African Journal of Hospitality, Tourism and Leisure
ISSN: 2223-814X
2025, Vol. 14 No. 4 pp. 925-932

Homestay Management Models in Tourism Development: Case Studies of Java and Sumatra, Indonesia

Ahmad GUSPUL
Economics Department, Universitas Sains Al-qur'an Wonosobo, Indonesia, Email, guspul@unsiq.ac.id
Corresponding Author

Hermawan HERMAWAN
Architecture Department, Universitas Sains Al-qur'an Wonosobo, Indonesia, Email, hermawan@unsiq.ac.id

Zaflis ZAIM
Urban and Regional Planning, Universitas Islam Riau, Indonesia, Email, zaflis@eng.uir.ac.id

Abstract

The main objective of this research is to encourage improved homestay management in the Java and Sumatra regions by proposing a research model that focuses on increasing homestay visitors. In turn, it can strengthen tourism development. Quantitative research method involving 460 domestic tourist respondents in Dieng Plateau, Java and Harau Valley, Sumatra. Data were collected through questionnaires. Purposive sampling was chosen as the sampling technique. Data were analyzed using (SEM)-AMOS software. The research findings show that there are different results in the two regions of the Dieng Plateau of Java and the Harau Valley of Sumatra, where homestay facilities and comfort have no effect on the decision to stay at the Dieng Plateau homestay in Java. On the other hand, different results were found. Future research requires research data from other identical regions in Indonesia, so that the results can be generalized. This research discusses homestay management models in Dieng Plateau and Harau Valley using a multidisciplinary approach, finding that tourists' decision to stay overnight is influenced by different factors in each location. This research offers new insights into the importance of considering cultural and environmental contexts in homestay management strategies to support sustainable tourism.

Keywords: Nature tourism; homestay; environmental comfort; facilities; stay decision

How to cite this article: Guspul, A., Hermawan, H. & Zaim, A. (2025). Homestay Management Models in Tourism Development: Case Studies of Java and Sumatra, Indonesia. African Journal of Hospitality, Tourism and Leisure, 14(4):925-932. DOI: https://doi.org/10.46222/ajhtl.19770720.677

Introduction

Tourism will improve the welfare of the local community. Even people who live at home will benefit from tourism in their neighbourhood (Diekmann & Haukeland, 2024). Highland or mountain tourism is one of the tourist attractions that is the main destination for tourists in recreation. Tourism development in developing countries presents unique infrastructural and operational difficulties in mountainous areas where one of them is fragile natural ecosystems (Sood et al., 2017). Mountain communities, especially in developing countries like Indonesia, are openly dependent on grazing and agriculture, which makes them more vulnerable to climate change and other disasters (Vedwan, 2006). To diversify non-agricultural income sources, highland communities in developing countries should focus more on non-agricultural livelihoods such as tourism (Rasul & Kollmair, 2010). Service businesses such as homestays are one of the nature business trends in the highlands that can bring profits to their owners. The advantage of homestay is that tourists who stay at homestays can learn and experience the culture and lifestyle of the local community (Adli & Chin, 2021). 'Homestay tourism refers to a type of tourism with an emphasis on ecotourism and community-based tourism, where visitors stay with host families in rural areas and host families are required to treat tourists as their own family and involve them in their daily activities to share experiences, learn about the way of life of local people, and learn about the local culture and environment (Ahmad et al., 2014; Rahardjanto et al., 2019). For example, one of the cultures, namely 'genen culture' with stoves can be an attraction for highland communities in the Java region (Hermawan et al., 2022). Homestay development needs to be adjusted to the conditions of the local community so as not to reduce the welfare of the community. Undirected homestay development can result in changes in the spatial layout, structure and function of rural settlements and can have an impact on reducing the standard of living and space for indigenous farmers, thus causing a transformation of farmers' livelihoods and changes in their daily lives (Bi & Yang, 2023; Triyanto et al., 2018). This research tries to place two different locations, namely in the Java Island community and the Sumatra Island community, which have different characteristics and cultures. Previous studies on spatial management and comfort of highland homestays by comparing 2 areas that have different characters and cultures have never been done, so this research is important to get information on spatial management and comfort of good highland homestays. Likewise, research on homestay tourism is still limited in the H&T literature, despite its importance for developing the quality of life of local communities, protecting the natural environment, and contributing to sustainable tourism practices (Janjua et al., 2021).

According to the Homestay Management Regulations, homestays are run as a secondary activity to provide accommodation for tourists in a rural environment. Homestay buildings are usually located close to tourist areas that function for rent to tourists where tourists can directly see the daily life of the community, see the scenery, and even live like local residents. Homestay is an accommodation facility that provides leisure, recreation, and a wide range of local culture for tourists, which is transformed by homestay hosts from unused housing resources in rural areas. The facilities usually provided by homestay managers are various such as; room decoration, design and layout, adequate hygiene facilities, internet facilities, smoking areas and ecological areas (Lin et al., 2019; Novalita et al., 2018). In research on tourists' behavioral intentions, research by Tavitiyaman et al. (2021) suggests that destination facilities can influence tourists' behavioral intentions when choosing a destination. If tourists gather more information about destinations on the Internet and have stronger perceptions of destination images, they will have higher behavioral intentions to choose a destination. The space expressed as a 'courtyard', used for natural lighting and convective ventilation in and around the building. The courtyard plays an important role in improving comfort conditions by modifying the microclimate around the building and improving airflow within the building, as a transitional space that connects the indoor and outdoor spaces of the building. They can avoid the negative effects of extreme hot and humid weather conditions, meeting people's needs for a better thermal environment and acting as a buffer against external pressures (Sun et al., 2024). A good space design is expected to maintain air quality and temperature conditions, so that it will form a comfortable space that visitors will feel. Humans have a natural tendency to adapt to changing conditions in their environment, and this natural tendency is expressed in the adaptive approach to thermal comfort. Nicol & Humphreys (2002) have proposed adaptive thermal comfort models as a suitable tool for the design of naturally ventilated spaces and for the quantification of their thermal comfort performance. Previous studies have shown that the assessment of the sound environment of a room is highly dependent on the specific characteristics of the room, as well as the various conditions of the physical environment that influence individual behavior (Meng et al., 2013; Yu & Kang, 2009). Homestay development requires the right strategy so that homestays are not displaced by hotels. The right strategy can be realized by fulfilling the wishes of tourists who have stayed at the homestay. This research is important because it uses a multidisciplinary approach, namely management, architecture and urban and regional planning, which has never been done before. The novelty of this research is in the design of the variable indicators used, namely the decision to stay at a homestay related to aspects of space comfort from the architectural side and aspects of facilities from the urban and regional planning side. Architectural comfort is related to thermal comfort, sound, wind, and odour. Facilities relate to activities offered by homestays, parking spaces, places of worship.

Literature review

Stimulus-organism-response theory

The Stimulus-Organism-Response model has been adopted by many researchers as a basic theory to study consumer behavior (Chae et al., 2020). Similarly, this article proposes the S-O-R paradigm as a conceptual framework. Mehrabian & Russell (1974) states that the stimulus from the environment (S) affect the user's behavioral response (R) through eliciting organisms (O). Stimulus can be formed as a factor that affects the internal conditions of individuals, wherein organism refer to internal processes that are the result of a stimulus, usually playing a mediating function from stimulus and response. Response is the end result of the stimulus and the organism. Which includes factors such as individual intentions and actual behavior. The stimulus model from Mehrabian-Russell describes that the formation of a person's response to a stimulus because of environmental factors. Stimulus-Organism-Response explains that the environment is a stimulus (S), a set of symptoms that triggers an internal evaluation (O) and create a response (R). The SOR model indicates that responding to environmental stimuli requires consumer emotions. This model also shows that conscious and unconscious responses as well as what a person feels are influenced by the interpretation of the environment (Donovan & Rossiter, 1982).

Homestay tourism

Homestay is a new addition to the accommodation industry that has recently emerged in the tourism industry. Although there is no universal definition for homestay, it is usually defined as a type of accommodation where visitors stay in the homes of local people. Homestays, the initial definition as "the accommodation product for experience in a tourist environment". A homestay is an accommodation product that has been transformed by a homestay host from an unused housing resource in a rural area to provide leisure, recreation and a wide range of local culture to tourists (Lin et al., 2019). Homestay refers to booking accommodation in someone's home away from home, allowing travellers to experience a new lifestyle, unique customs, or even a different language. In this case, the local community provides tourists with furnished accommodation and homelike treatment that is respectful of the local environment and sustainable in nature (Ramaiah et al., 2025). However, the concept of homestay varies according to the circumstances of the countries involved, for example, the concept of homestay in Western countries is to provide an ideal setting for overseas students to become familiar with the target culture and language while remaining in the comfort and safety of a family (Richardson, 2003). While homestays in eastern countries are generally associated with leisure activities, adventure and exploring local customs (Basak et al., 2021).

Homestay facilities

Homestay is a type of accommodation where visitors can experience local life by living in a local home (Mura, 2015). As an alternative to traditional accommodation, rural homestays have grown rapidly in recent years (Sood et al., 2017). However, rural homestays are more than just an accommodation option in a scenic location; they are also an important means of promoting economic growth and sustainable development in local communities and rural tourism destinations (Long et al., 2018). Homestay facilities are operated as a secondary household activity to provide accommodation for tourists in a rural environment. Homestay establishments normally have five or fewer guest rooms with a total guest room area of less than 150 m2. The facilities, such as amenities and living space, are shared with the tourists so that they can experience a homely welcome. To make it more of an experience, the service is typically packed with local cuisine, utilities and even opportunities to participate in local traditions (Greer & Wagner, 2023). It is an alternative form of accommodation that allows visitors to stay with selected households, communicate with them and experience daily life in the host family's culture (Jamal et al., 2011).

Comfort homestay space

Comfort experienced during activities is subjective. Some studies have suggested that comfort is a psychological sensation that occurs in a particular environment (Richards et al., 1978). Well-designed outdoor spaces provide a pleasant environment for visitors and encourage outdoor use, which has a positive impact on visitors' health and well-being. It is therefore necessary to take a comprehensive view of the aspects of neighbourhood and architectural design that affect people's comfort and the quality of the environment in which they live. Environmental comfort can be measured in at least three dimensions, including thermal comfort, visual comfort and acoustic comfort. Thermal performance and the lack of design guidelines in the early stages of building design. Appropriate spatial scale and configuration of terraces helps to improve their effectiveness in achieving indoor and outdoor thermal comfort. Nicol & Humphreys (2002) have proposed adaptive thermal comfort models as appropriate tools for designing naturally ventilated spaces and quantifying their thermal comfort performance. Outdoor thermal comfort is related to outdoor microclimates such as air temperature, humidity, wind velocity, mean radiant temperature (Błazejczyk et al., 2010). Homestay visual comfort refers to the level of psychological satisfaction derived from observing elements outside the homestay, including the street scene, terrain conditions, road types, and information provided by the homestay (Yunwei et al., 2023). Currently, acoustic criteria for buildings recommend background noise levels that do not take into account the different contextual conditions in which people perceive sound and the adaptive mechanisms that may be at work. In addition, sound pressure levels can only explain a limited part of an individual's acoustic perception: at the same sound level, very different perceptual outcomes can occur due to various variables related to acoustic and non-acoustic factors (e.g. individual, environmental and contextual) (Hossain et al., 2025).

Decision to stay

Altunel & Koçak (2017) define behavioral intention as a consumer's tendency to behave in a certain way towards products or services. Tourist stay decisions refer to tourists' behavioral intentions in the form of purchasing behavior by tourists after their subjective perceptions and assessments of the services provided and experiences during the location. Tourist behavioral intention, more than a simple purchase decision, comprises a variety of factors ranging from repeat purchases to word-of-mouth recommendations (Chen et al., 2024). The decision to stay overnight can be driven by various aspects such as the level of service, facility design that will provide tourist comfort. Tourists who feel the maximum service from destination managers tend to behave loyally and will even recommend destinations to other tourists (Souza et al., 2020). Examining pre-purchase decisions, there have been several studies such as brand perception (Chen et al., 2024) , quality of experience (Altunel & Koçak, 2017) and facilities (Tsai et al., 2014) that predict purchase behavior intentions and are seen as fairly accurate predictors of their future purchase behavior.

The effect of homestay facilities on the decision to stay

Homestay facilities are usually what the owner provides in their home. Generally, homestays have facilities, such as bathrooms, bedrooms, kitchens, living rooms and so on like residential houses as usual. Some homestays even provide additional services such as internet connection and others. Tourist satisfaction with a destination, one of which is seen from the fulfilment of its facilities, is important to create visits. The concept of facility design has been recognized as one of the important indicators of company success in tourism marketing literature (Bi & Yang, 2023; Oliver, 2010). Visiting behavior is considered a manifestation of consumer satisfaction after utilizing the facilities that have been provided (Oliver, 2010). Findings from many studies suggest that it is important to consider all relevant aspects of consumer behavior that may be less salient yet still important indicators of facility design to achieve a reliable assessment of customer behavior. Another study conducted by Lin et al. concluded that the external environment of homestays has little effect on the intention to visit homestays (Lin et al., 2019). Another study from Nguyen (2023) explains that customer knowledge about a product or service will be able to influence purchase intentions, such as electric vehicle products.

H1ab: Homestay facilities have a positive effect on visitor stay decisions

The effect of homestay comfort on the decision to stay

The presence of a transition space that connects the inside and outside of the building will play an important role in improving the comfort conditions around the building and will have an impact on visitor behavior when deciding to stay overnight (Sun et al., 2024). It is also clear that the use of outdoor spaces is also influenced by environmental conditions and the thermal experience of users. This means that the design of the accommodation geometry plays a key role in improving thermal comfort and therefore encouraging the use of accommodation (Yang, 2017). There have been other recent studies into the acoustics of homestay accommodation, but these have focused on how acoustics affect comfort and behavior (Torresin et al., 2024).

H2ab: Homestay environmental comfort has a positive effect on visitor stay decisions

The explanation for the development of the above-mentioned hypotheses then forms the research model, as shown in figure 1, as follows:

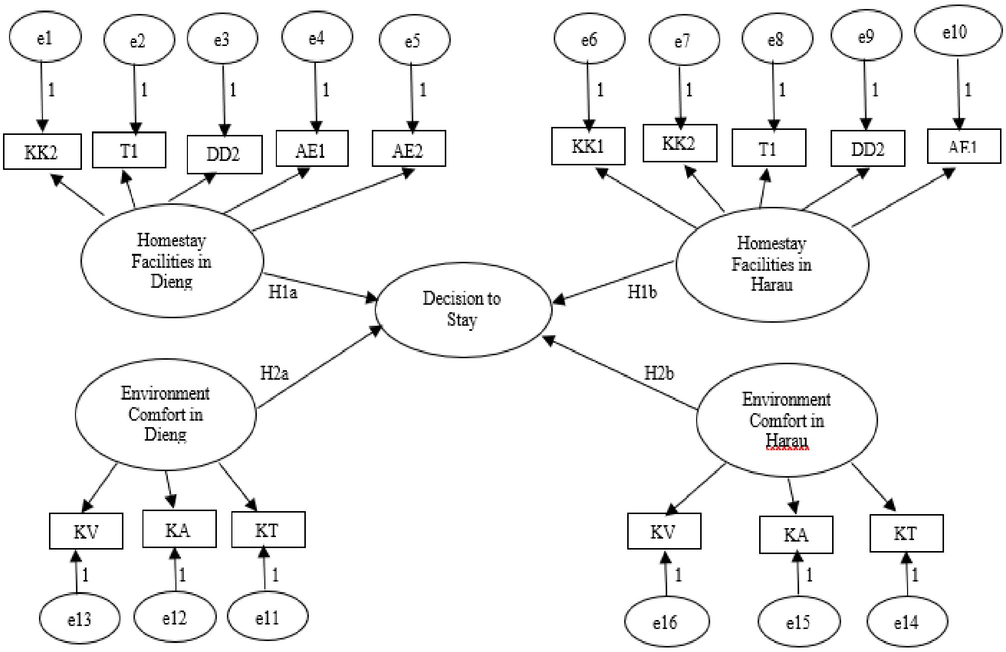

Figure 1: Research model

Research methods

Research design with a quantitative approach based on SEM-AMOS modelling, explaining the relationships between variables and indicators, and also explains how they relate to each other (Hair et al., 2019). A survey based on questionnaires was chosen as the data collection tool. This study is based on three variables, namely homestay facilities, environmental comfort and decision to stay at a homestay. The questionnaire was developed based on the adoption of previous relevant research. The adopted questionnaire has been adapted in wording to the context of this study. The sample criteria set as a purposive sampling option include tourists who have reached adulthood so that they can assess the comfort of the homestay (Leguina, 2015). Data were collected at one time (cross-section) from visitors staying in the Dieng Plateau region of Central Java and the Harau Valley region of West Sumatra. Completion of the questionnaire was accompanied by the research team, so that there were no empty or defective questionnaires. The questionnaire was distributed to 230 respondents who stayed at homestays in each region. The total valid and processable questionnaires were 460 questionnaires or a response rate of 100%. Convergent validity of constructs is measured and assessed in the SEM measurement modelling technique with a minimum threshold value of 0.50 or more. The square root of the AVE must be greater than the correlation of the latent variables for discriminant validity. While the reliability of individual items is evaluated from the construct reliability (CR) score and the average extracted variance (AVE). For all construct reliability (CR) achieved values above the required threshold of 0.7 and AVE exceeds the 0.5 threshold for all constructs (Hair et al., 2017).

Results

Demographic characteristics of respondents in Dieng Plateau Central Java and Harau Valley West Sumatra

The study managed to obtain 230 valid responses from respondents in the Dieng Plateau region of Central Java which were then analyzed. The final sample consisted of male respondents (54.8%; n=126) followed by female respondents (45.2%; n=104). Respondents in terms of employment background were dominated by employees at 34.3% (n=79). In terms of domicile, respondents were dominated by visitors from Central Java at 37% (n=85). Central Java is the dominant domicile, because Dieng Plateau tourism is located in the Central Java region, precisely in Wonosobo Regency. Meanwhile, this study also managed to obtain 230 valid responses from respondents in the Harau Valley region of West Sumatra which were then analyzed. The final sample consisted of male respondents (67.8%; n=156) followed by female respondents (32.2%; n=74). Respondents based on employment background were dominated by entrepreneurs at 37% (n=85). In terms of domicile, respondents were dominated by visitors from Riau at 63.1% (n=145). Although Harau Valley is located in West Sumatra, it is located halfway between the cities of Padang and Riau, so many potential tourists also come from Riau province.

Measurement model test: Validity and reliability Dieng Plateau Central Java and Harau Valley West Sumatra

AMOS software was used to conduct confirmatory factor analysis (CFA). The results of data processing in the Dieng Plateau region of Central Java show that the measurement model has met the statistical criteria for goodness of fit, where the CMIN/DF score is 2.00 (less than or equal to 2.00), Goodness of Fit Index (GFI) scores are 0,928 and Adjusted Goodness of Fit Index (AGFI) scores are 0,883 respectively, RMSEA score is 0.074 (less than 0.08), and TLI and CFI scores are 0,911 and 0,933 respectively (greater than 0.90). Therefore, according to the rule of thumb Hooper et al. (2008) satisfactory rating for this model. Testing also shows that all items are reliable (Homestay Facilities: 0.78; Homestay Comfort: 0.74; Stay of Decision: 0.71), as all variables have a Construct Reliability (CR) value of more than 0.70 (Xing et al., 2022). The threshold of 0.50 has also been met for the average variance extract (AVE) values of all variables (Homestay Facilities: 0.59; Homestay Comfort: 0.56; Stay of Decision: 0.53) (Sarstedt et al., 2021). Therefore, there are no convergent validity problems with the model in this study. Likewise, the square root of the AVE/DV is greater than the correlation value of the latent variable, indicating that it is free from discriminant validity problems. As shown in Figure 2 below;

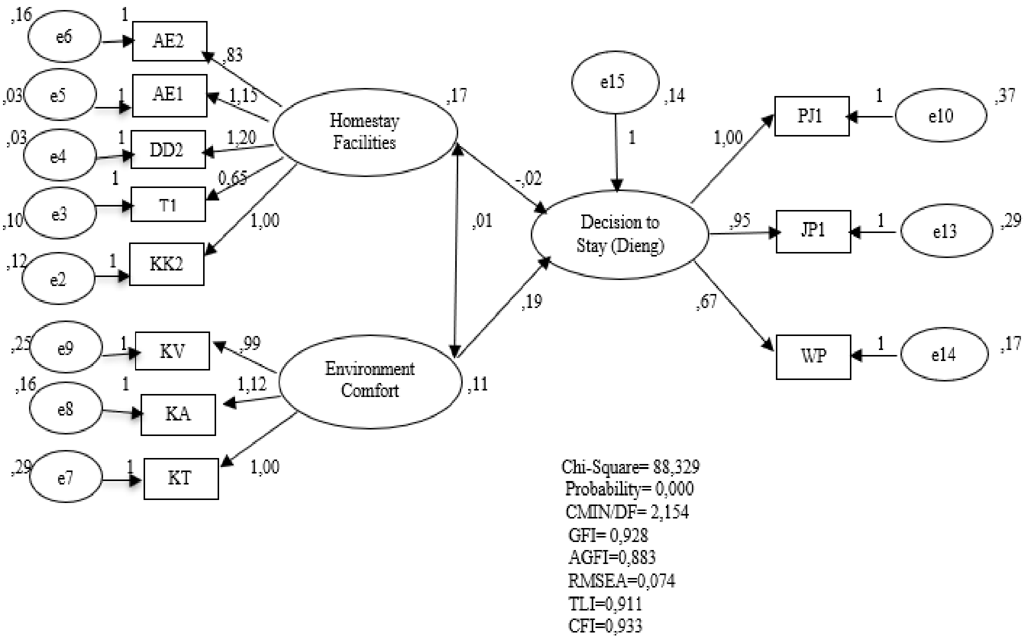

Figure 2: Full structural model test

Confirmatory factor analysis (CFA) was conducted using AMOS software. The results of data processing in Harau Valley West Sumatra show that the measurement model met the statistical criteria for goodness of fit. Where the Goodness of Fit Index (GFI) value is 0.945 and the Adjusted Goodness of Fit Index (AGFI) value is 0.901 (greater than 0.90), the RMSEA value is 0.084 (equal to 0.08), and the CFI values are 0.837. Therefore, according to the rule of thumb Hooper et al. (2008) this model is satisfactory. This test also shows that all items are reliable (homestay facilities: 0.76; homestay comfort: 0.71; decision of stay: 0.72) because all variables have Construct Reliability (CR) values greater than 0.70 (Xing et al., 2022). The threshold of 0.50 was also met for the Average Variance Extract (AVE) values of all homestay facilities variables: 0.58; homestay comfort: 0.53; decision of stay: 0.54) (Sarstedt et al., 2021). Therefore, the model in this study has no convergent validity problems. Similarly, the square root of the AVE/DV is greater than the correlation value of the latent variable, indicating that it is free from discriminant validity problems. As shown in Figure 3 below;

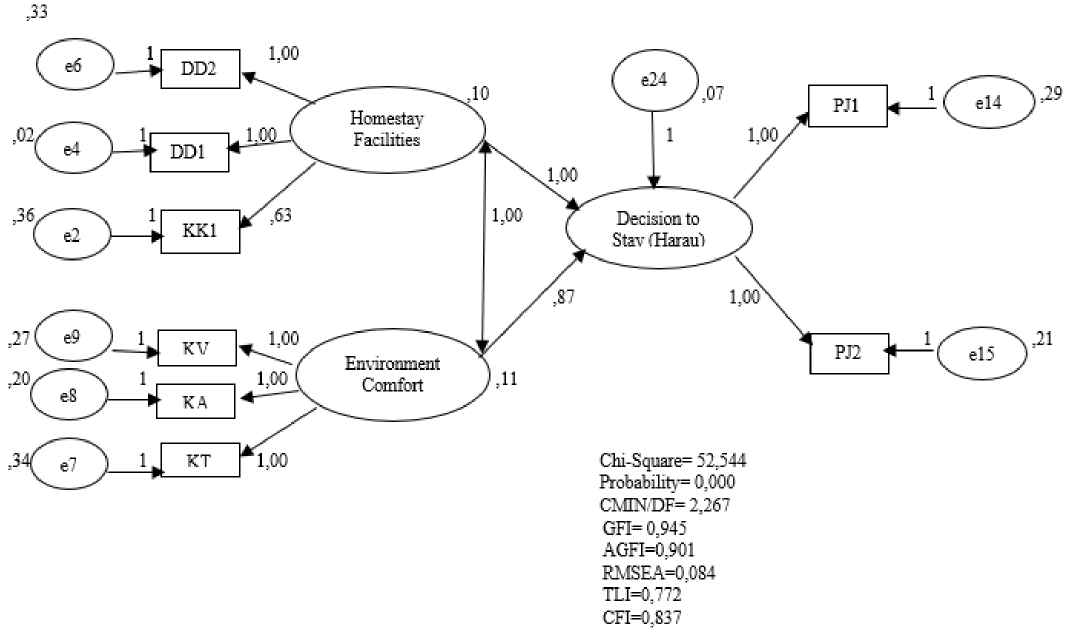

Figure 3: Full structural model test

Structural model test: Hypotheses testing Dieng Plateau Central Java and Harau Valley West Sumatra

Estimating causal relationships between exogenous and endogenous latent variables is the next step in the analysis. To validate the research hypotheses, the SEM-AMOS approach was used to further analyse the data in the Dieng Plateau region of Central Java. The results of SEM-AMOS analysis that can be explained are as shown in table 8; homestay facilities significantly have no effect on visitor stay decisions (β = -0.015, p-value 0.805 < 0.05), Likewise, homestay environmental comfort also has no effect on visitor stay decisions (β = 0.126, p-value 0.185 > 0.05). Thus, H1a, H2a are rejected. As seen in tables 1 below;

Table 1: Path estimates and hypothesis results in Dieng Plateau Central Java

Hypothesis	Regression	β	S.E.	p-value	Result
H1a	HF → DS	-0,015	0,059	0,805	Rejected
H2a	HC → DS	0,185	0,095	0,126	Rejected

Source: Primary data processed (2024)

The next step in the analysis is to estimate causal relationships between exogenous and endogenous latent variables. The SEM-AMOS approach was used to further analyse the data in Harau Valley, West Sumatra in order to validate the research hypotheses. The results of the SEM-AMOS analysis that can be explained are shown in Table 9; homestay facilities have no significant effect on visitors' decision to stay (β = -0.077, p-value 0.554 > 0.05), as well as the comfort of the homestay environment which has effect on visitors' decision to stay (β = 0.746, p-value 0.002 < 0.05). Therefore, H1b is rejected and H2b is accepted. As seen in tables 2 below;

Table 2: Path estimates and hypothesis results in Harau Valley West Sumatra

Hypothesis	Regression	β	S.E.	p-value	Result
H1b	HF → DS	-0,077	0,130	0,544	Rejected
H2b	HC → DS	0,746	0,242	0,002	Accepted

Source: Primary data processed (2024)

Discussion

Currently, visiting highland tourist destinations is the tendency of many people, in addition to refreshing purposes as well as for the purpose of spending time with family. Homestay is the main alternative in making decisions to stay overnight. Therefore, this study tries to examine the factors that contribute to tourist behaviour in making overnight decisions in the highlands of Dieng Plateau Central Java and Harau Valley West Sumatra. SEM-AMOS technique has been used to test the developed conceptual framework. Findings from visitors staying at homestays in Dieng Plateau Central Java and Harau Valley West Sumatra (n=460) show that the proposed model cannot all explain the predicted level of visitor behaviour. The results of the analysis in the Dieng Plateau region of Central Java, it was found that the variable homestay facilities did not affect visitors' decisions to stay at the homestay. This result can be explained that whether the homestay facilities are well fulfilled or not, this does not affect the decision to stay overnight. This finding is not in line with research conducted by Sun et al. (2024) and Tsai et al. (2014) which explains that the facilities provided by tourist destinations will have an impact on the decision to visit. This confirms that visitors who decide to stay at the Dieng Plateau homestay in Central Java do not see the facilities as complete or not, good or not. Visitors tend to decide to stay overnight because the average homestay has been booked or filled by other visitors, so when the homestay is still empty visitors immediately decide to stay. The Dieng Plateau destination is busy being visited towards the weekend. This is what causes homestays in the Dieng Plateau area towards the weekend to be booked. Zeithaml et al. (1996) explains that behavioural intentions correspond to customer purchases of the product, that behavioural intention is a key concept in the theory of planned behaviour, identified as an individual customer's motivation based on his or her decisions regarding behavioural intentions. This study also found that the comfort of the homestay environment had no effect on the decision to stay at the Dieng Plateau homestay in Central Java. This can be explained that visitors who decide to stay at a homestay do not pay attention to whether the homestay is comfortable or not. These results are not in line with previous research, which explains that visitors decide to make purchases at tourist destinations that provide good environmental comfort (Chen et al., 2024; Lau & Choi, 2021; Meng et al., 2013; Sun et al., 2024). As with the explanation of homestay facilities, Visitors who decide to stay overnight tend not to pay attention to the comfort level of the homestay environment. Visitors tend to choose to stay overnight because the average homestay is booked or filled by other visitors, so if the homestay is still available, visitors will choose to stay overnight.

The results of the data analysis in the Harau Valley, West Sumatra, showed that the homestay facility variable had no effect on visitors' decisions to stay with a homestay. This can be interpreted that homestay visitors in the Harau Valley, do not see the facilities provided, whether or not the homestay facilities provided do not affect the visitors' decision to stay. These results are not in line with previous research, which explains that destination facilities significantly influence tourists' purchasing decisions (Sun et al., 2024; Tsai et al., 2014). In addition, some tourists are parents of students who visit in order to visit their children according to the schedule given by the boarding school manager, with a short visit time, so that the main motive for the parents of students to visit Harau is not recreation so that when staying does not prioritise the completeness of homestay facilities. Consumer purchasing behaviour for goods or services tends to be the same, where the goods or services needed are relatively scarce, consumers tend to make purchases without paying attention to the facilities of the goods or services provided (Huang et al., 2020). Likewise, consumer purchasing behaviour for Harau Valley homestays appears to be high on weekends, which causes homestays to be booked by many visitors. Another finding that can be explained in this study is that the level of environmental comfort has a positive effect on the decision to stay at the Harau Valley homestay in West Sumatra.

This can be interpreted that the more comfortable the homestay environment is, the higher the visitors decide to stay. The results of these findings are in line with previous research, which explains that the comfort of the hotel environment or similar settings can influence visitors' purchasing decisions (Chen et al., 2024; Lau & Choi, 2021; Meng et al., 2013; Sun et al., 2024). Environmental comfort that can be provided by homestay managers in the form of good room lighting, away from motor vehicle noise and maintained room temperature will be able to influence visitor behaviour in deciding purchases. Environmental comfort in the Harau Valley as a supporter of homestay comfort in the form of fairly cool climatic conditions (between 20-28 degrees Celsius), 86.6% humidity, noise-free, dust and pollution-free. The natural panorama in this area is equipped with rock cliff formations, waterfalls, community forests and panoramic rice fields.

Conclusion

Homestay tourism refers to a type of tourism with a focus on ecotourism and community-based tourism, where visitors stay with host families in rural areas. The Stimulus-Organism-Response theory is confirmed and validated by these findings. There are differences in results in the two research areas, where the results show that homestay facilities and homestay environmental comfort have no influence on the decision to stay overnight for homestay visitors in the Dieng Plateau highland area, Central Java. Meanwhile, the results of research in the Harau Valley region of West Sumatra show that environmental comfort affects visitors' decisions to stay overnight. These two results show that community culture or everything attached to the community will trigger individual behavior and character or even community character in an area. The policies applied in the management and design of homestays are of course adjusted to the geographical conditions and characteristics of each region. Homestay managers cannot necessarily adopt it in other regions, without looking at the conditions of the region and the characteristics of the community. Management and design policies that can be used as strategic references are policies that can be applied in the region. Our research provides important insights into the factors driving visitors from two regions with different cultures to decide to stay at a homestay. However, there are still some limitations such as the data taken in this study are only two in different highland areas used for comparison. Future research requires research data from other regions in Indonesia that are identical, namely highland homestays so that the research results can be generalized.

Acknowledgement

Thanks to the Directorate of Higher Education of the Republic of Indonesia for the research grant with contract number 108/E5/PG.02.00.PL/2024.

References

Adli, A. & Chin, W. L. (2021). Homestay Accommodation in Brunei Darussalam. *Southeast Asia: A Multidisciplinary Journal*, 21(1), 15–29. https://doi.org/10.1108/seamj-01-2021-b1002

Ahmad, S.Z., Jabeen, F. & Khan, M. (2014). Entrepreneurs Choice in Business Venture: Motivations for Choosing Home-stay Accommodation Businesses in Peninsular Malaysia. *International Journal of Hospitality Management*, 36, 31–40. https://doi.org/10.1016/j.ijhm.2013.08.006

Altunel, M.C. & Koçak, Ö.E. (2017). The Roles of Subjective Vitality, Involvement, Experience Quality, and Satisfaction in Tourists' Behavioral Intentions. *European Journal of Tourism Research*, 16, 233–251. https://doi.org/10.54055/ejtr.v16i.287

Basak, D., Bose, A., Roy, S., Chowdhury, I.R. & Sarkar, B.C. (2021). Understanding Sustainable Homestay Tourism as a Driving Factor of Tourist's Satisfaction Through Structural Equation Modelling: A Case of Darjeeling Himalayan Region, India. *Current Research in Environmental Sustainability*, 3. https://doi.org/10.1016/j.crsust.2021.100098

Bi, G. & Yang, Q. (2023). The Spatial Production of Rural Settlements As Rural Homestays in the Context of Rural Revitalization: Evidence From a Rural Tourism Experiment in a Chinese Village. *Land Use Policy*, 128, 106600. https://doi.org/10.1016/j.landusepol.2023.106600

Błazejczyk, K., Broede, P., Fiala, D., Havenith, G., Holmér, I., Jendritzky, G., Kampmann, B. & Kunert, A. (2010). Principles of the New Universal Thermal Climate Index (UTCI) and Its Application to Bioclimatic Research in European Scale. *Miscellanea Geographica*, 14, 91–102. https://doi.org/10.2478/mgrsd-2010-0009

Chae, H., Kim, S., Lee, J. & Park, K. (2020). Impact of Product Characteristics of Limited Edition Shoes on Perceived Value, Brand Trust, and Purchase Intention; Focused on the Scarcity Message Frequency. *Journal of Business Research*, 120, 398–406. https://doi.org/10.1016/j.jbusres.2019.11.040

Chen, H., Fu, S. & Bei Lyu. (2024). Homestays in China: Mediator Effects of Brand Perception Upon Host-Guest Interaction and Tourist Behavior Intention. *Heliyon*, 10, 18. https://doi.org/https://doi.org/10.1016/j.heliyon.2024.e29820

Diekmann, A. & Haukeland, J.V. (2024). Tourism Non-Participation – A Persistent Social Welfare Issue. *Annals of Tourism Research*, 104, 103717. https://doi.org/10.1016/j.annals.2023.103717

Donovan, R.J. & Rossiter, J.R. (1982). Store Atmosphere: An Environmental Psychology Approach. *Journal of Retailing*, 58(1), 34–57.

Greer, T. & Wagner, J. (2023). The Interactional Ecology of Homestay Experiences: Locating Input Within Participation and Membership. *Second Language Research*, 39(1), 85–113. https://doi.org/10.1177/02676583211058831

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

Hair, J.R.F., Matthews, J.M.L., Matthews, L.R. & Sarstedt, M. (2017). PLS-SEM or CB-SEM: Updated Guidelines on Which Method to Use. *International Journal of Multivariate Data Analysis*, 1(2), 107. https://doi.org/10.1504/ijmda.2017.10008574

Hermawan, Prijotomo, J., Dwisusanto, Y.B. & Faqih, N. (2022). Changing Meanings of Hearths in Vernacular Highland Houses in Indonesia. *ISVS E-Journal*, 9(2), 130–145.

Hooper, D., Coughlan, J. & Mullen, M. R. (2008). Structural Equation Modelling: Guidelines For Determining Model Fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60.

Hossain, M.R., Manohare, M. & King, E.A. (2025). Systematic Review of Indoor Soundscape Assessments: Activity-Based Psycho-Acoustics Analysis. *Building Acoustics*, 32(1), 123–141. https://doi.org/10.1177/1351010X241294151

Huang, H., Liu, S. Q., Kandampully, J. & Bujisic, M. (2020). Consumer Responses to Scarcity Appeals in Online Booking. *Annals of Tourism Research*, 80, 102800. https://doi.org/10.1016/j.annals.2019.102800

Jamal, S.A., Othman, N. & Muhammad, N.M.N. (2011). Tourist Perceived Value in a Community-Based Homestay Visit: An Investigation Into the Functional and Experiential Aspect of Value. *Journal of Vacation Marketing*, 17(1), 5–15. https://doi.org/10.1177/1356766710391130

Janjua, Z.A., Krishnapillai, G. & Rahman, M. (2021). A Systematic Literature Review of Rural Homestays and Sustainability in Tourism. *SAGE Open*, 11(2). https://doi.org/10.1177/21582440211007117

Lau, K.K.L. & Choi, C.Y. (2021). The Influence of Perceived Aesthetic and Acoustic Quality on Outdoor Thermal Comfort in Urban Environment. *Building and Environment*, 206, 108333. https://doi.org/10.1016/j.buildenv.2021.108333

Leguina, A. (2015). A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM). *International Journal of Research & Method in Education*, 38(2). https://doi.org/10.1080/1743727x.2015.1005806

Lin, Y.C., Lai, H.J. & Morrison, A.M. (2019). Social Servicescape and Asian Students: An Analysis of Spring Break Island Bed and Breakfast Experiences in Taiwan. *Tourism Management Perspectives*, 31, 165–173. https://doi.org/10.1016/j.tmp.2019.04.005

Long, F., Liu, J., Zhang, S., Yu, H. & Jiang, H. (2018). Development Characteristics and Evolution Mechanism of Homestay Agglomeration in Mogan Mountain, China. *Sustainability (Switzerland)*, 10(9). https://doi.org/10.3390/su10092964

Mehrabian, A. & Russell, J. A. (1974). *An Approach to Environmental Psychology*. Cambridge, M.I.T. Press.

Meng, Q., Kang, J. & Jin, H. (2013). Field Study on the Influence of Spatial and Environmental Characteristics on the Evaluation of Subjective Loudness and Acoustic Comfort in Underground Shopping Streets. *Applied Acoustics*, 74(8), 1001–1009. https://doi.org/10.1016/j.apacoust.2013.02.003

Mura, P. (2015). Perceptions of Authenticity in a Malaysian Homestay - A Narrative Analysis. *Tourism Management*, 51, 225–233. https://doi.org/10.1016/j.tourman.2015.05.023

Nguyen, G.N. (2023). Mediating Roles of the Resistance to Change and Willingness to Pay on the Impact of Face Consciousness on Purchase Intention of Evs in Vietnam. *Journal of Global Business and Technology*, 19(1), 1–17.

Nicol, J.F. & Humphreys, M.A. (2002). Adaptive Thermal Comfort and Sustainable Thermal Standards For Buildings. *Energy and Buildings*, 34(6), 563–572. https://doi.org/10.1016/S0378-7788(02)00006-3

Novalita, R., Barlian, E., Muchtar, B. & Syah, N. (2018). Design of a Tourism Awareness Education Module For Tourism Attraction Managers in Agam District, West Sumatra. *African Journal of Hospitality, Tourism and Leisure*, 7(3), 1–16. http//: www.ajhtl.com

Oliver, R.L. (2010). *Satisfaction: a Behavioral Perspective on the Consumer*. Routledge. https://doi.org/https://doi.org/10.4324/9781315700892

Peng, C. & Kim, Y.G. (2014). Application of the Stimuli-Organism-Response (S-O-R) Framework to Online Shopping Behavior. *Journal of Internet Commerce*, 13, 159–176. https://doi.org/10.1080/15332861.2014.944437

Rahardjanto, A., Husamah, H., Fatmawati, D., Miharja, F.J. & Setyawan, D. (2019). The Problematic Implementation of Community-Based Ecotourism in Indonesia: A Case Study in Ecotourism of Gili Labak-East Java. *African Journal of Hospitality, Tourism and Leisure*, *8*(SpecialEdition), 1–18. http//: www.ajhtl.com

Ramaiah, A.K., Azmi, A., Sulaiman, S., Sirait, N.N., Robert. & Saviera, L. (2025). Penang Community-based Homestay Tourism Driving Factor for Resources Conservation and SDGs: A Qualitative Study. *Advances in Economics, Business and Management Research*, 277–295. https://doi.org/10.2991/978-94-6463-801-1_20

Rasul, G. & Kollmair, M. (2010). Sustainable Livelihood Promotion Through Agricultural Development in the Hills of South Asia. *Hill Agriculture in SAARC Countries, Constraints and Opportunities*, *January 2008*, 167–182.

Richards, L.G., Jacobson, I.D. & Kuhlthau, A.R. (1978). What the Passenger Contributes to Passenger Comfort. *Applied Ergonomics*, 9(3), 137–142. https://doi.org/10.1016/0003-6870(78)90003-0

Richardson, K. (2003). International Education: Homestay Theory Versus Practice. *Proceedings for the International Education Research Conference AARE–NZARE*, 27–35.

Sarstedt, M., Ringle, C.M. & Hair, J.F. (2021). Partial Least Squares Structural Equation Modeling. In *Handbook of Market Research*. https://doi.org/10.1007/978-3-319-05542-8

Sood, J., Lynch, P. & Anastasiadou, C. (2017). Community non-participation in Homestays in Kullu, Himachal Pradesh, India. *Tourism Management*, 60, 332–347. https://doi.org/10.1016/j.tourman.2016.12.007

Souza, L.H., Kastenholz, E., Barbosa, M. de L.A. & Carvalho, M.S. (2020). Tourist Experience, Perceived Authenticity, Place Attachment and Loyalty When Staying in a Peer-To-Peer Accommodation. *International Journal of Tourism Cities*, 6(1), 27–52. https://doi.org/10.1108/IJTC-03-2019-0042

Sun, Q., Fan, Z. & Bai, L. (2024). Influence of Space Properties of Enclosed Patio on Thermal Performance in Hot-Humid Areas of China. *Ain Shams Engineering Journal*, 15(2), 102370. https://doi.org/10.1016/j.asej.2023.102370

Tavitiyaman, P., Qu, H., Tsang, W.L. & Lam, C.R. (2021). The Influence of Smart Tourism Applications on Perceived Destination Image and Behavioral Intention: The Moderating Role of Information Search Behavior. *Journal of Hospitality and Tourism Management*, 46, 476–487. https://doi.org/10.1016/j.jhtm.2021.02.003

Torresin, S., Aletta, F., Dicle, S., Albatici, R., de Dear, R., Hasegawa, Y., Kang, J., Parkinson, T. & Cabrera, D. (2024). Towards Developing a Model of Adaptive Acoustic Comfort in the Built Environment: a Thematic Analysis From An Expert Focus Group. *Building and Environment*, 266(September), 112074. https://doi.org/10.1016/j.buildenv.2024.112074

Triyanto, Iwu, C.G., Musikavanhu, T.B. & Handayani, R.D. (2018). Rural Tourism as a Way to build Economic Independence. *African Journal of Hospitality, Tourism and Leisure*, 7(4), 1–11. http//: www.ajhtl.com

Tsai, K.T., Lin, T.P., Hwang, R.L. & Huang, Y.J. (2014). Carbon Dioxide Emissions Generated By Energy Consumption of Hotels and Homestay Facilities in Taiwan. *Tourism Management*, 42, 13–21. https://doi.org/10.1016/j.tourman.2013.08.017

Vedwan, N. (2006). Culture, Climate and the Environment: Local Knowledge and Perception of Climate Change among Apple Growers in Northwestern India. *Journal of Ecological Anthropology*, 10(1), 4–18. https://doi.org/10.5038/2162-4593.10.1.1

Xing, B., Li, S. & Xie, D. (2022). The Effect of Fine Service on Customer Loyalty in Rural Homestays: The Mediating Role of Customer Emotion. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.964522

Yang, W. (2017). Effects of Noise on Indoor Thermal Sensation and Comfort. *KIEAE Journal*, 17(1), 83–89. https://doi.org/10.12813/kieae.2017.17.1.083

Yu, C.J. & Kang, J. (2009). Environmental Impact of Acoustic Materials in Residential Buildings. *Building and Environment*, 44(10), 2166–2175. https://doi.org/10.1016/j.buildenv.2009.03.013

Yunwei, M., Wen, L., Liu, T., Xu, J., Zheng, B., Zhang, X. & Qing, G. (2023). Research on Catastrophe Progression of Driving Load in Mountainous Road Based on Visual and Environmental Characteristics. *Engineering Reports*, 5(1), 1–16. https://doi.org/10.1002/eng2.12554

Zeithaml, V.A., Berry, L. & Parasuraman, A. (1996). The Behavioral Consequences of Service Quality. *American Marketing Association*, 60. https://doi.org/10/10/2013 05:40