

## WHAT DRIVES ECOTOURISM CONSUMPTION? A QUALITATIVE TPB APPLICATION

*Álvaro Freitas Faustino-Dias\**

Universidade Federal de Mato Grosso do Sul. Brasil  
<https://orcid.org/0000-0002-7477-8769>

*Milton Augusto Pasquotto Mariani\**

Universidade Federal de Mato Grosso do Sul. Brasil  
<https://orcid.org/0000-0001-9485-0150>

*Geraldino Carneiro de Araujo\**

Universidade Federal de Mato Grosso do Sul. Brasil  
<https://orcid.org/0000-0001-7506-703X>

### ABSTRACT

Ecotourism demand has increased over the years, but consumer intentions are still largely unknown. Based on Theory of Planned Behavior (TPB), the objective was to identify tourists' behavioral, normative, control and environmental perceptions about ecotourism. Data collection included 21 interviews, and content analysis was used to study them. The results identified as main perception: highlighting the value of keep contact with nature, learning about environment and contributing to natural resources conservation.

**Keywords:** environmental commitment; consumer; environmental education; nature; sustainability.

### ¿Qué impulsa el consumo de ecoturismo? una aplicación cualitativa de la TPB

### RESUMEN

La demanda de ecoturismo aumentó, pero es poco lo conocido de las intenciones de los consumidores. Basado en la Teoría del Comportamiento Planeado (TCP), el objetivo fue

---

Fecha de recepción: 1 de septiembre de 2024.

Fecha de aceptación: 17 de enero de 2025.

\* Escola de Administração e Negócios da Universidade Federal de Mato Grosso do Sul. Avenida Senador Filinto Müller, 1015, Cidade Universitária, CAMPO GRANDE (Brasil). E-mail: [alvaro.dias@ufms.br](mailto:alvaro.dias@ufms.br), [milton.mariani@ufms.br](mailto:milton.mariani@ufms.br), [geraldino.araujo@ufms.br](mailto:geraldino.araujo@ufms.br)

identificar las percepciones de conducta, normativas, de control y ambientales de turistas sobre el ecoturismo. La colección de datos incluyó 21 entrevistas, y el análisis de contenido se utilizó para su estudio. Los resultados identificaron las principales creencias, destacando el valor de estar en contacto con la naturaleza, aprender sobre medio ambiente y contribuir a la conservación de recursos naturales.

**Palabras clave:** compromiso ambiental; consumidor; educación ambiental; naturaleza; sostenibilidad.

## 1. INTRODUCTION

Ecotourism, a component of tourism focused on responsible travel to natural areas that preserve the environment and improve the local people well-being, gained considerable attention in recent years (Solís *et al.*, 2010; Díaz-Carrión, 2014; Barba-Sánchez and Ramírez, 2015; Kangai *et al.*, 2023). This trend reflects the increasing concern among academic community in global awareness about environmental sustainability, as well as the need to mitigate tourism negative impacts on natural ecosystems.

As a tourist activity with strong sustainable appeal, there are constant discussions about its development. On one hand, the strong concern about territory commodification and natural environment degradation surrounding the tourist's product (Fletcher, 2019); in the other hand, the concern goes around how the tourist's product can be part of the commercial and educational transformation of the local territory, and for the people visiting it (Choi *et al.*, 2017; Roseta *et al.*, 2020).

As result, what has been observed is the constant growth of ecotourism activities' demand, reinforcing the importance of tourism product formulators considering the development of activities avoiding endanger the territory. Studies demonstrate that ecotourism can be a powerful tool for environmental conservation and sustainable development, offering economic benefits to local communities and encouraging ecosystems preservation (Blamey, 2001; Courvisanos and Jain, 2006).

Furthermore, there are projections that revenue generated by ecotourism could reach USD 333.8 billion in 2027 (Lock, 2021). This growth projection raises a warning signal for public and private managers linked to tourism activities to direct efforts so that tourist products meet the demands of the local community, the environment and the consumer population.

Despite the fact that ecotourism represents one of the most relevant opportunity of conservation and sustainable development, there are many challenges related to meeting consumers demand and mitigating potential environmental impacts. In this sense, it is necessary to better understanding the tourists' behavioral intentions in relation to ecotourism consumption, aiming this understanding with the Theory of Planned Behavior (TPB) (Ajzen, 1991).

TPB is a well-established psychological framework used to predict and understand human behavior in various contexts, including tourism. According to Ajzen (1991), TPB assume that human action is guided by three different constructs: attitudes, subjective rules and perceived behavioral control (PBC). The author adds, about these constructs,

that they are directly influenced by underlying perceptions, with attitudes influenced by behavioral beliefs; subjective norms influenced by normative beliefs and PBC influenced by control beliefs.

Ajzen (1991) indicates that to achieve a comprehensive understanding of the individuals' intentions, in this case tourists', in relation to ecotourism it is essential to go deeply through specific behavioral, normative and control beliefs influencing attitudes, subjective norms and control perceived behavioral, respectively, since they can vary between objects.

Considering the importance of identifying the beliefs underlying constructs, the present research aimed to identify the behavioral, normative and control tourists' perceptions in relation to ecotourism. Additionally, as this is a topic aligned with environmental issues, we have chosen to investigate a new construct to evaluate behavioral intentions in ecotourism.

## **2. ECOTOURISM DYNAMICS AND THEORY OF PLANNED BEHAVIOR APPLICATION**

According to Ziffer (1989), ecotourists practice non-consumable use of wildlife and natural resources, contributing to the area visited through labor or financial resources intended to, directly, benefit the local environmental conservation and the residents' economic well-being. According to The International Ecotourism Society (2015), ecotourism joins conservation; communities and sustainable traveling with the intention of improve nature, local society and culture understanding and appreciation. In this context, ecotourism is defined as responsible travel to natural areas that preserve the environment, as well as guarantee and maintain local population well-being, involving tourists' education and interpretation.

Besides ecotourism represents a great economic opportunity, its main characteristic is care for nature. Deming (1996) emphasized that people have the strong desire to get closer to natural attractions, which could lead to unsustainability if the quantity of tourists increases significantly (Butcher, 2007). On the other hand, the Center for Responsible Travel (CREST, 2017) informs that the ecotourism demand is increasing, with tourists more interested in sustainable practices.

Blamey (2001), as well, presents the concept of ecotourism as tourism based on nature, environmentally correct and sustainably managed. For a destination to be considered as ecotourism, it must relate these three dimensions. The "nature-based" dimension involves tourist activities in natural environments, the "environmentally correct" dimension commits to minimizing environmental impacts and promoting awareness, and the "sustainably managed" dimension considers natural resources conservation and cultural experiences in the long term, providing benefits for both destinations and visitors.

Empirical literature on ecotourism highlights the importance of human resources and local community involvement (Courvisanos and Jain, 2006). Attractions, natural or artificial, public or private, are areas of visitor attention and include uniqueness, tourist attractions and environmental quality. Destination image is also crucial for consumer decisions, influencing tourist loyalty and intention (Zhang *et al.*, 2014; Chi and Pham, 2024).

Tourists' motivation, attitudes towards ecotourism, environmental concern, environmental knowledge, experience in ecotourism and environmental identity are determining factors for the intention to consume ecotourism. Luo and Deng (2008) concluded that environmental attitudes influence tourist motivations, while Hultman *et al.* (2015) highlight the relationship between motivation, environmental beliefs and willingness to pay premium prices (WPPP). Huang and Liu (2017) and Pham and Khanh (2021) highlight the importance of environmental concern intending to visit ecotourism destinations. Additionally, Zheng *et al.* (2018) and Teeroovengadum (2019) concluded that environmental knowledge and identity influence positively the human attitudes and behaviors related to ecotourism.

The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action, developed by Ajzen (1985); with the aim of predicting and explaining human behavior in different contexts. It postulates that behavior is directly influenced by behavioral intention, which, in turn, is shaped by three main constructs: attitudes toward the behavior, subjective norms and perceived behavioral control (PBC) (Ajzen, 1991). This theory has been widely used to understand behaviors in several areas due to its theoretical robustness and practical applicability.

Ajzen (1991) adds that the three main constructs influencing behavioral intention are preceded by different types of beliefs, with attitudes derived from behavioral perceptions, subjective norms from normative beliefs and PBC, influenced by control beliefs. According to Ajzen (1991), also, TPB is based on the premise that beliefs underlying attitudes, subjective norms and PBC are central determinants of intentions and behaviors. Thus, beliefs play a crucial role in behavioral intentions formation and, consequently, in the effective behavior of individuals.

For example, behavioral beliefs regard tourists' perceptions of the benefits and costs associated with engaging ecotourism activities. These beliefs are critical as they shape tourists' attitudes and, consequently, their intentions to participate in ecotourism (Ajzen, 1991). Normative beliefs refer to perceived social pressures performing, or not, a specific behavior; meaning that they are influenced by significant other's expectations, such as family, friends and social rules (Ajzen, 1991). Control beliefs, additionally, refer to the perceived ease or difficulty of performing the behavior and are linked to the individual's PBC (Ajzen, 1991). These beliefs are shaped by past experiences and anticipated obstacles. In ecotourism context, control beliefs may include factors such as accessibility to ecotourism places, availability of eco-friendly accommodations and personal economic resources.

In the context of tourism, while previous studies have employed the TPB model (Lam and Hsu, 2004; Lam and Hsu, 2006; Sparks and Pan, 2009; Hultman *et al.*, 2015; Lin and Huang, 2021), there remains a gap in identifying the beliefs that influence to the model's constructs. Lam and Hsu (2006), for example, analyzed the TPB applicability by its central constructs (attitude, subjective norm and PBC), adding past behavior variables on behavioral intention in choosing travel destinations; and concluded that attitude, PBC and past behavior are related to behavioral intentions choosing travel destinations.

Chen and Tung (2014), on the other hand, aimed to expand TPB methodology by adding the construct "environmental concern", as antecedent of base constructs (attitudes, subjective norms and PBC) to predict consumers' intention visiting green hotels. Their findings indicate that consumers' environmental concern, actually, exerts positive

influence over base constructs which in turn, and as expected, influences their intention to visit green hotels.

Hultman *et al.* (2015) based on TPB and post-materialist assumptions, researched the main antecedent's ecotourism engage intentions and willingness to pay premium prices (WPPP) for this type of experience. In this sense, the authors proposed a conceptual model consisting of environmental beliefs, attitudes towards ecotourism, behavioral indications and WPPP, combining with tourism materialism and general motivation. Among those most important results, the authors observed that environmental attitudes and beliefs are linked positively with WPPP intention; however, materialistic values showed negative effect. These results also revealed divergent moderating influences on environmental beliefs, depending on the type of tourist motivation guiding them.

In recent literature, a test was applied to expand TPB where two new constructs, ecological protection and personal well-being, were included aiming to assess residents' intentions in China. The results showed that the three psychological residents' factors (attitude, subjective norm and PBC) influence ecological intentions. Furthermore, the authors observed that ecological intention impacted behaviors, and the attitude toward the behavior proved to be the main factor influencing residents' ecological intention (Lin and Huang, 2021).

As seen, the TPB is a valuable tool for understanding consumer consumption behaviors; including in ecotourism, a sector that has gained visibility, continuously, demonstrating significant concern about sustainable practices. Applying TPB in ecotourism can help to identify the main factors influencing consumer intentions, allowing more effective interventions promoting environmentally responsible behaviors.

Even if prior studies were focused on the main TPB factors and behavioral intention impacts (Lam and Hsu, 2006; Chen and Tung, 2014; Hultman *et al.*, 2015), there is still a significant gap in investigating the beliefs underlying these factors, especially on ecotourism context, since exploring them would introduce new discussions about tourists' motivations, allowing the development of better targeted strategies encouraging sustainable behaviors.

Additionally, Ajzen (2020) highlights that the current TPB constructs are adequate to guarantee an accurate intention and behavior prediction. However, TPB is, at first, open to the inclusion of additional constructs. Thus, considering the object of this research and previous research, we sought to develop a new construct, focusing on environmental commitment through the identification of its underlying beliefs.

### 3. METHODOLOGICAL PROCEDURES

For data collection, interviews were applied with a group of experts in ecotourism. Following Creswell and Creswell (2021) suggestions, qualitative research sample should consist of people selected intentionally aiming to better understanding the problem, as well as the research question. The sample size was not defined, considering the obtained responses' saturation as advised by Sampieri et al, (2013). The authors highlight that estimating the sample size in qualitative research should not be fixed *a priori*, since it evolves as the research is going on, through different events that may happen. They indicate that

in sampling process, the final sample size does not follow probabilistic distributions but, separately of the phenomena's nature, by the research objective and saturation point when new cases provide similar data or information, when compared with the first ones.

In this context, semistucture interviews was selected as method collection data because it was the most appropriate methodology for the current research, since people from different geographic locations were interviewed. To apply the interviews, Google-Meet online platform tool was used enabling the participation from different geographic areas, considering restrictions imposed by COVID-19 pandemic (data collection period). For every participant to be considered for interviews, it was mandatory that they had access to internet, aged 18 or over and reside in any Brazilian municipality. In addition, specialist interviews on the subject were preferred and chosen, as shown in Table 1.

Finally, 21 interviews were conducted between March 31 and May 12, 2021. Regarding the interviews duration, the average was 39 minutes and 34 seconds, with the shortest of 17 minutes and 13 seconds and the longest of 1 hour 48 minutes and 3 seconds.

It is important to highlight that the sample beginning saturation process started at the sixteenth (E16), without addition of any new information to the data already collected. However, even though saturation had already occurred, it was decided to carry out at least five more interviews to confirm saturation. In this sense, confirmation was obtained, and no new information had been registered; then, was decided to finish with data collection stage.

**Table 1**  
**PARTICIPANTS AND CODING FOR DATA ANALYSIS**

OCCUPATION AREA	GENDER	DURATION	CODE
Ecotourist	Masculine	32min27s	E1
Teacher	Masculine	30min52s	E2
Teacher	Feminine	46min39s	E3
Teacher	Masculine	1:48:03	E4
Teacher	Masculine	1h13min30s	E5
State Tourism Secretary	Masculine	1h26min51s	E6
Tourismologist	Masculine	31min53s	E7
Teacher	Masculine	57min21s	E8
Teacher	Masculine	54min36s	E9
Entrepreneurship	Masculine	26min01s	E10
Consultant	Feminine	24min12s	E11
Teacher	Feminine	30min31s	E12
Consultant	Feminine	25min31s	E13
Ecotourist	Feminine	39min30s	E14
Ecotourist	Feminine	20min51s	E15

OCCUPATION AREA	GENDER	DURATION	CODE
Tourism Trade	Feminine	22min22s	E16
Ecotourist	Feminine	28min59s	E17
Ecotourist	Feminine	24min08s	E18
Teacher	Masculine	18min23s	E19
Teacher	Masculine	31min26s	E20
Tourism Trade	Feminine	17min13s	E21

Source: Prepared by the authors.

Note: hour (h); minutes (min); seconds (s).

For data analysis, the research followed the different phases mentioned by Bardin (2015). For the author, the analysis process must follow three specific phases: I) pre-analysis, referred about the choice of documents to be analyzed, hypotheses and objectives formulation and the indicators elaboration, supporting interpretation finishing the analysis; II) material exploration, where analysis itself will be executed, and III) treatment, inference and results interpretation. The author highlights that, at this point, the results will be treated, verifying whether they are relevant and valid.

In this context, at first, bibliographical survey was applied to approach the research topic aiming for the better developing of the interview script for data collection. After bibliographical survey registration, it was possible to develop the interview script used in this research. Based on the script, interviews were applied with the sample and then transcribed, and categorized, according to pre-defined categories.

As suggested by Bardin (2015), after every interview it is necessary, for the researcher, to read the documents aiming to establish contact with the data to be analyzed, in order to provide better theories projections related to the obtained material.

To develop data analysis, pre-defined categories preceding TPB constructs were used, with the addition of “environmental commitment” category. Such categories are intended to provide a simplified representation of the data. Bardin (2015) implies that using pre-defined categories does not influence the generation of data set deviations but allows invisible indices identification on raw data. Considering prior categories definition, the interviews transcribed in this research were scanned aiming to identify environmental, behavioral, normative and control beliefs. Faustino-Dias *et al.* (2022) and Faustino-Dias *et al.* (2024) conceptualize the scanning process in content analysis, as the reading task of analyzed documents; is based on the defined categories in the research.

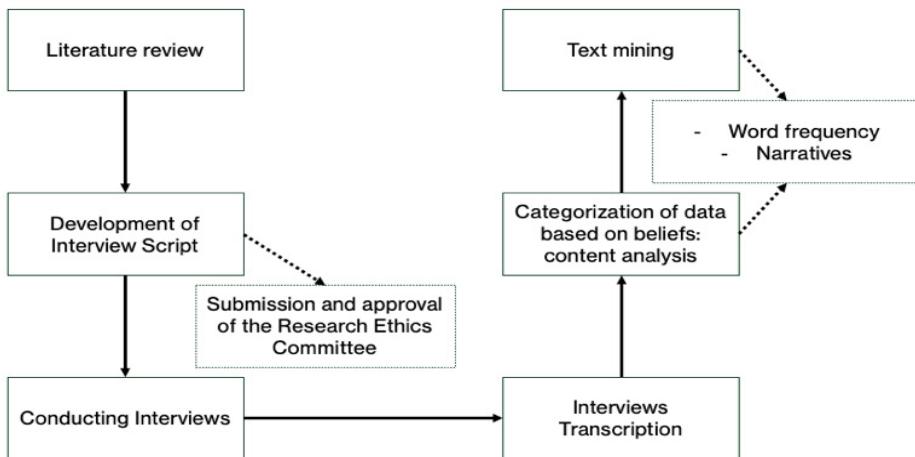
It must be reminded that in the current work, to operationalize the data; QDA Miner software in v.5.0.19 and resources from the WordStat module v.7.1.21, were used. WordStat aimed at analyzing texts statistically, leading to obtain results in form of frequency, percentage of frequency in relation to the total number of words displayed and analyzed, with the objective of estimate term frequency-inverse document frequency (TF\*IDF) index, which evaluates terms relevance in documents (Marhov and Larose, 2007). Marhov and Larose (2007) and Faustino-Dias *et al.* (2022) declare that this index, despite not

being consistent in the set of documents, help in determining the importance of a specific term into data set.

Additionally, software's exclusion dictionary was used containing "stop words" (pronouns, articles, prepositions, etc.). In addition, words outside the scope of the research, acronyms and country names were also excluded. Lemmatization it was also used. As explained by Nascimento and Menandro (2006), this process replaces words with their reduced form, considering the common root of semantically close words, but which differ in gender, number and/or grammatical class.

Finally, based on content analysis, the narratives of each participant in this research were analyzed. For this, pre-established categories were added to the software, to obtain results considering individual categories. Figure 1 shows the research workflow.

**Figure 1**  
**FLOW OF RESEARCH ACTIVITIES**



Source: Prepared by the authors.

#### 4. RESULTS AND DISCUSSIONS

As mentioned, 21 interviews were conducted and recorded, completing approximately 14 hours of audio. After transcription, the documents were allocated into QDA Miner software to perform content analysis. The first stage of the analysis consisted of identifying the most frequent words in the set of documents (Figure 2). At this stage, the software, after excluding stop words, verified the existence of 3,714 words.

It is important to highlight that the absolute frequencies observed at this stage of the research are lower than those observed by Faustino-Dias *et al.* (2024). This difference might be because the author analyzed a large number of documents (5,166 scientific articles), which justifies the high frequency of analyzed words.

The word “environment” showed the highest absolute frequency ( $F = 100$ ), followed by the word “nature” ( $F = 80$ ). These words evidence the basic characteristics to understand the type of tourism analyzed in this research; that is ecotourism. When analyzing these words in a contextualized way, it is possible to observe that the participants believe in the importance of the role of nature and the environment in ecotourism activities, which corroborates the definition of Bjork (2000), Blamey (2001) and TIES (2015), as well as the empirical results observed by Roseta *et al.* (2020), but it can also be a warning sign, as mentioned by Kiper (2013) and Baloch *et al.* (2023). Blamey (2001), for example, emphasizes that ecotourism must be based on nature, be environmentally adequate and managed sustainably.

**Figure 2**  
MOST FREQUENT WORDS IN NARRATIVES



Source: Research data.

TIES (2015), on the other hand, highlights that ecotourism is result of integrate conservation practices, the community's well-being and sustainable tourism, favoring appreciation and respect for nature and local cultures. This kind of tourism is characterized as responsible travel to natural destinations preserving the environment, assuring the local communities benefit incorporating educational and allegorical activities for visitors.

On empirical side, Roseta *et al.* (2020) sought to understand the determinants of consumer decision-making process in ecotourism contexts, as well as verify the growing importance of this activity. In their results, the authors accentuate the fact that ecotourism is the natural evolution of tourism, since it is responsible for taking care of the environment, culture and local traditions at the same time, promoting environmental education, with both destination image and previous experiences affecting positively the intention to undertake ecotourism trips. Participants E16 and E17 narratives, for example, demonstrate that ecotourism goes beyond its natural characteristics, but provides moments that could contribute to the tourist's mental health:

“[...] I really like ecotourism because of the contact with nature; you can go there to enjoy it. [...] I want to hear the place; I like to hear the birds, the water there, if it’s a place with water in it” (E16).

“[...] Peace, tranquility, these are the most peaceful environments. You can admire the trees, see those places with native trees, birds, some animals, the rivers. This calmness, the contact with nature makes me feel very good” (E17).

Regarding this, Callaghan *et al.* (2021) focus attention on the contact with nature, fact that may act as psychological restorer through natural spaces visualization and observation. Krishna *et al.* (2023) reinforce this idea concluding that mental health can be significantly improved through ecotourism activities. In their study, the authors found that spending time in natural areas helps reduce stress levels, facilitates relaxation and diminish anxiety and depression symptoms.

On the other hand, Kiper (2013), argued that ecotourism activities, even if carried out in natural environments, can be a problem if they are not executed according to their purposes and principles. As claimed by the authors, the increase in ecotourism activities causes disturbances in environmental, economic and sociocultural fields due to excessive intensification in these areas. Baloch *et al.* (2023) investigating the relationship between tourism development and environmental suitability, proposed a framework for sustainable ecotourism and concluded that a substantial quantity of people realize real socioeconomic benefits in it, but both natural and environmental resources has been increasingly degraded, caused by excessive land use, outside crops intrusion and air and water pollution due solid waste accumulation; and car, sewage and carbon emissions.

As seen in E3’s narrative, for example, it is evident that environmental discourse, mainly related to sustainability, is a subject that remains only in discussion and is rarely considered to be practiced:

“... Therefore, this responsibility is not just picking up the trash [...] sustainability is a predominant discourse, but this practice is far from happening. [...] preaches sustainability through exploration, including human exploitation, not just environmental” (E3).

In the context of environmental degradation and discuss, it is highlighted that words such as “garbage” (F = 34), “concern” (F = 21) and “throw” (F = 19) are the most frequent, suggesting that for the current research participants, one of the main interests related to the maintenance of the visited environment is the proper waste disposal or, in other words, “throwing trash” in its respective place. In their narratives, E1 and E2 demonstrate significant concern and care for environment, as registered in their interviews:

“[...] I actually care a lot about the environment. [...] I would be that guy ‘look at the rubbish over there, wow, that’s not fair’” (E1).

“It’s about throwing trash where trash is, respecting the environment the way it is” (E2).

Furthermore, waste disposal is not only linked to the appropriate disposal location, but also to excessive waste production from tourist activities (Hockett *et al.*, 1995; Manomaivibool, 2015; Martins and Cró, 2021; Yuxi *et al.*, 2023; Baloch *et al.*, 2023; Koliotasi *et al.*, 2023). Hockett *et al.* (1995), for example, almost 20 years ago, found that tourists tend to invest significant amounts of money in products such as food, clothing and other items, resulting in the production of various types of junk, including packaging and food waste, due to these goods' transportation and consumption.

Recently, Martins and Cró (2021) argued that environmental resources are production inputs in tourist experience creation. Therefore, there may be negative impacts from inadequate solid waste management. For the authors, tourism sector is an intensive producer of waste, and tourists may be considered an additional source of its generation, in the tourist destination. Koliotasi *et al.* (2023) add that, as tourist activities follow a seasonal pattern, this increases seasonal quantities of waste generated, changing the seasonal qualitative composition of territories' debris flow.

In E10's narrative, as entrepreneur's point of view, it is noticed that when visiting an ecotourism environment, it might be considered as relevant that that tourists would pay respect to it, without increasing its territory's degradation:

“[...] when you come to the environment, you must respect that place, not leaving garbage, not throwing garbage in that place.” (E10)

Still regarding the frequency of words, we chose to point out some aspects related to the environment structure, in terms of constitution. In this context, words like “accessibility” (F = 37) and “security” (F = 21) were the ones that stood out the most. Regarding structural issues, E2's narrative shows a very important concern about how the big part of ecotourism offers are made:

“ [...] It needs to have a minimum structure. [...] so, I see disadvantage in it, in structural terms” (E2).

Palmer and Riera (2003) argue that structural problems related to ecotourism are often linked to the excessive growth in tourists' quantity, which affects not only tourist processes such as accommodation and leisure, but the local people's quality of life. Pintassilgo and Silva (2007) revealed that open access to tourist accommodation industry, generally, leads to economic and environmental overexploitation. This consideration can also be seen in E5's and E11's narrative:

“Sometimes the city has no structure. I remember that I was quite uncomfortable, because they [the location], the use of digital media, the Wi-Fi, these support things, Wi-Fi and so on, you could get them if you wanted, but it wasn't available” (E5)

“It must have infrastructure investment without generating conflict between visitors, by having many people at the same moment, in the same space of time” (E11)

Furthermore, as tourism in natural areas, the security of the territory can be constantly questioned. On one hand, tourists with strong environmental appeal stipulate that environment for ecotourism should have as few changes as possible; this means preserving its natural configuration (Fletcher, 2019; Honjo and Kubo, 2020). This aspect is reinforced by E16's narrative:

“ [...] The place must be an original place; there are places that, today, are so modified, and for me it's no longer ecotourism; it's, I don't know, a resort project or something like that, which doesn't attract me” (E16).

According to Fletcher (2019), for example, ecotourism operates within “post-nature” concept, where environmental and social consciousness are exploited, diverging from the pure and unaltered state of nature. For him, this trend allows ecotourism expansion as well as environmental degradation, influenced by industrial capitalism, reconstructing such destructive impacts as opportunities for growing ecotourism activity.

On the other hand, this natural configuration can be considered inaccessible and unsafe for most tourists who visit the destination. Thus, there is an argument for infrastructure development that can guarantee visitors' safety, even if this implies certain modifications to the natural environment, including safer trails construction, adequate signposts and emergency resources provision, balancing the ecotourism experience with the tourists' safety needs and protection (Bentley *et al.*, 2010; Ashok *et al.*, 2022; Zhu and Sun, 2022). The narratives of E3 and E20, for instance, reinforce the concern of other groups of tourists:

“ [...] I like safer situations. The environment must have adequate structures and give me security” (E3).

“ [...] Since they are building an environment, make it accessible. [...] if I go somewhere and know that the bathroom door is 55cm wide, I know I won't be able to use it” (E20).

Bentley *et al.* (2010) reinforce that ecotourism locations equipped with better and secure infrastructure tend to decrease the occurrence of serious accidents. In their research, the authors revealed that the most frequent incidents include slips, trips and falls, often resulting from unpredictable and adverse weather conditions, as well as visitors' skills and behaviors.

Regarding attractive items, the words “trail” ( $F = 32$ ), “waterfalls” ( $F = 27$ ) and “beauty” ( $F = 15$ ) stand out. It is known that scenic beauty is considered one of the main tourism motivators (Neuts *et al.*, 2016; An *et al.*, 2019; Carvache-Franco *et al.*, 2021; Pham and Khanh, 2021; Sethy and Senapati, 2023; Chi and Pham, 2024). Neuts *et al.* (2016) in their research indicate that the most attractive activities for tourists are landscape elements and scenic beauty. Chi and Pham (2024) also add that tourists tend to visit ecotourism destinations with beautiful landscapes more frequently. This relationship, the

intention to consume ecotourism and scenic beauty, can be seen at E11, E15, E17 and E18 narratives:

“[...] having scenic beauty, scenic beauty is a necessary item for a nature product on the market” (E11).

“[...] I generally choose places that I consider more beautiful” (E15).

“[...] I really like taking photos, I see those beautiful places, I choose them and go” (E17).

“[...] Places need to be beautiful. If it's not pretty, I won't go” (E18).

It must be noted that waterfalls are often considered attractions to engage tourists and enhance ecotourism consumption. However, it can also cause concerns for tourists and their families, due to the potential risks they may represent (Judson, 2013). E14 narrative makes this concept clear:

“[...] father and mother are always very worried, especially since a mother lost her son in this waterfall” (E14).

Regarding risks, Judson (2013) highlights that the main risks linked to waterfalls are drowning due to intense water currents or unexpected emergence of water heads, falls resulting from slipping on damp rocks and smooth surfaces, trauma due to collisions with submerged rocks when diving in unsuitable areas, thermal shocks when entering in very cold water, as well as dehydration and heatstroke caused by lack of adequate hydration, or heat protection during prolonged skin exposure to the sun.

To mitigate these risks, precautions are recommended such as respecting safety warnings, avoiding water in bad weather, wearing appropriate footwear, not consuming alcohol before visiting, supervising children, checking the depth before diving and being cautious when traveling over rough terrain (Férias Vivas, 2023).

Regarding financial questions, the words “travel” (F = 29), “access” (F = 27), “tour” (F = 18), “price” (F = 14), “expensive” (F = 11) and “money” (F = 10) were the most frequent. The narratives of E2, E3, E7 and E10 participants show concern with prices, as the limiting factor for decision making about whether to undertake an ecotourism trip. Furthermore, the participants' narratives highlight that, besides being a limiting factor, the price is considered high for most services related to ecotourism.

“[...] (the price) ends up being an obstacle to make this type of tourism. [...] ‘Ah, this place here, I would like to visit, but the price is exorbitant’. [...] so, the exorbitant price issue would be the main limiting factor for me to take a trip today” (E2).

“[...] A reduced income is limiting, because ecotourism destinations are generally more expensive. [...] then ecotourism is elitist, you know?” (E3).

“[...] the question of the cost of it, how much it costs, whether it is affordable for my standards” (E7).

“[...] first of all, if the person really will have the budget, financial resources to carry out that activity” (E10).

It is important to specify that ecotourism is considered an expensive tourist activity, something already known and confirmed by several researchers. However, two perspectives are differentiated from each other in previous research: the first relates to consumers' willingness to pay a premium price (WPPP) for ecotourism services, reflecting the value they attribute to environmentally responsible experiences (Hultman *et al.*, 2015; Kazeminia *et al.*, 2016; Lu *et al.*, 2016; Duong *et al.*, 2022; The second, focuses on the substantial need for investments in environmental conservation, support for local community development and implementation of sustainable practices, crucial elements for ecotourism success and viability (Choi *et al.*, 2017; Roscioni *et al.*, 2019; Almeida *et al.*, 2022).

In the first approach, Lu *et al.* (2016) discuss that tourists' intention to participate in ecotourism can predict their WPPP. This intention often arises from the tourists' active interest in the environment, driven by their own health or the future of their children. Therefore, consumers' bias towards ecotourism, promoting improvements of the natural environment, environmental education and sustainable management, motivating tourists to greater WPPP.

In a similar way, Hultman *et al.* (2015) concluded that there is a direct relationship between affective attitude and WPPP for decisions related to ecotourism. For the authors, improving tourists' affinity with natural attractions can increase tourists' ecological WPPP. Duong *et al.* (2022) also find that WPPP showed positive relationship with the intention and way in which tourists perceive the value of the destination, emphasizing that tourists are attracted, mainly, when they receive unique information about the destination and, therefore, they tend to go on ecotourism trips and pay more for it.

Weerasekara and Assella (2023) point out that ecotourism stakeholders must collaborate in the development and implementation of communication strategies focusing on the relevance and benefits of ecotourism, for environmental and cultural conservation. Those strategies can generate positive results for both local communities and tourists. Additionally, the authors punctuate that segmenting the ecotourism market might be relevant for the design of strategic decisions, developing new products, creating efficient advertising campaigns and establishing strategic market positioning.

Regarding the second perspective that justifies the high costs related to ecotourism destinations, Choi *et al.* (2017) argue that both viability and success of tourist activities depend on considerable investments in environmental conservation, local community development and sustainable practices. For them, the most important thing is investing in environmental conservation, not only for protecting ecosystems, but for ensuring that future generations can appreciate and learn from nature. Furthermore, strengthening local communities through education and economic benefits is fundamental to sustainable development.

Roscioni *et al.* (2019) indicate that the most relevant in ecotourism is preserving the natural environment that, although expensive, is essential to prevent physical and ecological damage. Careful maintenance of ecosystems not only avoids ongoing costs arising from negative impacts, but also extends the lifespan of ecotourism destinations, contributing to their long-term sustainability.

Almeida *et al.* (2022) in turn, highlight that substantial investments in natural spaces preservation and maintenance play an essential role in environmental conservation and for local communities' socioeconomic support. The authors argue that these high costs are justified, as they contribute to the local culture protection and strengthening, ensuring the preservation of their identity and traditional values. This financial support, aimed at maintaining the natural environment's integrity, helps preventing cultural erosion as result of uncontrolled tourism or invasive development.

Regarding the community, it is important to highlight that when evaluating the ecotourism activities impacts on community, words such as "community" ( $F = 29$ ) and "impact" ( $F = 12$ ) are used in the narrative. In this sense, it is important to verify that concerns about the ecotourism destination territory can be seen in different ways. E3 and E4, for example, demonstrate direct concern for local communities in their narratives:

"[...] I think a lot here in Pantanal, about the communities that live in this space" (E3).

"[...] I won't go to a destination that won't prioritize the local community" (E4).

This is also evident in the work of Salman *et al.* (2021) and Thapa *et al.* (2022). Salman *et al.* (2021) state that ecotourism should contribute to environmental conservation and cultural recovery, as well as improving the local community lives. Furthermore, the authors add that this tourist activity strongly depends on active participation of the local community; considering, at the same time, that the involvement and collaboration of all interested parties is necessary to improve the destination's financial conditions, expand market opportunities and increase the destination's competitiveness, thus increasing the benefits of the destination.

Thapa *et al.* (2022), in the same wavelength, reinforces the critical importance of integrating socioeconomic gains with conservation efforts in ecotourism destinations, in a way that both environmental protection and local development could be supported. Specifically, for local communities, these authors point out that, although ecotourism can be a source of economic benefits, there is a risk of significant sociocultural costs for the region's inhabitants; this means that in the territory where ecotourism is developed, a complex trade-off between economic advances and local cultural identity preservation may be present.

On the other hand, ecotourism is often considered an opportunity to boost regional economic development while maintaining and enhancing local culture. In this context, it can act as a unifying element, promoting economic growth without compromising local traditions and cultural values. The narratives of E7 and E9, as example of this, talk about these ecotourism activity contributions:

“[...] Another advantage is the possibility of promoting the communities’ development, surrounding populations, and these protected areas” (E7).

“[...] the great advantages are entrepreneurship for business, jobs generation and better income for professionals from different sectors, better insertion of communities in these regions in the development process and economic growth, led by an intelligent development. (E9)

Regarding this, Abdullah *et al.* (2020) and Kunjuraman *et al.* (2022) argued that ecotourism is constantly used as a conservation strategy, but it can also be considered a way to eradicate rural poverty. In the study of Abdullah *et al.* (2020), for example, evaluating the socioeconomic benefits of ecotourism for communities in forest regions, they identified significant economic benefits, and the income received from ecotourism is important for reducing poverty among local families.

Kunjuraman *et al.* (2022) identified that ecotourism brings numerous benefits to the local community, including the increase of sustainable job opportunities and population income, as well as participants assets accumulation for ecotourism projects. However, the authors also indicate that income distribution might be unequal among project’s participants, with small entrepreneurs<sup>1</sup> receiving less income than corporate employees do.

Still on the word cloud (Figure 1), the groups and/or people that participants consider seeking information before making decisions related to ecotourism are highlighted. In this context, the most frequent words were “friends” (F = 52), “family” (F = 18) and “guides” (F = 16). When dealing with friends’ influence, for instance, the narratives of E15, E17 and E19 make the participants’ thoughts clear.

“[...] Some of my friends also like this kind of trip, we always go in the same group” (E15).

“[...] I have a group of friends who say: “look, let us go to this place” and we go, you know?” (E17).

“[...] most of my friends, the major of my city also encourages this kind of trip” (E19).

In the same context, E2, E5 and E17 narratives strengthen the influence that family members have on participants’ decisions:

“[...] I get together there with my daughter, with my wife, to decide.” (E2)

“[...] I like reunite my family; my wife, my children, having other experiences, you know?” (E5)

<sup>1</sup> Kunjuraman *et al.* (2022) divide the participants in projects linked to ecotourism as family home operators, what we call “small entrepreneurs”, and commercial bed and breakfast (B&B), what we call here “corporates”.

“[...] My adult nephews really enjoy it, sometimes they say: “uncle, let’s plan a weekend so we can go to Chapada<sup>2</sup>?” (E17)

As noted, friends and family opinions seem to be important in consumers’ decisions. This is because, very often, shared experiences and recommendations of these close groups influence ecotourism destinations and activities, reflecting their trust and opinion’s value. Hoang *et al.* (2022) concluded that potential tourists tend to value recommendations from friends and family when planning their trips. This behavior aims to minimize risks associated with tourist experience and, simultaneously, strengthen social ties through sharing reliable information and previous experiences.

These narratives are also aligned with Zhang (2022) findings, where tourists’ word-of-mouth communication has the best impact on tourists’ travel decisions, with more than a third of tourists listening suggestions and advice from their families and friends before traveling. Nevertheless, it has been observed that less than 5% of tourists make their travel decisions based on tourism advertisements.

Finally, tour guides emerge in E12, E13 and E18 narratives, as relevant elements for tourism, acting not only aiding to have safe access to ecotourism destinations, but also as guardians of the experience, ensuring that risks are minimized as much as possible.

“[...] People who influence me most are professionals, right? Guides, agencies that have been working for a long time, because they have experience” (E12).

“[...] Guide, a tour guide, because you should have someone to guide you, “you’re going to go there, there”, you know?” (E13)

“[...] the tourist guides who present and film, who post [...] it’s important to have tourism guiding, without a guide I won’t go at all.” (E18)

Ren *et al.* (2024) emphasize that tourism guides are extremely important for both proper and safe functioning ecotourism activities. For the authors, they are responsible for ensuring adequate tourists’ good experience, since they can personalize their service based on tourists’ needs. Furthermore, it must be noted that after COVID-19 pandemic, tourists have increasingly sought out tourist destinations with greater contact with nature.

After analyzing words frequency, categorization was developed based on beliefs related to ecotourism based on interviews (Table 2). Beliefs were organized into four categories: normative, behavioral, control and environmental; corresponding to the constructs of subjective norms, attitudes, perceived behavioral control (PBC) and environmental commitment, respectively; and the latter added as construct.

As seen in Table 2, normative beliefs regarding family members (76.2%) and bloggers and influencers (66.7%) are frequently mentioned, reflecting the interviewees’ perception that these groups were influenced regarding their destination choices. Attention must be

<sup>2</sup> Chapada refers to the tourist destination of Chapada dos Veadeiros, located in the state of Goiás, Brazil. The destination has high tourist reception rates and is considered a Natural World Heritage Site by UNESCO (ICMBio - Parna 2024).

given in the relation to bloggers and digital influencers; narratives E3, E5, E7 and E10 suggest that they shape travel decisions and are catalysts in creating new tourism demands.

“[...] Some Instagram travelers and influencers profiles [...] some black women blogs” (E3).

“[...] Social network groups [...] a group called Kalunga communication. [...] It's always interesting to blog.” (E5).

“[...] these digital influencers who generate various content, increases tourism demand” (E7).

“[...] Social networks like Instagram and Facebook, due to influencers, have a lot of impact. [...] the TV Series called “Pantanal”, also influence a lot of people” (E10).

Kilipiri *et al.* (2023) state that travel influencers on Instagram are significantly related to consumers' preference for sustainable destinations, mainly because they act as key communicators for many people. Such influence can be associated with the ability of digital influencers to shape perceptions, as well as highlighting the importance of sustainability through their platforms. Having said that, the authors believe when influencers share their experiences promoting responsible travel practices, this not only educates their followers about the importance of sustainable choices, but actively encourage the selection of environmental preservation, value every destination and contribution to local communities.

In the context of behavioral beliefs, adequate accommodation appears with 57.1% of the mentions, demonstrating its importance for ecotourism experience. The concern of accommodation is expressed in E2, E7, E19 and E21 narratives.

“[...] If the place where I am staying provides the minimum comfort structure” (E2).

“[...] Hosting that guarantees the services that will be offered” (E7).

“[...] you need some comfort at least for camping” (E19).

“[...] sometimes I prefer to go to a hotel because of the structure” (E21).

**Table 2**  
**IDENTIFIED BELIEFS AND FREQUENCY IN NARRATIVES**

<b>NORMATIVE BELIEFS</b>	
<b>Belief</b>	<b>Frequency (%)</b>
People with reduced mobility	42.9
Bloggers and influencers	66.7

Environmental Sciences students and researchers	33.3
Ecotourism <i>traders</i>	66.7
Friends	66.7
Relatives	76.2
Review websites	28.6
Elderly	57.1
<b>BEHAVIORAL BELIEFS</b>	
<b>Belief</b>	<b>Frequency (%)</b>
Innovation	47.6
Animals	52.4
Planning	42.9
Location	52.4
Food	33.3
Suitable accommodation	57.1
Learning	52.4
<b>CONTROL BELIEFS</b>	
<b>Belief</b>	<b>Frequency (%)</b>
Accessibility	42.9
To be alone	9.5
Price	66.7
Transport	61.9
Climate/Weather	38.1
Variety of attractions	71.4
Destination image	52.4
Legislation	19.0
<b>ENVIRONMENTAL BELIEFS</b>	
<b>Belief</b>	<b>Frequency (%)</b>
Contact with nature	85.7
Environment structure	81.0
Local culture	38.1
Environmental concern	85.7
Traditional people	23.8

Source: Prepared by the author.

Regarding this, Paço *et al.* (2012) highlight that tourist accommodation must be adequate and satisfy their requirements. However, the authors also emphasize that, in the context of ecotourism, it is essential that hotels adopt sustainable practices minimizing environmental impacts, aligning with tourists' ecological awareness. Zhang *et al.* (2023), in the same context, add that the use of green energy and increased electric efficiency,

in hotels and tourist accommodation, has increasingly been demanded by tourists, which makes the hotel sector move towards more sustainable management.

Regarding control beliefs, the variety of attractions is highlighted in 71.4% of the interviews, suggesting that it is the critical factor in choosing tourism destinations. This need is reinforced in E1, E14, E18 and E21 narratives.

“[...] there has to be a high volume of possible things to do. If you go to *Bonito*, for example, there are several touristic options to visit” (E1).

“[...] I think it must have many attractions. The attraction of developing a game like zip line, float; so you need to have one more” (E14).

“[...] when there's variety, it's cool. The last one I went, I went tubing, rappelling, hiking, zip-lining” (E18).

“[...] If it has a lot of attractions, it attracts more people's attention” (E21).

Deb and Rout (2023) also add that attractions diversification is the key factor for enhancing the ecotourism destination appeal. This means that every location must offer a wide range of activities, from wildlife observation and nature trails to immersive cultural experiences, which provide tourists with a variety of enriching experiences. Additionally, adequate infrastructure, opportunities for meaningful social interaction and effective management are equally important to maximize the destination's potential, ensuring a complete and satisfying experience for visitors.

Finally, environmental beliefs are managed by contact with nature and environmental concern, both at 85.7%, emphasizing the central value that respondents attribute to the interaction with environment and its conservation. Regarding contact with nature, the narratives analyzed point out that participants seek contact with nature as a way of relaxation and disconnection from urban and daily life demands, in addition to the desire of a deep connection with fauna and flora. Narratives from E10, E12 and E18 participants corroborate this perspective, getting relevance to the nature as a sanctuary and an restoration and learning source.

“[...] the person comes to seek contact with nature, so they want to come and feel nature, the Pantanal, [...] see what you have here in the middle [...].” (E10)

“[...] the very contact with nature and what it allows us, relaxation, forgetting about the urban [...].” (E12)

“[...] to have greater contact with nature, because I think it is very therapeutic.” (E18)

Similar to what participants said, Liu *et al.* (2022) exhort the importance of direct contact with nature, noting that such connection offering positive effects on both per-

sonal well-being and environmentally responsible behavior promotion. The authors identified that regular contact with natural environments, in private outdoor spaces and in green urban areas, contributes significantly to these positive relationships. Furthermore, involvement with nature can influence pro-environmental actions, such as volunteering in conservation initiatives.

Regarding environmental concerns, participants not only express the need to preserve natural spaces but also resemble the importance of continuity and consistency in the actions occurring in such environments. The narratives of E5 and E12 indicate this environmental awareness, reflecting participants' commitment to sustainability and ecological responsibility.

“[...] my environmental concern comes from this immersion, in the sense of understanding the importance of environmental conservation, the path that I am following, do I realize that it already has environmental impact?” (E5)

“[...] as long as you don't throw a stick of anything, put it in your bag, everyday stuff and especially when this concern is in fact with the environment [...].” (E12)

As can be seen, these narratives reveal that environmental concern seems to be a prevalent feeling among the participants. Huang and Liu (2017) found that tourists' environmental concern is the determining factor for ecosystems preservation, and act as a driving force for choosing any ecotourism destinations. Considering the authors' point of view, this awareness plays a vital role in expanding the meaning and depth of tourist's experience, while also encouraging their responsible and sustainable behaviors.

Regarding this influence, it is essential that ecotourism operators and managers dedicate themselves to the creation of experiences that not only respect, but also maintain the importance of sustainability, encouraging visitors to adopt environmentally conscious and active postures.

## 5. CONCLUSIONS

The results indicated that behavioral, normative and control beliefs play significant role in shaping tourists' intentions towards ecotourism. Attitudes regarding ecotourism behavior, subjective norms and perceived behavioral control (PBC) were influenced by several beliefs, reflecting the motivations complexity influencing tourists to choose ecotourism destinations. Environmental concern, the desire for contact with nature and local culture appreciation emerged as determining factors to practice ecotourism, being added to “environmental commitment” construct.

The analysis of behavioral beliefs revealed that tourists highly value the experience of being in contact with nature, the opportunity to learn about the environment and the possibility of contributing to the conservation of natural resources. These beliefs are aligned with classic ecotourism definitions, emphasizing the importance of environmental preservation and tourist education. Normative beliefs, on the other hand, highlighted the significant influence of friends, family and digital influencers shaping tourists' intentions.

These reference groups are important by disseminating information and building positive images related to ecotourism.

Control beliefs, which include factors such as accessibility, infrastructure and safety also proved to be important determinants of ecotourism intention. Tourists' perception of the ease or difficulty of carrying out ecotourism activities influences directly their decision to engage in this kind of tourism. The presence of adequate infrastructure, the guarantee of security and the availability of clear and precise information, are essential elements to promote ecotourism effectively.

This study also identified the need for specific strategies to balance the growing demand for ecotourism with environmental conservation, as well as the local communities' well-being. Ecotourism sustainability depends on the implementation of practices minimizing negative impacts and maximizing socioeconomic and environmental benefits. It is recommended that ecotourism destinations managers invest in environmental education, community involvement and sustainable infrastructure development. Furthermore, it is crucial to promote tourists' awareness of environmentally responsible behaviors and importance during their visits.

Despite the significant contributions of this study, some limitations must be recognized. The research was applied with a sample of experts in ecotourism, without having an amplified view of consumers being necessary that, in the future, the opinion of tourists should be heard; so will be possible to quantify the level of beliefs' impact (behavioral, normative, control and environmental) in consumer decisions. In this sense, it is suggested that future research consider using other data collection and analysis methods, such as the use of surveys (collection) and structural equation modeling (analysis).

**Authorship statement:** The authors declare no conflict of interest. Conceptualization: Álvaro Freitas Faustino-Dias and Milton Augusto Pasquotto Mariani. Consulting and treatment of original sources: Álvaro Freitas Faustino-Dias, Milton Augusto Pasquotto Mariani e Geraldino Carneiro de Araujo. Research and writing: Álvaro Freitas Faustino-Dias, Milton Augusto Pasquotto Mariani e Geraldino Carneiro de Araujo.

## 6. REFERENCES

Abdullah, M., Mamat, M.P., Adnan, N., and Hussain, F.N.T. (2020). Ecotourism as tool for eradicating rural poverty in Peninsular Malaysia, *IOP Conference Series: Earth and Environmental Science*, 549, 012091. <https://doi.org/10.1088/1755-1315/549/1/012091>

Ajzen, I. (1985). From intention to actions: a theory of planned behavior. In: Kuhl, J., Beckmann, J. (eds). *Action control: from cognition to behavior*. (p. 11-39). Springer.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50 (2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)

Ajzen, I. (2020). The theory of planned behavior: frequently asked questions. *Human Behavior and Emerging Technologies*, (2), 314-324. <https://doi.org/10.1002/hbe2.195>

Almeida, L.M.L.D., Vasconcelos, I.M., Brito, D.M.C., and Hilário, R.R. (2022). Current status, attractions, and obstacles for ecotourism in protected areas of Amapá,

Brazil. *Ambiente e Sociedade*, 25, e00061. <https://doi.org/10.1590/1809-4422aso-c20220006r1OA>

An, L.T., Markowski, J., Bartos, M., Rzenca, A., and Namiecinski, P. (2019). An evaluation of Destination attractiveness for nature-based tourism: recommendations for the management of national parks in Vietnam. *Nature Conservation*, 32, 51-80. <https://doi.org/10.3897/natureconservation.32.30753>

Arnegger, J., Herz, M., and Campbell, M. (2024). Mass ecotourism, media, and wildlife experience. *Journal of Outdoor Recreation and Tourism*, 45, 100732. <https://doi.org/10.1016/j.jort.2023.100732>

Baloch, Q.B., Shah, S.N., Iqbal, N., Sheeraz, M., Asadullah, M., Mahar, S., and Khan, A.U. (2023). Impact of tourism development upon environmental sustainability: a suggested framework for sustainable ecotourism. *Environmental Science and Pollution Research*, 30, 5917-5930. <https://doi.org/10.1007/s11356-022-22496-w>

Barba Sánchez, V., and Ramírez, E.M. (2015). Efectos del apoyo emocional de las redes cercanas al emprendedor indígena sobre el éxito de la nueva empresa ecoturística en la mitad sur de México. *Cuadernos de Turismo*, (36), 79-99. <https://doi.org/10.6018/turismo.36.230891>

Bardin, L. (2015). *Análise de conteúdo*. Edições 70.

Bentley, T.A., Cater, C.I., and Page, S.J. (2010). Adventure and ecotourism safety in Queensland: operator experiences and practice. *Tourism Management*, 31 (5), 563-571. <https://doi.org/10.1016/j.tourman.2009.03.006>

Bjork, P. (2000). Ecotourism from a conceptual perspective, an extended definition of a unique tourism form. *International Journal of Tourism Research*, 2 (3), 189-202. [https://doi.org/10.1002/\(SICI\)1522-1970\(200005/06\)2:3%3C189::AID-JTR195%3E3.0.CO;2-T](https://doi.org/10.1002/(SICI)1522-1970(200005/06)2:3%3C189::AID-JTR195%3E3.0.CO;2-T)

Blamey, R.K. (2001). *Principles of ecotourism: the encyclopedia of ecotourism*. CAB International.

Butcher, J. (2007). *Ecotourism, NGOs, and development: a critical analysis*. Routledge.

Callaghan, A., Mccombe, G., Harrold, A., Mcmeel, C., Mills, G., Moore Cherry, N., and Cullen, W. (2021). The impact of green spaces on mental health in urban settings: a scoping review. *Journal of Mental Health*, 30 (2), 179-193. <https://doi.org/10.1080/09638237.2020.1755027>

Carvache Franco, M., Carvache Franco, W., Víquez Paniagua, A.G., Carvache Franco, O., and Pérez Orozco, A. (2021). The role of motivations in the segmentation of ecotourism destinations: a study from Costa Rica. *Sustainability*, 13 (17), 9818. <https://doi.org/10.3390/su13179818>

Center for Responsible Travel – CREST. (2017). *The case for responsible travel: trends and statistics*. <https://www.responsibletravel.org/wp-content/uploads/sites/213/2021/03/trends-and-statistics-2017.pdf>.

Chen, M.F., and Tung, P.J. (2014). Developing and extended theory of planned behavior model to predict consumers' intention to visit green hotels. *International Journal of Hospitality Management*, 36, 221-230. <https://doi.org/10.1016/j.ijhm.2013.09.006>

Chi, N.T.K., and Pham, H. (2024). The moderating of eco-destination image in the travel motivations and ecotourism intention nexus. *Journal of Tourism Futures*, 10 (2), 317-33. <https://doi.org/10.1108/JTF-01-2022-0014>

Choi, Y.E., Doh, M., Park, S., and Chon, J. (2017). Transformation planning of ecotourism systems to invigorate responsible tourism. *Sustainability*, 9 (12), 2248. <https://doi.org/10.3390/su9122248>

Coursivanos, J., and Jain, A. (2006). A framework for sustainable ecotourism: application to Costa Rica. *Tourism and Hospitality Planning and Development*, 3 (2), 131-142. <https://ssrn.com/abstract=2137985>

Creswell, J.W., and Creswell, D. (2021). *Projeto de pesquisa: métodos qualitativo, quantitativo e misto*, Penso.

Deb, R., and Rout, H.B. (2023). Identifying the determinants of ecotourism potential: an investigation of Reiek in Mizoram. *Journal of Insights*, 13, 6. <https://doi.org/10.9707/2328-0824.1303>

Deming, A. (1996). The edges of the civilized world: tourism and the hunger for wild places. *Orion*, 15 (2), 28-35.

Diáz Carrión, I.A. (2014). Ecoturismo y vida cotidiana de las mujeres em Sontecomapan (Veracruz, México). *Cuadernos de Turismo*, (34), 69-88. <https://revistas.um.es/turismo/article/view/203031>

Duong, N.G.H., Chi, N.K., Nguyen, H.T., Nguyen, N.T.K., Nguyen, C.P., and Nguyen, U.T.T. (2022). WTPP for ecotourism: the impact of intention, perceived value, and materialism. *Journal of Hospitality and Tourism Insights*, 5 (5), 1034-1045. <https://doi.org/10.1108/JHTI-01-2021-0005>

Faustino Dias, A.F., Spanhol Finocchio, C.P., and Mariani, M.A.P. (2022). Escaneamento das políticas públicas brasileiras de alimentação a partir do 'Nourishing Framework'. *Economia and Região*, 10, 53-65. <https://doi.org/10.5433/2317-627X.2022v10n1p53>

Faustino Dias, A.F., Spanhol, C.P., and Marques, J.L.D. (2024). Alimentação e obesidade no contexto governamental brasileiro: análise das políticas, programas, planos e manuais por meio da mineração de texto. *Revista de Administração IMED*, 14, 19-43. <https://doi.org/10.18256/2237-7956.2024.v14i1.5046>

Férias Vidas. (2023). *Perigo nas cachoeiras*. <https://www.feriasvivas.org.br/cachoeiras-do-brasil-em-segurança-conheça-as-8-regras-de-ouro/>

Fletcher, R. (2019). Ecotourism after nature: anthropocene tourism as a new capitalist 'fix'. *Journal of Sustainable Tourism*, 27 (4), 522-535. <https://doi.org/10.1080/09669582.2018.1471084>

Hoang, S.D., Nguyen, D.T.N., and Pham, M. (2022). Factors affecting ecotourism loyalty with the moderating role of social influence: empirical evidence in Vietnam. *GeoJournal of Tourism and Geosites*, 43 (3), 946-954. <https://doi.org/10.30892/gtg.43314-908>

Hockett, D., Lober, D., and Pilgrim, K.M. (1995). Determinants of per capita municipal solid waste generation in the Southeastern United States. *Journal of Environmental Management*, 45 (3), 205-217. <https://doi.org/10.1006/jema.1995.0069>

Honjo, K., and Kuboo, T. (2020). Social dilemmas in nature-based tourism depend on social value orientations. *Scientific Reports*, 10, 3730. <https://doi.org/10.1038/s41598-020-60349-z>

Huang, Y.C., and Liu, C.H.S. (2017). Moderating and mediating roles of environmental concern and ecotourism experience for revisit intention. *International Journal of*

*Contemporary Hospitality Management*, 29 (7), 1854-1872. <https://doi.org/10.1108/IJCHM-12-2015-0677>

Hultman, M., Kazeminia, A., and Ghasemi, V. (2015). Intention to visit and willingness to pay premium for ecotourism: the impact of attitude, materialism, and motivation. *Journal of Business Research*, 68 (9), 1854-1861. <https://doi.org/10.1016/j.jbusres.2015.01.013>

Icmbio-Parna. (2024). *Parque Nacional da Chapada dos Veadeiros*. <https://www.icmbio.gov.br/parnachapadadosveadeiros/guia-do-visitante.html>.

Judson, B.J. (2013). Waterfalls, science and aesthetics. *Journal of Cultural Geography*, 30 (3), 356-379. <https://doi.org/10.1080/08873631.2013.828482>

Kangai, D., Aman, E.E., and Papp-Váry, A.F. (2024). Ecotourism practices, perspectives, and consumer preferences, attitudes, and expectations: post-COVID-19 Review. In: Maingi, S.W., Gowreesunkan, V.G., Korstanje, M.E. (eds). *Tourist behaviour and the new normal*, vol. II. Palgrave Macmillan. [https://doi.org/10.1007/978-3-031-45866-8\\_9](https://doi.org/10.1007/978-3-031-45866-8_9)

Kaseminia, A., Hultman, M., and Mostaghel, R. (2016). Why pay more for sustainable services? The case of ecotourism. *Journal of Business Research*, 69 (11), 4992-4997. <https://doi.org/10.1016/j.jbusres.2016.04.069>

Kilipiri, E., Papaioannou, E., and Kotzaivazoglou, I. (2023). Social media and influencer marketing for promoting sustainable tourism destinations: the instagram case. *Sustainability*, 15 (8), 6374. <https://doi.org/10.3390/su15086374>

Kiper, T. (2013). Role of ecotourism in sustainable development., In Ozyavuz, M. *Advances in Landscape Architecture*. <https://dx.doi.org/10.5772/55749>

Koliotasi, A.S., Abeliotis, K., and Tsartas, P.G. (2023). Understanding the impact of waste management on a destination's image: a stakeholders' perspective. *Tourism and Hospitality*, 4, 38-50. <https://doi.org/10.3390/tourhosp4010004>

Krishna, S.H., Rajput, H., Prathibha, M.K., Rangnekar, S., and Sethumadhavan, R. (2023). Impact of nature-based tourism on physical and mental health of patients. *Journal for ReAttach Therapy and Developmental Diversities*, 6 (10s), 347-357. <https://jrtdd.com/index.php/journal/article/view/1123>

Kumar, S., Hasija, N., Kumar, V., and Sageena, G. (2023). Ecotourism: a holistic assessment of environmental and socioeconomic effects towards sustainable development. *Current World Environment*, 18 (2), 589-607. [http://dx.doi.org/10.12944/CWE.18.2.14](https://dx.doi.org/10.12944/CWE.18.2.14)

Kunjuraman, V., Hussin, R., and Aziz, R.C. (2022). Community-based ecotourism as a social transformation tool for rural community: a victory or a quagmire? *Journal of Outdoor Recreation and Tourism*, 39, 100524. <https://doi.org/10.1016/j.jort.2022.100524>

Lam, T., and Hsu, C.H. (2004). Theory of planned behaviour: potential travellers from China. *Journal of Hospitality and Tourism Research*, 28 (4), 463-482. <https://doi.org/10.1177/1096348004267515>

Lam, T., and Hsu, C.H. (2006). Predicting behavioral intention of choosing travel destination. *Tourism Management*, 27 (4), 589-599. <https://doi.org/10.1016/j.tourman.2005.02.003>

Lin, X., and Huang, D. (2021). The effect of psychological factor and ecotourism on resident's ecological behavior in National Park in China. *Polish Journal of Environmental Studies*, 30 (3), 2191-2201. <https://doi.org/10.15244/pjoes/127913>

Liu, Y., Cleary, A., Fielding, K.S., Murray, Z., and Roiko, A. (2022). Nature connection, pro-environmental behaviours and wellbeing: understanding the mediating role of nature contact. *Landscape and Urban Planning*, 228, 104550. <https://doi.org/10.1016/j.landurbplan.2022.104550>

Lock, S. (2021). *Market size of the ecotourism sector worldwide in 2019, with a forecast for 2027*. <https://www.statista.com/statistics/1221034/ecotourism-market-size-global/#statisticContainer>

Lu, A.C.C., Gursooy, D., and Chiappa, G.D. (2016). The influence of materialism on eco-tourism attitudes and behavior. *Journal of Travel Research*, 55 (2), 176-189. <https://doi.org/10.1177/0047287514541005>

Luo, Y.L., and Deng, J. (2008). The new environmental paradigm and nature-based tourism motivation. *Journal of Travel Research*, 46 (4), 392-402. <https://doi.org/10.1177/0047287507308331>

Manomaivibool, P. (2015). Wasteful tourism in developing economy? A present situation and sustainable scenarios”, *Resources, Conservation and Recycling*, 103, 69-76. <https://doi.org/10.1016/j.resconrec.2015.07.020>

Marhov, Z., and Larose, D.T. (2007). *Data mining the web: uncovering patterns in web content, structure, and usage*. John Wiley and Sons.

Martins, A.M., and Cró, S. (2021). The impact of tourism on solid waste generation and management cost in Madeira Island for the period 1996-2018. *Sustainability*, 13 (9), 5238. <https://doi.org/10.3390/su13095238>

Nascimento, A.R.F., and Menandro, P.R.M. (2006). Análise lexical e análise de conteúdo: uma proposta de utilização conjugada. *Estudos e Pesquisas em Psicologia*, 6 (2), 72-88.

Neuts, B., Romão, J., Nijkamp, P., and Shikida, A. (2016). Market segmentation and their potential economic impacts in an ecotourism destination: an applied modelling study on Hokkaido, Japan. *Tourism Economics*, 22 (4), 793-808. <https://doi.org/10.1177/1354816616654252>

Paço, A., Alves, H., and Nunes, C. (2012). Ecotourism from both hotel and tourists' perspective. *Economics and Sociology*, 5 (2), 132-142.

Palmer, T., and Riera, A. (2003). Tourism and environmental taxes: with special reference to the ‘Balearic ecotax’. *Tourism Management*, 24 (6), 665-647. [https://doi.org/10.1016/S0261-5177\(03\)00046-3](https://doi.org/10.1016/S0261-5177(03)00046-3)

Pham, H.S.P., and Khan, C.N.T. (2021). Ecotourism intention: the roles of environmental concern, time perspective and destination image. *Tourism Review*, 76 (5), 1141-1153. <https://doi.org/10.1108/TR-09-2019-0363>

Pintassilgo, P., and Silva, J.A. (2007). Tragedy of the commons’ in the tourism accommodation industry. *Tourism Economics*, 13 (2), 209-224. <https://doi.org/10.5367/000000007780823168>

Ren, L., Wong, C.U.I., Ma, C., and Feng, Y. (2024). Changing roles of tour guides: from ‘agent to serve’ to ‘agent for change’. *Tourist Studies*, 24, 55-74. <https://doi.org/10.1177/14687976231200909>

Roscioni, F., Contestabile, P., Greco, M., Markus-Michalczyk, H., Clarisó, X.C., Mas, G., Tihcheva, V., and Nikolova, G. (2019). *Ecotourism integrated approach for coastal zone management*. Land-Sea Interreg Europe.

Roseta, P., Sousa, B.B., and Roseta, L. (2020). Determiners in the consumer's purchase decision process in ecotourism contexts: a portuguese case study. *Geosciences*, 10 (6), 224. <https://doi.org/10.3390/geosciences10060224>

Salman, A., Jaafar, M., Mohamad, D., and Malik, S. (2021). Ecotourism development in Penang Hill: a multi-stakeholder perspective towards achieving environmental sustainability. *Environmental Science and Pollution Research*, 28 (31), 42945-42958. <https://doi.org/10.1007%2Fs11356-021-13609-y>

Sampieri, R.H., Collado, C.F., and Lucio, M.D.P.P. (2013). *Metodologia de pesquisa. Penso.*

Satyra, I.D.G., Kaihatu, T.S., Budidharmanto, L.P., Karya, D.F., and Rusadi, N.W.P. (2023). The role of ecotourism in preserving environmental awareness, cultural and natural attractiveness for promoting local communities in Bali, Indonesia. *Journal of Eastern European and Central Asian Research*, 10 (7), 1063-1075. <https://doi.org/10.15549/jeecar.v10i7.1386>

Sethy, M.K., and Senapati, A.K. (2023). Perceptions towards ecotourism practice and the willingness to pay: evidence from Chilika coastal wetland ecosystem, Odisha. *International Journal of Geoheritage and Parks*, 11 (3), 497-513. <https://doi.org/10.1016/j.ijgeop.2023.08.001>

Solís, V.V., Pérez, O.R., González, J.G.R., Caretta, M.N., and Hernández, H.R. (2010). Evaluación de los atractivos naturales para el desarrollo del ecoturismo em la Región Huasteca de San Luis Potosí, México. *Cuadernos de Turismo*, (25), 229-245. <https://revistas.um.es/turismo/article/view/109651>

Sparks, B., and Pan, G.W. (2009). Chinese outbound tourists: understanding their attitudes, constraints, and use of information sources. *Tourism Management*, 30 (4), 483-494. <https://doi.org/10.1016/j.tourman.2008.10.014>

Teeroovengadum, V. (2019). Environmental identity and ecotourism behaviours: examination of the direct and indirect effects. *Tourism Review*, 74 (2), 280-292. <https://doi.org/10.1108/TR-11-2017-0190>

Thapa, K., King, D., Banhalmi-Zakar, Z., and Diedrich, A. (2022). Nature-based tourism in protected areas: a systematic review of socio-economic benefits and costs to local people. *International Journal of Sustainable Development and World Ecology*, 29 (7), 625-640. <https://doi.org/10.1080/13504509.2022.2073616>

The International Ecotourism Society – TIES. (2015). *What is ecotourism?* <https://ecotourism.org/what-is-ecotourism/>

Uzulmez, M., Istin, A.E., and Barakazi, E. (2024). Environmental awareness, ecotourism awareness and ecotourism perception of tourist guides. *Sustainability*, 15 (16), 12616. <https://doi.org/10.3390/su151612616>

Weerasekara, D., and Assella, P. (2023). The effect of motivations on ecotourism intention and willingness to pay premium for ecotourism: a conceptual paper. *International Journal of Contemporary Business Research*, 2, 164-192.

Yuxi, Z., Filimonau, V., Ling-En, W., and Linsheng, Z. (2023). The impact of tourism on municipal solid waste generation in China. *Journal of Cleaner Production*, 427, 139255. <https://doi.org/10.1016/j.jclepro.2023.139255>

Zhang, H., Fu, X., Cai, L.A., and Lu, L. (2014). Destination image and tourist loyalty: a meta-analysis. *Tourism Management*, 40, 213-223. <https://doi.org/10.1016/j.tourman.2013.06.006>

Zhang, H., Liang, Q., Li, Y., and Gao, P. (2023). Promoting eco-tourism for the green economic recovery in ASEAN. *Economic Change and Restructuring*, 56 (3), 2021-2036. <https://doi.org/10.1007%2Fs10644-023-09492-x>

Zhang, S. (2022). Model construction of the influence of tourist destination image on tourists' word-of-mouth communication based on cognitive and emotional environment. *Journal of Environmental and Public Health*, 3343946. <https://doi.org/10.1155/2022/3343946>

Zheng, Q.J., Xu, A.X., Kong, D.Y., Deng, H.P., and Lin, Q.Q. (2018). Correlation between the environmental knowledge, environmental attitude, and behavioral intention of tourists for ecotourism in China. *Applied Ecology and Environmental Research*, 16, 51-62. [http://dx.doi.org/10.15666/aeer/1601\\_051062](http://dx.doi.org/10.15666/aeer/1601_051062)

ZIFFER, K. (1989). Ecotourism: the uneasy alliance. *Conservation International*, Ernst and Young.