

Factors influencing university students in conducting ecotourism

Javier A. Sánchez-Torres, Yuri Lorene Hernández Fernández and Carolina Perlaza Lopera

Abstract

Purpose – This study examines the factors that influence the ecotourist behavior of university students. The understanding of what motivates these students can inform future suggestions for strategies and actions in ecotourism.

Design/methodology/approach – The study was applied to university students of the University of Medellín, Colombia. It was an exploratory empirical study that surveyed a total of 696 students.

Findings – The results show that students with a positive attitude toward ecology tend to be interested in nature-related activities, therefore generating an intention to engage in ecotourism. The authors found that those who view ecotourism as an activity that promotes fun and happiness tend to engage more frequently in these activities.

Originality/value – This study is of great interest for research in motivational theory, specifically the analysis of personality profiles and how these relate to specific tourism behaviors. The findings of this study strongly suggest that those interested in the management and development of ecotourism should establish practices and programs that consider factors such as tourist segmentation, effective communication of the positive qualities of ecotourism and environmental stewardship involved in these activities.

Keywords Ecotourism, University students, Environmental attitude, Leisure, Free time

Paper type Research paper

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Received 7 September 2020
Revised 12 August 2022
Accepted 28 December 2022

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This study was carried out under the internal innovation project entitled, "Green Path," one of the research teams at Tourism Research Group (GET) and the group, Tetrix Marketing at the University of Medellín, Colombia. The authors also thank Professors Dora Luz Delgado Díaz and Herрман Eduardo Noreña Betancur for the participation in this study. The authors thank Crimson Interactive Pvt. Ltd. (Enago) – <https://www.enago.com/es/> for the assistance in manuscript translation and editing.

Declarations of interest: None.

Compliance with ethical standards: Informed consent was obtained from all individual participants included in the study.

Conflict of interest: The authors declare that they have no conflict of interest.

1. Introduction

According to the World Tourism Organization (UNWTO), the most frequently utilized definition of tourism is as follows: tourism is the sector that includes the activities carried out by people during trips and occupancies in places different from their usual environment for a consecutive period of time of less than year for leisure, business and other purposes (Camilleri, 2018). With another description of the term, Ledhesma (2018) expresses that tourism is the entire spectrum that is generated from the idea and/or action that involves the displacement of human beings to a place different from their residence and that holds recreational possibilities. Here recreation is understood as the intention of rest, fun and/or contact with the host destination.

Tourism is a highly complex subject. According to Cohen *et al.* (2014), tourism not only comprises many components but its development also involves various sectors of the economy, most prominently, income generation, job creation and foreign exchange contributions. These can, in turn, offset the balance of payments and increases in public revenue while promoting business activity in the towns where tourism occurs. Thus, tourism is especially important for its substantial contribution to add value in matters of economic and global development (Ledhesma, 2018; Pasquinelli *et al.*, 2022).

Because of tourism's broad cross-sectional presence in other areas of knowledge, modalities are generated and classified according to the spatial, temporal component or sometimes according to the purpose of the trip (Camilleri, 2018; Cohen *et al.*, 2014).

In accordance with the aforementioned, a new paradigm has emerged in the last decade that has motivated the analysis of tourism focused on nature, natural trends and the environment (Dávid, 2011). Aimed at rebuilding tourism as a system that is environmentally friendly and highly sustainable (Chi, 2022; Tseng *et al.*, 2019), “ecotourism” is a type of tourism that creates awareness of its impact on the environment. Ecotourism seeks to preserve natural and cultural values without damaging them and to help solve the problems caused by tourism itself (Cobbinah, 2015).

Hence, the aim of this study is to examine the behavior of the ecotourist who is a university student. To this end, first a theoretical review is carried out to define the variables that can explain the behavior of this population. Second, an empirical study conducted on the University of Medellín campus in Colombia is presented. Finally, an analysis and the results of this study are presented.

2. Theoretical framework

2.1 Ecotourism

In a general context, it can be said that ecotourism is one of the fastest growing industries worldwide (Nematpour and Faraji, 2019). Within the tourism industry, ecotourism is growing three times faster than the industry as a whole (Carvache-Franco *et al.*, 2019). The number of travelers who prefer this alternative form of tourism increases by 20% each year, generating between 10 and 20% of the total world tourism market, thus making it the fastest growing sector of the tourist industry (Dorofeeva *et al.*, 2020). Ecotourism is also considered to be one of the five leading strategic areas of future development in the tourism industry (Carvache-Franco *et al.*, 2019; Dorofeeva *et al.*, 2020; Tseng *et al.*, 2019).

However, it is important to clarify that, in essence, tourism and ecotourism do not differ because they are economic activities with unequally distributed revenues but rather because of the type of attractions that characterize them and for the value contribution that they generate, given that ecotourism is particularly important for standardized and reasonable tourist behavior and the rational use and management of natural resources (Tseng *et al.*, 2019). Thus, various definitions have emerged that will be examined in the following sections.

Ecotourism is an approach to travel to natural spaces derived from the experience of tourism in a natural setting, but differing from the latter in that ecotourism includes sustainability, environmental values and education, making it something more specific than simply utilizing a natural environment for the purpose of recreational activity (Dávid, 2011).

According to Andarani *et al.* (2018), ecotourism is a responsible trip to a natural area during which the environment is preserved and the well-being of the local population is improved. Similarly, the experience is geared toward caring for the environment, focusing on trips of limited magnitude that minimize the ecological, cultural and behavioral impact of tourist activities carried out on a massive scale (Wondirad, 2019).

Alternately, Stronza *et al.* (2019) define ecotourism as any recreational activity explicitly involving the observation or extraction of living entities in nature, which includes some sort of environmental education, has low environmental impact, aims to be sustainable and, in some cases, supports local conservation efforts.

Ecotourism activities vary by region, but most of these activities focus on interaction with the natural environment (Huang *et al.*, 2020). The choice of places designated for these activities is influenced by the size of the sites themselves (Agius *et al.*, 2019).

In recent years, international ecotourism has developed rapidly, and national parks have been crucial locations for this development (Li *et al.*, 2020). We must bear in mind that this activity is carried out primarily in natural settings, national parks and protected public areas, all of which are becoming increasingly important locations for this type of activity throughout the world (Agius *et al.*, 2019). As these areas increasingly gear themselves toward ecotourism, they have become

important destinations because these are places that can efficiently protect the environment while supporting education, recreation and the creation of new economies (Li *et al.*, 2020). Additionally, these locations offer high levels of access to natural resources such as landscapes, rivers, forests and wildlife (Carvache-Franco *et al.*, 2019).

Ecotourism is then a responsible trip to a natural area that preserves the environment, bolsters the well-being of the local population and integrates education with understanding. Ecotourism must provide an educational experience for tourists as well as economic, sociocultural and environmental sustainability for the destination (Cobbinah, 2015). Thus, this tourist trend can also be viewed as an effective means of promoting natural conservation and sustainable development in less developed regions, while also acting as a learning tool that can link conservation to sustainable development goals (Mondino and Beery, 2019). Therefore, ecotourism is increasingly recognized as a way to promote not only local lifestyles and culture but also the conservation of the environment (Carvache-Franco *et al.*, 2019). This type of tourism has the potential to provide economic incentives to preserve natural habitats but only if the income is great enough and accessible to the target populations (Andarani *et al.*, 2018).

Under the aforementioned definitions, the motivations for traveling of the tourists who engage in this type of tourism must also be taken into account (Cohen *et al.*, 2014). Some ecotourists travel to satisfy recreational and pleasure-seeking needs, along with a desire to educate themselves about specific areas. These are tourists with motivations and behaviors related only to nature and the learning criteria of ecotourism. The primary intrinsic motivation of these tourists is to observe and appreciate natural attributes and those cultural facets that are related to learning about nature, while being physically active and meeting people with similar interests (Carvache-Franco *et al.*, 2019).

Despite the positive attributes and effects of the concept, the impact of ecotourism appears ambiguous and requires more research (Kim *et al.*, 2018). Ecotourism can have many positive and negative effects, usually as a function of how it is perceived, developed and the focus of the planning (Andarani *et al.*, 2018).

Because of environmental pollution resulting from human activities including tourism, the development of ecotourism is of particular interest today (Dorofeeva *et al.*, 2020). Although it has been seen as a vehicle to support ecological conservation and local communities, there are concerns that the potential arrival of more tourists to such small areas, which are already under intense pressure, will aggravate the situation or worsen the potential of ecotourism (Agius *et al.*, 2019). Consequently, the limitations of visitors must be taken into account to avoid a violent reaction and a negative environmental impact.

2.2 *The university and ecotourism*

Universities have always been considered by society as substantial organizations with a significant global impact. In this new millennium, a new trend has emerged in the evolution of universities, the rise of so-called “living laboratories,” in which universities are seen as actors, mediators, generators and solvers of environmental impact (Gu *et al.*, 2019). The aforementioned finding surpasses the traditional concept of a “business ecosystem” (Kim *et al.*, 2018), which involves the commitment not only of traditional actors and stakeholders in higher education but also of nongovernmental organizations, local institutions, students, educators, nonprofit organizations, the environment and local community (Reid, 2018; Thomsen *et al.*, 2018).

Consequently, universities take a leadership role in formulating objectives for sustainable development. This implies that within their own stated mission, these institutions consider actions related to these objectives such as making the university campus “green” to make changes to the community with regard to sustainable development (Dagiliūtė *et al.*, 2018).

This is where the concept of a “green campus” or “greenspace” arises, a concept that envisions a different set of interpretations with regard to everything related to land, habitat, geography, architecture, ecology, sustainable policies, inhabitants, local and regional impact, among other

factors (Agustina *et al.*, 2022; Gulwadi *et al.*, 2019). Therefore, universities must assume a proactive environmental role where campuses serve as examples of ecosystem regeneration that could potentially be adopted by the cities (Mangrich *et al.*, 2019).

Several researchers have developed and applied tools that measure, within the university community, the perceptions of students and the impact of policies related to having a green campus; simultaneously, diverse studies have measured other factors as well in different universities around the world. Some of the scales that were used were perceived greenery, perceived restoration related to the individual and his/her environment and the scale of the World Health Organization on the quality of life (WHOQOL-BREF). The latter includes a cross-cultural instrument that also evaluates physical and psychological health, social relations, and the environment (Gulwadi *et al.*, 2019).

Dagiliūtė *et al.* (2018) specifically proposes a tool to determine students' perception regarding green universities and to examine whether universities truly offer concrete practices with regard to sustainability. In their results, the authors observe that university students positively value their university's actions regarding sustainable development, social well-being and inclusion, and the authors point out that these factors need to be included in the educational process.

Other global metrics, specifically the IU Green Metric World University Ranking, evaluate sustainable practices at universities. This tool is still new. Few universities have adopted it because of its demanding metrics and the requirements to actually establish the concept of a green campus (Ounsaneha, 2018).

For their part, studies investigating the environmental consciousness of university students show that, in general, this population has a high level of interest in global problems such as climate change (Muflihaini *et al.*, 2020). University students recognize that environmental problems are serious, and they adopt a positive attitude regarding these issues although they engage in few environmentally friendly behaviors in the course of their daily activities (Gurbuz and Ozkan, 2019).

2.3 The embracing of tourism among university students

The existing research on students and tourism focuses primarily on the use of vacation time. Very few studies analyze the use of university campuses as tourist destinations although some have focused on university choices made by foreign students and how these choices relate to educational tourism (Garrido Yserte, 2007; Martínez Roget *et al.*, 2013). Regarding the behavior of carrying out edu-tourism, the following considerations are found: risk aversion, discrimination and racism, learning another language, geographical proximity, cultural proximity, the educational system's reputation, security, need for international experience, benefits of the course, visa acquisition procedures, price and cost of travel, cost of the course, legislation and related policies and social influence (Harazneh *et al.*, 2018). For example, in the case of Malaysia, the things students look for in tourism are challenges, relaxation, to have fun, to build social relationships and to experience new adventures (Mohsin *et al.*, 2017). This supports theories about motivations during free time, in which the most important findings reveal that free time is dedicated to social relationships, such as making new friends (Beard and Ragheb, 2018).

There is a scarcity of literature that explains the behavior of university students with regard to ecotourism although there is an urgent need for these types of studies as new generations demonstrate a greater concern for environmental stewardship. However, some studies have found that although many university students demonstrate a positive attitude toward the environment, they do not display proenvironmental behaviors (Heyl *et al.*, 2014).

3. Research framework and hypotheses

This study proposes that the practice of ecotourism can result from an individual's intrinsic and extrinsic characteristics, that is to say, from an individual's attitude toward ecology and the degree

to which ecological experiences occupy one's leisure time. These would, in turn, relate to an enjoyment of, or a kind of hedonism related to, the practice of ecological tourism (Figure 1).

The first correlation that is examined is the attitude toward ecology. An attitude is understood as a summarized psychological evaluation of an object attributing measurable dimensions, such as good or bad, pleasant or unpleasant (Ajzen, 2001). According to Gurbuz and Ozkan (2019), an ecological attitude is the sum of all the intrinsic positive and negative attitudes toward the environment, that is, the individual's thoughts that produce behaviors toward the environment, as well as an individual's environmental value judgments and their willingness to resolve them. We bear in mind that attitudes toward something can generate a behavior associated with such an attitude (Chaiken and Baldwin, 1981; Dodds et al., 2019; Okumus et al., 2019). Those with an ecological attitude will tend to want to engage in tourist activities related to ecology (Chang and Chung, 2018; Dolnicar, 2010).

In view of the foregoing, the following hypotheses are raised.

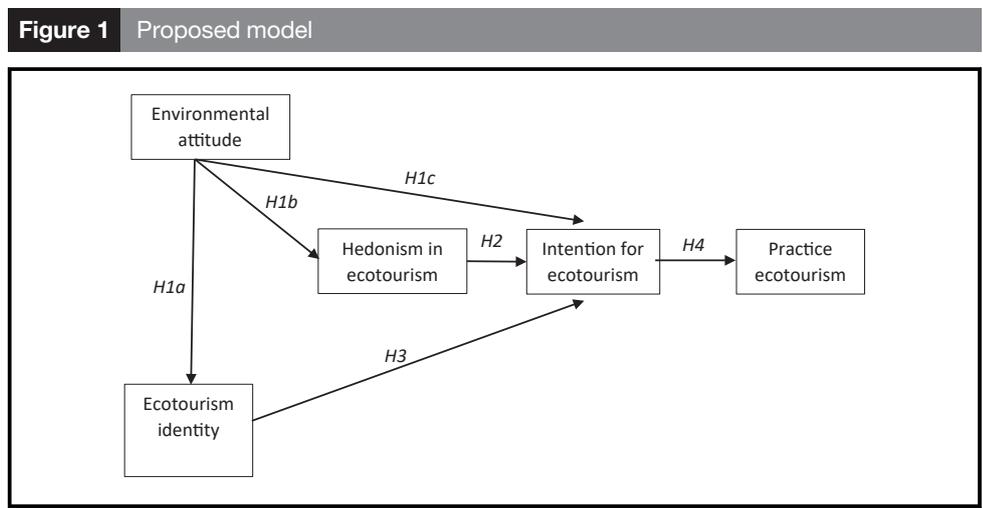
- H1a. Ecological attitude positively influences the perception of ecotourists/hedonism.
- H1b. Ecological attitude positively influences the intention of engaging in ecotourism.
- H1c. Ecological attitude positively influences the ecotourist identity.

Hedonistic psychological theories demonstrate a direct relationship between a behavior and motivation rooted in hedonism or enjoyment (Mees and Schmitt, 2008). Hedonism, derived from sensations that involve happiness and pleasurable feelings associated with a behavior, is consequently one of the motivations for tourism (Elomba and Yun, 2015). Engaging in various types of tourism, such as ecotourism, will also be influenced by hedonistic motivation (Chang and Chung, 2018; Juvan and Dolnicar, 2017). In the case of ecotourism, tourists will highly value the ecotourism experience over other possible deciding factors (Ruhanen, 2019). Ecotourism can generate "delight factors" that can be defined as reassuring, relaxing, comforting and pleasure sensations (Hong and Ma, 2019).

We therefore propose the following hypothesis.

- H2. Hedonism in ecotourism positively influences the intention of engaging in ecotourism

Leisure identity is defined as a belief structure related to self-worth, self-identity, social identity and the emotional attachment tied to a positive leisure belief structure (Chang and Chung, 2018). In the case of ecotourism, individuals can develop an identity related to ecotourism based on their habits, life experiences and the social factors surrounding them (Dolnicar, 2010; Juvan and Dolnicar, 2017).



H3. An ecotourist identity positively influences the intention of engaging in ecotourism.

Finally, the intention of engaging in ecotourism will be the best determining factor predicting the practice of ecotourism (Zheng *et al.*, 2018).

H4. The intention to perform ecotourism affects the continuous practice of ecotourism.

4. Research method

4.1 Sampling and data collection methods

A nonprobabilistic sample based on the convenience method was developed through personal surveys administered to students at the University of Medellín, Colombia. Because the nature of the model is exploratory and the target population comprises university students, all sampling requirements for analysis of the model using the partial least square (PLS) method were satisfied (Hair *et al.*, 2014).

The questionnaire was collected from university students of all courses regardless of the number of years of study. They were asked to indicate to what extent they agreed with statements in the questionnaire on a five point Likert-type scale (1 = Totally disagree; 2 = Disagree; 3 = No opinion, 4 = Agree and 5 = Totally agree). A greater number of responses were received from female students, which did not affect the results of the study (Statistical tests were performed by gender and for moderating effect without finding any significant differences). Similarly, no significant differences were found between the two participating age ranges (Table 1).

4.2 Questionnaire design

The questionnaire comprised two sections. The first section collected basic demographic information of the participants, mainly gender and age range (Table 1). The second section included five variables taken from the literature. The environmental attitude variable was adapted from Gurbuz and Ozkan (2019), and the variables of ecotourism identity, hedonism in ecotourism, ecotourism intention and ecotourism practice were adapted from Chang and Chung (2018) (Table 2).

5. Data analysis and results

The data were analyzed using the Smart PLS 3.2.8 program following Hair *et al.* (2017) recommendations for examining undertested relations or underdeveloped theories. First, the measurement tool was validated; then we evaluated the validity of the model and the hypothesis.

5.1 Validating the measuring instrument

The discriminant validity test was applied. This test checks that the items measure only to their corresponding variable. The results showed that all the item values of the discriminant loadings were greater than 0.505; consequently, they were all valid (Table 3) (Hair *et al.*, 2017). The other reliability tests, such as Cronbach's alpha tests (>0.70), average variance extracted (AVE) (>0.5), compound reliability (>0.6) and Rho_A (>0.70) exceeded the minim required levels (Table 4) (Gefen *et al.*, 2000;

Table 1 Sample		
Variables	Demographic traits	%
Gender	Male	34.6
	Female	65.4
Age of the respondent	Between 16 and 20 years of age	51.9
	Between 21 and 30 years of age	48.1

Table 2 Descriptive analysis of the measures

Variable/adopted from	Measurement items
Ecological attitude (Gurbuz and Ozkan, 2019)	AE1. I take an active part in protecting the environment AE2. I try to use resources like electricity, water, etc., in the most efficient way possible AE3. I consider that the environment is the responsibility of all of us
Ecotourism intention (Chang and Chung, 2018)	BT1. I engage in ecotourism activities whenever I have free time BT2. I schedule ecotourism activities regularly BT3. I spend a great deal of my leisure time engaging in ecotourism activities
Hedonism in ecotourism (Chang and Chung, 2018)	HE1. Leisure and tourist activities in nature are fun for me HE2. I really enjoy engaging in tourist and free-time activities in nature HE3. My favorite type of tourism is in nature, and I really like it
Ecotourism identity (Chang and Chung, 2018)	ID1. My favorite activity in my free time involves enjoying tourist activities in nature ID2. The enjoyment of tourism in nature during my free time is a reflection of who I am ID3. Other people are important to me when they engage in ecotourism activities
Ecotourism practice (Chang and Chung, 2018)	B1. How likely is it that you will engage in tourism activities in nature over the coming months?

Table 3 Validity of measuring instrument

Indicators/variable	Loads	Statistics t (O/STDEV)	p values
AE1 ← Ecological attitude	0.822	13.234	0.000
AE2 ← Ecological attitude	0.784	13.695	0.000
AE3 ← Ecological attitude	0.740	25.667	0.000
BT1 ← Ecotourism intention	0.931	75.862	0.000
BT2 ← Ecotourism intention	0.947	87.236	0.000
BT3 ← Ecotourism intention	0.939	84.212	0.000
HE1 ← Hedonism in ecotourism	0.928	57.568	0.000
HE2 ← Hedonism in ecotourism	0.900	46.019	0.000
HE3 ← Hedonism in ecotourism	0.888	33.889	0.000
ID1 ← Ecotourism identity	0.908	36.491	0.000
ID2 ← Ecotourism identity	0.933	41.249	0.000
ID3 ← Ecotourism identity	0.899	14.742	0.000

Note(s): Significant at $p < 0.01$, t -value > 2.576

Henseler *et al.*, 2015). The divergent validity was verified comparing the AVE value of the variables with the correlation of the constructs with respect to each variable elevated to the square, being that these are inferior to the square root of the AVE, demonstrating that each variable is related more strongly to its items than to the other (Table 5) (Fornell and Larcker, 1981). Finally, Henseler-Ringle test also was confirmed the divergent validity (Table 6) (Henseler *et al.*, 2015).

The results confirm the proposed model (Table 7), first in their power to predict the practice of ecotourism, showing an R-squared level of $R^2 = 0.635$ for the intention toward ecotourism and second in terms of the practice of ecotourism with a level of $R^2 = 0.449$. Both are acceptable values validating the explanatory level of the proposed relationships. Likewise, all of the hypotheses were validated, with the exception of Hypothesis H1b: $\beta = 0.040$, which had proposed that the environmental attitude influenced the intention toward ecotourism. However, this relation is arbitrarily generated through the two variables: hedonism in ecotourism (H2: $\beta = 0.441^*$) and ecotourism identity. That is to say, as a tourist who shows an environmentally conscientious attitude becomes immersed in ecotourist activities, and their intention to perform these activities and to practice

Table 4 Reliability test

Variable	Cronbach's alpha	Rho_A	Compound reliability	Average variance extracted (AVE)
Ecological attitude	0.751	0.705	0.764	0.627
Hedonism in ecotourism	0.891	0.906	0.931	0.819
Ecotourism intention	0.933	0.933	0.957	0.882
Ecotourism identity	0.796	0.864	0.880	0.713

Table 5 Discriminant validity test – Fornell and Larcker criterion (AVE)

	Ecological attitude	Hedonism in ecotourism	Intention of tourism in nature	Ecotourism identity	Performs ecotourism
Ecological attitude	0.726				
Hedonism in ecotourism	0.417	0.905			
Ecotourism intention	0.377	0.766	0.939		
Ecotourism identity	0.418	0.832	0.756	0.845	
Performs ecotourism	0.310	0.662	0.670	0.602	1.000

Table 6 Discriminant validity test – The heterotrait–monotrait (HTMT) ratio

	Ecological attitude	Hedonism in ecotourism	Ecotourism identity	Ecotourism identity
Hedonism in ecotourism	0.586			
Ecotourism intention	0.492	0.823		
Ecotourism identity	0.619	0.808	0.847	
Performs ecotourism	0.414	0.701	0.693	0.671

ecotourism will be strengthened. This stems from their own principles having to do with their attitude toward the environment.

With respect to the other hypotheses, the results have all demonstrated validity; therefore, it is validated that the environmental attitude in university students positively affects the perception of hedonism with regard to ecotourism (H1a: $\beta = 0.417^*$). The environmental attitude also affects the strengthening of the students' ecotourist identity (H1c: $\beta = 0.418^*$). For its part, the ecotourism identity positively influences the ecotourism intention (H3: $\beta = 0.378^*$), thus proving that a tourist who likes activities linked to ecology will tend to prefer ecotourism over other types of tourism. Finally, ecotourism intention positively affects the practice of ecotourism (H4: $\beta = 0.417^*$) (Figure 2).

6. Discussion and implications

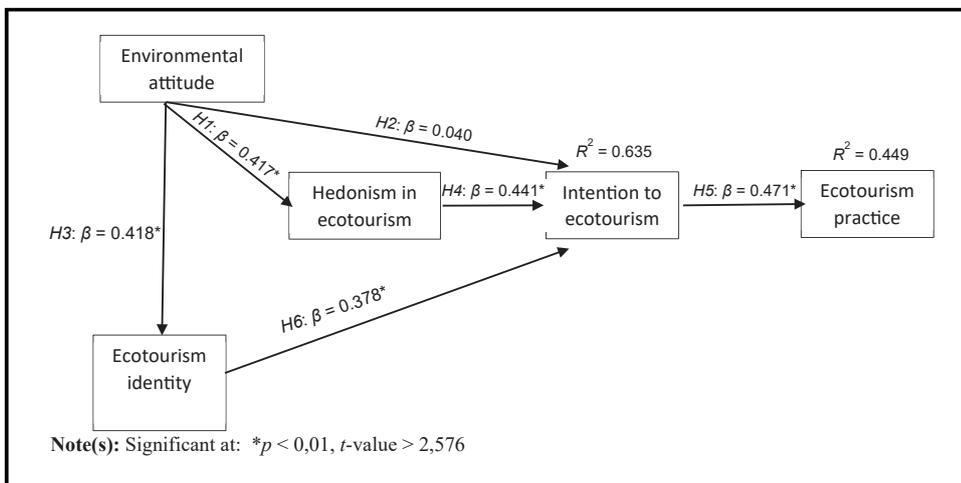
6.1 Theoretical implications

The aim of this study is to explore whether the practice of ecotourism depends on the extent of an individual's positive ecological attitude and on the level of engagement in ecological experiences demonstrated during their leisure time, which in turn relates to high levels of hedonism in the enjoyment of ecological tourism.

Table 7 Validity of empirical model

Hypothesis	Validation	Original sample (β)	Statistics t (O/STDEV)	p values
H1a: Ecological attitude → Hedonism in ecotourism	Supported	0.417 [*]	10.945	0.000
H1b: Ecological attitude → Ecotourism intention	Not supported	0.040	1.410	0.290
H1c: Ecological attitude → Ecotourism identity	Supported	0.418 [*]	11.361	0.000
H2: Hedonism in ecotourism → Ecotourism intention	Supported	0.441 [*]	11.295	0.000
H3: Ecotourism intention → Performs ecotourism	Supported	0.670 [*]	27.717	0.000
H4: Ecotourism identity → Ecotourism intention	Supported	0.378 [*]	9.513	0.000

Note(s): Significant at ^{*} $p < 0.01$, t -value $> 2,576$

Figure 2 Empirical model

The results showed that in the case of university students, those with the highest levels of ecotourism intention and practice will tend to be the students who exhibit an individual profile with a clearly positive environmental attitude as part of their approach to life. These students also exhibit an appreciation for, (identity) and enjoyment of (hedonism), the activities taking place in nature. This result is consistent with the study conducted by [Dodds et al. \(2019\)](#) with regard to the ecological attitude being one of the strongest predictors of participation in environmental activities, which in this case is the participation in ecotourism. This finding is of great interest for research in motivational theory, specifically the analysis of personality profiles and how these relate to specific behaviors. The application of personality profile analysis is important not only because it explains the cause of a positive behavior such as ecotourism, but rather because it represents a continuation of previous theoretical research about attitudes and behaviors. Specifically, this research helps us understand that behaviors that demonstrate environmental stewardship are linked to an individual's psychological and educational profile. Therefore, environmental education is very important at every stage of an individual's education, including at the university level.

While the objectives of the present study did not include other determinants of individual attitudes and behaviors, the impact of the COVID-19 pandemic has generated attitudinal and

behavioral changes of all kinds in relation to tourism (Ahmad *et al.*, 2022). For example, recent studies have shown that certain personality types are more likely to engage in local ecotourism, which is more popular these days (Isaac and Keijzer, 2021). It seems that rural and natural tourist activities will become increasingly attractive in the future (Li *et al.*, 2021) not only because they are considered safer than other forms of mass tourism but also because people are more environmentally aware. This may be related to a perception that the pandemic was partly the result of environmental despoilation (Carvache-Franco *et al.*, 2022; Chi, 2022; Sanjeev and Tiwari, 2021). Meanwhile, the increased use of virtuality, especially amongst young people, has led to a lesser intention to engage in physical tourism, ecotourism included (Bui *et al.*, 2021; Sanjeev and Tiwari, 2021). At the same time, some scholars have argued that young people can integrate digital and virtual tourism with sustainable tourism and ecotourism, given their empathy with both trends (Sfodera *et al.*, 2022).

6.2 Practical implications

The practical implications of this study allow us to offer recommendations to organizations that work with ecotourism. These recommendations include implementing communication programs focusing on tourists with a highly positive attitude toward environmental issues, for example, individuals belonging to environmental nongovernmental organizations or green parties. Likewise, it is recommended to guide tourist offerings to include activities related to stewardship of the natural world, such as planting, interventions, area clean-up activities and clean (environmentally conscious) production and consumption.

Conversely, it is important that all servuction and other points of contact with the client do not exhibit pollution and do exhibit an efficient use of resources, especially with regard to resources that are nonrenewable. Other aspects of the ecotourism experience that should be considered with regard to the provision of ecotourism services are sociocultural impact (such as social and cultural development), increased awareness, identity construction, community attachment, perceived community belonging, community revitalization and the sharing of positive sociocultural expression that ecotourism brings.

Finally, the management of ecological tourism must pay special attention to improving the relationship between tourists and nature, to environmental education through the development and implementation of behavioral standards within natural environments and to environmental tourism itineraries. Ecological tourism management must planned to fully assist tourists (as in state-owned natural resources and natural areas with special protections), and ecotourism management must function as a protector of nature for the tourist, along with the profitable creation and implementation of tourism products and services, should derive from the consideration of all possible economic and social consequences.

6.3 Limitations and future studies

This study is greatly limited due to its sample that is only the representative of Colombian university students. Likewise, other factors of both an intrinsic and an extrinsic nature were not evaluated as possible motivating factors for the practice of ecotourism. Therefore, future research examining similar populations of university students is recommended. It is also necessary that future studies analyzing the practice of ecotourism consider other variables that were not taken into account in this study (e.g. Covid-19 pandemic, virtuality, climate change among others).

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