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Article

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Sustainability and community-based tourism nexus: a mediation role of consumer satisfaction

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ABSTRACT

This research aims to analyze the effects of community-based tourism and consumer satisfaction on tourism sustainability in Breksi Cliff Park, Yogyakarta, Indonesia. Statistical power and arrows were used to determine the minimum sample size. A total of 299 responses were collected for statistical analysis. A simple mediation model was employed, and the data were analyzed using Partial Least Squares – Structural Equation Modeling (PLS-SEM) in SmartPLS. The results show that the local community, food, superstructure, and natural environment have positive and significant effect on the consumer satisfaction. Further, local culture, entertainment, superstructure, and consumer satisfaction have positive and significant effect on the tourism sustainability. However, the local culture has negative effect on the tourism sustainability. In addition, the mediation of local community, natural environment, local food, and local superstructure strengthens the effect of consumer satisfaction on the tourism sustainability. These findings are expected to contribute to the government's decision-making on community-based tourism and tourism sustainability, and highlight possible actions that the government and policymakers can take to realize sustainable tourism. The government needs to foster local culture performance, especially in renewing local culture property. The government also needs to maintain and improve the uniqueness of local food, reliefs on the Breksi Cliff walls, and local entertainment (regular special events).

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1. Introduction

The Governor Regulation of Yogyakarta Number 115 of 2015, particularly Article 8 Letter C, concerning the Preservation of Geological Heritage Areas prohibits activities that may cause damage to objects in the areas. This regulation governs the prohibition of developing Breksi Tourism Destination as a Geological Heritage Area, considering that it was once a limestone-mining zone. Article 4 regulates areas included in the Geological Heritage Area category. Specifically, Article 4 (a) explains that the Eocene limestone in Gamping District, Sleman Regency, is a Geological Heritage Area. This regulation is supported by the Regulation of the Minister of Energy and Mineral Resources of the Republic of Indonesia Number 13. K/HK.01/MEM.G/2021 for the Determination of the Geological Heritage (geoheritage) Area of Yogyakarta. Based on these articles, the Sambirejo Ancient Piroclastic Breksi Cliff in the Sambirejo Kapanewon Village/Prambanan District of Sleman Regency was identified as one of the 20 geoheritages/geosites. When Breksi Cliff Park becomes a heritage site, this regulation ensures its preservation. Thus, it is essential to conduct this research in order to protect the environment and create opportunities for the local community.

Yogyakarta has 41 tourist destinations. Based on recent data, this figure has risen over time. As of 2016, there were 30 tourism destinations, with one additional tourism destination compared to the

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previous year. In 2017, there were four additional tourism destinations and seven additional destinations in 2018. These tourism destinations include Prambanan Temple, Kalasan Temple, Breksi Cliff Park, The World Landmarks of Merapi Park, Volcano Tour, and etc. These tourism destinations picture a rise in the number of tourists owing to an increase in the number of tourists per tourism destination and the number of new tourism destinations.

Breksi Cliff Park, formerly a stone-mining area, is located in the hills. The local community near Sambirejo village has designated Breksi Hill, which includes limestone, as a mining area. Currently, they no longer mine stone because of the government's restrictions and instead promote it as a tourism destination. Geographically, Breksi Cliff Park is located 200 meters above sea level. This condition qualifies Breksi Cliff Park as a mountain tourist site. Several studies on mountain tourism have been conducted by Ali (2022, 2023), Bachi et al. (2020), Bacoş and Gabor (2021), Barthod-Prothade and Leroux (2020), Beltramo et al. (2024), Giachino et al. (2020), Dax and Tamme (2023), Duglio et al. (2019), Duglio and Letey (2019), Dunets et al. (2019), Firoiu et al. (2019), Gozieva et al. (2023), Havlíková et al. (2019), Herman et al. (2021), Hussain et al. (2024), Iversen et al. (2024), Kelfaoui and Rezzaz (2021), Krishnan et al. (2023), Liu et al. (2022), Miličević et al. (2021), Pourzavareh et al., 2022; Herman et al. (2023), Bošković et al. (2020), Seraphin and Dosquet (2020), Steiger et al. (2024), Xu et al. (2023), and Zeng and Li (2021).

Formerly, the Minister of Energy and Mineral Resources issued a regulation confirming Breksi Cliff Park as a heritage tourism object that must be conserved. The primary focus of this research shows that Breksi Cliff Park is a karst region that is off-limits to mining since the rock determines how much water is managed. Therefore, Breksi Cliff Park qualifies as a heritage tourism. Previous studies on heritage tourism focusing on the economic, ecological, social, political, and cultural effects have also been widely investigated (Santa & Tiatco, 2019; Asmelash & Kumar, 2019; Lak et al., 2020; Yang & Wall, 2022; Park et al., 2019; Handapangoda et al., 2019; Jelinčić & Mansfeld, 2019; Roque & Forte, 2019). Previous studies have attempted to understand tourism development and sustainability (Abuhay & Abiew, 2019; Bec et al., 2019; Beltramo et al., 2024; Chauhan, 2022; Domínguez-Quintero et al., 2020; Fu, 2019; Hernández-Rojas et al., 2021; Lak et al., 2020; Lee et al., 2020; Li et al., 2020; Little et al., 2020; Mutanga et al., 2024; Park et al., 2019; Parlindungan et al., 2021; Peng & Tzeng, 2019; Wijayanti & Damanik, 2019; Yang & Wall, 2022; Zolotovskiy, 2023).

Considering that Breksi Cliff Park must be highly conserved, it requires the assistance and participation of the local community. In this context, it is crucial to employ a community-based tourism (CBT). Past researches on the CBT had been conducted by Han et al. (2019), Elbarmelgy et al. (2019), Giampiccoli and Mtapuri (2020), Hlengwa and Maruta (2019), Juma and Khademi-Vidra (2019), Mohanty et al. (2019), Sasongko et al. (2019), Sène-Harper and Séye (2019), Singgalen et al. (2019), Vajirakachorn (2011), and Sujarweni and Jaya (2019). Despite some of these findings offering a solid foundation for developing the models on community-based and sustainability tourism, there is little literature in Indonesia on mountain and heritage tourism. To fill this gap, the present research aims to investigate the effect of CBT while also considering the mediating role of consumer behavior in sustainable tourism. Based on these ideas, the objective of this research is to analyze the nexus of community-based and sustainability tourism. This research is divided into 6 sections: [Section 1](#) explains the introduction; [Section 2](#) elaborates the tourist trip trends from 2018 to 2022; [Section 3](#) discusses the literature review and hypothesis development; [Section 4](#) describes the research methods; [Section 5](#) presents the empirical results and discussion; and [Section 6](#) summarizes the conclusions.

2. Trends of tourist trips in 2018–2022

The numbers of tourists visiting Yogyakarta Province and Breksi Cliff Park remained relatively consistent. However, it decreased from 2018 to 2021 and then increased from 2021 to 2022. [Tables 1](#) and [2](#) present the number of foreign and domestic tourist visits during a period to 2018–2022.

Based on the above tables, the domestic tourist visits to Breksi Cliff Park continued to outnumber the foreign tourist visits until 2022. Both domestic and foreign tourist visits fell from 2018 to 2021 but then increased by 2022. This was caused by the spread of the COVID-19 pandemic, which paralyzed the tourism industry. [Table 3](#) shows the number of foreign tourist visits by their country of origin to Yogyakarta Province in 2018–2023.

Table 1. Number of foreign tourist visits to Breksi Cliff Park in 2018–2022.

Year	Tourism destination				Total	
	Breksi Cliff Park	%	Others	%	Foreign tourist visit	%
2018	4,493	1.54	287,283	98.46	291,776	100
2019	2,104	0.90	230,946	99.10	233,050	100
2020	337	1.40	23,707	98.60	24,044	100
2021	23	0.49	4,674	99.51	4,697	100
2022	607	0.95	63,365	99.05	63,972	100

Source: Yogyakarta Tourism Agency (2018, 2019, 2020, 2021, 2022).

Table 2. Number of domestic tourist visits to Breksi Cliff Park in 2018–2022.

Year	Tourism destination				Total	
	Breksi Cliff Park	%	Others	%	Domestic tourist visit	%
2018	1,097,550	14.43	6,508,762	85.57	7,606,312	100
2019	1,647,819	16.24	8,497,285	83.76	10,145,104	100
2020	700,243	16.57	3,525,832	83.43	4,226,075	100
2021	147,765	11.97	1,086,867	88.03	1,234,632	100
2022	825,278	12.35	5,858,425	87.65	6,683,703	100

Source: Yogyakarta Tourism Agency (2018, 2019, 2020, 2021, 2022).

Table 3. Number of foreign tourists by country of origin in 2018–2023.

Nationality	2018	2019	2020	2021	2022	2023
Malaysian	66,152	45,901	9,269	0	6,228	37,710
Singaporean	18,069	15,864	2,251	0	1,634	14,056
Japanese	2,415	2,460	707	0	2	1,954
German	3,302	3,192	394	0	153	2,096
Chinese	3,514	3,720	382	0	77	4,096
American	3,161	3,235	445	0	324	2,513
Indian	2,789	2,334	342	0	214	2,282
French	6,114	4,323	343	0	186	2,743
British	2,673	2,234	267	0	178	1,814
Australian	1,779	734	268	0	12	1,114
Dutch	1,738	0	0	0	163	1,760
Vietnamese	433	0	0	0	11	432
Philippine	1,112	0	0	0	6	1,056
Spanish	2,348	1,372	0	0	173	1,635
Canadian	666	0	0	0	17	513
Italian	2,069	0	0	0	54	0
Others	20,488	28,160	3,972	0	2,692	18,265
Total	138,822	113,529	18,640	0	12,124	94,039
Trend	Decreasing				Increasing	

Source: Yogyakarta Tourism Agency (2018, 2019, 2020, 2021, 2022, 2023).

Table 3 shows that the number of foreign tourists visiting Yogyakarta Province declined between 2018 and 2021. This was mainly caused by the COVID-19 pandemic. However, the number of tourists visiting Yogyakarta Province grew between 2022 and 2023, as the economy recovered from the COVID-19 pandemic.

3. Theoretical framework, literature review, and hypothesis development

3.1. Triple bottom line and social exchange theory

The triple bottom line (TBL) theory emphasizes that tourist satisfaction is a dynamic process that must be maintained to ensure the sustainable tourism by providing the tourists with a meaningful experience. Tourist intention is heavily influenced by the equilibrium of environmental, economic, and sociocultural characteristics of tourist destinations (Michniak & Więckowski, 2021). The CBT has the potential to influence and shape tourism growth in all aspects, which simultaneously influences the degree of satisfaction among tourists. The fundamental goal of CBT is to maintain the equilibrium and harmony between the living environment, diverse resources, and tourist satisfaction through local initiatives. The tourist satisfaction can be influenced by the community that effectively manage the tourist destinations (Afenyo-Agbe & Mensah, 2022; Priyanto et al., 2024). What determines a community's success is its ability to stimulate

continual development while also providing high-quality goods and services to its clients. Human resources have the potential to enhance the tourist satisfaction and confer a competitive edge in the worldwide market (Eky et al., 2019; Lau et al., 2019; Nazarudin & Dioh, 2019).

Further, the CBT is one approach that clearly demonstrates how community involvement supports the development of sustainable tourism. It is believed that the CBT is an especially effective strategy for developing the sustainable tourism. The CBT focuses on the local community that actively contribute to the tourism growth by participating and owning tourism assets (Afenyo-Agbe & Mensah, 2022; Priyanto et al., 2024). In addition to highlighting the implementation of the CBT concept, tourism must be promoted ethically and deliver equitable benefits to the community (Afenyo-Agbe & Mensah, 2022).

Successful implementation of the CBT concept can be a sustainable solution for a better society while also ensuring the tourist satisfaction (Saputro et al., 2023). In order to assess the tourism sustainability, Blancas et al. (2011) developed three-dimensional framework that includes social, economic, and environmental dimensions. They also emphasized the significance of visitor satisfaction within the economic dimension. A grand theory called social exchange theory (SET) is applied to explain the connection between the idea of CBT, sustainable tourism, and visitor satisfaction (Nunkoo, 2016). The SET is based on the idea that social interaction and human behavior involve exchanges of both tangible and intangible goods and services, most notably costs and rewards (Homans, 1961). According to the SET, everyone can determine whether or not to participate in an interaction process after considering their options and performing a subjective cost-benefit analysis. After considering the benefits and costs, people engage in an exchange process and form partnerships to optimize the benefits while reducing the costs (Ap, 1992). From the standpoint of locally-based tourism management, the interactions between visitors and local community provide opportunities for mutually beneficial exchanges between the two groups, creating the opportunities to benefit one of the parties at the same time. In addition to economic factors, the exchange process includes sustainable environmental and sociocultural elements (Nunkoo, 2016; Sutton, 1967).

3.2. Sustainable tourism

The sustainable tourism involves not only the development of tourist destinations, but also the consideration of the impact of tourism activities on the environment, culture, social and economy. This concept emphasizes long-term thinking by considering positive impacts on the local community and the environment as a whole. The tourists are increasingly concerned with the environmental sustainability, health, safety, and comfort protocols as they become more aware of the benefits of sustainable tourism. The sustainable tourism is not only a new travel trend, but it also reflects global awareness of shared responsibility in maintaining the sustainability of the earth and social life. The tourism is a critical economic resource for sustainable development (Abuhay & Abiew, 2019). It serves as an agent of cultural change, influencing individual positions, practices, and worldviews. Organizing and promoting the CBT with a focus on domestic tourist development is critical, since exploiting local resources is a determining factor that can boost the benefits of tourism (Giampiccoli & Mtapuri, 2020; Müller, 2011; Nordin et al., 2020).

The term 'sustainable tourism development' may have several different meanings. The World Trade Organization (WTO) defines it as a development that serves the requirements of tourists today while safeguarding and promoting opportunities for the future. This leads to the management of all resources in a way that meets the economic, social, and aesthetic requirements while preserving cultural integrity, critical ecological processes, biodiversity, and life support systems. Sustainable tourism products are managed in accordance with the environment, society, and local culture, resulting in permanent beneficiaries rather than victims of tourism. Sustainable tourism development policies emphasize the long-term utilization of natural and human resources (Sharpley, 2000).

Meanwhile, the Indonesian government has created several metrics for sustainable tourism development. First, there must be an awareness of environmental accountability, which means that a sustainable tourism development strategy must position tourism as a green industry, with duties shared by the government, tourism industry, community, and tourists. Second, local governments should be given greater responsibility for tourism development. Third, the stability of the tourism industry must be capable of producing tourism products that can compete on a global scale as well as improve the well-being of the community around

tourism destinations. Fourth, partnership and community participation in the tourism development must strive to eliminate disparities in the welfare of tourists and communities in tourism destinations to avoid conflict and control. Local communities can also help support this by developing small-scale businesses. As an industry, the tourism industry has also accepted the concept of sustainable tourism development, described as the tourism that considers present and future economic, social, and environmental implications while serving the needs of tourists, industry, environment, and host communities (UNEP, 2005). According to the definition of sustainable tourism above, the tourism industry must thoroughly address the many implications on present and future economic, social, and environmental dimensions while not ignoring the needs of tourists, industry, the environment, and local communities. In general, the sustainable tourism considers three major aspects, namely environmental, social and economic aspects. The tourism is the sector that causes the least amount of damage, because its development is based on sustainable principles. In addition, the sustainable tourism development takes into account the 3Ps: Planet, People, and Prosperity. The People aspect is concerned with the tourists' wishes. The Planet aspect is concerned with the care and maintenance of tourist attractions. Meanwhile, the Prosperity is concerned with the economic values of a tourist attraction. Today, the tourists are expected to do more than just visit the tourism destinations; they are also expected to contribute to the environmental and cultural preservation.

3.3. Community-based tourism

The community plays an important role in the CBT implementation by actively participating in various stages of development, management, and evaluation of indicators that have been implemented, aiming that the concept will improve the community's welfare and quality of life. According to Hlengwa and Maruta (2019), the CBT implementation benefits the development of local socio economic, natural, and cultural potential as well as the preservation of local community programs. In this context, the community aims to enhance the development of skills, culture, and natural potential without conflicting each other because these indicators define and promote sustainable development, including environmental preservation.

Elbarmelgy et al. (2019) explained that the CBT approach serves as the primary entrance point for growing the creative economy, improving local tourism quality in rural regions, and improving the living conditions of local communities as area developers and managers. This method integrates strategic policy plans and the resulting tourism development impact across sectors. The establishment and evolution of this concept are based on the 2023 Sustainable Development Goals (SDGs) program, which seeks to eliminate poverty, improve urban development, and promote sustainable development. The CBT, which is based on the principles of community-based empowerment is a critical concept in the evolution of conventional tourism development theory, which in general, has received criticism for not paying enough attention to the rights and involvement of local communities in tourism activities in a destination.

3.4. Consumer satisfaction

One of the main indicators of a visitor's connection to a particular service and site is their return to a previously visited destination. The success of the tourism industry is based on tourist/consumer satisfaction which influences tourist loyalty. A previous research shows that tourists' confidence in revisiting a tourism destination in the future is mainly determined by their satisfaction with the facilities and tourism products provided on their initial visit (Garcia et al., 2020). This can be considered a useful tool to attract or deter new tourists. It is also important to develop marketing strategies for indigenous communities and provide tourism facilities. Therefore, it is important for the success of destination marketing and tourism service organizations. Moreover, the tourist/consumer satisfaction also plays an important role in the decision to revisit a tourism destination.

The tourist satisfaction is crucial to the success of the tourism industry in terms of the quality of service received during tourist visits. Many factors contribute to the tourist satisfaction and perceived quality, including comfort, friendliness, safety, cleanliness, accommodation, transportation, and infrastructure. The process of offering maximum service determines critical assessments of tourist satisfaction, as loyal consumers have significant value now and in the future, benefiting tourism destinations and their competitiveness.

3.5. CBT and consumer satisfaction

The tourism has been identified as one of the most significant industries in the world for earning foreign exchange and creating socio-economic changes with a multiplier effect on the sustainable development, both locally and globally. United Nations has explicitly recognized by the tourism sector's contribution to the sustainable development through the 2030 Agenda and SDGs. The CBT is an important strategy for attaining the sustainable development, because it reduces poverty while increasing long-term sustainability (Hutnaleontina et al., 2022). It also helps ensure economic and physical sustainability in the community (Juma & Khademi-Vidra, 2019). This can be used to promote sustainable local development and biodiversity conservation (Sène-Harper & Séye, 2019).

In addition, the products have the potential to attract both domestic and foreign tourists interested in using community-based products in rural areas (Rami et al., 2019). In a wider context, the CBT is a paradigm for creating tourism areas based on local wisdom that prioritizes enhancing the community's living standards while minimizing environmental damage, making sustainability the primary goal (Mohanty et al., 2019; Ren et al., 2019). Partnerships are essential for coherent policy, fostering synergy between different policy areas (e.g. social, economic, environmental) and levels (e.g. supranational/global, national, and local) and providing impact for all stakeholders through a collective vision, shared goals, alignment, and transparency.

To achieve the sustainable tourism development through CBT, knowledge or support from the stakeholders, such as non-governmental organizations (NGOs) or scientists, is needed to plan and manage the tourism development and provide greater benefits to the local community. Although the decision-making process in CBT is inward-oriented, the knowledge gained can come from anywhere, both at national and regional levels, and from different communities. Therefore, cooperation between stakeholders is required, especially in the implementation of science at the policy level and the adaptation of scientific discoveries to changes in the community's livelihoods. Therefore, globally, the development of CBT is gaining global attention from various sectors, namely: government and non-governmental organizations, public and private sectors, and involvement of local communities.

According to Eky et al. (2019), Lau et al. (2019), and Nazarudin and Dioh (2019), the elements that contribute to tourist attraction have an impact on how well the CBT is implemented in terms of visitor satisfaction. The local communities, who are competent at managing the tourist attraction resources, are the creators of tourist attraction factors. Liang (2022) demonstrated that the CBT significantly and favorably affects the visitor satisfaction. This research looked at how satisfied the tourists were with their entire experience when they participated in the CBT activity process as co-creators. The findings suggested that the visitor satisfaction is positively influenced by co-creating CBT experiences. To be effective, the tourism destinations must allow the visitors to interact with the local communities in a personalized manner. Furthermore, the CBT encompasses a wide range of elements, including local culture, local accommodation, local community, local entertainment, local food, local superstructure, natural environment, and local products (Han et al., 2019; Jones, 2005; Kiatkawsin & Han, 2017; Lee & Jan, 2019; Mayaka et al., 2019; Mtapuri & Giampiccoli, 2013; Simpson, 2008; Wearing et al., 2010). Previous studies have shown that these elements are important characteristics of tourism destinations (Lee & Jan, 2019; Wearing et al., 2010; Han et al., 2019). Based on the previous literature, the following hypotheses are proposed:

- H₁: Local culture affects the consumer satisfaction.
- H₂: Local accommodation affects the consumer satisfaction.
- H₃: Local community affects the consumer satisfaction.
- H₄: Local entertainment affects the consumer satisfaction.
- H₅: Local food affects the consumer satisfaction.
- H₆: Local superstructure affects the consumer satisfaction.
- H₇: Natural environment affects the consumer satisfaction.

3.6. CBT, consumer satisfaction, and sustainable tourism

Previous studies on the sustainable tourism have confirmed the importance of numerous mediators that clearly explain sustainable decision-making processes and behaviors (e.g. satisfaction, emotions, and commitment) (Cheng et al., 2013; Han & Hyun, 2018; Hwang & Choi, 2017; Zhang & Wang, 2019). Vajirakachorn (2011) defined ten success factors for CBT in the context of Thai rural communities, including community participation, benefit distribution, conservation of tourism resources, partnership and support from within and outside the community, local ownership, management and leadership, stakeholder communication and interaction, quality of life, scale of tourism development, and tourist satisfaction.

In terms of distribution of benefits, the tourism industry is one of the determining factors for social equality in the economy compared to other industries. Instead, traveling to different locations will familiarize them with the culture and practices of other communities. The right conditions for cultural and social interaction are then created, leading to increased peace, security, and tolerance among diverse cultures, all of which are pillars of sustainable development (Cheng et al., 2016; Muresan et al., 2019; Waheed et al., 2016). The multifaceted nature of the tourism industry has a significant impact on the host communities, in addition to serving the tourists.

The tourist/consumer satisfaction is one of the most important criteria for determining future revenue development. Many parties view the tourist satisfaction as an important benchmark for assessing the quality of the tourism industry. The tourist satisfaction can be achieved by developing appropriate processes to ensure that the services offered are in line with the tourists' expectations (Zhang & Wang, 2019). A tourism literature explains that the tourist satisfaction with a tourism destination is an important element in choosing a destination, which shows that if the tourists feel satisfied with their trip to a destination, they will tend to visit again or recommend the destination to others. The tourist/consumer satisfaction is a very important thing to pay attention to in the tourism industry, where experience is the core product offered by the destinations. Low level of tourist satisfaction in a destination indicates that the management is unable to meet the needs of its consumers. It will also threaten the sustainability of tourist destinations in the future. Considering the importance of tourist satisfaction, the tourism destinations must be able to design their tourism products that cater to the tourist needs.

Furthermore, maintaining the equilibrium among environmental, economic, and sociocultural factors requires the application of sustainability-oriented CBT. A number of benefits can result from effective application of CBT to the sustainable tourism, including the preservation of traditional values, the creation of high-quality jobs, an improvement in the local economy, and the creation of eco-friendly tourism (Han et al., 2019). Beneficial effects of CBT activities on the sustainable tourism were outlined by Krittayaruangroj et al. (2023), including the ability to increase income and lower poverty rates, preserve the local communities' traditional cultural heritage, protect natural resources, and enhance biodiversity. Based on these previous arguments, the following hypotheses are proposed:

- H₈: Local culture affects the tourism sustainability.
- H₉: Local accommodation affects the tourism sustainability.
- H₁₀: Local community affects the tourism sustainability.
- H₁₁: Local entertainment affects the tourism sustainability.
- H₁₂: Local food affects the tourism sustainability.
- H₁₃: Local superstructure affects the tourism sustainability.
- H₁₄: Natural environment affects the tourism sustainability.
- H₁₅: Consumer satisfaction affects the tourism sustainability.

4. Research methods

4.1. Data and sample

This research investigates how consumer satisfaction influences the effect of CBT on tourism sustainability in Breksi Cliff Park, Yogyakarta, Indonesia. A purposive sampling method was employed to obtain

samples of visitors of Breksi Cliff Park. Data were collected through a questionnaire distributed between August and October 2023 during the holiday season in Indonesia. Individual questionnaires were given to potential participants, who then completed a form indicating their agreement to take part in the current investigation. Consented respondents filled out the questionnaire on their own and returned it to the enumerators. In order to avoid sample bias, this research had closely examined the survey design methodology. A disclaimer stating that responses would remain anonymous and be utilized solely for research purposes was provided at the beginning of the research survey (questionnaire) in an attempt to reassure the respondents. To obtain accurate data, this research had additionally followed up with non-respondents. These supplementary data offered useful insights for the investigation. Several respondents were also excluded from the data collection procedure in order to reduce the possibility of bias.

The Institutional Review Board (IRB) of Satya Wacana Christian University's Department of Economics granted ethical approval for this research. This signified that the researchers complied with all rules and regulations regarding the use of subjects in research. To acquire informed consent, the researchers spoke to the respondent in Breksi Cliff Park. The researchers received their approval by outlining the objectives of this research. Further, the researchers also provided each respondent with a thorough explanation of the research's objectives, methods, and advantages. With verbal informed consent, each respondent confirmed that they had learned the context and willingly decided to participate.

In this research, the sample size was determined mostly by statistical power and pointing arrows (Cohen, 1992). The minimum sample size for a statistical power of 80% and three pointing arrows (minimum R^2 value of 0.1; error tolerance of 5%) was 124 respondents. A total of 299 valid respondents participated in the research. Following the process of validating and verifying the data, they were analyzed further, including hypothesis testing.

4.2. Data analysis

Mediation analysis was employed, which is an essential statistical approach in economics and business. Many studies have employed statistical mediation analysis to identify the pathways underlying the influence of exposure variables and mediators on outcomes (Atahau et al., 2021, 2023; Kim et al., 2022; Kim & Huruta, 2021; Lee & Huruta, 2022; Rijnhart et al., 2017)

Figure 1 depicts the three primary variables: consumer satisfaction (mediator), CBT (exposure), and tourism sustainability (outcome). This is illustrated in Figure 2.

According to Figure 2, the consumer satisfaction consists of four measures; CBT consists of 28 indicators stemming from seven aspects (local culture, local accommodation, local community, local entertainment, local food, local superstructure, and natural environment); and tourism sustainability is measured using four indicators. Table 4 summarizes the measurements of the research variables.

Based on Table 4, a structural model is developed and examined using SmartPLS. Figure 3 presents a partial least squares – structural equation modeling (PLS-SEM) path diagram.

A type I model in PLS-SEM represents the reflecting link between high- and low-level components. As a result, the construct validity and reliability scale were incorporated into the PLS-SEM measurement model assessment process. The outer loading value shows the indicator's reliability within the construct, and the recommended value is ≥ 0.6 (Hair et al., 2017). Furthermore, Cronbach's alpha is commonly used

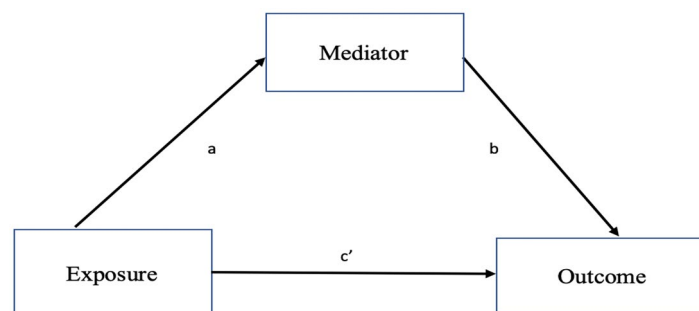


Figure 1. Simple mediation model.

to determine the internal consistency of indicators, and the recommended value is ≥ 0.7 (Taber, 2018; Tavakol & Dennick, 2011). In addition, the average variance extracted (AVE) assessed the convergent

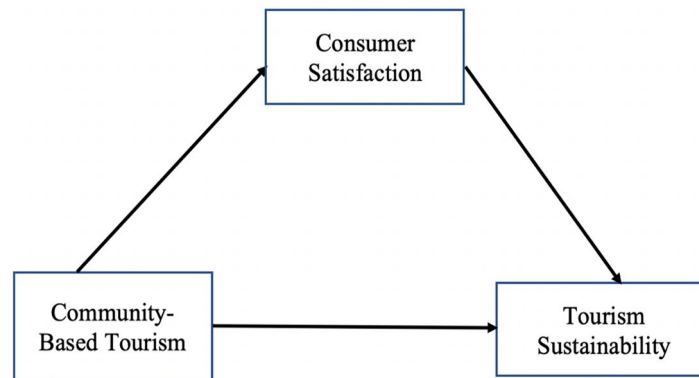


Figure 2. Research framework.

Table 4. Variable measurement.

Construct	Indicators
Consumer satisfaction	<ol style="list-style-type: none"> 1. The customer service at Breksi Cliff Park is excellent. 2. The embellishments on Breksi Cliff Park are stunning. 3. There are memorable selfie photo spots. 4. The view at Breksi Cliff Park is breathtaking.
CBT	<ol style="list-style-type: none"> 1. Local culture <ul style="list-style-type: none"> ○ I have the opportunity to learn about the many ways of life of the locals. ○ Breksi Cliff Park offer programs that teach the tourists about the local history. ○ I know where to get food at Breksi Cliff Park. ○ I know where to get drinks at Breksi Cliff Park. 2. Local accommodation <ul style="list-style-type: none"> ○ I know where to get clean accommodations near Breksi Cliff Park. ○ I know where to get comfortable accommodations near Breksi Cliff Park. ○ I know where clean restaurants around Breksi Cliff Park are. ○ I know where comfortable restaurants around Breksi Cliff Park are. 3. Local community <ul style="list-style-type: none"> ○ The Breksi Cliff Park staffs are quite friendly. ○ There are many available Breksi Cliff Park staffs willing to assist the tourists who have a lack of information. ○ The Breksi Cliff Park staffs are polite. ○ The Breksi Cliff Park staffs are informative towards the tourists. 4. Local entertainment <ul style="list-style-type: none"> ○ I know about special/non-daily events at Breksi Cliff Park. ○ I am interested in participating in the special/non-daily events at Breksi Cliff Park. ○ I know about fascinating activities at Breksi Cliff Park. ○ I am interested in participating in the fascinating activities at Breksi Cliff Park. 5. Local food <ul style="list-style-type: none"> ○ I am familiar with the meal menu at Breksi Cliff Park restaurants. ○ I am familiar with the drink menu at Breksi Cliff Park restaurants. ○ I know local food of Breksi Cliff Park. ○ I know local drink of Breksi Cliff Park. 6. Local superstructure <ul style="list-style-type: none"> ○ Objects at Breksi Cliff Park are unique, including the steps. ○ Buildings at Breksi Cliff Park are well developed, including the restaurants, rest areas, souvenir shops, etc. ○ The ornaments/reliefs on Breksi Cliff Park are extremely artistic. ○ There is a safe regulation of vehicle inflow and outflow. 7. Natural environment <ul style="list-style-type: none"> ○ The environment around Breksi Cliff Park is quite interesting. ○ Breksi Cliff Park is well-maintained. ○ The view from Breksi Cliff Park is breathtaking. ○ The Breksi Cliff Park's ambient atmosphere contributes to its recognition as a comfortable tourism destination.
Tourism sustainability	<ol style="list-style-type: none"> 1. I plan on revisiting Breksi Cliff Park in the near future. 2. I will encourage others to visit Breksi Cliff Park. 3. I will promote Breksi Cliff Park on social media. 4. I am willing to make suggestions to managers to improve Breksi Cliff Park.

Source: The questionnaire was adapted from Han et al. (2019).

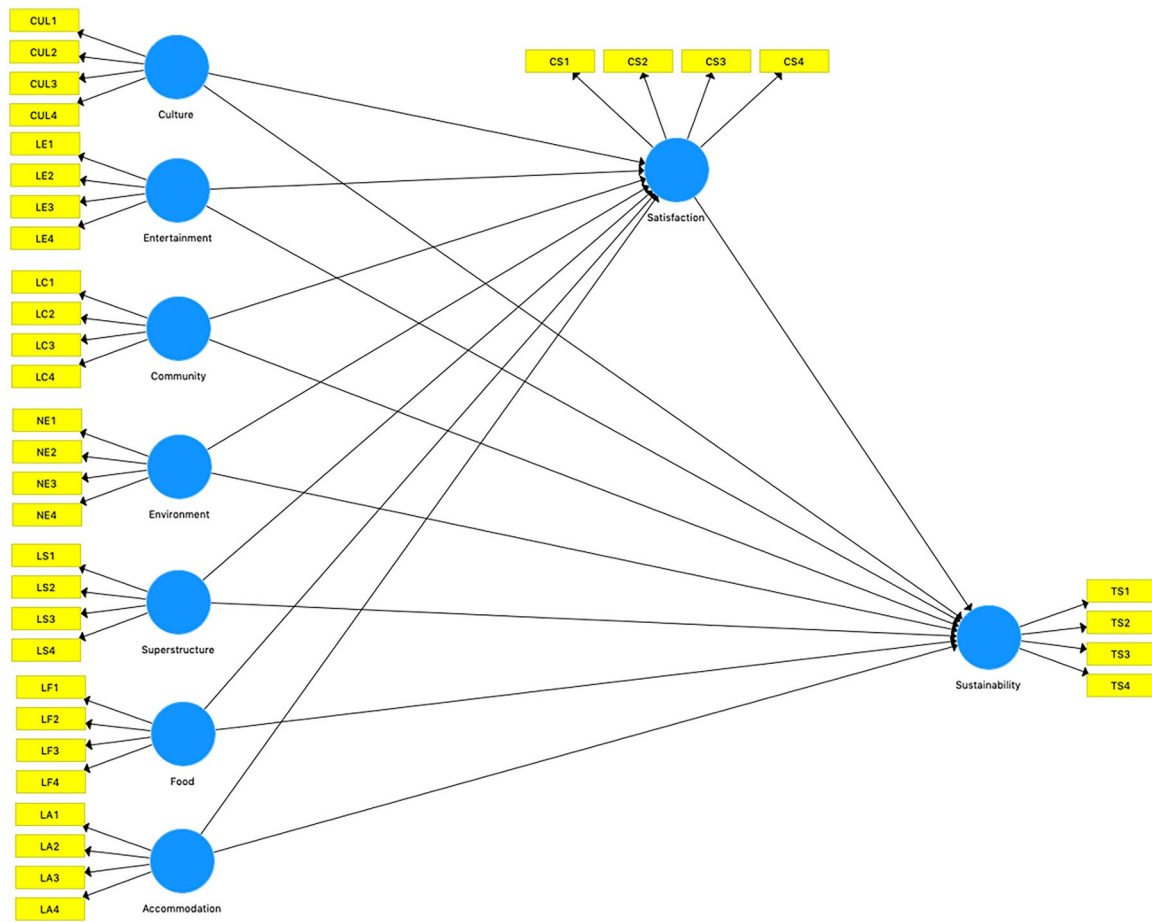


Figure 3. Path diagram of PLS-SEM.

validity, and an AVE value of 0.5 or greater showed satisfactory convergence (Hair et al., 2018). Furthermore, composite reliability (CR) assessed the dependability and internal consistency of indicators describing a construct, and a CR value greater than 0.7 denoted internal consistency (Brunner & Süß, 2005). Furthermore, the heterotrait-monotrait ratio (HTMT) was used to measure discriminant validity (Hair et al., 2018). HTMT values below 0.85 implied a stringent criterion, 0.90 indicated a conservative criterion, and $-1 < \text{HTMT} < 1$ with the bootstrapping technique indicated a liberal criterion (Gold et al., 2001; Hair et al., 2018; Henseler et al., 2015)

5. Empirical results and discussion

5.1. Descriptive statistics

Descriptive statistics explained the quantitative summaries of the dataset's characteristics. Table 5 displays the respondent profile, including place of origin, age, gender, education, frequency of visiting Breksi Cliff Park, occupation, length of visit, and type of visit.

Table 5 demonstrates that most respondents were not from Yogyakarta. They were mostly female and 20–29 years old. They graduated from senior high school and worked as students. Their average visit lasted barely one day, and they were the first to visit Breksi Cliff Park.

5.2. Reflective measurement model

Table 6 presents the results of the reflective model measurements in terms of validity and reliability testing.

Table 5. Respondent profile.

Characteristic	Frequency	Percentage (%)
Place of origin		
Yogyakarta	40	13.4
Non-Yogyakarta	259	86.6
Total	299	100
Age		
≤20 years old	88	29.4
20–29 years old	80	26.8
30–39 years old	26	8.7
40–49 years old	45	15.1
50–59 years old	44	14.7
60–69 years old	10	3.3
≥70 years old	6	2.0
Total	299	100
Gender		
Male	137	45.8
Female	162	54.2
Total	299	100
Education		
Did not attend school	4	1.3
Did not graduate from primary school	5	1.7
Primary school graduate	32	10.7
Junior high school graduate	64	21.4
Senior high school graduate	118	39.5
Diploma degree	13	4.3
Bachelor/masters/doctoral degree	63	21.1
Total	299	100
Frequency of visiting Breksi Cliff Park		
Once	210	70.2
Twice	40	13.4
More than twice	49	16.4
Total	299	100
Occupation		
Civil servant	14	4.7
Private employee	38	12.7
Student	112	37.5
Housewife	49	16.4
Others	86	28.8
Total	299	100
Length of visit		
1 day	257	86.0
2–3 days	33	11.0
More than 3 days	9	3.0
Total	299	100
Type		
Tour	171	57.2
With family/friends	128	42.8
Total	299	100

Table 6 displays the outer loadings between a construct and its indicators, demonstrating that all the indicators were valid (outer loadings >0.6). The results also showed that the Cronbach's alpha, CR, and Rho-A values were all higher than 0.7. The AVE value was also greater than 0.5, indicating that convergent validity exists. Table 7 presents the results of the discriminant validity tests.

Table 7 shows the HTMT ratio, which is less than 0.85. This implies that the stringent criteria were met. After conducting validity and reliability tests, the hypotheses were tested.

5.3. Hypothesis testing

The hypotheses were tested for direct effects. The results are presented in Figure 4 and Table 8.

Figure 4 depicts the structural model's coefficient of determination (*R*-squared) values of 0.526 and 0.351, respectively. This model explains 52.6 and 35.1% of the fitted data of the structural model. The independent variable explains 52.6% of the variance in the consumer satisfaction. Moreover, the independent variable also accounts for 35.1% of the variance in the tourism sustainability.

The results of the hypothesis testing on the direct effect show that the local community has a significant effect on consumer satisfaction. Similarly, the natural environment, local food, and local

Table 6. Results of validity and reliability test.

Indicator	1st Outer loading	2nd Outer loading	Cronbach's α	AVE	CR	Rho-A
CS1	0.739	0.739	0.811	0.639	0.876	0.810
CS2	0.824	0.824				
CS3	0.824	0.824				
CS4	0.808	0.808				
CUL1	0.636	0.621	0.757	0.688	0.866	0.803
CUL2	0.496*	–				
CUL3	0.918	0.925				
CUL4	0.901	0.907				
LA1	0.819	0.819	0.916	0.786	0.936	0.990
LA2	0.851	0.851				
LA3	0.943	0.943				
LA4	0.929	0.929				
LC1	0.830	0.830	0.918	0.803	0.942	0.928
LC2	0.904	0.904				
LC3	0.929	0.929				
LC4	0.918	0.918				
LE1	0.681	0.681	0.799	0.624	0.868	0.814
LE2	0.803	0.803				
LE3	0.828	0.828				
LE4	0.838	0.838				
LF1	0.889	0.889	0.860	0.693	0.900	0.907
LF2	0.901	0.901				
LF3	0.766	0.766				
LF4	0.765	0.765				
LS1	0.811	0.811	0.806	0.636	0.874	0.820
LS2	0.852	0.852				
LS3	0.849	0.849				
LS4	0.664	0.664				
NE1	0.753	0.753	0.763	0.586	0.850	0.768
NE2	0.730	0.730				
NE3	0.827	0.827				
NE4	0.748	0.748				
TS1	0.707	0.706	0.811	0.640	0.876	0.824
TS2	0.867	0.867				
TS3	0.828	0.828				
TS4	0.789	0.790				

Notes: *CUL2 is invalid (<0.6) and has been removed from the model. CS: consumer satisfaction; CUL: local culture; LA: local accommodation; LC: local community; LE: local entertainment; LF: local food; LS: local superstructure; NE: natural environment; TS: tourism sustainability.

superstructure influence the consumer satisfaction. Furthermore, the local culture has a significant effect on the tourism sustainability. Likewise, local entertainment, consumer satisfaction, and the local superstructure contribute to the tourism sustainability.

Further, the Sobel test was performed to verify the mediating role of mediators in the relationship between exposure and outcomes. The results are presented in Table 9.

Table 9 shows the results of the Sobel test analysis. The consumer satisfaction has been proven to play a mediating role in the effect of local community, natural environment, local food, and local superstructure on the tourism sustainability in Breksi Cliff Park. Furthermore, the results of the robustness test for the mediation role were corroborated by the results of the mediation test in Table 10.

The results of the mediation test showed that the role of local culture in mediating the effect of consumer satisfaction on tourism sustainability had the highest proportion (73.687%). This was followed by the mediation by local accommodation (50.067%), local community (50.058%), local entertainment (49.944%), local superstructure (49.928%), natural environment (49.894%), and local foods (49.613%) in the effect of consumer satisfaction on the tourism sustainability. The mediation proportion is the percentage change in the regression coefficient after incorporating the mediating variable into the research model.

5.4. Discussion

The results of this research indicate that the local community, natural environment, local food, and local superstructure all have an impact on the consumer satisfaction. The CBT has also been proven to address various issues, including local community, natural environments, local superstructure, and local food (Han et al., 2019; Jones, 2005; Kiatkawsin & Han, 2017; Lee & Jan, 2019; Mayaka et al., 2019; Mtapuri &

Table 7. Results of HTMT ratio test.

Statistics	Original sample
Community → Accommodation	0.100
Culture → Accommodation	0.434
Culture → Community	0.207
Entertainment → Accommodation	0.458
Entertainment → Community	0.222
Entertainment → Culture	0.502
Environment → Accommodation	0.058
Environment → Community	0.543
Environment → Culture	0.199
Environment → Entertainment	0.286
Food → Accommodation	0.425
Food → Community	0.210
Food → Culture	0.581
Food → Entertainment	0.392
Food → Environment	0.243
Satisfaction → Accommodation	0.137
Satisfaction → Community	0.621
Satisfaction → Culture	0.161
Satisfaction → Entertainment	0.184
Satisfaction → Environment	0.772
Satisfaction → Food	0.301
Superstructure → Accommodation	0.111
Superstructure → Community	0.523
Superstructure → Culture	0.192
Superstructure → Entertainment	0.297
Superstructure → Environment	0.768
Superstructure → Food	0.271
Superstructure → Satisfaction	0.737
Sustainability → Accommodation	0.163
Sustainability → Community	0.420
Sustainability → Culture	0.119
Sustainability → Entertainment	0.391
Sustainability → Environment	0.530
Sustainability → Food	0.236
Sustainability → Satisfaction	0.604
Sustainability → Superstructure	0.570

Giampiccoli, 2013; Simpson, 2008; Wearing et al., 2010). According to Lee and Jan (2019), , Wearing et al. (2010), and Han et al. (2019), these are also important characteristics of a tourism destination. These findings are in line with those of Han et al. (2019), who noted that optimizing these variables' performance assisted a tourism destination in stimulating positive post-purchase behaviors from consumers. Performance was defined as consumers' opinions on the results they received from using a product's quality (Bitner, 1990). Similarly, the CBT performance in the current research reflected the tourists' perceived outcomes from the interactions with the CBT characteristics at Breksi Cliff Park.

This research highlights that the local community, natural environment, food, and superstructure all have an impact on the consumer satisfaction in Breksi Cliff Park, which attracted the tourists due to its uniqueness. From the local community perspective, the tourists seemed satisfied with the staff's friendliness. In terms of the natural environment, the tourists enjoyed the stunning cliff views. They were also happy with the local food from around Breksi Cliff Park. Furthermore, the tourists appreciated the superstructure (characteristic) and used it as a memorable photo spot. However, several variables are not proven to have a significant influence, namely accommodation to satisfaction and sustainability. Then, culture and entertainment to satisfaction. It happened because the tourists did not entirely accept the whole parts of local culture, which signified a need to tailor it to the consumer interests or preferences.

This research also confirms that local culture, entertainment, consumer satisfaction, and superstructure all influence the tourism sustainability. It happened because the tourists who visited Breksi Cliff Park returned and recommended it to others. In addition, the tourism sustainability was one of the most critical topics in the tourism industry. It had been increasingly viewed as a competitive advantage in the tourism destinations as the consumers become more conscious of pro-social, environmental, and conservation issues (Han et al., 2019). This finding is supported by prior studies that found that the consumer satisfaction and CBT were the most important components of sustainable tourism (Han et al., 2019; Jones, 2005; Mayaka et al., 2019). The CBT contributed to socioeconomic development, local community

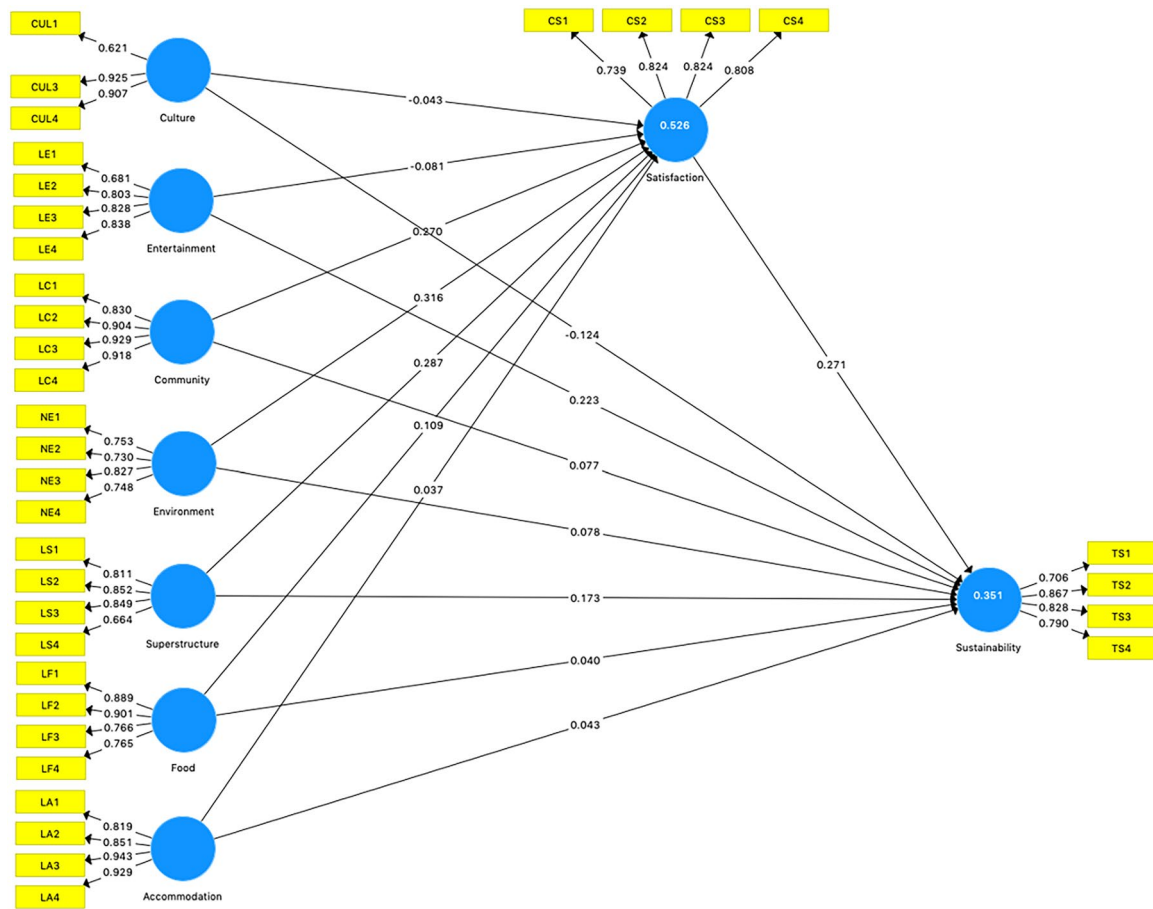


Figure 4. Bootstrapping results for path diagram of PLS-SEM.

Table 8. Results of hypothesis testing.

Path	β	T-statistics	p-Value	Conclusion
Accommodation → Satisfaction	0.037	0.818	0.414	Rejected
Accommodation → Sustainability	0.043	0.782	0.434	Rejected
Community → Satisfaction	0.270	4.692	0.000***	Accepted
Community → Sustainability	0.077	1.263	0.207	Rejected
Culture → Satisfaction	-0.043	0.944	0.345	Rejected
Culture → Sustainability	-0.124	1.670	0.095*	Accepted
Entertainment → Satisfaction	-0.081	1.599	0.110	Rejected
Entertainment → Sustainability	0.223	3.465	0.001***	Accepted
Environment → Satisfaction	0.316	5.223	0.000***	Accepted
Environment → Sustainability	0.078	0.986	0.324	Rejected
Food → Satisfaction	0.109	2.456	0.014**	Accepted
Food → Sustainability	0.040	0.578	0.564	Rejected
Satisfaction → Sustainability	0.271	3.132	0.002***	Accepted
Superstructure → Satisfaction	0.287	4.757	0.000***	Accepted
Superstructure → Sustainability	0.173	2.065	0.039**	Accepted

Notes: *, **, and *** indicate significance at the 10, 5, and 1% levels, respectively.

ownership, human resource development, community strength, community empowerment, and ecological protection, leading to the sustainable tourism (Lee & Jan, 2019; Mayaka et al., 2019).

Similarly, consumer satisfaction is also found to play a mediating role in the impact of local communities, natural environments, local food, and local infrastructure on the tourism sustainability. The consumers typically developed post-purchase intentions and engage in activities, such as referrals or repurchases, based on how well they perceived a product or service performed (Bitner, 1990). Han et al. (2019) also discovered that tourists' intention to revisit and recommend a tourism destination was significantly influenced by their perception of the tourism destination's performance in terms of these criteria.

The tourist satisfaction could help rural communities improve their social inclusion and economic growth, as well as overall well-being (An & Alarcón, 2020; Kumar & Shekhar, 2020). It could also be considered as the most important factor influencing the sustainable development of rural tourism (Asmelash & Kumar, 2020; Jin & Park, 2019; Leković et al., 2020; Long & Nguyen, 2018; Park & Yoon, 2011; Wu & Yang, 2023). Enhancing the tourist/consumer satisfaction would also help with the environmental and cultural preservation, as rural destinations relied on well-preserved natural and cultural resources to attract and retain the tourists (An & Alarcón, 2020). It was such a key to successfully implementing the idea of sustainable tourism development in the tourist villages (Priyanto et al., 2024). It was difficult to implement the concept of sustainable tourism without keeping the tourists satisfied (Asmelash & Kumar, 2019; Basak et al., 2021). The tourists who were satisfied with their experience were more likely to return and promote it to others (Hassan & Rahman, 2022).

From the standpoint of tourism, Sutton (1967) contended that interactions between the host community and tourists might offer chances for fruitful interactions. It could strengthen the host community's desire to take advantage of others. Yoon et al. (2001) Found that the economic, social, and environmental factors resulting from the host community-tourist exchange process influence the host community's attitude towards the tourism. The results of these research indicated that the host community's perceptions of tourism and the degree of community acceptance of tourism development was influenced by the value put on the exchange's components.

Meanwhile, from the perspective of SET and TBL theory, the CBT influenced the consumer satisfaction by providing authentic, personalized experiences and fostering positive interactions with the local community. The consumer satisfaction also influenced the tourism sustainability by increasing the likelihood of recommending the destination, revisiting, or engaging in sustainable practices. The CBT contributed to the tourism sustainability by promoting environmental, economic, and socio-cultural benefits. Further, the tourism sustainability promoted the consumer satisfaction and tourism sustainability because the tourists who valued the sustainability were more satisfied and more likely to engage in and advocate for the sustainable practices. In summary, the CBT positively affected the consumer satisfaction, which in turn influenced the tourism sustainability. Both consumer satisfaction and CBT contributed to the tourism sustainability, creating a feedback loop in which positive experiences and sustainable practices reinforced each other.

This research has the potential to significantly expand the understanding of sustainable tourism in a number of ways. This research illustrates how community involvement in tourist planning and management can result in more environmentally friendly tourism practices by looking at the CBT implementation. The results of this research demonstrate how the CBT might support the community growth, cultural preservation, and environmental responsibility. There was a significance of community involvement in accomplishing sustainability objectives and a prove of how the CBT might function as a prototype for more environmentally friendly tourism approaches. This research clarifies how authenticity influences the consumer behavior and sustainable tourism practices, highlighting the necessity of incorporating environmental and cultural authenticity into tourism initiatives (Blackstock, 2005; Chen & Chen, 2010; Gössling & Peeters, 2015).

This research demonstrates how the sustainable practices could be driven by the consumer satisfaction. Satisfied tourists were more likely to participate in and encourage environmental initiatives. It demonstrates how the consumer satisfaction might actively support the sustainable tourism practices in addition to being an outcome of excellent service, emphasizing the mutually reinforcing relationship between them (Tosun, 2001). Tourism managers could leverage the consumer satisfaction to promote sustainability considering that the satisfied consumers would be more likely to express positive behavioral intentions. It highlights the significance of generating pleasant tourist experiences in order to support long-term tourism sustainability goals and encourage sustainable behaviors (Chen & Chen, 2010).

In addition, this research provides policymakers with evidence about the advantages of CBT and how it affects the sustainability. It also advises them on how to develop policies that encourage the community involvement and sustainable behaviors. It fosters the creation of more sensible tourism regulations that meet the demands of regional communities and environmental objectives. This research underlines the need of incorporating the sustainability and community involvement into the tourism strategy for the tourism managers seeking to boost the consumer satisfaction. It emphasizes the need for methods that are in line with both consumer preferences and SDGs, guiding the tourism management practices in more sustainable directions.

Table 9. Results of Sobel test.

Path	T-stat	Std. error	p-Value
Accommodation → Satisfaction → Sustainability	0.795	0.013	0.427
Community → Satisfaction → Sustainability	2.603	0.028	0.009***
Culture → Satisfaction → Sustainability	−0.895	0.013	0.371
Entertainment → Satisfaction → Sustainability	−1.484	0.015	0.138
Environment → Satisfaction → Sustainability	2.681	0.032	0.007***
Food → Satisfaction → Sustainability	1.912	0.015	0.056*
Superstructure → Satisfaction → Sustainability	2.610	0.030	0.009***

Note: * and *** indicate significance at the 10 and 1% levels, respectively. Sobel test equation: $z\text{-value} = a*b/\text{SQRT}(b^2*s_a^2 + a^2*s_b^2)$.

Table 10. Results of mediation test.

Path	a	b	c'	ab/(ab + c')	%
Accommodation → Satisfaction → Sustainability	0.037	0.271	0.01	0.50067409	50.067
Community → Satisfaction → Sustainability	0.27	0.271	0.073	0.50058151	50.058
Culture → Satisfaction → Sustainability	−0.124	0.271	−0.012	0.73686519	73.687
Entertainment → Satisfaction → Sustainability	−0.081	0.271	−0.022	0.49944256	49.944
Environment → Satisfaction → Sustainability	0.316	0.271	0.086	0.49893962	49.894
Food → Satisfaction → Sustainability	0.109	0.271	0.03	0.49612859	49.613
Superstructure → Satisfaction → Sustainability	0.287	0.271	0.078	0.49928423	49.928

Notes: *a* is the direct effect of exposure on mediators, *b* is the direct effect of mediators on outcomes, and *c'* is the indirect effect of exposure on outcomes through mediators.

In addition, this research finds that the local culture has the greatest mediation on its impact on sustainability through the consumer satisfaction. This happened because the tourists revisited Breksi Cliff Park and recommended it to others, indicating that achieving tourist satisfaction could support the sustainability of the tourism destination. Breksi Cliff Park was previously a stone-mining location that provided the majority of the community's income. Stone mining activities were then restricted under the governor's decree, which was strengthened by the minister's decision. This prohibition was enforced to protect the existing Krast rocks listed as must-preserved. In the research field, it was also found that Breksi Cliff Park destination operators organized and sculpted the former mining area into magnificent rocks that served as photo spots for the tourists to make a lasting record of their visit to Breksi Cliff Park. In addition, improved tourist satisfaction was projected to help Breksi Cliff Park remain a viable tourism destination in the long term. This finding theoretically strengthens the literature on sustainable tourism that the tourist behavioral factors influence the sustainable tourism. In this case, the tourist behavior was influenced by the tourists' personal preferences. Hence, it was necessary to consider the suitability of what the tourism destination offered and the tourists' preferences throughout their visit.

6. Conclusions, limitations, and future research agenda

The current research is one of the few to consider the mediating role of consumer satisfaction in a sustainable tourism setting, as well as CBT as an explanatory variable. The empirical findings show that CBT promotes consumer satisfaction, which is required for sustainable tourism. These findings also highlight the importance of consumer satisfaction as a moderator in increasing the tourism sustainability. The local superstructure, local community, local food, local entertainment, local culture, and natural environment are the foundational elements of the CBT performance framework. To summarize, the local superstructure is the component that has the biggest impact on the consumer satisfaction and tourism sustainability.

Further, this research contributes to the understanding of sustainable tourism by explaining the structural connections among CBT, consumer satisfaction, and sustainability. It offers a theoretical and practical framework for incorporating these components into successful tourism plans, emphasizing the role that the consumer behavior and community involvement play in achieving the SDGs. In the area of sustainable tourism, this research promotes both scholarly understanding and real-world applications by providing novel and evidence-based insights and recommendations.

Understanding the findings of this research can provide managers and policymakers in the tourism industry useful information for enhancing their tourism initiatives. Both tourism managers and policymakers should concentrate on developing genuine and captivating experiences that increase the consumer satisfaction and promote sustainability. It is expected that they can encourage constructive behavioral intentions, such as endorsing the tourism destination and eco-friendly behaviors. Effective tourism policies that serve both tourists and local communities will be further supported by cooperative partnerships and regular evaluation.

There are several managerial implications for the tourism managers to enhance the tourism initiatives. First, the tourism managers can develop creative tourism packages that highlight regional customs, culture, and community engagement. Positive word-of-mouth and increased customer satisfaction are frequently the consequence of authentic interactions. Second, the tourism managers can provide the tourists with the opportunity to interact with the community directly. Third, the tourism managers can adopt and encourage environmentally responsible travel strategies, such as conservation initiatives and eco-friendly lodging. Fourth, the tourism managers can emphasize these efforts in marketing campaigns aimed at drawing environmentally conscious tourists. Fifth, the tourism managers can educate the tourists on how they may support the environmental initiatives. Sixth, to establish a good reputation and draw more tourists, the tourism managers may develop marketing plans that showcase case studies of CBT and sustainability successes. Lastly, the tourism managers can also encourage the construction of an environment that inspires satisfied tourists to tell others about their wonderful experiences and suggest the destination to others. Empowering the CBT by increasing the involvement of local communities can also maintain the sustainability of tourism destinations, for example maintaining existing quality (restaurants).

Meanwhile, the policymakers can implement regulations that facilitate the community participation in the design and management of tourism. This can ensure that the tourism initiatives meet the needs and interests of both local community and tourists. Further, the policymakers are also suggested to adopt regulations and procedures that support the tourism destination's sociocultural, economic, and environmental sustainability. They can encourage projects that balance the community benefits, conservation efforts, and tourism expansion. The policymakers could also consider regulations and legality to protect heritage tourism destinations while preserving the environment and culture. Apart from that, the number of heritage tourism destinations can be increased by empowering the CBT around the destinations.

Along with its significance, this research has a limitation. This exploratory research included only a small number of respondents. Consequently, this research cannot yield broad (generalizable) conclusions. Therefore, future research should involve more respondents and investigate different and larger tourism destinations that include the entire Yogyakarta Province for more accurate results and conclusions.

Author contributions

Andrian Dolfriandra Huruta and Gatot Sasongko: research model and first draft. Yustinus Wahyudi: literature review and data collection. Istiarsi Saptuti Sri Kawuryan: methodology and supervision. Carol Yirong Lu: final draft (proof-read) and visualization. All authors have read and approved the final version of the manuscript.

Ethical approval

This research was reviewed by the ethics committee of the Department of Economics, Satya Wacana Christian University (28202310).

Disclosure statement

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Data availability statement

Data is available upon reasonable request (andrian.huruta@uksw.edu).

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