

MOUNTAIN ADVENTURE TOURISM: THE EFFECT OF PERSONAL VALUES, PARTICIPATION CONSTRAINTS AND TOURIST AMENITIES TOWARD TOURIST SATISFACTION

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Abstract:

The natural beauty of Indonesia, which is in the position of the Ring of Fire, causes many mountain clusters on various islands in Indonesia; this increases the interest and activities of mountain climbing, especially among young people. This study aims to analyze the factors that cause the satisfaction of mountaineering tourists both in terms of personal values, obstacles and amenities provided by the manager of mountaineering activities. The research method was carried out with a quantitative method approach by distributing questionnaires to mountaineering communities throughout Indonesia with as many as 100 respondents. The results of the questionnaire were processed with SMART PLS-4. The results of the study show that the personal value and amenities provided for climbers will increase tourist satisfaction; on the other hand, obstacles in health, skills and risks have a negative influence on the satisfaction of mountaineers. This implies that as a special interest tourist, a mountaineer needs to have strong personal values and provided with adequate amenities, and improve their health and skills to be able to overcome risks in order to feel satisfaction in mountaineering activities.

Keywords: Personal Values, Adventure Participation Constraint, Amenities, Tourist Satisfaction, Mountaineering

INTRODUCTION

The beauty of nature in Indonesia, with its biodiversity, is one of the driving factors for tourists to enjoy its beauty. One way to enjoy the beauty of nature is by actively traveling to nature, such as forest tours, lake tours, sea tours, mountain climbing, rock climbing, rafting, parachuting, diving or paragliding. One of the sources of Indonesia's natural beauty is the many mountains. As a ring of fire country, Indonesia has many active mountain clusters spread across various islands. The beauty of this mountain is an attraction for tourists to explore which is generally located in a national park area that offers mountain climbing activities (Fasandra et al., 2019).

Mountaineering tourism activity is an adventure in the hard adventure category that contains a risk component; the risk of climbing a mountain can arise from external factors that cannot be controlled. Soft adventures tend to have less risk (Pomfret, 2006). Therefore, in mountaineering tourism, risk management is important so that risks are anticipated and identified both sources of risk from nature, humans, equipment and supplies, the possibility of risk occurrence, risk impact, risk prevention and control, and parties responsible for risk (Asmungi et al., 2024). Research results on sources of risk, according to Asmungi et al. (2024), include extreme weather, steep hiking terrain, long hiking trails, wild animals and plants, physical inability and stamina, lack of preparation, and human error.

Although mountaineering adventure activities have become a trend in various countries, previous research states that the perspective of mountaineers is still under-researched, whether the



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risk will be the only obstacle or become a motivation for mountaineers to do adventure recreation (Callander & Page, 2003). To find out the perspective of climbers, the Five Factors Model theory of the structure of human nature can be used. This theory describes most personality traits, including neuroticism, openness, extraversion, agreeableness, and conscientiousness. This theory is used to surmise differences in how individuals organize their activities. Some consider stable individuals to be an expression of their personality traits. However, other factors such as needs, motives, goals, and personal values need to be considered.

Previous research explains the influence of experience on risk perception, where experienced individuals have a perception of the occurrence of potential risks less than those without experience. The results lead to a deeper understanding of the cognitive aspects of personal risk that individuals are responsible for handling and, therefore, will contribute to risk management education in mountaineering (Murakoshi & Matsushita, 2024). The implication is that experienced mountaineers regard climbing as a regular activity and a calling in life. The regularity of performing climbing activities helps tourists relive their climbing experiences, achieve self-actualization, and achieve awareness of mountaineering activities as meaningful in their lives (Galiakbarov et al., 2024).

To understand individual responses to risk in the mountains, aspects of risk perception need to be studied. There are still very few studies that compare risk perception characteristics over time and space. More research is needed comparing different communities in the same mountains, communities from different mountainous regions around the world, but also communities from highlands and lowlands (Schneiderbauer et al., 2021).

Personal value in adventure activities can be defined as the unique meaning individuals attach to engaging in new and exciting experiences. For some, adventure may represent a sense of freedom and exploration, while for others, it may symbolize growth and self-discovery. Regardless of how it is interpreted, the personal value of adventure plays an important role in shaping a person's outlook on life and influencing their choices and decisions (Loeffler, 2004).

Personal value adapted from Roccas et al. (2002) has 4 dimensions with 13 items to measure personal value, namely value for self-improvement and achievement. Value for openness, value for conversation. And value for self-transcendence. Nguyen-van et al. (2024) state personal value as a trade-off between the benefits obtained and sacrifices, such as money, time, or effort to obtain them. Functional value, price value, emotional value, social value, novelty value.

One's values are abstract, resembling needs, motives and goals, values that motivate actions. Examining the relationship between personality traits and values will deepen our understanding of both. Personal values in tourism refer to the actual benefits or functional benefits, price benefits, emotional benefits, social benefits and novelty that can be obtained by doing tourism activities. Consumer personal values include the consumer's overall assessment of the consumption of a product, namely the comparison between the perceived benefits compared to the sacrifice of time, energy, money and psychology. Overall, comfort in service also plays an important role in the main function of travel services.

Customer satisfaction is critical to all marketing activities, reflecting reactions to experiences and influencing decisions on whether or not to reuse services (Kotler & Keller, 2016). Tourism satisfaction is the relationship between expectations and experience, and a favorable experience leads to a positive behavioral response. The positive response is expected to be the intention of loyal behavior tendencies. In the context of tourism, tourists with high satisfaction will have behaviors such as revisiting a destination, recommending it to others, or making positive comments about the destination (Zeng & Li, 2021).



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One factor that can reduce satisfaction is participation barriers. Barriers to mountaineer participation were identified to include a lack of participatory management plans for tourists engaged in mountaineering activities, uncertainty of the risks and benefits of their participation, technical barriers, lack of time, and financial constraints. By identifying barriers and opportunities for mountaineer participation, this research provides insights that can inform the development of effective participatory management approaches (Maleknia & ChamCham, 2024).

Jackson & Dunn (1988) and Boothby et al. (1981) suggest that constraints can be related to "ceasing to participate," while Davies & Prentice (1995) refer to constraints as "loss of interest" and (Davies & Prentice, 1995; Chick & Roberts, 1989) suggest that constraints are due to "free time" issues. Other opinions state that constraints result from a lack of skills, abilities, lack of knowledge, health, time, funds, facilities, and transportation (Hudson & Gilbert, 2000). Barriers to participation in climbing were also raised in terms of the frequency of participation and their interest due to negative image issues and difficulty in committing time (Hudson & Gilbert, 2000).

The success of mountaineering tourism depends on various levels of mountaineering participation, and personal values influence the level of participation and the influence of barriers can be recognized through personal values. Pennington-Gray and Kerstetter (2002) examined the barriers to adventure recreation activities and concluded that individual perceptions are a barrier to nature-based tourism activities and that structural barriers affecting participation are the most common. In order for the adventure tourism sector to grow, it is necessary to study the barriers to mountain climbing.

Many studies in the field of nature-based tourism explain that barriers to participating in adventure tourism differ from category, ranging from non-participants to experts and experienced participants in adventure tourism. Several publications have described individual barriers to leisure, travel, and adventure travel that include the excitement of adventure participation (Hudson & Gilbert, 2000; Pennington-Gray & Kerstetter, 2002). Although the scope of studies on travel constraints has been extensive, little attention has been paid to alternatives to minimize constraint challenges to tourist participation. This study aims to analyze the relationship between personal values and the presence of constraints on mountaineers' satisfaction and hope to return to mountaineering.

One important aspect of mountaineering tourism is the availability of facilities that cater to the needs of tourists. From comfortable accommodations to well-stocked gear rental shops, having access to these facilities can greatly enhance the overall experience for mountaineering enthusiasts. Additionally, having knowledgeable guides and experienced staff can ensure the safety and enjoyment of tourists as they embark on their mountain adventure. By investing in these facilities, destinations can attract more visitors and establish themselves as a top destination for mountaineering tourism. Whether it is cozy lodges nestled in the mountains or convenience stores stocked with the best gear, tourists appreciate having everything they need at their fingertips. Guides who are familiar with the terrain and can offer valuable insights can make all the difference in ensuring a successful and memorable trip. Ultimately, by prioritizing these amenities, destinations can set themselves apart from the competition and create a reputation of excellence in the world of mountaineering tourism.

Mountaineering tourism is a type of adventure tourism that involves activities such as climbing, trekking, and hiking in mountainous areas (Ahmed & Nihei, 2023). This form of tourism is popular among adventure enthusiasts and nature lovers who seek to challenge themselves physically and mentally while experiencing the beauty and splendor of mountain landscapes.



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Mountaineering tourism offers a unique opportunity to explore remote and rugged terrain, discover diverse flora and fauna, and connect with local cultures and communities. It is a physically demanding and exhilarating activity that requires proper training, equipment and preparation to ensure a safe and enjoyable experience.

The study aims to prove that personal values can be one of the causes of risky activity participation. By understanding personal values, mountaineering operators have a big challenge in value innovation marketing strategy to increase mountain adventure tourism. Therefore, this study considers it necessary to develop insights into climbers' values that are not separate from risk management. Climbers' awareness of risk management and how management itself values consumers' value for the activity ensures that safety strategies are fully and practically implemented (Bentley et al., 2010).

METHODS

This research uses quantitative methods in a path analysis design to test the direct influence of personal value, barriers and amenity on mountain climber satisfaction. The sample was drawn from an unknown population of mountain climbers in Indonesia. To determine the sample for an unknown population, Malhotra's theoretical formula was used (Malhotra, 2006). The number of questions on the questionnaire must be at least four or five times the number of question items. The number of questions in the questionnaire was 22 questions \times 4 = at least 88 respondents. In this study, 100 respondents were taken, which exceeds the minimum. Representative 100 samples of mountain climbers to fill out the research questionnaire and selected by incidental sampling were processed using SMART-PLS version 4.0 as an analytical tool to calculate two sub-models, namely the outer model and the inner model. Outer model analysis is used to be able to determine the level of data feasibility in terms of validity and reliability tests, also using validity tests in terms of Average Variance Extracted (AVE), Discriminant Validity, and Convergent Validity. The inner model analysis is a model and hypothesis test, indicated by R-Square, F-Square, and Path Estimation Coefficient.

RESULT AND DISCUSSION

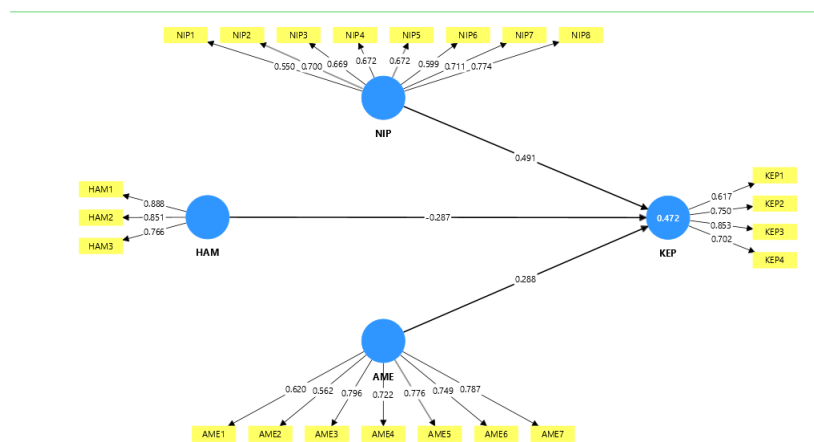
The study used the Partial Least Square (PLS) analysis tool, which is a multivariate statistical analysis that estimates the influence between variables simultaneously with the aim of prediction, exploration or structural model development studies (Hair, Risher, et al., 2019). Model evaluation in PLS consists of evaluating the measurement model, evaluating the structural model and evaluating the goodness and fit of the model.

Respondent Profile. From the results of data processing, it was found that the profile of mountain climbers in the study was mostly male (56%) compared to women (44%). In the dominant age range in the 17-25 year range (69%), 26-35 year age range (23%), 35-45 year age range (4%), 46-55 year age range as much as 3% and the remaining 56-65 years 1%. Most of the 40% have done climbing activities 2-5 times, climbing more than 10 times; 29% just 1 time climbing the mountain there are 17%, and 6-10 times climbing the mountain as much as 14%. The regional origin of mountain climbers is mostly from Java Island, 74%, followed by 10% from Sumatra Island, 9% from Bali Island, from Kalimantan Island and 3% NTB and NTT each 2%. Risks, according to mountain climbers, are mostly sourced from the weather as much as 42%, steep climbing terrain 21%, because of the climbing path 10%, physical inability 12%, lack of preparation 8%, risk due to human error 6% and risk of wild animals 1%.



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Evaluation of the Measurement Model (Outer Model). This study conducted a measurement model, namely a reflective measurement model, where the variables of personal value, climbing barriers, amenities and tourist satisfaction were measured reflectively. In Hair et al. (2021), reflective measurement consists of an outer model, namely a validity test by calculating convergent validity with Outer Loading ≥ 0.70 and AVE > 0.50 criteria and discriminant validity, namely the Fornell and Lacker HTMT (Heterotrait Monotrait Ratio) criteria < 0.90 . Followed by Cronbach's Alpha reliability test and composite reliability ≥ 0.70 . The results of the PLS Alogarith Analysis in the outer model are described as follows:



Source: Primary data processed with SMART-PLS (2025)

Figure 1. Results of PLS Algorithm Analysis (Outer Model)

Evaluation of Outer Loading, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE). The results of data processing are presented in the table as follows:

Table 1. Outer Loading, Cronbach's Alpha, Composite Reliability, and Average Variance Extracted (AVE)

Variable	Measurement Items	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Personal Value X_1	NIP1	Appreciate the challenge	0,550	0,826	0,838	0,551
	NIP2	Strong interest	0,700			
	NIP3	Appreciate the experience	0,669			
	NIP4	Appreciate fellow hiking groups	0,672			
	NIP5	Appreciate the interaction with other hikers	0,672			
	NIP6	Appreciate the ability	0,599			
	NIP7	Take risks	0,711			



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Variable	Measurement Items	Indicator	Outer Loading	Cronbach's Alpha	Composite Reliability	AVE
Barriers Climbing X₂	NIP8	Appreciate the effort even if it fails	0,774	0.783	0,787	0,700
	HAM1	Less native	0,888			
	HAM2	Health problems	0,851			
	HAM3	Hiking risks	0,766			
Amenity X₃	AME1	Registration and information services	0,620	0,852	0,878	0,520
	AME2	Porter services and equipment rental	0,562			
	AME3	Trails and directions	0,796			
	AME4	Adequate food and drink stalls	0,722			
	AME5	Facilities are rest posts, prayer rooms, public toilets, camping areas, and garbage bins.	0,776			
	AME6	Clean water sources are easily available	0,749			
	AME7	Sufficient clean water sources are available	0,787			
Tourist Satisfaction Y	KEP1	Satisfied with need	0,617	0,711	0,729	0,541
	KEP2	Enjoy mountaineering	0,750			
	KEP3	Satisfied with the climbing decision	0,853			
	KEP4	Satisfied with experience	0,702			

Source: Primary data processed by SMART PLS, 2025

To measure the validity of the questionnaire items, the Outer Loading ≥ 0.70 and AVE > 0.50 criteria and discriminant validity are used, namely the Fornell and Lacker HTMT (Heterotrait Monotrait Ratio) criteria < 0.90 . Followed by Cronbach's Alpha reliability test and composite reliability ≥ 0.70 .

In this study, the personal value variable (X1) has been measured using 8 (eight) statement items for valid measurement with outer loading results between 0.550-0.774. Three items have outer loading > 0.70 , and 5 items have outer loading $< 0,70$ namun ke 5 item tersebut masih memiliki nilai outer loading > 0.50 so that the indicator can still be maintained, meaning that the eight measurement



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items are declared valid and reflect the measurement of personal value. The level of convergent validity is shown by the AVE value score of $0.551 > 0.50$, so it qualifies as having good convergent validity. The level of reliability of the personal value variable is indicated by Cronbach's Alpha value of (0.826), and Composite Reliability of (0.838), which is above 0.70 (reliable), or its internal consistency has been fulfilled. Of the eight measurement items, measurement items NIP8 and NIP7 have the highest outer loading values (0.774) and (0.711) measurements related to the statement of the dimension of personal values in mountaineering with items appreciating effort despite failing to reach the summit and items taking risks as important personal values for mountaineers. Both items are measurements of the personal value for the risk dimension.

Variable X2 mountain climbing obstacles used 3 (three) items as a measure and has a validity number with outer loading between 0.766-0.888, meaning that the three items can validly reflect the measurement of climbing obstacles variables. The level of convergent validity measure is an AVE value of $0.700 \geq 0.50$, so it meets the requirements of good convergent validity. Overall, the variation of measurement items contained by the variable reaches 70%. Of the three measurement items, measurement items HAM 1 and HAM2 have the highest outer loading (0.888) and (0.851), which indicates that these two measurement items, namely related to statements of lack of expertise and stamina or health problems that are inhibiting factors for mountain climbing. This shows that mountaineers value the importance of having sufficient expertise and good health. The variable reliability level of Cronbach's Alpha (0.783) and Composite Reliability (0.787) is above 0.70 (reliable), meaning that its internal consistency has been met.

Variable X3 amenity for mountain climbers is measured by 7 (seven) valid measurement items with outer loading between 0.562-0.796. 2 items have an outer loading of <0.70 namun sudah >0.50 so that they can be retained, and 5 measurement items have an outer loading >0.70 . The level of convergent validity of the AVE value of $0.520 > 0.50$ has met the requirements for good convergent validity. Overall, the variation of measurement items contained by variables reaches 52%. Of the seven measurement items, measurement items AME3 and AME7 have the highest outer loading (0.796) and (0.787), which indicates that these two measurement items, namely related to amenity about the statement that available trails and trail directions and adequate clean water sources are important for mountain climbing. The level of reliability of variables with Cronbach's Alpha (0.852) and Composite Reliability (0.878) > 0.70 (reliable) or internal consistency is met.

Variable Y tourist satisfaction is measured by 4 statement items with outer loading validity measurements between 0.617-0.853, so there is 1 item with an outer loading value of <0.70 namun masih diatas >0.5 so that it can be maintained and while the other 3 items are >0.70 and AVE convergent validity (0.541) > 0.50 so that it meets the requirements of good convergent validity, the measurement items are declared valid and can reflect the measurement of tourist satisfaction. Of the four items, item KEP3 (0.853) and item KEP2 (0.853) are the items with the highest outer loading. The item is related to the statement of being satisfied with deciding to go on a hike and really enjoying the hiking trip. The level of reliability of the personal value variable indicated by Cronbach's Alpha value of (0.711) and Composite Reliability of (0.729), it is above 0.70 (reliable), or its internal consistency has been fulfilled.

Evaluation of Discriminant Validity. It is necessary to evaluate discriminant validity by looking at the criteria of Fornell and Lacker, which is a form of evaluation to ensure that variables are theoretically different and empirically proven or statistically tested. The Fornell and Lacker criteria state that the root AVE of the variable must be greater than the correlation between the



variables themselves. The results of data processing on the evaluation of discriminant validity are presented in the following table:

Table 2. Discriminant Validity-Fornell-Larcker Criterion

Variable	Amenity (X3)	Climbing Barriers (X2)	Tourist Satisfaction (Y)	Personal Value (X1)
Amenity (X3)	0,721			
Climbing Barriers (X2)	0,267	0,836		
Tourist Satisfaction (Y)	0,325	-0,287	0,735	
Personal Value(X1)	0.233	-0,157	0,603	0,672

Source: Primary data processed, 2025

The results of the table above show that the results of the Fornell-Larcker method the AVE root of each variable is above the AVE value between variables. From the table above, the personal value variable has an AVE root of 0.672 greater correlation with the amenity variable (0.233), climbing obstacles (-0.157) and tourist satisfaction (0.603). Meanwhile, the tourist satisfaction variable has an AVE root of 0.735, which is greater in correlation with personal values (0.603), obstacles (-0.287) and amenities (0.325). The climbing obstacle variable has an AVE root of 0.836, greater than its correlation with personal value (-0.157), tourist satisfaction (-0.297) and amenity (0.267). The amenity variable has an AVE root of 0.721, greater than its correlation with personal value (0.233), tourist satisfaction (0.325), and climbing obstacles (0.267). This means that the variables of personal value, obstacles, amenity and tourist satisfaction have good discriminant validity or are fulfilled according to the Fornell and Lacker method.

Cross Loading Evaluation. The results of data processing for Cross Loading evaluation are presented in the following table:

Table 3. Discriminate Validity Test Results from Cross-Loading Evaluation

Instrument Item	Amenity (X ₃)	Climbing Barriers (X ₂)	Tourist Satisfaction (Y)	Personal Value (X ₁)
AME1	0,620	0,118	0,198	0,072
AME2	0,562	0,104	0,096	0,148
AME3	0,796	0,279	0,271	0,243
AME4	0,722	0,310	0,172	0,105
AME5	0,776	0,212	0,176	0,021
AME6	0,749	0,225	0,276	0,253
AME7	0,787	0,111	0,322	0,226
HAM1	0,179	0,888	-0,246	-0,128
HAM2	0,214	0,851	-0,247	-0,173
HAM3	0,282	0,766	-0,226	-0,090
KEP1	0,430	-0,015	0,617	0,358
KEP2	0,130	-0,268	0,750	0,383
KEP3	0,202	-0,313	0,853	0,531
KEP4	0,217	-0,216	0,702	0,475
NIP1	0,228	-0,005	0,271	0,550
NIP2	0,110	-0,208	0,255	0,700



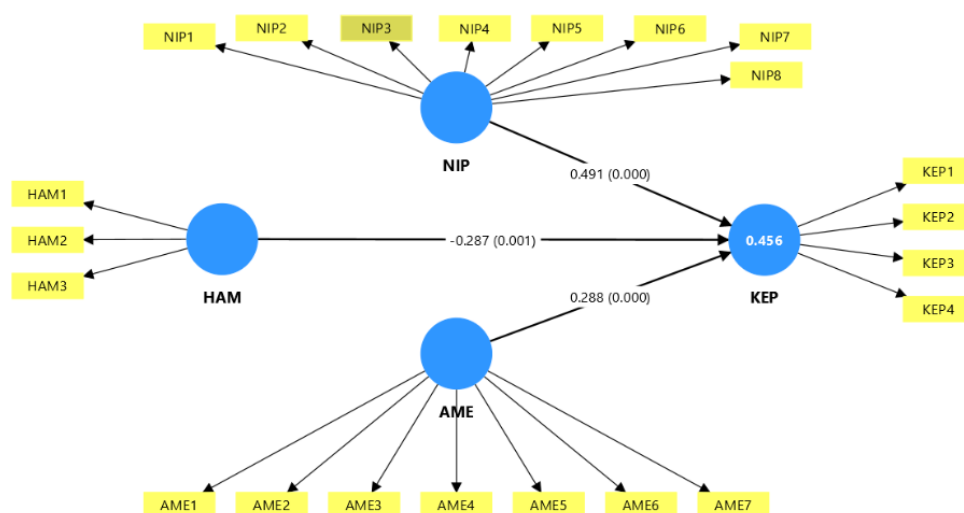
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Instrument Item	Amenity (X_3)	Climbing Barriers (X_2)	Tourist Satisfaction (Y)	Personal Value (X_1)
NIP3	0,030	-0,186	0,492	0,669
NIP4	0,084	-0,130	0,380	0,672
NIP5	0.167	-0,026	0,361	0,672
NIP6	0,292	0,089	0,240	0,599
NIP7	0,299	-0,104	0,477	0,711
NIP8	0,139	-0,131	0,445	0,774

Source: Primary data processing with PLS (2025)

In order for all latent variables to have good discriminant validity, the Discriminant Validity (Cross Loading) test is carried out, provided that the latent variable cross-loading indicator value is greater than other variables (Ghozali & Latan, 2015). The cross-loading results in the table above prove that the value of each latent variable indicator is greater than other variables. This shows that the indicator has good discriminant validity.

Structural Model Evaluation (Inner Model). For hypothesis testing, a structural model evaluation is carried out to determine the influence between research variables. Testing of the structural model evaluation is carried out in 3 stages, namely first testing the absence of multicollinearity between variables with the inner VIF (Variance Inflated Factor) size where the Inner VIF<5 (Hair et al., 2021). Second is hypothesis testing between variables by looking at the t-statistic or p-value. If the t-statistic of the calculation results is >1.96 (t-table) or the p-value of the test results is <0.05, there is a significant influence between variables. The third is the f-square value, which is the direct variable effect at the structural level, with an f-square criterion of 0.02 being low, a value of 0.15 for moderate effect and 0.35 for high effect (Hair et al., 2021). The results of the Bootstrapping Inner Model are as follows:



Source: Primary data processed with SMART-PLS (2025)

Figure 2. PLS Bootstrapping Analysis Results (Inner Model)

Multicollinearity Test. The results of data processing for multicollinearity are as follows:



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Table 4. Multicollinearity of Inner VIF Results

	Amenity	Climbing Barriers	Tourist Satisfaction	Personal Value
Amenity			1,000	
Climbing Barriers			1,000	
Tourist Satisfaction				
Personal Value				1,000

Source: Primary Data processed with PLS, 2025

The result of inner VIF <5 is no high multicollinearity between personal value and tourist satisfaction, no high multicollinearity between climbing obstacles and tourist satisfaction and no high multicollinearity between amenity and tourist satisfaction. The results of this test corroborate that the results of parameter estimation in SEM PLS have been robust or there is no bias.

Hypothesis Testing of Direct Influence. The results of data processing testing the direct effect hypothesis are presented in the following table:

Table 5. Hypothesis Testing of Direct Effect

Hypothesis	Path Coefficient	t-statistic	p-value	f-square
H1 Personal Value \rightarrow Tourist Satisfaction	0,491	8,119	0,000	0,409
H2 Barriers \rightarrow Tourist Satisfaction	-0,287	3,436	0,001	0,137
H3 Amenity \rightarrow Tourist Satisfaction	0,288	3,549	0,000	0,134

Source: Primary data processed with SMART PLS, 2025

Based on the table of hypothesis test results above is described as follows:

- 1) The first hypothesis (H1) is accepted, namely that there is a significant effect of personal value on tourist satisfaction; the path coefficient is 0.491 with a t-statistic of $8.119 > t\text{-table } 1.96$ and a p-value of $0.000 < 0.05$. The existence of personal value in increasing tourist satisfaction has a high influence at the structural level ($f\text{-square} = 0.409 > 0.35$), meaning that the direct influence effect is strong. This shows that in order to increase tourist satisfaction, it is necessary to have strong personal values.
- 2) The test results for the second hypothesis (H2) are accepted, namely that there is a significant negative effect of climbing obstacles on tourist satisfaction path coefficient of -0.286 with t-statistic $3.436 > t\text{-table } 1.96$ and p-value $0.001 < 0.05$. Any increase in climbing obstacles will reduce tourist satisfaction. The existence of climbing obstacles in causing tourist dissatisfaction has a moderate effect at the structural level ($f\text{-square} = 0.137 < 0.15$). This shows that in order to increase tourist satisfaction, it is necessary to reduce climbing obstacles.
- 3) Testing the third hypothesis (H3) is accepted, namely that there is a significant positive effect of amenity on tourist satisfaction, the path coefficient is 0.288 with and t-statistic $3.549 > t\text{-table } 1.96$ and p-value $0.000 < 0.05$. Any increase in amenities will increase tourist satisfaction. The existence of amenities in increasing tourist satisfaction has a moderate effect at the structural level ($f\text{-square} = 0.124 < 0.15$). This shows that in order to increase tourist satisfaction, it is necessary to increase the provision of amenities.

Evaluation of Goodness and Model Fit (Goodness of Fit Test). It is necessary to conduct several tests to determine how good the model is. Namely model fit evaluation, R-Square, SRMR, and Goodness of Fit Index. Variance-based SEM analysis using PLS aims to test the theory of the model by emphasizing prediction studies. To declare the model accepted, several measures are used, namely R-Square, Q-Q-Square, and SRMR (Hair, Samuel, et al., 2019).



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R-Square Value. To describe the size of the ability of other exogenous/endogenous variables to explain variations in endogenous variables in a model, the Adjusted R-Square statistical measure is used. According to Shin (1998), the qualitative interpretation value of R-Square is 0.19 (low influence) if the value is 0.33 (moderate influence) and 0.66 (high influence).

Table 7. R-Square

	<i>R-Square</i>	<i>R-Square Adjusted</i>
Tourist satisfaction (Y)	0,472	0,456

Source: Primary Data processed by PLS, 2025

Based on the processing results above, the adjusted R-square value is 0.456, and the magnitude of the influence of the personal value variable, climbing obstacles and amenity on the tourist satisfaction variable is 45.6%, meaning that the influence of the three variables on tourist satisfaction is in the category of moderate to high influence ($0.456 > 0.33$). The remaining influence of 54.4% is explained by variables other than the variables of personal value, climbing obstacles and amenity that are not examined in this study.

The F-Square value. F-square looks at the partial effect to determine the variable that has the greatest influence. F-square criteria ≤ 0.02 (weak influence), $0.02 \geq f\text{-square} \leq 0.15$ and a large influence ≥ 0.35 (large influence). The effect of personal value on tourist satisfaction of 0.409 shows the greatest influence, while the effect of barriers on tourist satisfaction of 0.137 is included in the moderate influence and the effect of amenity on satisfaction of 0.134 moderate influence.

SRMR Value. From the results of the PLS data, the model fit test is obtained as follows:

Table 8. SRMR Value

	Rule of Thumb	Parameter Value	Description
SRMR	$< 0,10$	0,109	Unfit
d_ ULS	$> 0,05$	3,027	Fit
d_ G	$> 0,05$	0,993	Fit
Chi-square	$> X^2_{\text{tabel}} = 31,410$	500,025	Fit
NFI	Approaching value 1	0,559	Fit

SRMR is Standardized Root Meta Square Residual; this value is a measure of model fit (fit-model), namely the difference between the data correlation matrix and the estimated model correlation matrix. Of the 5 indicators of measuring model fit above, 4 criteria state that the research model is fit. Empirical data can explain the influence between variables in the model.

Effect of Personal Value on Tourist Satisfaction. The results of hypothesis testing state that hypothesis 1 is accepted, namely, the personal value of mountain climbers has a positive and significant effect on tourist satisfaction. Personal value in this study is measured in the dimensions of Value for Self-enhancement, Value for openness, value for conversation, value for self-transcendence (self-actualization), and Value for risk. Of the 8 indicators of personal value, the highest dimension is the awareness of climbers that this mountaineering adventure has a significant risk value. So that by realizing the value of risk will help climbers to be able to feel satisfaction and dissatisfaction in mountaineering activities. Based on the test results H1 is accepted, that the better the personal value of climbers will be able to feel more satisfaction in mountaineering. Personal value is a source of tourist satisfaction. This can be seen from the highest f-square value and shows



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a strong influence value. So that mountain climbers can feel the satisfaction of climbing, it is necessary to have personal values such as the value of self-achievement, the value of self-actualization and the value of appreciation for risk. This result shows that personal values have an important role in influencing tourist satisfaction, which is in accordance with previous findings (Nguyen-van et al., 2024).

The Effect of Climbing Barriers on Tourist Satisfaction. Mountaineering barriers also have a negative and significant impact on tourist satisfaction; the results of the H2 hypothesis test are accepted. So, this shows that the higher the obstacles experienced by climbers will further reduce tourist satisfaction, and conversely, the lower the obstacles experienced will further increase tourist satisfaction. In this study, obstacles are measured in 3 indicators, namely obstacles in health, obstacles in skills and obstacles in the risks faced. From the respondents' responses, it was found that the main obstacles that interfere with satisfaction are obstacles in the lack of skills or expertise in mountaineering. So, this implies the importance of mountaineers always improving their mountaineering skills and expertise in addition to health and the risks they will face.

Effect of Amenity on Tourist Satisfaction. Amenity provided for mountain climbers has a positive and significant influence on tourist satisfaction; hypothesis H3 is accepted. This means that the better the amenity services provided for climbers will further increase tourist satisfaction. In this study, amenity is measured by management and information services, registration, porter services, and climbing equipment rental. Facilities and infrastructure of trails and trail directions, eating and drinking facilities, camping areas, rest post facilities, toilets, prayer rooms, trash bins and availability of clean water. From among the mentioned amenities, climbers rated the importance of hiking trail facilities, hiking directions and the availability and adequacy of clean water during the trip.

CONCLUSION

The results of this study concluded that personal values positively and significantly affect the satisfaction of mountain climbing tourists. Personal values such as achievement value, self-actualization value, and value against risk influence one's satisfaction in mountaineering. Further results show that climbing barriers have a negative and significant influence on tourist satisfaction, health barriers, skill barriers and the risk of climbing activities have a negative effect on mountain climbing satisfaction. Amenity variables, which include management and services of climbing activities, facilities and infrastructure and the provision of clean water, also have a positive and significant effect on tourist satisfaction.

To increase tourist satisfaction in mountaineering activities as part of special interest tourism, climbers are advised to have strong personal values, such as mental toughness, motivation, and a positive attitude towards natural challenges, so that the experience gained becomes more meaningful. In addition, efforts to increase satisfaction also need to be supported by climbers' physical and mental readiness, including the ability to overcome obstacles such as health problems, as well as continuous improvement of climbing technical skills. However, hiker satisfaction does not only depend on individual aspects but also on the role of hiking area managers in providing adequate amenities, such as safe hiking trails, clear directions, supporting infrastructure, and access to clean water, all of which contribute to a comfortable and satisfying hiking experience.

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