



# The Influence of Motivation and Behavior on Sustainable Tourism in Indonesia

Fithria Khairina Damanik<sup>(✉)</sup>, Jেসিসা, Hana Ulinnuha, and Wendy Purnama Tarigan

Tourism Department, Faculty of Digital Communication, Hotel and Tourism, Bina Nusantara University, Jakarta 11480, Indonesia  
Fithria.damanik@binus.edu

**Abstract.** Tourism is one of the industries that have an important role for Indonesia, especially in its economic development which has unlimited development potential [1]. Sustainable tourism is believed to be the most suitable concept for the industry in the new normal era which is supposed to make less crowd and interaction [2]. Indonesia is one of the countries experiencing the largest proportional decline in sustainable tourism by 56% [3]. Therefore, this study aims to analyze the influence of the motivation and behavior of domestic tourists on sustainable tourism as an effort to restore the economy of the Indonesian tourism industry after the COVID-19 pandemic. It is not only the responsibility of the government and tourism stakeholders, but also the responsibility of Indonesian citizens as tourism consumers to be able to consciously participate in reviving and maintaining the sustainability of this important industry. This research uses questionnaire as data collection methods and multiple linear regression as main analysis methods. The sample of the research is 122 domestic tourists who have knowledge of sustainable tourism. Furthermore, this research contributes to creating a better sustainable tourism development strategy by understanding and increasing awareness about sustainable tourism not only from the side of tourism supply but also from the demand side.

**Keywords:** Tourist perception · Sustainable tourism · Tourist motivation · Tourist behavior

## 1 Introduction

Tourism is one of the industries that have an important role for Indonesia, especially in its economic development which has unlimited development potential. The Ministry of Tourism Performance Report shows an increase in the contribution of foreign exchange from the tourism sector in 2018 which reached IDR 229.5 trillion and increased to IDR 280 trillion in 2019 [4]. However, after the COVID-19 pandemic hit Indonesia, UNWTO stated that there was a significant decline in the number of foreign tourists to Indonesia in 2020 since the pandemic reached 74.84% compared to 2019 [4]. The contribution of the tourism sector to gross domestic product (GDP) and foreign exchange also declined to 4.05% in 2020 from 4.7% in the previous year [5, 6].

Based on the 2021 Tourism Trends Book, the major changes in the tourism industry caused by the COVID-19 pandemic have resulted in a new industrial landscape with four characteristics: hygiene, low-touch, less-crowded, and low-mobility [2]. This statement shows that it is important for the Indonesian tourism industry to be able to further develop Indonesian tourism towards a more sustainable direction in the pandemic era because it is low-touch and less crowd. Although research shows positive attitudes towards sustainable tourism, only a small proportion of tourists act ethically towards the tourist destination [3]. Therefore, those statements show the research problem drives this study to see how ethics of tourists through motivation and behavior influence the sustainable tourism.

This research is used to see whether motivation and behaviour are effective to influence the development of sustainable tourism in Indonesia. The aim of this study will be answered in the following structure of research paper containing of introduction, literature review, research methodology, finding, and conclusion. This research focuses on domestic tourists since domestic tourist can be the first step to revive the Indonesia's tourism industry. The research used indicators based on tourist knowledge model to see tourist perception influence on sustainable tourism development. The result will show whether tourist motivation and behaviour can influence sustainable tourism development, as well as how far the influence would be. Whether it only explores the depth of domestic tourist knowledge, or it can encourage people to support sustainable tourism development. Hopefully, the result will be an insight into marketing development in the tourism industry, as an integrated part of sustainable tourism development.

## 2 Literature Review

This part will talk about the variables used in this research consists of tourist's motivation, tourist's behaviour, and sustainable tourism. This literature review will be focused on definition and dimensions of each variable.

### **Tourist's Motivation**

Motivation is defined as a force that encourages a person to take an action or not which in essence exists internally and externally, positive, or negative [7]. In the context of tourism, humans will go to places that can meet the needs or desires of humans and make trips which are known as tours. Humans first travel for the sake of sustaining life, then the motivation to travel turns into a motivation to escape from the saturation of the city [8]. Motivation is the starting point of the decision process made by consumers and is an important construct for understanding tourist behavior [8]. Therefore, the motivational variable is the subject of this study where an understanding of the motivational variable is very important for better tourism marketing motivation which is a trigger for tourists to travel can come from push motivation or pull motivation [9]. By understanding the motivation of tourists, the government and tourism destination managers can make better plans to encourage sustainable tourist behavior that supports the development of sustainable tourism by understanding the target market which is tourists.

### **Tourist's Behaviour**

Tourist behavior is the consumption of products and services both daily and not outside the environment of daily life such as in tourist destinations. Understanding consumer behavior is very important for the success of an industry or company [10]. Consumers must be predicted, explained, and controlled based on the understanding of their behavior. In this study, it is stated how the behavior of domestic tourists who travel to Indonesia is reviewed from the stages before to the end of traveling activities in Indonesia. Tourist behavior can be divided into three connected phases, namely before traveling, during traveling, and after traveling [11]. The thought processes, emotions and actions of individual tourists, tour groups and large tourism organizations are always changing, which is why tourist behavior is considered dynamic. In the concept of tourist behavior there are five indicators, namely accommodation choices, travel preferences, problems during travel, intention to return, and behave responsibly [12].

### **Sustainable Tourism**

The growing tourism industry, increasing population, increasing tourism demand, and increasing investment in the tourism industry make negative impacts on the environment, culture, and others increasingly prone to occur. This sustainable tourism development requires encouragement from local communities in implementing it. Instead of referring to tourist destinations, sustainable tourism refers to the environmental, socio-cultural, and economic components of tourism which must be balanced between these three variables to ensure long-term sustainability [8]. This tourism concept focuses on the importance of understanding tourists and the role of local communities in their development [13], as well as analysing the point of view of the tourists themselves. Knowing the behavior of tourists towards sustainable tourism development and the sensitivity of the people visited to the culture, environment and economy are important factors in protecting tourist destinations and reducing negative impacts [3].

## **3 Research Method**

The research was based on a purpose to see if influence of motivation and behaviour is effective on sustainable tourism development (based on tourist's perception). To answer that purpose, then these following hypotheses were proposed:

H1: Tourist motivation has an influence on sustainable tourism in Indonesia.

H2: Tourist behavior has an influence on sustainable tourism in Indonesia.

H3: Tourist motivation and behavior have an influence on sustainable tourism in Indonesia.

The population of this research is domestic tourist who know, understand, and have ever visited sustainable tourism destination. However, the total of the population cannot be defined because the number is undefinable. Therefore, the sample will be counted based on Lemeshow formula [3].

$$n = \frac{Za^2 \times P \times Q}{L^2}$$

Description:

n = Sample needed

Z<sup>a</sup> = Standard of distribution with α = 5% = 1,96

P = Prevalence of Outcome, 50% for unknown population

Q = 1 – P

L = level of accuracy, 10% (0.01)

Based on the formula, the sample calculation for this research is:

$$n = \frac{(1.96)^2 \times 0.5 \times 0.5}{(0.1)^2} = 96.04$$

Therefore, based on the calculation, the sample of the research must be at least 96 respondents.

The questionnaire that will be given to the sample of this research consist of several questions about respondent’s basic profile, 7 statements about respondent’s motivation to visit tourist destination, 14 statements about respondent’s behaviour at tourism destination and 15 statements about respondent’s perception on sustainable tourism concept. The valid questionnaire is only the answer from the respondents who understand sustainable tourism concept. The following table shows each part of tourist perception based on motivation and behaviour, operational definition of each variable, and indicators represent the variables (summarized and modified by several research before) [14] (Table 1).

**Table 1.** Indicator of tourist perceptions

Perception	Operational definition	Indicator
Motivation	The combination of needs and wants that influence tourist decisions in the travel process	<ul style="list-style-type: none"> <li>• Push motivation</li> <li>• Pull Motivation</li> </ul>
Behavior	The process of evaluating, acquiring, using, or disposing of products and services, and the physical activities that accompany them	<ul style="list-style-type: none"> <li>• Accommodation options</li> <li>• Travel preferences</li> <li>• Problems during traveling</li> <li>• Intention to visit again</li> <li>• Responsible behavior</li> </ul>
Sustainable tourism	Tourism is a concept that has an impact on the environment, society, culture, and economy for both residents and tourists now and in the future	<ul style="list-style-type: none"> <li>• Environment</li> <li>• Society and Culture</li> <li>• Economy</li> <li>• Tourist Satisfaction</li> </ul>

Each statement in the questionnaire for respondents will be measured by the Likert scaled. The answer is divided into 5 options, consists of number 1–5 which represent very disagree until very agree opinions. This questionnaire will be spread online by using google form which make the answer easier to be downloaded into an excel file. Some

of the data about the variables of motivation and behavior will be proceeded using t-test with SPSS. The result of the t-test will show the influence of motivation and behaviour on sustainable tourism. To be more specific, the result of t-test shows the value of t-statistic which will be the answer of hypotheses and research questions.

## 4 Result

The table below shows profiles of the respondents in this research (Table 2).

**Table 2.** Profile of respondents

Profile of Respondent	Result
Gender	Male 59.2% Female 40.8%
Age	17–25 years 85.4% 26–35 years 13.1% 36–45 years 1.5%
Place of Origin	Java 51.5% Kalimantan 17.7% Sumatera 12.3% Sulawesi 2.3%
Education	Senior High School 20.4% S1 74.6% S2 4.6% S3 0%
Know the concept of sustainable tourism	Yes 96.9%
Understand the concept of sustainable tourism	Yes 93.8%
Have ever visited sustainable tourism destination	Yes 95.4%
Source of information about sustainable tourism	Word of mouth 13.1% Social Media 71.5% Lesson 10% Article, brochure, film, book 5.4%

Explanation of the result.

According to the result, the following table will show the score of each indicator.

Classical assumption test was carried out with SPSS. The normality test used is the one sample komogrov-Smirnov technique, the residual value of the dependent variable and the independent variable with the total of samples (N) of 122 was 0.19. Based on these results, it can be stated that the data in this study are normally distributed because all the residual value variables are more than a significance value of 0.05. Therefore, it can be said that the regression model can be used for hypothesis testing.

Furthermore, based on the results of the SPSS output, it is known that Sig 0.000 < 0.05 then Ho is accepted, meaning that there is a linear relationship between motivational

**Table 3.** Score for each indicator

Variable	Statement	Total of respondent's answer	Average of respondent's answer
Motivation	Push Motivation	1,697	4.351
	Pull Motivation	2,294	4.41
Total and Average Score for Attention		3,991	4.38
Behaviour	Accommodation Option	1,155	4.4
	Travel Preferences	1,564	4.0
	Problems during traveling	1,141	2.9
	Intention to Visit Again	1,658	4.2
	Responsible Behaviour	1,761	4.5
Total and Average Score for Interest		7,279	5.68
Sustainable Tourism	Environment	1,775	4.5
	Society and Culture	2,871	4.4
	Economy	2,317	4.4
	Tourist Satisfaction	1,774	4.5
Total and Average Score for Desire		8,737	4.45

and behavioral variables towards sustainable tourism. Because the value of Sig 0.000 is much smaller than 0.05, the regression model can be used in this study.

The results of the SPSS also show that there is no symptom of multicollinearity between each independent variable in the regression model when the VIF and tolerance values are tested. The results of the calculation of tolerance on the motivational independent variable of 0.584 and the behavioral variable of 0.584 indicate that there is no independent variable that has a tolerance value of less than 0.1. Therefore, these results indicate that there is no correlation between the independent variables.

Finally, the results of the classical assumption test using SPSS show that the sig value for all independent variables is greater than 0.05. So based on the test results using the scatter plot graph and the glejser test above, it can be concluded that there is no statistically significant independent variable that affects the dependent variable Abs res. So based on these results, it can be concluded that this regression model does not experience heteroscedasticity.

The next step is to analyze the t test score by proceeding with the average score of 11 indicators to get the score of variables. The score will be proceeded by SPSS program with t test analysis to see the influence of motivation and behaviour on sustainable tourism development. The result of the t-test is shown in the following tables (Table 4).

**Table 4.** Score of each indicator. One sample T test

One-Sample Test						
	Test Value = 0					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Motivation	8.591	99	.000	1.443	.175	1.443
Behaviour	2.912		.004	.320	.109	.320

Based on the results of the T test in the table above, it shows that the first hypothesis in this study is that motivation (X1) has a positive effect on sustainable tourism (Y). Based on the table of T test results above, it is known that the significant value of motivation is 0.000. Because the value of Sig  $0.000 < 0.05$ , it can be concluded that **H1 is accepted** (motivation has a significant influence on the sustainable tourism variable).

The second hypothesis in this study is that behavior (X2) has a positive effect on sustainable tourism (Y). Based on the table of T test results above, it is known that the behavioral significance value is 0.004. Because the value of Sig  $0.004 < 0.05$ , it can be concluded that **H2 is accepted** (behavior has a significant influence on the sustainable tourism variable) (Table 5).

**Table 5.** One sample F test

Model		Sum of squares	df	Mean square	F	Sig
1	Regression	7,126.674	2	3,563.337	79.411	.000 <sup>b</sup>
	Residual	5,339.785	119	44.972		
	Total	12,466.459	121			

<sup>a</sup>Dependent Variable: Sustainable Tourism

<sup>b</sup>Predictors: (Constant): Behavior, Motivation

Based on the result of the F test contained in the table above, it shows that the third hypothesis in this study is that motivation (X1) and behavior (X2) simultaneously have positive effect on sustainable tourism (Y). Based on the table of F test results, the F value obtained is 97.028 and sig =  $0.000 < 0.05$ . So, it can be concluded that **H3 is accepted** (motivation and behavior have a significant influence on sustainable tourism variables).

However, from the Table 3, we can analyze the trend for each score of each indicator. For behaviour indicator, both total and average score are the highest. This shows that behaviour has a huge impact on how sustainable tourism can be implemented. Especially on the tourist's responsible behaviour at the tourism destination.

For motivation indicator, both total and average scores are the lowest. Pull motivation has a higher score than push motivation, this shows that sustainable tourism motivation is more dominant from pull motivation.

And for sustainable tourism, both total and average score are still high although it is under to the behaviour variable. From the result, tourist has a good understanding towards sustainable tourism concept.

This study shows an in-line result with previous research about Sustainable Tourism at Kuta Beach Bali in Tourist Perceptions Through Tourist Motivation and Behavior. In which the research also shows that the motivation and behavior of tourists has a major impact in producing sustainable tourism on Kuta Beach, Bali [15].

Another research about Analysis of Tourist Consumer Behavior in the Era of the Covid-19 Pandemic in West Nusa Tenggara” also shown that a good understanding of the influence of tourist motivation variables will make it easier for stakeholders in the tourism industry to identify tourist needs with visiting decisions as a reflection of tourist behavior [4].

Based on this research, sustainable tourism variable has the lowest sub-variable which is socio-cultural sub-variable. The lowest value is found in the statement where sustainable tourism can overcome crowds/overcrowded (15.6%). This shows that the understanding of tourists’ perceptions of sustainable tourism which has a good influence in overcoming the problem of crowds or, in another term, overcrowding in tourism destinations is still lacking.

## 5 Conclusion, Limitation, and Future Research

According to the result of the research, we can conclude that influence of motivation and behaviour are highly effective on sustainable tourism development. The independent variables of motivation (X1) and behavior (X2) partially and simultaneously have a significant influence on the dependent variable of sustainable tourism (Y). Therefore, government and tourism stakeholders need to consider on becoming more focus on sustainable tourism not only from the tourism destination but also the demand side. To attract visitors with high sustainable behavior to a country or destination, tourism policies should promote sustainable tourism concept as a part of general knowledge. The result of this research hopefully can enrich sustainable tourism development as part of recovering tourism industry in Indonesia post pandemic Covid-19.

For further researchers, it is recommended for other researchers to use a bigger sample size and do the study in a specific destination. This might give more focus and accurate result for a specific characteristic of destination. Therefore, the results obtained in further research can enrich the results and knowledge, then give a better suggestion for a specific place.

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