the visitor experience and contribute to the sustainable development of heritage tourism on the island.

The variable cultural background generated an average of 4.363, thus showing that the respondents agree that the cultural background of Pulau Besar makes the experience enjoyable. Among the items, CB2 received slightly higher levels of agreement than CB1, indicating the participants' appreciation of the island's traditions, practices, and historical influence. This study confirms that Pulau Besar has gained prominence through its cultural heritage. Visitors travel to the island because of its unspoiled natural surroundings, authentic traditions, and historical tales. Visitor satisfaction increases significantly when people genuinely appreciate local customs, history, and traditional rituals. This evidence proves that cultural preservation and promotion initiatives are essential. Well-documented traditions, historical preservation, and tourist-oriented implementation enhance visitor satisfaction. Tourists engage more deeply with destinations through cultural storytelling, guided tours, and interactive heritage experiences.

The mean score for the perception of authenticity was 4.331, indicating that the participants perceived the heritage and spiritual experiences on Pulau Besar to be authentic. Items PA2 and PA4 were more agreed upon than PA1 and PA3. This implies that visitors were mainly satisfied with aspects that attribute heritage to the site in relation to actual cultural and spiritual practices. This implies that authenticity plays a crucial role in shaping visitor experience and expectations (Ivanovic, 2011).

The mean of tourist satisfaction was the highest, at 4.490, indicating strong agreement on the participants' satisfaction with their overall visit to the island. Of all the items, TS4 obtained the highest level of agreement, indicating that the participants were most satisfied with the integration of cultural, spiritual, and tourism-related experiences during their visits. This shows a high level of satisfaction, implying that despite the problems created by the destruction of heritage sites and other development pressures, the island can satisfy its visitors. The analysis generally indicates that while Pulau Besar has managed to retain many aspects of its cultural and spiritual heritage, it still faces several challenges, including heritage site destruction. In this case, the island's cultural background, authenticity, and infrastructure were the key drivers of visitor satisfaction. These findings highlight the importance of sustainable tourism practices at the destination, which balance development with the preservation of the island's unique cultural and spiritual identity. Research shows that visitor satisfaction on Pulau Besar depends heavily on its cultural heritage, religious values, and tourism facilities. Although visitors acknowledge both the island's authentic qualities and the economic advantages of tourism, they remain worried about heritage site destruction.

Measurement Model

From Table 4, the measurement model was then assessed using SmartPLS4 for the measurement quality of the observed variables with respect to outer loading, scale reliability, convergence, and discriminant validity based on the recommendations given by Hair et al. (2013). The assessment of key thresholds involved testing the composite reliability (CR), Cronbach's alpha, and Average Variance Extracted (AVE). The internal consistency metric, known as composite reliability (CR), should exceed 0.7, according to Henseler and Sarstedt (2013). DeVellis and Thorpe (2021) demonstrated that the reliability levels behind Cronbach's alpha must exceed 0.7. Convergent validity was evaluated using the AVE as an index, which shows the percentage of construct-related item variance. To guarantee sufficient convergent validity, researchers must establish that the AVE reaches a minimum of 0.5, according to Hock et al. (2010).

Table 4. Result of evaluating the measurement model

Factor	Code of items	Outer loading	VIF	Alpha	CR	AVE
Heritage site	HSD1	0.770	2.099	0.823	0.876	0.587
destruction	HSD2	0.854	2.937			
	HSD3	0.721	2.645			
	HSD4	0.817	2.212			
	HSD5*	0.651	2.588			

Local spiritual	SP1	0.900	3.552	0.914	0.939	0.793
practice	SP2	0.902	3.831			
	SP3	0.900	2.903			
	SP4	0.860	2.192			
Tourist	TI1	0.887	1.801	0.800	0.908	0.831
Infrastructure	TI2	0.936	1.801			
Economic	ED1*	0.662	1.305	0.782	0.861	0.609
development	ED2	0.792	1.595			
	ED3	0.841	1.899			
	ED4	0.813	1.811			
Religious belief	RB1*	0.459	1.278	0.636	0.730	0.606
	RB2	1.000	1.278			
Cultural	CB1	0.896	1.497	0.731	0.881	0.788
background	CB2	0.879	1.497			
Perception of	PA1	0.818	1.777	0.691	0.813	0.525
authenticity	PA2*	0.586	1.127			
	PA3	0.787	1.513			
	PA4*	0.684	1.373			
Tourist	TS1	0.760	1.610	0.732	0.827	0.550
satisfaction	TS2	0.909	1.931			
	TS3*	0.670	1.295			
	TS4*	0.590	1.274			

$\chi^2= 1183.287$, SRMR=0.089, NFI=0.630

*Variables were eliminated due to outer loading factor < 0.7

Notes: VIF= Variance inflation factor; CR= Composite reliability; AVE= average variance extracted.

Analysis of the preliminary results indicated that the AVE exceeded 0.5, but multiple outer loadings fell short of the 0.7 threshold. Seven insufficient indicators were deleted from the revised model because analyzing the model required higher loadings to reach the > 0.7 threshold level. The modification improved both composite reliability and Cronbach's alpha to maintain model validity and reliability around the measurements. The retest confirmed that the modified model passed the tests for convergence and internal consistency. According to the research findings, established thresholds are vital for measurement model assessments. The removal of low-performing variables allowed for a more accurate representation of the constructs under study, ensuring their reliability and their convergent validity. With the attainment of these criteria, this measurement model supports the intent of the study in providing robust and reliable findings, which again underlines the effectiveness of SmartPLS4 as a tool for structural equation modeling. This process underlines the critical relationship between proper model refinement and the realization of reliable research outcomes.

Following the refinement of the measurement model, the overall model fit was assessed. The Standardized Root Mean Square Residual (SRMR) value was 0.089, which is below the recommended threshold of 0.10 (Cho et al., 2020; Henseler et al., 2014), indicating an acceptable fit between the model and the observed data. The

Normed Fit Index (NFI) value of 0.630, while low, is not the primary fit index for PLS-SEM prediction-oriented models and is provided for completeness (Hair et al., 2019). The model's explanatory power is further demonstrated by the R^2 values presented in the structural model assessment.

Discriminant Validity

Table 5. The measurements' discriminant validity

Fornell criterion	-Larcker	CB	ED	HSD	PA	RB	SP	TI	TS	
CB		0.888								
ED		0.408	0.780							
HSD		0.487	0.230	0.766						
PA		0.418	0.582	0.362	0.725					
RB		0.623	0.415	0.388	0.295	0.778				
SP		0.404	0.229	0.605	0.244	0.271	0.891			
TI		0.355	0.695	0.244	0.577	0.457	0.261	0.912		
TS		0.226	0.494	0.206	0.527	0.281	0.203	0.456	0.742	
HTMT Criterion		CB	ED	HSD	PA	RB	SP	TI	TS	RB x SP
CB										
ED		0.542								
HSD		0.634	0.267							
PA		0.590	0.790	0.465						
RB		0.679	0.477	0.368	0.327					
SP		0.488	0.259	0.722	0.294	0.257				
TI		0.464	0.877	0.277	0.754	0.558	0.288			
TS		0.293	0.633	0.270	0.667	0.344	0.249	0.599		
RB x SP		0.205	0.115	0.130	0.127	0.179	0.033	0.070	0.114	
CB x SP		0.287	0.080	0.143	0.241	0.126	0.141	0.050	0.057	0.723

Table 5 shows the evaluation of discriminant validity using two well-recognized criteria: the Fornell-Larcker criterion and the Heterotrait-Monotrait ratio.

Discriminant validity ensures that the constructs under study are conceptually distinct and represent different phenomena, which is an important prerequisite for any robust measurement model. This is relevant to ensure that constructs are not too similar and their respective indicators do not coincide in the measurement of other constructs. First, for discriminatory power, also known as the Fornell-Larcker criterion, the diagonal values in bold refer to the square root of the AVE for each construct and are compared to the correlations between itself and other constructs.

The nature of discriminant validity dictates that for this characteristic to hold, the diagonal value must be higher than all other off-diagonal correlations in its row and column. Herein, one can observe how the results satisfy the demand for all constructs under scrutiny. For instance, the square root of the AVE for CB is 0.888, which is larger than the correlation of this construct with other constructs, such as ED and HSD (ED = 0.408, HSD =

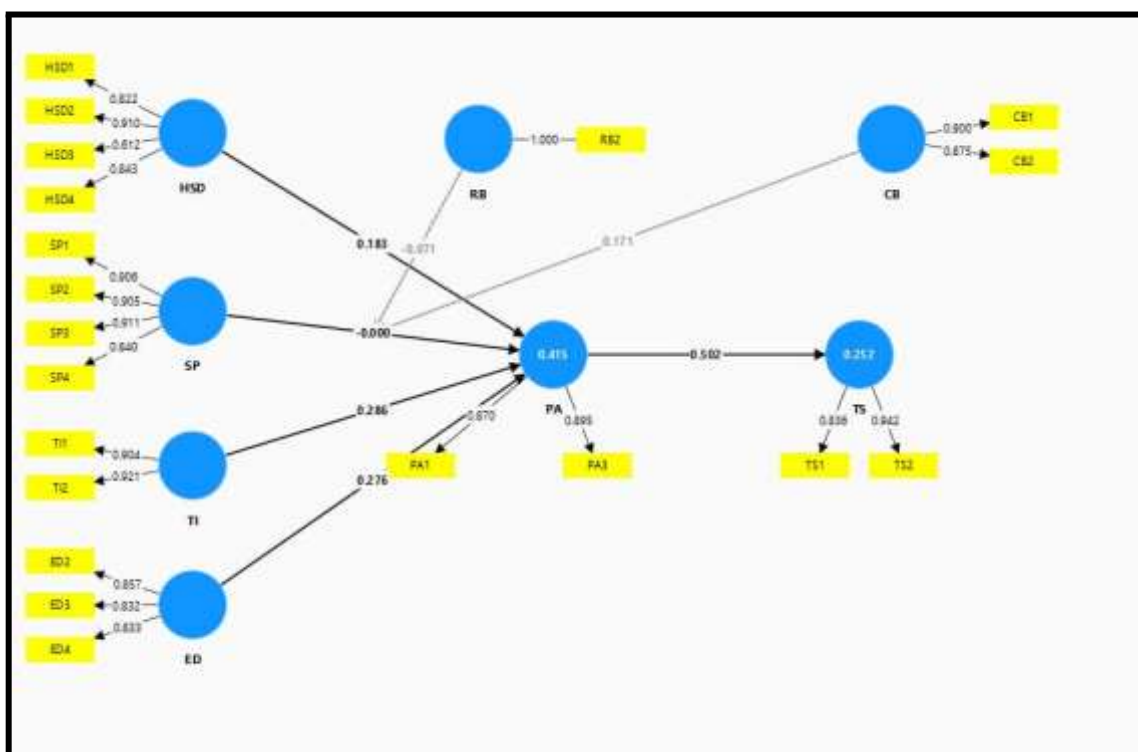
0.487). Conversely, in ED, the square root of AVE is 0.750, higher than the correlation of ED with other constructs such as HSD (0.230) and CB (0.408).

This is an invariant pattern across all the constructs, such as TS, RB, and SP, which may provide further assurance regarding each construct sharing more variances with its respective indicators than any other. The HTMT ratio is a more strident and novel approach to discriminatory validity. This criterion calculates the ratio of the correlations between constructs to the correlations within a single construct. According to Henseler et al. (2015), HTMT values should be below 0.85, although a threshold of 0.90 may be acceptable in specific contexts. The table shows that all HTMT values are below 0.85, confirming the distinctiveness among the constructs. The HTMT between CB and ED, for example, has a value of 0.542, falling well within the recommended threshold, and for tourism infrastructure and ED, it stands at 0.335, a good indication of discriminant validity. The remaining pairs were Cultural Background and Local Spiritual Practices (0.493) and Perception of Authenticity and Tourist Satisfaction (0.657). In all cases, the values fell below the threshold, demonstrating that the constructs did not exhibit excessive correlation.

The Fornell-Larcker criterion and the HTMT ratio ensured a comprehensive assessment of discriminant validity. Although the Fornell-Larcker criterion is viewed as more traditional, it might be less sensitive to the detection of validity problems in cases where the constructs are highly correlated. For this limitation in the former method, the latter method provides a much more rigid assessment. Together, these methods confirmed that the measurement model was robust and reliable. Eventually, both criteria affirmed that the constructs in the study were different, and the overall model had a good fit, hence suitable for further analysis.

Structural Model

Figure 4 : Hypothesis test result



Source: Authors (2025)

Under the established criteria for rigorous analysis adherence, the structural model generated results consistent with goodness-of-fit standards, even though two variables fell short of their respective thresholds. Although these two rejected variables did not meet the threshold criteria, most of the indicators of reliability, including composite reliability ($CR > 0.7$), average variance extracted ($AVE > 0.5$), and Cronbach's alpha ($\alpha > 0.7$), as recommended by Hair et al. (2013) were above the threshold values. The AVE values established adequate convergent validity,

while the remaining observed variables were representative of the constructs studied. Although there is a minor rejection, the strength of the model remains unchanged. Hence, it is suitable for application in subsequent analyses using structural equation modeling. Such an outcome supports the reliability and validity of the data and provides a sound basis for further interpretation and testing of hypotheses.

The structural model was evaluated using SmartPLS4 based on the following coefficients. The VIF uses the Variance Exaggeration Factor to determine multicollinearity (Kim, 2019). The measurements in this study thus include coefficients along with path impacts that show significance following the guidelines provided by Hair et al. (2013). Tourist levels of satisfaction R^2 are assessed notwithstanding analysis has laid emphasis on squared f^2 formula for the establishment of the strength and weakness factors of each influencing factor (Hair et al., 2013). First, the author conducted a multicollinearity test using the VIF coefficient of the observed variables. The obtained VIF values of the observed ranged from the lowest TS4 = 1.274 to SP2 = 3.831, showing that all cohorts were less than 5 (see Table 2). From this analysis, it follows that the tested dataset is free from multicollinearity concerns, as stated by Kim (2019).

Using the bootstrapping command on SmartPLS4, with 5000 bootstrap samples, the p-value results of all relationships are <0.05 , and the hypotheses H1 ($p=0.009<0.05$), H3 ($p=0.000<0.05$), H4 ($p=0.001<0.05$), H5 ($p=0.000<0.05$) and H2b ($p=0.002<0.05$) are accepted, while H2 ($p=0.529>0.05$) and H2a ($p=0.371<0.05$) are rejected (Hair et al., 2013). Path relationship of HSD \rightarrow PA with a standardized impact coefficient (path coefficients) = 0.199. The path relationship of SP \rightarrow PA with a standardized impact coefficient (path coefficients) = -0.048. The path relationship of TI \rightarrow PA with a standardized impact coefficient (path coefficient) = 0.313. Path relationship of ED \rightarrow PA with a standardized impact coefficient (path coefficients) = 0.275. The path relationship of PA \rightarrow TS with a standardized impact coefficient (path coefficients) = 0.527. The path moderate relationship of RB with SP and PA was -0.087. The path moderate relationship of CB with SP and PA was 0.268.

Furthermore, the author continued to consider the coefficient R^2 . From this analysis, the factors explained 49.3% of the variation in tourist satisfaction, with $R^2 = 0.493$. Considering the values for the coefficient f^2 , only the relationship between PA \rightarrow TS ($f^2 = 0.385 > 0.15$) is high according to Cohen (1988), indicating that the perception of authenticity has a very strong effect on tourist satisfaction. The moderating effect of CB on the relationship between SP and PA was insignificant ($f^2 = 0.065 < 0.15$). The details are provided in Table 6.

The model explains 49.3% ($R^2 = 0.493$) of the variance in Tourist Satisfaction (TS) and R^2 value for Perception of Authenticity (PA) = 0.514, indicating substantial explanatory power according to Chin's (1998) guidelines.

4.3.1 Hypothesis Model

Table 6. The hypothesis test results

Hypothesis	Path Coefficient	Std. Dev.	t	p	f^2	Test results
H1: HSD \rightarrow PA	0.199	0.827	2.605	0.009	0.044	Supported
H2: SP \rightarrow PA	-0.048	1.039	0.630	0.529	0.003	Rejected
H3: TI \rightarrow PA	0.313	0.656	3.905	0.000	0.095	Supported
H4: ED \rightarrow PA	0.275	0.5941	3.206	0.001	0.075	Supported
H5: PA \rightarrow TS	0.527	0.614	9.977	0.000	0.385	Supported
H2a: RB x SP \rightarrow PA	-0.087	0.595	0.894	0.371	0.006	Rejected
H2b: CB x SP \rightarrow PA	0.268	0.689	3.071	0.002	0.065	Supported

Data analysis demonstrates essential factors that drive the understanding of Perception of Authenticity (PA) within the special historic and religious belief of Pulau Besar, Malaysia. Pulau Besar stands as a crucial historical site that delivers an authentic perspective for analyzing how factors interact within the studied model framework.

First, for H1, heritage Site Destruction (HSD) → Perception of Authenticity (PA) displayed significant value at $p = 0.009$ ($T = 2.605$), which depends on the delicate condition of Pulau Besar's heritage sites, including old mosques, maqams (tombs), and natural landmarks. HSD generates value for visitors as they recognize authentic heritage elements that are threatened with rarity, making chunks of their island experience more meaningful. The relationship between conservation and tourism requires careful management to avoid permanent site destruction while preserving authentic heritage sites.

H2 exhibited non-significant relationships, which produced lessons of value. The statistical analysis between Spiritual Practice (SP) and Perception of Authenticity (PA) ($p = 0.529$, $T = 0.630$) shows that spiritual activities do not independently increase authenticity perceptions. Recent findings show that religious visitors carrying out simple spiritual practices by themselves may not experience authenticity without strong ties between their traditions and views of the cultural past. Pulau Besar requires spiritual promotion practices to surpass isolation and integrate educational and historical information about the cultural context into such activities.

Research demonstrates that Tourism Infrastructure (TI) creates positive effects on PA ($p = 0.000$, $T = 3.905$) in H3. Infrastructure developments at Pulau Besar, including prayer facilities with interpretive centers and eco-friendly walkways, will enrich guest experiences without compromising the island's original qualities. Tourists who see maqams properly maintained alongside informational signage at interpretive centers gain a better understanding of their historical backdrop and religious value, which improves their sense of authenticity. Economic Development demonstrates a significant impact on the Perception of Authenticity, rated at $p = 0.001$ with $T = 3.206$ in the H4 context. Pulau Besar could benefit from this observation because socio-economically advanced visitors and those located in urban areas show appreciation for authentic cultural heritage coupled with spiritual values. Their educational resources allow them to understand the island's historical and spiritual components. Marketing campaigns should attract urban visitors by showcasing Pulau Besar's authentic spiritual history.

Tourist Satisfaction (TS) is directly impacted by Perception of Authenticity (PA), as indicated by a significant model connection ($p = 0.000$, $T = 9.977$). When tourists interact with the cultural and spiritual aspects of Pulau Besar, they achieve both emotional satisfaction and spiritual fulfillment. Tourist satisfaction increases when tourists visit maqams of Islamic saints and participate in religious ceremonies. Visitors need access to Pulau Besar's genuine cultural and spiritual facets to reach peak satisfaction levels with their experience.

The test results show that religious beliefs and spiritual practices fail to create meaningful significance with the perception of authenticity ($p = 0.371$, $T = 0.894$ in H2A). Inputs from religious beliefs combined with spiritual practices failed to show meaningful effects on perceived authenticity measurements. The island's maqams gain meaning for those who practice faith but seem insignificant to those with no cultural ties or historical context. Pulau Besar tourism operators should integrate cultural historical stories into religious site offerings so that visitors receive fully immersive experiences that welcome everyone. The Cultural Background × Spiritual Practice (CB × SP) interaction effect on perceptions of authenticity was significant ($PA = 0.002$, $T = 3.071$). This finding indicates that cultural background and spiritual practice jointly strengthen the perception of authenticity, as presented in hypothesis H2B. The spiritual site at Pulau Besar offers visitors opportunities to combine prayer and meditation, enhancing their sense of an authentic island experience. Tourists who visit Pulau Besar frequently discover the sacred nature of this place through its authentic history. Tourism providers should capitalize on religious opportunities by creating authentic religious retreats alongside programs featuring culturally respectful practices from the Pulau Besar region.

The results of our hypothesis testing provide essential insights that specifically benefit Pulau Besar. The findings indicate that cultural integration between historical attractions and spiritual experiences leads to higher authenticity perception and visitor satisfaction. Pulau Besar's infrastructure requires an integrated approach between sustainable development and heritage protection measures that will attract culturally educated audiences from advanced economic regions. Pulau Besar's sustainable future depends on stakeholders protecting its special cultural and spiritual identity, which will create longevity and sustainability.

By illustrating how Pulau Besar's concept of authenticity is impacted by local spiritual practices, tourism infrastructure, economic development, and cultural site damage, this study successfully meets its research aims.

The results show that while tourism infrastructure and economic growth positively contribute to authenticity by maintaining cultural assets and enhancing the visitor experience, historical site destruction increases authenticity perception because of the rarity effect. Local spiritual practices by themselves, however, have little effect on how authenticity is perceived, indicating that to maximize their impact, religious activities should be combined with historical instruction. As tourists who perceive authenticity in the cultural and spiritual dimensions report higher levels of happiness, this study also demonstrates the critical mediating function of the perception of authenticity. Religious beliefs are less powerful in shaping the relationship between spiritual practices and perceptions of authenticity than cultural heritage are. To maximize perceptions of authenticity and overall visitor satisfaction at Pulau Besar, these findings underscore the need for sustainable tourism development that balances contemporary infrastructure with the preservation of history and encourages culturally sensitive experiences.

DISCUSSION

Research data confirmed the successful achievement of all stated study objectives. Research into visitor contentment and beliefs about authenticity on Pulau Besar provides essential insights into the cultural effects on tourist encounters. Tourist evaluation of authentic cultural and spiritual experiences has a direct impact on their overall satisfaction. This research gathered data through 194 visitor responses to identify essential connections between heritage and authenticity, alongside traditional practices in the area.

According to the research results, most tourists perceive Pulau Besar's heritage alongside spiritual activities as genuine authentic destinations. Visitors awarded an average score of 4.331 to demonstrate their recognition of the honest cultural traditions practiced by local residents (Eck et al., 2023). The genuine experiences of tourists serve as essential factors for enhancing satisfaction because they create stronger connections with native customs. The involvement of authentic cultural elements results in increased visitor satisfaction, as proven by research (Hair et al., 2013).

Religious beliefs were an essential factor that affected how people perceived authenticity. Tourists develop stronger connections with island rituals when their beliefs match the observed religious practices on the island. Visitor satisfaction increases when visitors share religious beliefs because it enhances their perception of authenticity and their overall experience (Dudley et al., 2009). Visitors' beliefs require recognition from tourism operators, as they determine the effectiveness of delivering authentic experiences. Tourist satisfaction depends heavily on the cultural background of each individual tourist brings with them. People originating from cultures steeped in spirituality experience an increased appreciation of local events and traditional ceremonies. The results indicate that an overlap in cultural experiences between tourists and their destination culture directly influences their satisfaction levels (Dudley et al., 2009). Knowledge of visitors' cultural backgrounds enables businesses to develop experiences that capture the different tastes of their audience.

Some tourists expressed discontent because they viewed cultural events as manufactured parts of tourism activities. This dissatisfaction emerges because tourists feel that their expectations do not match their actual encounter experiences (Gopalan & Narayan, 2010). People who want genuine cultural encounters are disappointed after discovering that modified cultural practices are being used for commercial purposes, which reduces their satisfaction levels. The delivery of genuine experiences to tourists requires maintaining a precise balance in expectation management. The authors proposed multiple hypotheses to examine these connections during the study. The research findings matched the first hypothesis, which demonstrated how tourists with authentic perceptions experienced higher satisfaction levels. The positive role of authentic experiences leads visitors to express higher satisfaction rates, according to study data (Dudley et al., 2009). The study confirmed the hypothesis and demonstrated how religious beliefs influence the effect of spiritual practices on the perception of authenticity. Visitors who shared similar beliefs with the local rituals experienced stronger connections to these ceremonies, which increased their assessment of authenticity, along with their satisfaction levels (Dudley et al., 2009).

The hypothesis that cultural background influences how tourists perceive authenticity in local spiritual traditions was verified. Individual cultural backgrounds influence tourists' spiritual beliefs to better understand authentic local customs, which leads to enhanced satisfaction (Dudley et al., 2009). Research has confirmed the hypothesis that satisfaction problems emerge from mismatches between what tourists expect and what they experience. The

evaluation of experiences as commercialized activities led visitors to show decreased satisfaction ratings because authenticity factors deeply influence satisfaction levels (Gopalan & Narayan, 2010). This research demonstrates how authenticity provides essential factors for achieving tourist satisfaction experiences on Pulau Besar. Tourism stakeholders should protect original cultural traditions and understand the cultural diversity of their visitors to build superior tourist experiences for them. Tourist satisfaction increases through meaningful interactions and proper expectation management to decrease dissatisfaction. Sustainable tourism development and cultural heritage protection are long-term priorities that require attention as destinations move forward.

The negative impact of heritage site destruction on perceived authenticity (H1) aligns with Wang's (1999) concept of objective authenticity. The demolition of physical structures like the tombs of *Tok Janggut*, *Tok Putih*, *7 Beradik* and *Nenek Kebayan* directly erodes the objective, material basis for authenticity that many tourists seek, leading to a sense of loss and inauthenticity as found in our study. The non-significant finding for spiritual practices (H2) presents a complex picture. Though practices like incense burning could contribute to existential authenticity (a personal, experiential feeling of being authentic), our results suggest that in isolation, they are insufficient to overcome the loss of objective authenticity. Furthermore, the government's rebranding of the island as a family-friendly destination may be perceived as creating a constructive or even postmodern authenticity, a socially constructed or staged version of the island's identity which may not resonate with pilgrims seeking a spiritually objective authentic experience.

It is important to note that the perspective of religious authorities, who ordered the demolition of sites to curb practices deemed *khurafat* (superstition) or *shirk* (idolatry), is based on an imperative to protect religious orthodoxy. Their actions were not intended to diminish cultural tourism but to align the island's practices with mainstream Islamic doctrine. This research, however, highlights the unintended consequence of these actions on the perceptual landscape of tourists. The challenge, therefore, is not to assign blame but to find an equilibrium where concerns for religious propriety can be balanced with strategies for preserving cultural heritage and the tourist appeal that depends on it.

Limitations of Study

This study encountered several methodological and contextual constraints in examining tourist satisfaction and authenticity perception at Pulau Besar. The island's geographical isolation presents significant logistical challenges, limiting researchers' ability to collect comprehensive data and resulting in potential gaps in understanding visitor experiences (Gao et al., 2020). A notable limitation was non-response bias, as approximately 20% of the approached visitors declined to participate in the survey. This self-selection tendency raises concerns about whether respondents truly represent the broader visitor population, particularly regarding sensitive topics involving cultural and religious practices (Genc & Gülerterkin, 2022).

Reliance on self-reported measures introduces additional constraints. Participants may have provided socially desirable responses, potentially inflating satisfaction scores and obscuring genuine negative experiences (Amissah et al., 2022). This methodological limitation affects the study's capacity to accurately capture the complex relationship between heritage site alterations and tourist perceptions.

Temporal factors further constrained the scope of the research. The cross-sectional design provides only a snapshot of visitor attitudes and fails to document how perceptions evolve following heritage site modifications. Additionally, the study's focus on four specific destroyed tombs (*Tok Putih*, *Tok Janggut*, *7 Beradik*, and *Nenek Kebayan*) may not fully represent the diversity of heritage experiences across Pulau Besar Island. Addressing these limitations could lead to more effective strategies for balancing cultural preservation and sustainable tourism development on Pulau Besar.

The cross-sectional nature of this study provides only a snapshot in time. A longitudinal design tracking tourist perceptions before and after major heritage site interventions would provide stronger, causal evidence of how such changes directly impact authenticity and satisfaction. The quantitative approach that revealed the statistical relationships, may not capture the full depth and nuance of tourist experiences. Future qualitative research, employing in-depth interviews or focus groups, would be invaluable for exploring the emotional and phenomenological dimensions of authenticity loss or satisfaction, providing richer context to the numerical data

presented here.

Suggestions for future research

To strengthen the rigor and applicability of heritage tourism research, future studies should adopt an integrated methodological approach that combines quantitative surveys with qualitative techniques, such as in-depth interviews and focus group discussions. This mixed-methods design provides a more comprehensive understanding of tourist experiences, capturing both statistical trends and nuanced emotional responses that surveys alone may overlook (Dudley et al., 2009). Expanding survey participation to include diverse demographic groups would further enhance the validity of the findings, particularly in assessing how different tourist segments perceive authenticity and satisfaction (Gao et al., 2020). Longitudinal studies tracking tourist perceptions before and after changes in heritage sites would provide stronger evidence of causal relationships. Expanding participant recruitment to include more diverse visitor demographics and investigating how different cultural backgrounds mediate authenticity perceptions would enhance the generalisability of the findings (Eck et al., 2023).

On the practical front, immediate action is needed to safeguard the cultural heritage of Pulau Besar. Implementing a Heritage Conservation Act would provide legal protection for historical sites, while establishing a Community Heritage Management Board would ensure that local stakeholders have a meaningful role in preservation efforts (Amissah et al., 2022). Such measures must strike a careful balance between honouring the site's cultural significance and maintaining its appeal to international tourists. Tourism strategies should incorporate educational initiatives to promote respectful engagement with local heritage and help visitors appreciate its authentic value. Future research should focus on evaluating the effectiveness of these conservation strategies, particularly their impact on tourist satisfaction and sustainability. By combining robust methodologies with proactive policy measures, Pulau Besar can serve as a model for reconciling cultural preservation and tourism development.

To build upon this research, future studies should adopt a mixed-methods approach. As noted in the limitations, longitudinal studies are critical to move beyond correlation and understand the causal impact of site changes on perceptions over time. Furthermore, qualitative investigations are essential to explore deeper into the 'why' behind the numbers, to understand the emotional resonance of authenticity, the personal definition of spiritual experiences, and the nuanced reasons for satisfaction or dissatisfaction that a survey cannot fully unveil. Combining these methods will offer a more holistic and robust understanding of the complex interplay between heritage, authenticity, and tourism.

CONCLUSION

The research on Pulau Besar's tourist satisfaction and perception of authenticity revealed key significant results. The research has proven that damaging heritage sites changes tourist perspectives on authenticity, resulting in lower satisfaction during their visit. Despite some heritage sites being damaged, many tourists discover the authentic value of engaging in local cultural activities and spiritual practices at the destination. Tourists find authenticity more meaningful through cultural events at heritage sites, even when the sites show physical damage. This study provides recommendations for better research procedures while enhancing tourist vacation experiences. Research advocates that adding survey and qualitative interview approaches allows researchers to obtain extensive and detailed data, resulting in more comprehensive findings. A diverse participant selection process will lead to a better comprehension of tourist perspectives by giving equal importance to all viewpoints (Gao et al., 2020).

It is necessary to understand how site destruction affects tourism. Future research should investigate multiple tourist groups to understand their reactions to modifications in cultural sites. Tourism managers must understand how local culture changes to establish visitor-friendly plans that honor heritage value (Eck et al., 2023). The outcomes of this research hold practical value for governmental leaders and tour operators.

Organizations can leverage their findings to build improved approaches that combine cultural legacy maintenance efforts with guest necessities. Management strategies maintain both visitor satisfaction and the

protection of the distinctive cultural heritage of Pulau Besar. Combining visitor contentment with local cultural conservation will lead to sustainable travel that favors both tourists and residents (Budeanu, 2007). Future studies should examine how different tourist generations view authenticity, as some tourists may have different expectations of a destination's authenticity. To guarantee that Pulau Besar's spiritual and cultural identity is maintained for upcoming tourists, officials must create heritage-friendly tourism policies.

Ethical Consideration

This study received full ethical approval from the Research Ethics Committee of UiTM Melaka (Reference: BERC/MLK/381/2025). All research procedures comply with institutional ethical guidelines regarding participant confidentiality, voluntary participation, and informed consent. The authors declare no conflicts of interest in this research.

REFERENCES

1. Azmi, E. (2001, May 14). Makam keramat Pulau Besar diruntuhkan. *Malaysia Kini*. <https://www.malaysiakini.com/news/2971>
2. Albert, H., & Hazen, H. (2010). Maintaining authenticity and integrity at World Heritage Sites. *Geographical Review*, 100(1), 56-73. <https://doi.org/10.1111/j.1931-0846.2010.00006.x>
3. Amissah, E. F., Addison-Akotoye, E., & Blankson-Stiles-Ocran, S. (2021). Service quality, tourist satisfaction, and destination loyalty in emerging economies. In *Marketing tourist destinations in emerging economies: Towards competitive and sustainable emerging tourist destinations* (pp. 121-147). Cham: Springer International Publishing. https://10.1007/978-3-030-83711-2_6.
4. Asawachai, P. (2018). The impact of religious tourism on Buddhist Monasteries: An examination of nine temples in Ang Thong. *Electronic Journal of Open and Distance Innovative Learning*, 8(1), 238-258.
5. Aulet, S., & Vidal, D. (2018). Tourism and religion: sacred spaces as transmitters of heritage values. *Church, Communication and Culture*, 3, 237 - 259. <https://doi.org/10.1080/23753234.2018.1542280>.
6. Ayeh, J. K., Au, N., & Law, R. (2013). "Do we believe in TripAdvisor?" Examining credibility perceptions and online travellers' attitude toward using user-generated content. *Journal of Travel Research*, 52(4), 437-452. <https://doi.org/10.1177/0047287512475217>
7. Badmus, S. S., & Adebayo, B. M. (2025). An Islamic perspective of superstitious practices related to death among Yoruba Muslims of Ogun State. *MAQOLAT: Journal of Islamic Studies*, 3(1), 44-60. <https://doi.org/10.58355/maqolat.v3i1.88>.
8. Beirman, D. (2020). Restoring tourism destinations in crisis: A strategic marketing approach. London: Routledge. <https://doi.org/10.4324/9781003117148>
9. Boukas, N., & Ioannou, M. (2020). Co-creating visitor experiences in cultural heritage museums: the avenue to sustainable tourism development. *International Journal of Tourism Policy*, 10(2), 101-122.
10. Bruno, S., De Fino, M., & Fatiguso, F. (2018). Historic building information modelling: Performance assessment for diagnosis-aided information modelling and management. *Automation in Construction*, 86, 256-276.
11. Bucior, C. (2020). History's priests, history's magicians: exploring the contentious relationship between authorized heritage and ghost tourism in Gettysburg, Pennsylvania. *Journal of Heritage Tourism*, 15, 328 - 340. <https://doi.org/10.1080/1743873X.2019.1638391>.
12. Chin, W. W. (1998). The partial least squares approach to structural equation modeling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-336). Lawrence Erlbaum Associates Publishers.
13. Chock, T. & Bahaire, T. (2020). Community-based tourism in Hawaii: Examining local perspectives on sustainability and cultural preservation. *Tourism Management Perspectives*, 33, 100609.
14. Cho, G., Hwang, H., Sarstedt, M., & Ringle, C. (2020). Cutoff criteria for overall model fit indexes in generalized structured component analysis. *Journal of Marketing Analytics*, 8, 189 - 202. <https://doi.org/10.1057/s41270-020-00089-1>.
15. Cohen, J. (1992). Statistical power analysis. *Current directions in psychological science*, 1(3), 98-101.

16. Dewi, C., Rofo, M., Nichols, J., & Izziah, I. (2023). Heritage and the COVID-19 pandemic: the meaning of visitation. *Built Heritage*, 7. <https://doi.org/10.1186/s43238-023-00095-z>.
17. Dudley, N., Higgins-Zogib, L., & Mansourian, S. (2009). The links between protected areas, faiths, and sacred natural sites. *Conservation Biology*, 23(3), 568-577.
18. Duggan, K., Kuhl, R., & Williamson, L. (2018). Sustainable tourism development in the Maldives: Managing island environments. *Journal of Sustainable Tourism*, 26(5), 815-831. <https://doi.org/10.1080/09669582.2017.1420718>
19. Eck, T., Zhang, Y., & An, S. (2023). A study on the effect of authenticity on heritage tourists' mindful tourism experience: The case of the forbidden city. *Sustainability*, 15(10), 7756. <https://doi.org/10.3390/su15107756>
20. Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior research methods*, 41(4), 1149-1160.
21. Feng, H. (2024). Impact of urbanization on cultural heritage: A quantitative analysis. *Advances in Education, Humanities and Social Science Research*, 11(1), 153-163. <https://doi.org/10.56028/aehssr.11.1.153.2024>.
22. Flyen, A. C., Hegnes, A. W., & Flyen, C. (2023). Exploring vulnerability indicators: Tourist impact on cultural heritage sites in high arctic Svalbard. *Heritage*, 6(12), 7706-7726. <https://doi.org/10.3390/heritage6120405>
23. Gao, J., Lin, S. S., & Zhang, C. (2020). Authenticity, involvement, and nostalgia: Understanding visitor satisfaction with an adaptive reuse heritage site in urban China. *Journal of Destination Marketing & Management*, 15, 100404. <https://doi.org/10.1016/j.jdmm.2019.100404>.
24. Gahalot, R., & Gupta, C. (2024). Regenerating and reclaiming the contested spaces in sacred landscapes. *Archaeologies*. <https://doi.org/10.1007/s11759-024-09512-w>.
25. Genc, V., & Gulertekin Genc, S. (2023). The effect of perceived authenticity in cultural heritage sites on tourist satisfaction: the moderating role of aesthetic experience. *Journal of Hospitality and Tourism Insights*, 6(2), 530-548. <https://doi.org/10.1108/JHTI-08-2021-0218>.
26. Gopalan, R., & Narayan, B. (2010). Improving customer experience in tourism: A framework for stakeholder collaboration. *Socio-Economic Planning Sciences*, 44(2), 100-112. <https://doi.org/10.1016/j.seps.2009.11.001>
27. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: Rigorous applications, better results and higher acceptance. *Long Range Planning*, 46(1-2), 1-12. https://doi.org/10.1057/9781137293565_1
28. Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>.
29. Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common beliefs and reality about PLS: Comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182-209. <https://doi.org/10.1177/1094428114526928>
30. Huang, C. Y., Chou, C. J., & Lin, P. C. (2010). Involvement theory in constructing bloggers' intention to purchase travel products. *Tourism Management*, 31(4), 513-526. <https://doi.org/10.1016/j.tourman.2009.06.003>
31. Ismail, S., & Ismail, M. S. I. (2020). Unsur-unsur mistik dan pemujaan dalam kalangan masyarakat Melayu di Pulau Besar Negeri Melaka. *Jurnal Melayu*, 19(2), 254-269.
32. Ivanovic, M. (2011). Exploring the authenticity of the tourist experience in culture heritage tourism in South Africa (Doctoral dissertation, North-West University).
33. Jackson, J. C., Dimaggio, N., Gray, K., Buckner, W., Dillion, D., Watts, J., & Bastian, B. (2023). Supernatural explanations across 114 societies are more common for natural than social phenomena. *Nature Human Behaviour*, 7(5), 707-717. <https://doi.org/10.1038/s41562-023-01558-0>
34. Kim, J. (2019). Multicollinearity and misleading statistical results. *Korean Journal of Anesthesiology*, 72(6), 558-569. <https://doi.org/10.4097/kja.19087>.
35. Kline, R. B. (2023). Principles and practice of structural equation modeling. Guilford publications.
36. Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
37. Luckveerawattana, R. (2024). Enhancing innovation in cultural heritage tourism: navigating external

- factors. *Cogent Social Sciences*, 10(1), 2301813. <https://doi.org/10.1080/23311886.2024.2301813>.
38. Leeuwen, M. V., Mathys, G., De Vries, L., & Van Der Haar, G. (2020). From resolving land disputes to agrarian justice – dealing with the structural crisis of plantation agriculture in eastern DR Congo. *The Journal of Peasant Studies*, ahead-of-print (ahead-of-print), 309–334. <https://doi.org/10.1080/03066150.2020.1824179>
39. Loulanski, T., & Loulanski, V. (2011). The sustainable integration of cultural heritage and tourism: A meta-study. *Journal of Sustainable Tourism*, 19(7), 837-862.
40. MacCannell, D. (1973). Staged authenticity: Arrangements of social space in tourist settings. *American Journal of Sociology*, 79(3), 586-603. <https://doi.org/10.1086/225585>.
41. Mandić, A., Mrnjavac, Ž., & Kordić, L. (2018). Tourism infrastructure, recreational facilities and tourism development. *Tourism and Hospitality Management*, 24(1), 41-62.
42. Muis, A. A., Rahma, A., Dari, S. S. W., & Haeriah, N. (2023). Kajian Mendalam tentang Konsep dan Implikasi Sosial Syirik dalam Konteks Keagamaan. *At-Tuhfah: Jurnal Studi Keislaman*, 12(2), 45-52.
43. <https://doi.org/10.32665/attuhfah.v12i2.2701>.
44. Newby, P. T. (2013). Tourism: Support or threat to heritage? In *Building A New Heritage (RLE Tourism)* (pp. 206-228). London: Routledge.
45. Ning, W. (2017). Rethinking authenticity in tourism experience. In *The political nature of cultural heritage and tourism* (pp. 469-490). London: Routledge.
46. Podsakoff, P. M., MacKenzie, S. B., & Podsakoff, N. P. (2012). Sources of method bias in social science research and recommendations on how to control it. *Annual review of psychology*, 63(1), 539-569.
47. Ramadhani, D. P., Damayanti, L. Z. A., Febrianta, M. Y., & Alamsyah, A. (2024). Exploring tourists' behavioral patterns in Bali's top-rated destinations: Perception and Mobility. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(2), 743–773. <https://doi.org/10.3390/jtaer19020040>
48. Sujarwo, W., Caneva, G., & Zuccarello, V. (2020). Patterns of plant use in religious offerings in Bali (Indonesia). *Acta Botanica Brasilica*, 34(1), 40–53. <https://doi.org/10.1590/0102-33062019abb0110>
49. Poria, Y., Reichel, A., & Biran, A. (2006). Heritage site management: Motivations and expectations. *Annals of Tourism Research*, 33(1), 162-178. <https://doi.org/10.1016/j.annals.2005.08.001>
50. Petri, D. P., & Klocek, J. (2025). External and Internal Threats to the Freedom of Religion or Belief of Indigenous Peoples in Latin America. *Religions*, 16(2), 209. <https://doi.org/10.3390/rel16020209>.
51. Ramírez, F., Córdón, Y., García, D., Davis, L. S., Rodríguez, A., Chiaradia, A., Coll, M., & Carrasco, J. L. (2023). Large-scale human celebrations increase global light pollution. *People and Nature*, 5(5), 1552–1560. <https://doi.org/10.1002/pan3.10520>
52. Reitsamer, B. F., & Brunner-Sperdin, A. (2017). Tourist destination perception and well-being: What makes a destination attractive? *Journal of Vacation Marketing*, 23(1), 55-72.
53. Shrestha, R., Bhatta, K. D., & Shen, Z. (2024). Cultural heritage deterioration in the historical town 'Thimi.' *Buildings*, 14(1), 244. <https://doi.org/10.3390/buildings14010244>
54. Smith, L. (2006). *Uses of heritage*. London: Routledge.
55. Su, L., Hsu, M. K., & Swanson, S. (2017). The effect of tourist relationship perception on destination loyalty at a World Heritage Site in China: The mediating role of overall destination satisfaction and trust. *Journal of Hospitality & Tourism Research*, 41(2), 180-210. <https://doi.org/10.1177/1096348014525630>
56. Suryawardani, I., Bendesa, I., Antara, M., & Wiranatha, A. (2014). Tourism leakage of the accommodation sector in BALI. *Asean Journal on Hospitality and Tourism*, 13, 3-18. <https://doi.org/10.5614/AJHT.2014.13.1.01>.
57. Teo, C. B. C., Khan, N. R. M., & Abd Rahim, F. H. (2014). Understanding cultural heritage visitor behavior: the case of Melaka as world heritage city. *Procedia-Social and Behavioral Sciences*, 130, 1-10. 130.
58. Timothy, D. J., & Nyaupane, G. P. (2009). *Cultural heritage and tourism in the developing world: A regional perspective*. New York: Routledge.
59. Ummah, A. H., & Bustami, Y. (2024). The message of religious moderation in the “keleang” tomb pilgrimage tradition (an expectancy value communication approach). *Tahiro: Journal of Peace and Religious Mederation*, 1(1), 1-16. <https://doi.org/10.20414/tahiro.v1i1.10365>.

60. Wang, N. (1999). Rethinking authenticity in tourism experience. *Annals of Tourism Research*, 26, 349-370. [https://doi.org/10.1016/S0160-7383\(98\)00103-0](https://doi.org/10.1016/S0160-7383(98)00103-0).
61. Waterton, E., & Watson, S. (2015). Heritage as a focus of research: past, present and new directions. In *The Palgrave handbook of contemporary heritage research* (pp. 1-17). London: Palgrave Macmillan UK.
62. Zakaria, F.H. (2022). Aktiviti khurafat, pemujaan di Pulau Besar terkawal. *Melaka Hari Ini*, 4 Oktober 2022. Retrieved from <https://www.melakahariini.my/aktiviti-khurafat-pemujaan-di-pulau-besar-terkawal/>
63. Zakaria, F.H. (2022, October 4). Aktiviti khurafat, pemujaan di Pulau Besar terkawal. *Melaka Hari Ini*. <https://www.melakahariini.my/aktiviti-khurafat-pemujaan-di-pulau-besar-terkawal/>
64. Zeng, B., & Gerritsen, R. (2014). What do we know about social media in tourism? A review. *Tourism Management Perspectives*, 10, 27-36. <https://doi.org/10.1016/j.tmp.2014.01.001>
65. Zhang, T., Yin, P., & Peng, Y. (2021). Effect of commercialization on tourists' perceived authenticity and satisfaction in the cultural heritage tourism context: Case study of Langzhong Ancient City. *Sustainability*. <https://doi.org/10.3390/SU13126847>.