

The Study on Factors of Ecotourism and Management Strategy in Morocco

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Abstract: The rapid development of ecotourism provides a way to benefit both the ecosystem and the environment. Environmental protection and sustainable economic development. However, environmental issues are becoming more and more important at ecotourism destinations and seriously impede sustainable development. This study links a sample survey of 158 tourists to Morocco over the last five years, where environmental knowledge, perceptions of environmental value, perceptual effects of consumption, and environmental attitudes stimulate and shape environmentally friendly tourism behavior. Between the knowledge and behavior of the environment and the elucidation of the factors that directly and indirectly influence it.

The study findings mainly focused on understanding how the environmental knowledge impacts the environmental behavior. The study suggests that environmental knowledge has a direct impact on Morocco's environmental behavior, but other factors interact with this association, as shown in the indirect section. Tourists with a high level of environmental knowledge and education do not necessarily have to exhibit environmental behavior unless there are appropriate conditions for the behavior to prosper. The Moroccan government needs to invest in efforts to create more routes and long-haul shuttles while facilitating this action, improving infrastructure such as public transport, and improving the driver's experience. ... You also need to invest in better strategies for waste disposal on the road. With tax cuts on roads and green products, these measures not only promote healthy behavior but also strengthen the relationship between these two factors.

Keywords: ecotourism, environmental behavior, environmental knowledge, Morocco.

1. INTRODUCTION

Ecotourism become first conceived with inside the early Nineteen Eighties as a shape of a tour for folks that need to enjoy numerous and special surroundings without inflicting some other shape of tourism-associated environmental harm or harm^[1]. It have become a proper period in 1982 whilst it become introduced to the Oxford English Dictionary, Tourism to regions of ecological interest (normally special and regularly threatened herbal environments)^[2], esp. to aid conservation efforts and look at wildlife; spec. get right of entry to an endangered surrounding managed to have the least viable unfavorable effect."^[3] Historically, the period "ecotourism" become used to explain the herbal tourism phenomenon (Wallace & Pierce, 1996). To illustrate this with the early example, one of the first formal and maximum broadly used definitions of ecotourism become delivered via way of means of Ceballos-Lascura with inside the Nineteen Eighties (Blamey,2001; Boo, 1990)^[4].

It commenced journeying to exceedingly undisturbed or uncontaminated herbal regions with the specific goal of studying, admiring, and taking part in the surroundings and its wild vegetation and animals, in addition to any current cultural manifestations (each beyond and present) observed in those regions. (Ceballos-Lascurain, 1987: 14). This definition is welcome, however, critics factor out that it lacks imagination and prescient and overlooks possibilities for enjoyment (Fennell, 2001b)^[5].

It improperly makes a specialty of what travelers are doing, now no longer what they must do (which means they neglected the opportunity) (Stewart & Sekartjakrarini, 1994)^[6]. Since the Nineteen Eighties, the definition debate has

elevated to encompass different components of moral considerations (Blamey, 2001). For example, a few argue that ecotourism is an expression of sustainable improvement (Bjork, 2000; Fennell, 2003; Wight, 1993b). Others declare that it's far deeply rooted withinside the instructional enjoyment (Blamey, 2001; Buckley, 1994) and is related to the herbal surroundings, which distinguishes this form of tourism from different tourism reviews along with mass tourism. (Hvenegaard, 1994)^[7].

Ecotourism isn't a genetic phenomenon of Homo, however, it has mounted itself as a complicated and synergistic series of social, ecological, and monetary components that replicate not unusual place middle ideas (Bjork, 2000; Weaver, 2005)[8]. Ecotourism and the improvement of the tourism enterprise are at once associated, for example, "Ecotourism: effects, ability, and possibilities?". From Stephen Wearing, John Neil concludes that ecotourism has an instantaneous effect on the improvement of the tourism business.

2. LITERATURE REVIEW

A. ecotourism descriptions and early models

Based on these previous papers presented in this literature review, ecotourism plays a vital role in the development of the tourism industry based on a long term policy, developing strategies that target tourists and their behaviors seems to be an important strategy to be taken by countries that are seeking to develop their tourist sector in a general view but also have a great beneficial impact on companies in which sustaining this sector shapes a great deal for their business.

The role of the tourists was emphasized, as suggested by Su-lan Pan in "Is the future greener Environmental Behavioral Intentions "This study examines the behavioral intentions of tourists and the key factors that influence those behavioral intentions.

What is Sustainable Tourism, essential for the development of the tourism sector? Environmentally conscious behavior and behavioral intentions are important prerequisites for sustainable tourism.

Early models of environmentally responsible behavior (that is, environmentally sound behavior) were based on a linear relationship between environmental knowledge leading to environmental attitudes and environmental attitudes leading to environmentally conscious behavior. These models are now too simple and require further elaboration. In response, many researchers proposed alternative models to explain the relationships between various factors and environmentally responsible behavior.

B. Environmental knowledge

The concept of environmental knowledge derives from Environmental Psychology and describes how individuals and organizations perceive the environment. This "knowledge" consists of objective information and compliance with the environment or ecosystem owned by an individual or organization, and the impact of human behavior on it. This includes factual knowledge of the structure and function of ecosystems and strategies and skills to solve environmental problems^[10]. It has recently been understood that environmental knowledge includes the impact and causes of environmental problems and the steps taken to address the human-environmental relationship^[11]. It is generally believed that a wealth of environmental knowledge stimulates an individual's sense of responsibility for environmental protection^[12]. If people have a poor understanding of environmental issues and the actions they need to take to address them, they may not pay attention or take action to address them. The more people know about environmental issues, the more likely they are to worry^[13].

C. Environmental behavior

Based on this, environmental knowledge has a significant positive impact on environmental attitudes. As a subjective perception, the perceived value of the ecotourism experience is influenced by the degree and degree of object recognition^[14]. Eco-tourists' travel behavior is based on the values they place in ecological environmental performance, and their environmental knowledge leads to environmental protection psychology and their value judgments^[15]. For this reason, environmental knowledge in the tourism industry affects not only individual value judgments but also the perceived benefits of and the benefits of ecotourism experiences. In general: The more environmental knowledge a tourist has, the stronger the perceived value of their ecotourism experience. Therefore, environmental knowledge has a significant positive impact on the perceived environmental value. The perceived consumption effect aims to measure

people's awareness of the ability to change the environment through their actions. This depends not only on 's environmental knowledge, but also on direct and indirect previous experience, and level of education^[16]. Based on the theory of planned behavior, the perceived consumption effect plays an indirect role in predicting behavior^[17] and the causal relationship between objective knowledge and behavior is also perceived consumption.

D. Theological background on the relationship between environmental knowledge and environmental behavior

Environmental attitudes are a collection of beliefs, feelings, behavioral intentions, and psychological tendencies towards environmental activities^[18] and are usually expressed in terms of some degree of love or disgust^[19]. Attitudes toward the environment have attracted much research attention because they can affect human behavior. Many studies show that a positive attitude towards environmental protection can lead to environmentally friendly behavior on the part of tourists^{[20][21]}. Currently, many theoretical frameworks have been proposed to explain the relationship between attitudes towards the environment and environmentally friendly behavior.

The theory of rational behavior, the theory of planned behavior, and the normative theory of values. According to these theories, attitudes towards the environment are one of the decisive factors in determining an individual's motivation to participate in positive environmental behavior^[22]. Certainly, can, etc^[23].found that environmentally friendly behavior was the product of environmental attitudes. Perkins ET AL.^[24] found that strong environmental attitudes are an important predictor of environmentally friendly behavior. H4 has discovered that preference has a significant positive impact on environmentally friendly behavior.

3. METHODOLOGY

A. Conceptual Framework

In light of the research hypothesis, that knowledge affects Environmental behavior indirectly through environmental emotions, I employ structural equation modeling. The Structural Equations Model (SEM) (Fig. 1) is proposed and treated each of the variables in the model as a latent variable. Using SEM to assess the direct and indirect relationships between the four factors in the ecotourism (environmental knowledge, environmental emotion and environmental behavior). This paper represents these effects with the standardized β .

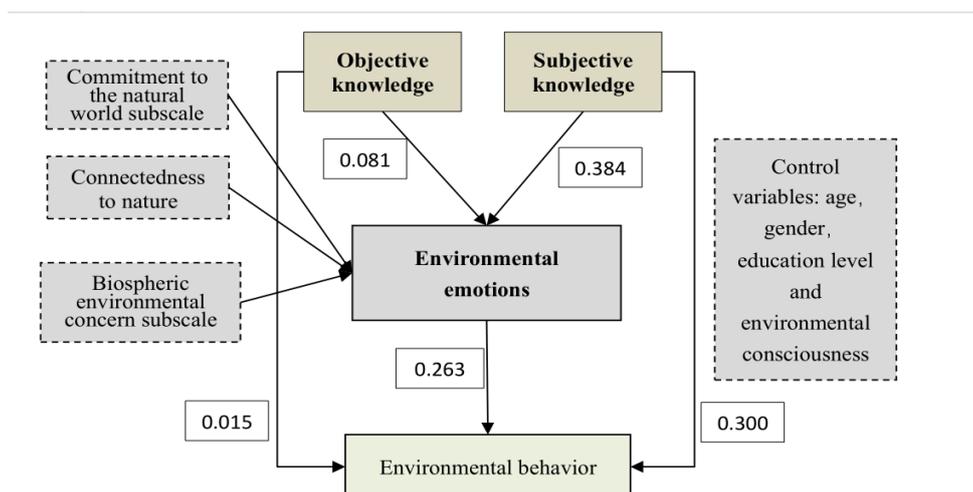


Fig. 1 The theoretical framework associated with the factors of environmental behavior in ecotourism

B. Study area

The research field targeted tourists who've been in Morocco for the last 5 years the idea was to have an up to date data from two means the first was by a questionnaire and the second was by a direct interview conducted by phone, the sample included tourists who have visited different geographic areas in Morocco including WAD DEHAB EL GUIRA in the south of Morocco and SOUSS MASSA DRAA in the middle and TANGIER in the north this strategic distribution aimed for having an equal distribution and a reality reflecting sample that could offer rich and true data to work with.

C. Objective knowledge

Table 1 shows the questionnaire of environmental knowledge in tourism. This study sets 7 questions that indicates the objective environmental knowledge of the respondents in the ecotourism.

Table 1: Questionnaire of objective environmental knowledge in ecotourism

The questions that indicate objective environmental knowledge

1. Which of the following elements are the most harmful to the environment?
 2. Which of the following gases compose the exhaust gas that has a direct
 3. negative impact on the environment?
 4. Do you believe that different organic materials have different decomposition
 5. conditions in a different environment?
 6. Are you aware that the disposal of medical face masks should be in their
 7. appropriate medical wastebasket?
 8. Is natural gas a major source of air pollution than fuel oil?
 9. Is drinking mineral water from bottles preferable to drinking water from the tap?
 10. Does the gases emit from a car in Morocco may reach anywhere in the world?
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D. Subjective knowledge

A subjective knowledge included two items: one referred to the subjective feeling of understanding the reasons for environmental problems, and the other, to a 25 sense of understanding their solutions. The respondents were asked to mark the level to which they agreed with each of the statements on a 5-point scale, ranging from 1 (I don't agree at all), to 5 (I agree completely). Thus, a higher score represented better understanding of environmental issues. This paper set 2 questions that indicates the objective environmental knowledge of the respondents in the ecotourism, as shown in table 2.

Table 2: Questionnaire of subjective environmental knowledge in ecotourism

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1. I think I know the reasons for the environmental problems in ecotourism.
 2. I think I know the ways to solve the environmental problems in ecotourism.
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E. Environmental behavior in the ecotourism

Table 3 shows the questionnaire of environmental knowledge in tourism.

I set 3 questions that indicates the environmental behavior of the respondents in the ecotourism.

Table 3: The questions that indicate environmental behavior in ecotourism

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1. What kind of the following products mentioned below have you often used during your residency period?
 2. During your period of residency what are means of transportation have you used often?
 3. What was your choice of residency during your travel period in Morocco?
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F. Environmental emotions in the ecotourism

Connectedness. The environmental emotions include three components [38]. The first one specifies how integrated one feels with nature. It is implicit, and exists outside of conscious awareness. It is a single-item graphic construct designed to measure the extent that one feels as a part of nature.

Ecological environmental concern. The second one is the degree that an individual feels concerned for the biosphere. This study focuses on the ecological environmental concern, which describes the concern and value ascribed by the individual for non-human species or for all living things. The ecological environmental concern scale is constructed as follows: respondents were asked to value the level of the ecological environmental will negatively affect each of the following items from the scale of 1 to 5: plants, animals, marine life, and birds.

Commitment. The third component is the commitment one feels to the natural environment. Respondents were asked to value the level of agreement with the statements ranging from 0 to 10. This study uses the following 4 items: "I feel committed to keeping the best interests of the environment in mind"; "I feel strongly linked to the environment"; "When I make plans for myself, I take into account how my decisions may affect the environment"; and "I believe that the well-being of the natural environment can affect my own well-being."

We treated the means of each of the three constructs (connectedness, biospheric concern, and commitment) as the indicator of the environmental emotion.

G. Control variables

There are some other variables that may well explain the variance of the environmental behavior in ecotourism. These variables include the gender (0 = male, 1=female), age (18-25, 25-30, 30-45, 45-60, 60 and above), education level (high school degree, bachelor degree, master degree, PHD degree, postdoctoral and diploma), and environmental consciousness. This paper measures them in order to control for their effects. The results proposed in the following indicate the effects after controlling for the effects of control variable described as above.

H. Interview

An interview is used as a qualitative means of completing the research and enhancing its accuracy to further understand the variables of the research and fully reflect the true reality of the hypothesis suggested in the research, the tourists shall be contacted by phone and questioned about their experience in Morocco with some key questions.

4. RESULTS ANALYSIS

A. Demographic Characteristic

Table 4: Respondents bio-data

Data items	Frequency	Percent (%)
Gender		
Male	83	52.5
Female	57	47.5
Total	158	100
Age		
18-25	55	34.81
25-30	58	36.71
30-45	39	24.68
45-60	3	1.90
60 and above	3	1.90
Total	158	100
Education		
High school degree	40	25.32
Bachelor degree	88	55.70
Master degree	23	14.56
PHD degree	5	3.16
Postdoctoral	1	0.63
Diploma	1	0.63
Total	158	100

B. Reliability and validity statistics of the data

Table 5 present the reliability statistics using Cronbach's Alpha, mean, standard deviation, and the number of items in each category. "Internal consistency reliability is used for multi-item measures. Internal consistency reliability is typically measured by a statistic known as Cronbach's alpha coefficient" (Cortina, 1993). An alpha coefficient greater than 0.70 is acceptable. This study revealed that Environmental knowledge ($\alpha=0.89$, $N=4$), Environmental behavior ($\alpha=0.83$, $N=3$), revealed that the data are reliable for further analysis and conclusion.

Table 5: Reliability and validity of the data

Variables	Mean	Std. Deviation	N	Cronbach's Alpha
Gender	70	18.38	158	-
Education	26.33	8.199779379	158	-
Environmental Knowledge	-	-	158	.890
Environmental Behavior	-	-	158	.839

C. The effects of the environmental knowledge on environmental behavior

Before testing the indirect effects of independent variables, moderators, and dependent variables, we first ran a correlation matrix to determine the directional relationships between the variables. All variables in SPSS were entered.

As shown in Table 6, the objective environmental knowledge ($p=0.096$), subjective environmental knowledge ($p=0.080$) and environmental emotion ($\text{sig}=0.057$) are positively related to environmental behavior, and the correlation coefficients are 0.04, 0.22 and 0.41, respectively. It indicates that the environmental knowledge has a direct relationship and impact on environmental behavior. In addition, the objective environmental knowledge is positively correlated with subjective environmental knowledge.

Table 6: Correlation coefficients among the variables

	Environmental Behavior	Objective knowledge	Subjective knowledge	Environmental emotion
Environmental Behavior	--			
Objective knowledge	.04	--		
Subjective knowledge	.22	0.65	--	
Environmental emotion	.41	0.06	0.37	--

Note: Bold numbers are significant for $p < 0.1$.

Table 7 proposes the effects of objective knowledge, subjective knowledge and environmental emotions on the environmental behavior in ecotourism. Both objective knowledge and subjective knowledge have significant direct effects on either environmental behavior. As shown in Fig. 2, the indirect effect of objective environmental knowledge on the environmental behavior is 0.021, and the indirect effect of subjective environmental knowledge on the environmental behavior is 0.101. The mediating effect is 0.263.

Table 7: The effects of the environmental knowledge on environmental behavior

Effect source	Total effect	Direct effect	Indirect effect
Objective environmental knowledge	0.036	0.015	0.021
Subjective environmental knowledge	0.401	0.300	0.101

Note: Numbers are standardized β 's.

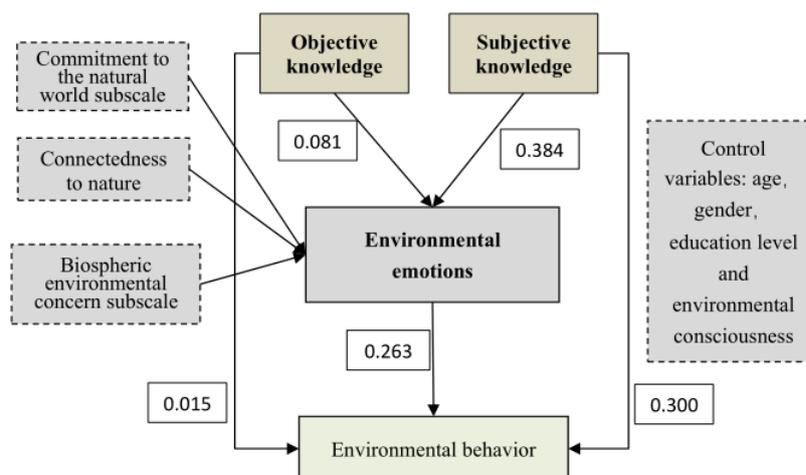


Fig. 2 The structural equations model path results

D. Indirect effects from the interview

An interview was conducted with 4 sample tourists on different levels that included parts where the linear relationship between Environmental knowledge and Environmental behavior wasn't perfectly correlated that included means of transpositions as presented in the table 8.

Table 8: Indirect effects extracted from interview of tourists (qualitative research)

Subjects	Range	Comfort	Time
Tourist 1	Low	2	2
Tourist 2	medium	1	1
Tourist 3	low	3	1

The characteristic on which the means of transportation were based on three factors range on how much distance does the public transportation covers and does is include major scenic spots, comfort and punctuality illustrated as "time".

Range was measured on a scale of low, medium, high. Comfort had a scale of 1 to 5, and the same applies for time. Each tourist was asked to give a point to each on of these characters. These tourists were chosen based on the geographic area on which they have traveled to "south, middle and north of Morocco".

The object of this interview is to clear why although the tourists had a high environmental knowledge on the effect of carbon emission from vehicle and choosing a public transportation mean was the best environmental option they still went for renting a car as shown in the questionnaire this can be explained by the low quality of the public transportation means and their low range which counter and limit the tourist movement inside of the country.

As for the waste management the samples show a very high environmental conscientiousness. However, they also stated that there is not enough recycling garbage bin in the streets "63%".

5. CONCLUSION

Humans are in the more fragile and devastated ecological environment of protected areas. Behavior is the root of environmental problems. Identify the mechanism by which this can be done. Promoting sustainable development and environmentally friendly behavior is an important concern.

Part of the agenda aimed at addressing the ecological damage to ecotourism destinations. We believe that these results do more than just provide supporting information for funding. Providing new things as well as eco-friendly tourism activities

for protected areas. Methods and strong theoretical foundations for the practice of natural pedagogy professionals. Based on this, policy makers suggest that you can start by using advertising tools. To raise and improve tourists' awareness and awareness of environmental damage. Environmental knowledge and environmental awareness value of tourists by implementation. Lecture on environmental knowledge.

You need to be aware of the limits of your research. First, as a method of self-disclosure, Used for surveys, some social expectations and memory bias. It was inevitable. Second, there are many planned behavioral theories that can be applied to research. Limitations within the framework of research as subjective norms and perceived behavioral intensity. Not included in the model. A more complete theoretical model to deal with this.

Some of the planned actions may apply to future research. The third was the sampling issue. Future comparisons of some geographical restrictions with other reserves and other reserves. The types of ecotourism destinations will be beneficial. Finally, the complexity of tourism. Behavior at ecotourism destinations cannot be completely captured by structural equations model. Therefore, research on environmentally friendly driving factors is constantly being conducted. Tourist behavior needs to be further supplemented and improved with the findings presented here.

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