

# Customer perspective from Generation Z on Sustainable Tourism Initiatives

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## **Abstract**

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This study aims to explore the consumer perspective on sustainable tourism, with a focus on Generation Z. By investigating the factors influencing engagement on ecotourism, including psychological and mundane aspects, this research seeks to provide insights into their preferences. Additionally, the study assesses the effectiveness of communication strategies in promoting sustainable tourism engagement among Generation Z. The research project utilized a survey experiment methodology, consisting of a descriptive analysis exploring the influence of psychological and mundane factors on consumers' engagement in ecotourism, and an experiment assessing the effectiveness of different communication strategies on the Generation Z consumers' willingness to engage in sustainable tourism. The results show that subjective norms and materialism are the key psychological factors, with higher social norms increasing engagement and higher materialism decreasing it. Among the more mundane factors, price and knowledge positively influence sustainable tourism participation. The study found no significant differences in the effectiveness of communication strategies emphasizing different aspects of sustainable tourism on participants' inclination towards ecotourism. Understanding the preferences of Generation Z consumers enables tailored marketing strategies and innovative sustainable tourism experiences in the industry. This study stands out by examining the factors influencing ecotourism among Generation Z, encompassing psychological and conventional determinants, while also assessing the impact of communication strategies.

**Keywords:** Sustainable Tourism, Communication, Consumer Behaviour, Sustainability, Generation Z

## Resumo

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Este estudo tem como objetivo explorar a perspectiva do consumidor sobre o turismo sustentável, com foco na Geração Z. Ao investigar os fatores que influenciam o envolvimento com o ecoturismo, inclusive os aspectos psicológicos e mundanos, esta pesquisa busca fornecer informações sobre suas preferências. Além disso, o estudo avalia a eficácia das estratégias de comunicação na promoção do envolvimento com o turismo sustentável entre a Geração Z. O projeto de pesquisa utilizou uma metodologia de experimento de pesquisa, que consiste em uma análise descritiva que explora a influência de fatores psicológicos e mundanos no envolvimento dos consumidores com o ecoturismo, e um experimento que avalia a eficácia de diferentes estratégias de comunicação na disposição dos consumidores da Geração Z de se envolverem com o turismo sustentável. Os resultados mostram que as normas subjetivas e o materialismo são os principais fatores psicológicos, sendo que normas sociais mais elevadas aumentam o envolvimento e o materialismo mais elevado o diminui. Entre os fatores mais mundanos, o preço e o conhecimento influenciam positivamente a participação no turismo sustentável. O estudo não encontrou diferenças significativas na eficácia das estratégias de comunicação que enfatizam diferentes aspectos do turismo sustentável na inclinação dos participantes para o ecoturismo. Compreender as preferências dos consumidores da Geração Z possibilita estratégias de marketing personalizadas e experiências inovadoras de turismo sustentável no setor.

**Palavras-chave:** Turismo sustentável, Comportamento do consumidor, Sustentabilidade, Geração Z

## 1. Introduction

The phenomenon of sustainable development has gained traction within modern society. It refers to the “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (UNITED NATIONS, 1987). In line with this paradigm shift on how businesses and governments pursue growth, the tourism industry is also undergoing important changes and becoming more aligned with sustainability principles. For example, ecotourism is one of the fastest growing activities within the tourism industry worldwide (Kazeminia, Hultmanb, Mostaghel, 2016), increasing at a rate three times higher than other traditional forms of tourism (International Ecotourism Society, 2006). Presently, this business sector constitutes over 7% of the global tourism demand, generating nearly \$100 billion in annual revenue (Meleddu, Pulina, 2016).

In this context, it is critical to understand the consumer perspective on the phenomenon, as it helps illuminate the tourists' preferences, behaviours, and expectations. In particular, understanding the proclivities of the so-called “Generation Z” consumers (i.e., those born after Millennials, typically between the late 1990s and the early 2010s) is especially important as they will compose the future consumer base for products and services. Furthermore, while recent studies have shown a widespread awareness among individuals about the environmental impact of human activities, acknowledging the finite nature of resources and the urgency to take action (Chaminuka, Groeneveld, Selomane, van Ierland, 2012), Generation Z consumers seem to exhibit particularly high environmental consciousness and commitment towards sustainable practices (Yamane & Kaneko, 2020), suggesting that they represent a particularly relevant segment of the population when it comes to sustainable forms of consumption such as ecotourism.

A few notable gaps exist in the literature concerning the connection between these young consumers and ecotourism initiatives. Firstly, while numerous studies have presented the environmental consciousness and commitment to sustainable practices among Generation Z individuals (Yamane, Kaneko, 2021, Robinson, Schanzel, 2019, Prayag et.al., 2022), very few have tried to understand their preferences and the factors influencing the choice of ecotourism options over conventional mass tourism. Additionally, many studies have concentrated on a limited number of mechanisms from specific categories (e.g., attitudes and perceptions influencing sustainable mobility behaviours and materialistic values; Gehlert, Dziekan & Garling,

2013; Lu, Gursoy, Del Chiappa, 2014). As such, other psychological considerations are often absent from the empirical literature.

In this research, I investigate the antecedents of ecotourism among Generation Z consumers. While previous studies examine a particular set of predictors and observe how they apply to the general population, I simultaneously contrast several possible groups of explanations to understand the most relevant predictors of ecotourism among Generation Z consumers specifically. In doing so, I investigate the role played by psychological factors such as materialism, environmental beliefs, subjective norms, importance of environmental identity, taste for nature-related activities, and desire for novelty along with more mundane explanations, including, price, convenience, and knowledge. These mechanisms were derived from past conceptual propositions and empirical findings in the literature on the correlates of ecotourism (Yamane, Kaneko, 2020, Highram, Carr, Gale, 2001, Lu, Gursoy, Del Chiappa, 2014).

Furthermore, the current research aims to investigate the role of different communication strategies in promoting ecotourism among the Generation Z. Specifically, we assess whether different dimensions of ecotourism such as promoting the local economy within the region, emphasizing environmental preservation, and offering new adventurous experiences in nature can successfully prompt willingness to engage in sustainable tourism activities. By assessing the effectiveness of these communication strategies, I aim to identify the most impactful approaches for engaging Generation Z in sustainable travel practices. In doing so, this investigation contributes to a comprehensive understanding of the interplay between consumer attitudes, psychological factors, and targeted communication strategies in shaping ecotourism behaviours.

Research in the field of ecotourism has important practical implications as it aligns with the growing demand for businesses to prioritize environmental and social responsibility while also preserving the economic goals intrinsic to any business. Research by Martínez and Rodríguez del Bosque (2013) indicates that when consumers perceive a company to be genuine in its sustainability efforts and when its products align with these principles, it can lead to increased levels of trust, satisfaction, and loyalty. Indeed, investing in sustainable options not only serves ethical imperatives but also functions as cost-saving measures for businesses. Implementing strategies such as energy-saving devices, waste reduction, and water use minimization can yield substantial economic benefits. Understanding the preferences and behaviours of Generation Z individuals empowers businesses to customize their offerings to cater

to this burgeoning market segment. By shedding light on the main drivers of ecotourism among this consumer segment, businesses can craft targeted marketing strategies, conceive innovative sustainable tourism experiences, and execute effective sustainability initiatives tailored to resonate with Generation Z travellers.

## **2. Literature Review**

### **2.1 Sustainable Tourism**

Tourism is commonly defined as “the activities of persons traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes” (WTO, 2006). While the tourism industry represents an important economic sector, providing 11 % of global GDP and being responsible for employment of 1 out of 12 workers worldwide (Gmelch, 2010), there is also an evident relationship between tourism and the environment, particularly within the context of mass tourism. Researchers have long raised concerns that tourists have an impact on the local environment, leading to the depletion of natural resources (Liu, 2003). The recognition of these effects has prompted an evolution towards ecotourism (also referred here as sustainable tourism) and increased the importance of minimizing the environmental footprint of tourism activities. Sustainable tourism is one of the answers to address the environmental challenges posed by mass tourism and to promote a balance between touristic activities and the environment.

Sustainable tourism is the maximization of benefits of tourism while reducing its environmental costs considering environment, people, and economic systems. In other words, it refers to “tourism which is developed and maintained in the area in such a manner and at such a scale that it remains viable over an indefinite period and does not degrade or alter the environment in which it exists to such a degree that it prohibits the successful development and wellbeing of other activities and processes” (Butler, 1999). Initially, the focus of sustainable tourism was on the environmental aspects (e.g., energy conservation, waste management, and recycling) and on the implementation of cost-saving measures, with less emphasis on developing the social dimension, including aspects such as human resources (Swarbrooke, 1999). However, as the concept evolved, it became evident that it could serve more broadly towards sustainable development.

It is important to add that there are different forms of sustainable tourism, including ecotourism, which is “the segment of tourism that uses the natural and cultural heritage in a sustainable manner, encourages conservation, and seeks the formation of environmental awareness by interpreting the environment, promoting population welfare” (Guidelines for a National Ecotourism Policy in Brazil, 1994). It is characterised by the network of local businesses, small-scale operations, minimal environmental impact, and a focus on promoting environmental awareness among both tourists and hosts. Drawing from principles outlined by Honey (1999), ecotourism is nature-based, aiming to minimize negative impacts associated with mass tourism, contribute positively to environmental conservation, and enhance the livelihoods of local communities.

Sustainable tourism emerged as a strategy for economic growth in developing areas, becoming a tool for achieving overall sustainable development goals and contributing to the economic well-being of communities and regions. For example, the Amazon region has adopted best practices for the sustainability of parks and natural attractions, providing guidelines in a best-practice concession framework that establishes vital links between local communities, rural development, and conservation efforts (Lohman et al., 2021). Another example is the collaboration between the public and private sectors in the region. Various eco-lodges and tour operators in the Amazon have formed partnerships with indigenous communities to offer sustainable tourism experiences that showcase the rich biodiversity of the rainforest while respecting the traditional knowledge and customs of the local inhabitants. These partnerships, exemplified by initiatives such as the Mamirauá Sustainable Development Reserve, provide economic opportunities for indigenous communities and contribute to the conservation of the Amazon ecosystem (Lohman et al., 2021). By integrating these goals into sustainable tourism initiatives, stakeholders can safeguard natural resources for present and future generations (Divino & McAleer, 2009; Castro & Silva, 2016).

## 2.2 Barriers and Facilitators of Ecotourism

Sustainability has become a topic that is integrated into research agendas, political disputes, and everyday life. This trend is particularly noticeable among younger generations, that are playing a crucial role in advancing the Sustainable Development Goals (SDGs). Research

indicates that a significant portion young consumers express a desire to be a part of communities actively implementing the SDGs, highlighting the growing importance of sustainability in shaping societal values and aspirations (Yamane & Kaneko, 2020). Fortunately, research suggests that sustainable tourism is experiencing growth, with companies, service providers, and industry workers recognizing the significance of investing in those practices. Despite the recent growth, there is a discrepancy between values expressed by consumers and their actual behaviour, a phenomenon referred to as attitude-behaviour gap (Tolkes, 2020). In this research, we examine how key barriers and facilitators put forth by previous research influence the intentions of Generation Z consumers to engage in sustainable tourism. We divide them into psychological and mundane factors.

### 2.2.1. Psychological Factors

#### Environmental Values and Beliefs

Previous research suggests that holding environmental values and beliefs induces participation in ecotourism activities. For example, Meleddu and Pulina (2016) identified environmental beliefs, such as concerns about nature, as significant drivers influencing the intention to allocate budget to ecotourism. Studies by Hultman, Kazemina, Ghasemi (2015) and Kazemina, Hultman, and Mostaghel (2016) delve deeper into the psychological factors influencing consumers' willingness to pay premium prices for sustainable services. Specifically, these studies highlight the positive impact of environmental beliefs and favourable attitudes towards sustainable offerings on the willingness to pay premium for ecotourism. Further, Beall and co-authors (2020) found that internalized values regarding the environment influence personal norms and, consequently, environment-related behaviours. Put together, these findings highlight the importance of targeting ecotourism marketing efforts towards individuals who align with these profiles, as they might be more likely to be interested in sustainable initiatives.

#### Social Identity

At its core, ecotourism relies on individuals' identification with the environmental cause. Despite the growth in the tourism industry, it remains difficult to persuade the majority of the mass tourism market to take an interest in ecotourism. Part of the reason for this reluctance lies in the perception that sustainably managed tourism services are limited to niche segments of

socially and environmentally conscious travellers. Thus, the reluctance to engage with sustainable tourism may stem from a perceived mismatch between the individual's social identity and the perceived identity of sustainable tourism consumers.

Research on social identity in ecotourism led by Lee and Jan (2018) has explored how consumers' self-perceptions as ecotourists impact their decision-making processes and behaviours while traveling to nature-based destinations. The findings indicate that a strong social identification as an ecotourist positively influences environmental attitudes, subjective norms, and intentions to engage in ecotourism activities. Thus, by fostering a sense of belonging to a community of like-minded individuals who prioritize environmental stewardship, social identity can motivate tourists to adopt eco-friendly behaviours and contribute to the conservation of natural and cultural heritage at tourism destinations.

### Subjective Norms

Social norms may play a pivotal role in shaping the behaviour of tourists and the sustainability of ecotourism destinations. Lee and Jan (2018) have examined the role of injunctive subjective norms (i.e., an individual's perception of social pressures to perform or not perform a particular behaviour) in shaping tourists' attitudes and behaviours. Their results indicate that when subjective norms are positive, they can encourage tourists to support environmentally friendly initiatives and engage in activities that promote conservation efforts during their travel experiences. Along similar lines, Gehlert, Dziekan, and Gärling (2013) found that individual attitudes, values, and norms are integral to understanding and influencing sustainable travel behaviour. If individuals have a positive attitude towards the outcomes of such behaviour during travels, by believing that significant others approve of this behaviour, then their intention to engage in sustainable travel behaviour is likely to be stronger.

### Desire for Novelty

Prior research has investigated the role of consumer motives in shaping tourists' attitudes towards ecotourism. One significant category identified was the "desire for novelty" (Holden & Sparrowhawk, 2002). After all, ecotourism is a new type of tourism activity that, despite recent growth, is yet far less common than mass tourism. The studies distinguished between two motivational categories: seeking something and escaping from everyday life. Individuals seeking

intrinsic rewards and mastery from their experiences are more likely to display favourable attitudes toward environmental issues. They are motivated by learning about nature rather than escaping from routines, indicating a desire for novel experiences and exploration of environmental content during their tourism activities. Tourists motivated by self-discovery seek to enhance their own intrinsic pleasure by engaging in ecotourism and tend to connect their attitudes to their beliefs more strongly than extrinsically motivated interpersonal seekers.

#### Taste for nature-related activities

Taste for nature-related activities refers to an individual's preference or inclination towards engaging in activities that involve direct interaction with nature or natural environments. Such taste for nature-related activities is aligned with the principles of ecotourism, which often involve experiencing and appreciating nature in a sustainable manner. Along these lines, previous research shows that visitors to ecotourism operations in New Zealand generally exhibit pro-environmental behaviours, such as active recycling, conserving energy, and a strong interest in pursuing nature-based activities during their leisure time (Highram, Carr, Gale, 2001). In a study by Yanju Luo and Jinyang Deng (2007), tourists more supportive of limits to growth and more concerned about ecological crises tended to have a higher desire to connect with nature, learn about the environment, and escape routine urban issues through nature-based tourism. Taken together, the existing research highlights that environmental attitudes such as the engagement in nature-related activities, play a role in influencing individuals' decisions to participate in nature-based tourism and support for sustainable tourism practices.

#### Materialism

Individuals with a materialistic value orientation prioritize needs such as financial worth and status over environmental concerns. They are less concerned about overconsuming scarce resources if it provides personal benefits and tend to evaluate public goods based on their personal benefits rather than their inherent value. Along these lines, previous research indicates that materialistic values meaningfully influence environmentalism and ecotourism intentions (Holden & Sparrowhawk 2002). Lu, Gursoy and Del Chiappa (2014), for instance, show that materialism can have a detrimental impact on consumers' attitudes and behaviours towards ecotourism. Individuals with high materialistic values are more likely to prioritize personal

gratification through material goods over environmental concerns, which are central to the goals of ecotourism. As a result, consumers who place a strong emphasis on material possessions may be less inclined to support or participate in ecotourism activities that promote environmental conservation and sustainability. In other words, this conflict of values can lead to a negative association between materialism and ecotourism attitudes, and, consequently, to a lower willingness to pay for ecotourism experiences.

### 2.2.2 Mundane factors

#### Price

Price is one of the main factors affecting consumers' perspective on tourism. In a research conducted in Western Europe, 56.5% of respondents indicated that price is considered very important and influences their travel reservation decisions (Pinto, Castro, 2019). Interestingly, for some respondents, price outweighed sustainability as a determining factor in their tourism choices. Thus, price may be another relevant factor influencing willingness to engage in ecotourism. Along these lines, a study conducted in the Spanish Costa del Sol, for example, found that only 26.6% of the surveyed tourists expressed a willingness to pay more for more sustainable travel destinations. The majority of those willing to pay a premium fall under the segment termed "pro-sustainable tourists". However, even within this segment, the additional amount they are willing to pay is generally limited to 10% of the total travel cost (Pulido-Fernandez, Lopez-Sanchez, 2016). These findings suggest that while there is a willingness to support sustainable tourism, it is often within limits that reflect a balance between sustainability and economic considerations.

#### Knowledge

The lack of information and knowledge among consumers may also serve as an important barrier to sustainable tourism activities. Prior research has shown that many consumers are not fully aware of the attributes of sustainability in their activities and exhibit difficulty identifying them, which results in lower engagement in ecotourism practices (Tolkes 2020). This lack of awareness and information could stem from communication issues between tour operators and tourists. Along these lines, Wehrlia and colleagues (2014) emphasized the challenges associated

with communication in the context of sustainable tourism. They argue that consumers often fail to recognize or understand the relevant sustainability attributes of tourism products unless explicitly communicated to them. This suggests a critical need for tour operators and promoters of sustainable activities to effectively communicate the sustainability aspects to customers in order to enhance the clients' understanding and appreciation of such initiatives.

### Convenience

Convenience can play a pivotal role in influencing sustainable travel behaviour. For instance, when considering eco-friendly travel options, convenience can sometimes deter tourists from choosing sustainable alternatives. Tourists may prioritize convenience over sustainability due to factors like travel time, accessibility, and comfort (Hergesell, Dickinger, 2013). It is essential to address these convenience-related concerns. Making sustainable options more accessible, user-friendly, and competitive can meaningfully influence tourists' decisions to opt for environmentally friendly transport modes.

In conclusion, while numerous studies have examined various aspects of sustainable tourism and consumer behaviour, there remains a gap in understanding the primary factors influencing tourists' decisions, particularly among younger generations. The identified psychological factors include materialism, environmental beliefs, subjective norms, social identity, the desire for novelty and taste for nature-related activities. On the other hand, mundane factors encompass price and willingness to pay, lack of knowledge/information, and the role of convenience. It is crucial to address these aspects to enhance consumer engagement and encourage greater participation in ecotourism initiatives. This is especially pertinent for Generation Z travellers, who will play a central role in shaping the future trends and direction of the tourism industry in the coming decades. Moreover, it's important to note that not all factors were extensively studied in the context of Generation Z. Therefore, further research and understanding of these implications are critical to develop effective strategies that resonate with the values and preferences of this emerging demographic and diverse global markets.

## 2.3 Prompting Ecotourism

Effective communication strategies are crucial in prompting individuals to engage in ecotourism practices. The core of sustainable tourism challenges traditional marketing approaches given that it relies on a network of local businesses and its activities often occur in remote locations away from urban centres (De Arruda, Silva Lobo, 2016; Gmelch, 2010). The existing gap between customers' interest in sustainable tourism and their understanding of sustainability attributes in tour products further highlights the need for effective communication initiatives (Tolkes, 2020).

Additionally, ecotourism involves several dimensions, activities, and objectives, which allows for different approaches to its definition. For example, ecotourism can be classified according to the type of activity offered, such as accommodations (e.g., eco-lodges), experiences (e.g., nature-based tours), transportations (e.g., shared transportation) or services and facilities (e.g., local guides). On the other hand, ecotourism can also be classified according to its goals, such as being conservation-focused, community based, to promote habitat restoration or adventure and education. Thus, it is essential to identify which of these multiple dimensions and facets are the most effective in promoting ecotourism engagement.

To that end, in the current research, we will focus on investigating whether highlighting different goals of sustainable tourism can successfully increase Generation Z consumers' willingness to engage in such practices. Specifically, sustainable tourism can promote the local economy and bring development to local populations by fostering economic activity without depleting natural resources. Infrastructure and activities encompassed in ecotourism such as ecolodges and handcrafts provide opportunities for additional income to the local community, which decreased dependency on singular income sources and allows for greater autonomy and decision-making power (de Arruda, Silva Lobo, 2016).

Further, sustainable tourism can foster environmental preservation through biodiversity conservation, responsible resource use, and community involvement. Thus, ecotourism appeals to those prioritizing environmental care and eco-conscious travellers. Placing an emphasis on ecotourism's positive impacts on ecosystems, travellers could be encouraged to opt for eco-friendly choices and to support the protection of natural and cultural assets (Kiper, 2013).

Finally, sustainable tourism offers new adventurous experiences in nature, such as guided treks through national parks or wildlife safaris in biodiversity-rich regions. These experiences provide travellers with the opportunity to engage directly with natural environments and might

lead to a deeper appreciation for biodiversity and conservation. Additionally, adventure tourism offers exciting and memorable experiences that differentiate ecotourism from traditional travel and mass tourism. By emphasizing these unique and immersive adventures, ecotourism initiatives can attract a wider audience (Kuenzi, McNeely, 2008).

We will assess the effectiveness of these three different ecotourism objectives (i.e., promoting the local economy, encouraging environmental preservation, and offering adventurous experiences in nature) as communication strategies to prompt engagement. While each dimension contributes uniquely to the overall appeal of ecotourism, understanding which resonates most with target audiences of Generation Z consumers can guide more effective communication strategies. For instance, emphasizing the economic benefits can appeal to local communities and business owners, while highlighting environmental preservation may attract environmentally conscious travellers. Simultaneously, offering new adventurous experiences can captivate adventure seekers and those looking for unique, immersive experiences in nature.

### **3. Methodology**

#### **3.1 Overview of the study**

This research investigates perceptions and preferences regarding sustainable tourism, with a specific focus on Generation Z consumers. Using a survey experiment methodology, the study consists of 2 parts, including the exploration of both psychological and mundane factors as predictors of ecotourism engagement (descriptive approach) and an investigation of the influence of different communication strategies on the inclination to engage in sustainable tourism (experimental approach).

Data was collected online via Qualtrics. The survey was distributed through web-based channels and personal networks. Participation was voluntary, with no compensation offered. Pre-testing of the survey questions was carried out to ensure clarity and avoid measurement issues. In the experimental section of the research, participants were randomly assigned to one of three ecotourism communication strategies, allowing for a comprehensive analysis of their causal impact on sustainable tourism engagement.

## 3.2 Participants

Two hundred and thirty-six participants were recruited online. Following the exclusion of some participants that did not answer one or more of the main dependent variables, as well as those that did not belong to our target age group of Gen Z (participants older than 28 years were excluded), a total of 130 individuals remained in the sample and were included in the analyses. Among them, 39,23% were male and 60,77% were female. All participants belonged to Generation Z, ranging in age from 15 to 28 years old, with a mean age of 23,5 years old. The primary region of origin for participants was Europe, comprising 80% of respondents, followed by Asia with 7,7%, South America with 6,9 %, North America with 2,3%, and Africa with 3,08%. In terms of educational background, the majority of participants were concentrated in 2 groups: holding bachelor's degree (40,77%) and master's degree (36,15%). Those groups were followed by 13,08% of respondents possessing a high school diploma, 7,69% with some college credits, 1,54% with less than high school and 0,77% not possessing any formal education. When asked about their social class, most participants described themselves as middle class (56,15%), with some identifying as upper-middle class (28,46%) and others falling into the remaining options (upper class 8,46%, lower-middle class 3,85% and lower class 3,08%).

## 3.3 Design and Procedure

After providing their consent, participants were presented with clear definitions of sustainable tourism and ecotourism. This step aimed to ensure a shared understanding of the terms, thus facilitating coherent responses throughout the questionnaire. The exact definition participants were exposed to was:

*“Sustainable tourism is tourism which is developed in the area in such a manner and at such a scale that it continues to be sustainable over an indefinite period and does not degrade or alter the environment in which it exists to such a degree that it prohibits the successful development and wellbeing of other activities and processes.*

*Ecotourism is regarded as part of sustainable tourism concept. It is characterized by small-scale operations, minimal environmental impact, and a focus on promoting environmental awareness among both tourists and hosts.”*

Upon reading the definition of sustainable tourism, participants responded to 19 items assessing different psychological factors that could potentially influence engagement on ecotourism, using scales available in the literature adapted to the purposes of this study. Specifically, we assessed dimensions related to:

Materialism ( $\alpha = 0.55$ ; Richins, 2004):

- I usually buy only the things I need. (R)
- Buying things gives me a lot of pleasure.
- I put less emphasis on material things than most people I know. (R)

Social norms ( $\alpha = 0.77$ ):

- Most people who are important to me would engage in sustainable tourism.
- Most people who are important to me would think that I should engage in sustainable tourism.
- The people who influence my decisions would think that I should engage in sustainable tourism.

Desire for novelty ( $\alpha = 0.87$ ; Lee & Crompton, 1992):

- I want to experience new and different things on my vacation.
- I want there to be a sense of discovery involved as part of my vacation.
- I feel a powerful urge to explore the unknown on vacation.

Taste for nature-related activities ( $\alpha = 0.82$ ; McMahan & Josh, 2017):

- I enjoy being in nature more than I enjoy being in towns and urban areas.
- I am more of a city person than a nature person. (R)
- I am more of a city person than a nature person. (R)

Social identity ( $\alpha = 0.65$ ; Kashima & Paladino, 2014)

- I think of myself as an environmentally-friendly consumer.
- I think of myself as someone who is concerned with environmental issues.
- I would be embarrassed to be seen as having an environmentally friendly lifestyle. (R)
- I would not want my family and friends to think of me as being concerned with environmental issues. (R)

We checked the participants' agreement with above statements on 1 (completely disagree) to 7 (completely agree) scale. We measured biospheric values ( $\alpha = 0.83$ ; De Groot & Steg, 2008) on a scale ranging from 1 (not at all important) to 7 (extremely important). Subsequently, participants were presented with 3 statements, each measuring one of the following mundane factors:

Price, Knowledge/Information, and Convenience:

- I am willing to pay a premium for sustainable tourism services.
- I feel that I am fully aware of the sustainable tourism activities available to me.
- I prioritize convenience over sustainability when making travel decisions.

with responses ranging from 1 (completely disagree) to 7 (completely agree).

After completing the scales measuring the psychological and mundane factors, participants were asked to imagine they were considering travelling to another city in their country. Next, they were randomly assigned to view one of three possible ecotourism advertisements, each highlighting different aspects of ecotourism—environmental preservation, adventurous activities, or the social dimension of local economy preservation (See below). After being exposed to the advertisement, participants were asked to indicate their willingness to engage in the displayed ecotourism activity on a scale ranging from 1 (not at all) to 7 (very much). By randomly allocating participants to different communication strategies, we provide causal evidence for the role of marketing communication on Generation Z consumers' willingness to engage in sustainable tourism.

Figure 1 Environmental preservation (source: own elaboration)

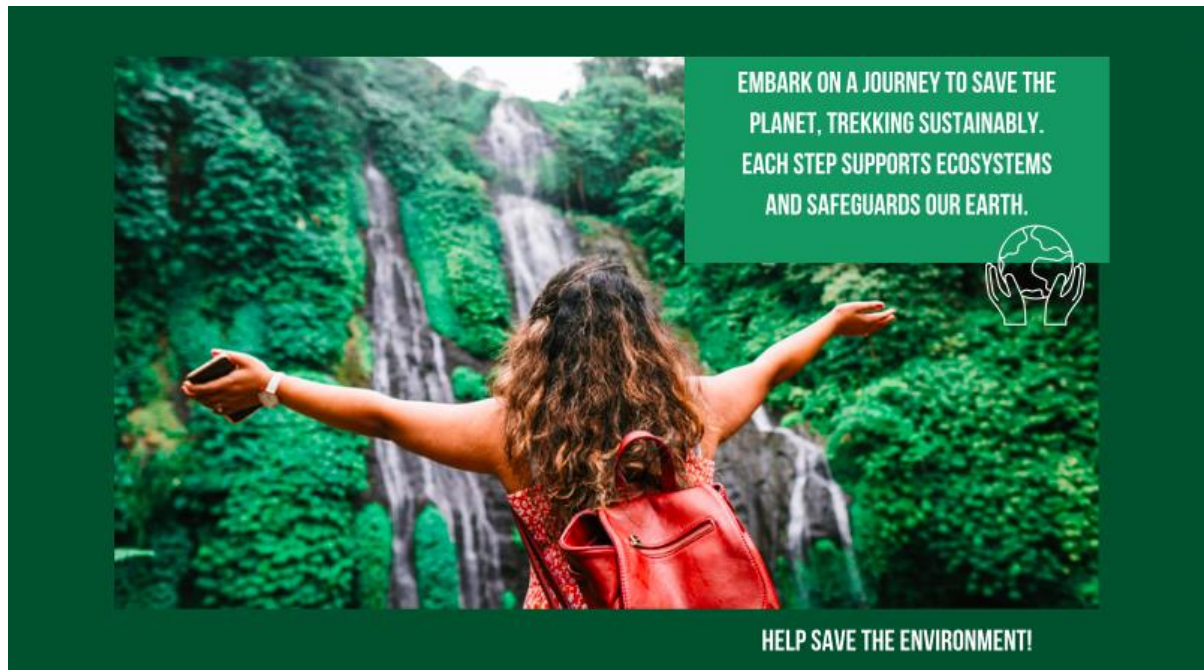


Figure 2 Adventurous activities (source: own elaboration)

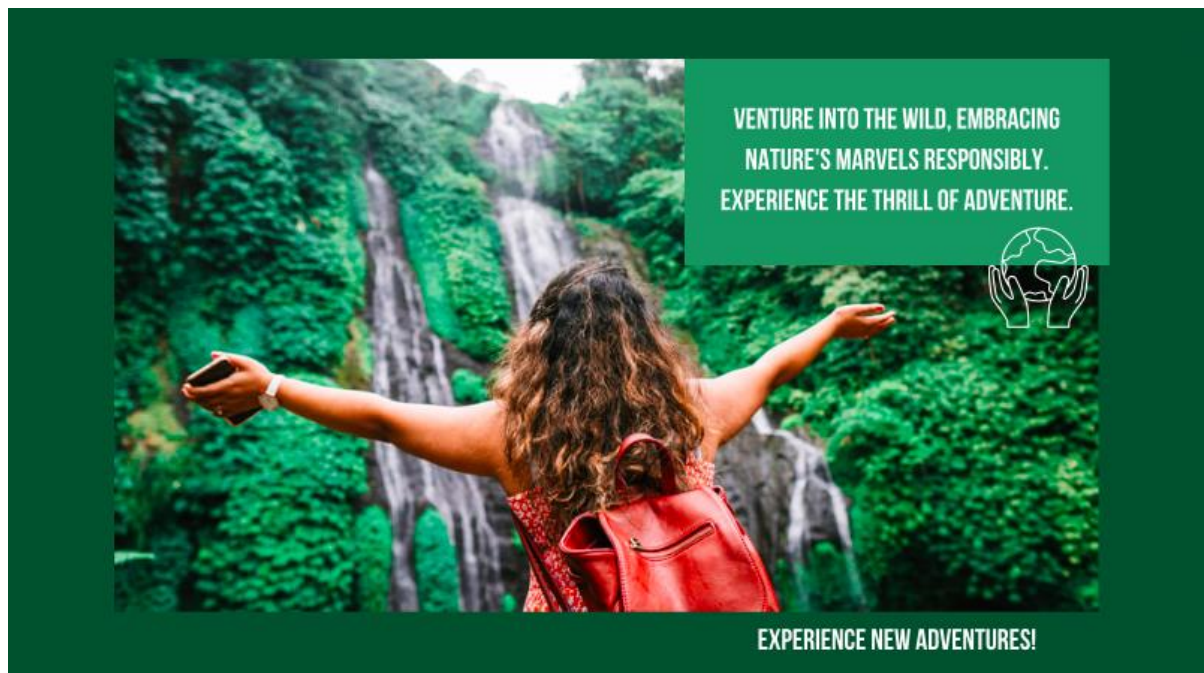
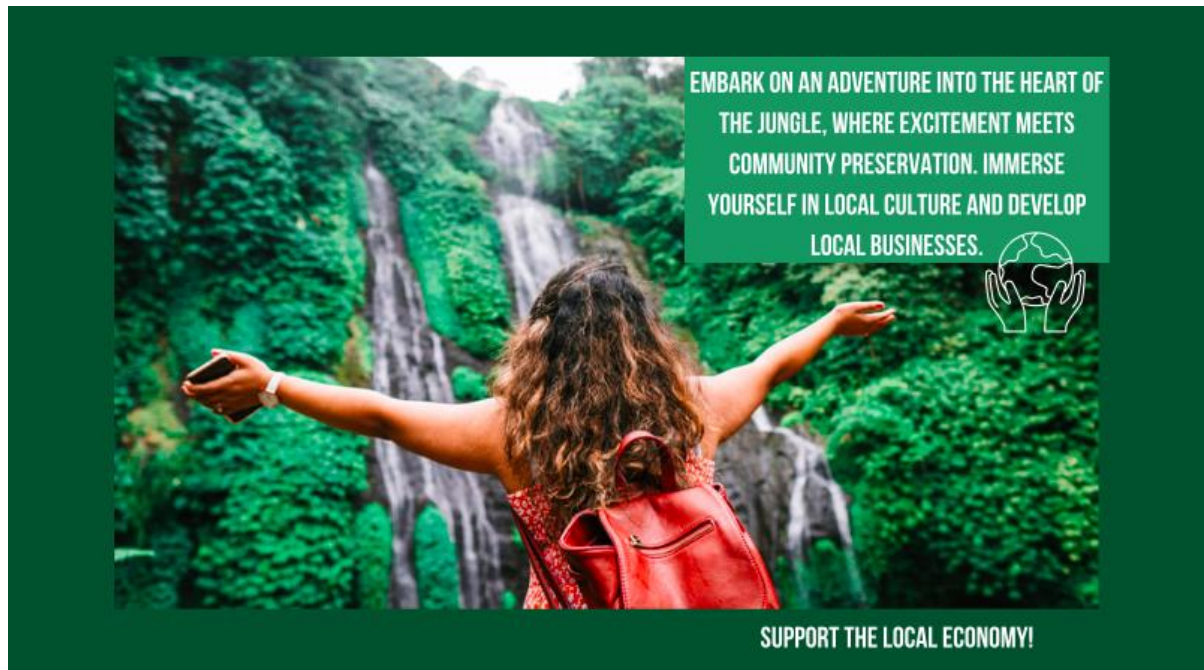


Figure 3 Local economy (source: own elaboration)



Next, participants answered general questions about sustainable tourism to assess their familiarity with the topic and their frequency of participation. This approach aimed to examine preferences within sustainable tourism practices and to understand the overall interest of participants in this topic. When asked if in the last 12 months they have taken part in any sustainable tourism activity, 46,92% declared “yes” and 53,08% declared “no”. Afterwards, participants were asked how aware they are about sustainable tourism activities around the world, in a scale ranging from 1 (not at all familiar) to 5 (very familiar). The majority of responses ranged between slightly familiar and neutral, with a mean of 2.77 and standard deviation of 1.16. Specifically, 13,85% participants claimed they are not at all familiar with those activities, 33,08% were slightly familiar, 20,77% were neutral, 26,15% were somewhat familiar and only 6,15% were very familiar.

Finally, to gather additional information about the participants' backgrounds, they were asked to answer a series of sociodemographic questions, including gender, age, education (1= No formal education, 6 = Master’s degree or higher), subjective social class (1 = Lower class, 5 = Upper Class) and continent of origin.

## 4. Results

### 4.1. Analysis of Barriers and Facilitators of Ecotourism

In the first set of analyses, we aimed to investigate the correlational impact of various psychological and mundane factors on individuals' engagement in ecotourism. To measure engagement in ecotourism, we used a categorical variable “In the last 12 months, have you taken part in any sustainable tourism activities?”, with response options being either “Yes” or “No”. Thus, we conducted a series of logistic regression models, each with one of the psychological and mundane factors as the independent variable being investigated.

In terms of psychological factors, the results indicate a nonsignificant effect of taste for nature-related activities ( $p = 0.55$ ), social identity ( $p = 0.55$ ), desire for novelty ( $p = 0.19$ ) and environmental values ( $p = 0.55$ ) on consumers' engagement in ecotourism activities in the past 12 months. Therefore, the fact that some individuals enjoy spending time in nature, identify with environmentally friendly groups and eco-friendly lifestyle, are willing to have new experiences while travelling or have strong environmental values do not seem to have a substantial influence on sustainable tourism engagement. However, results show that subjective norms have a positive and significant effect ( $\beta = 0.65$ ,  $SE = 0.19$ ,  $p < 0.01$ ), suggesting that individuals who prioritize social norms are more likely to engage in ecotourism. Materialism-related values, however, had a negative and significant effect ( $\beta = -0.38$ ,  $SE = 0.17$ ,  $p < 0.05$ ), indicating that the more materialistic individuals are, the less they are likely to engage in ecotourism.

In summary, subjective norms and materialism are the most influential factors in determining engagement in ecotourism out of psychological factors measured in this study, with higher adherence to social norms increasing the likelihood of participation and higher levels of materialism decreasing it. Other factors, including taste for nature-related activities, social identity, desire for novelty, and environmental values and beliefs, do not show significant impacts. Detailed results are presented in the table below.

Table 1 Analysis of Psychological Factors (source: own analysis)

Psychological Factors

<b>Taste for nature</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>taste_nature</i>	.0793671	.133592	0.59	0.552	-.1824685	.3412027
<i>_cons</i>	-.5198238	.6909961	-0.75	0.452	-1.874151	.08345037

<b>Social Norms</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>social_norms</i>	.6550001	.1924489	3.40	0.001	.2778072	1.032193
<i>_cons</i>	-3.064732	.8862204	-3.46	0.001	-4.801692	-1.327772

<b>Social Identity</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>social_identity</i>	.104041	.1735814	0.60	0.549	-.2361723	.4442543
<i>_cons</i>	-.682255	.9498793	-0.72	0.473	-2.543984	1.179474

<b>Desire for novelty</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>desire_for_novelty</i>	.2313136	.1759269	1.31	0.189	-.1134967	.5761239
<i>_cons</i>	-1.498081	1.064233	-1.41	0.159	-3.583939	.587777

<b>Materialism</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>materialism</i>	-.3762416	.1751445	-2.15	0.032	-.7195185	-.0329648
<i>_cons</i>	1.307824	.6880454	1.90	0.057	-.0407199	2.656368

<b>Environmental Values</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>env_values</i>	.1116682	.1855757	0.60	0.547	-.2520534	.4753899
<i>_cons</i>	-.7736442	1.095995	-0.71	0.480	-2.921756	1.374467

In terms of mundane factors, logistic regressions' results indicate that price has a positive and significant effect ( $\beta = 0.34$ ,  $SE = 0.13$ ,  $p < 0.01$ ) on consumers' engagement in ecotourism activities in the past 12 months, indicating that individuals willing to pay a premium price for services while traveling are more likely to engage in sustainable tourism activities. The knowledge/information factor also shows a positive and significant effect ( $\beta = 0.53$ ,  $SE = 0.14$ ,  $p < 0.01$ ). Thus, the more information people have about sustainable tourism and the more aware they are of sustainable options available when traveling, the more likely they are to engage in these activities. The convenience factor does not show a statistically significant effect ( $p = 0.24$ ),

suggesting that prioritizing convenience does not influence people's engagement in sustainable tourism activities.

Among the mundane factors considered, price and knowledge/information are significant predictors of engagement in sustainable tourism, with both factors positively influencing participation. Convenience, on the other hand, is not a relevant factor, as it does not significantly impact sustainable tourism engagement. Detailed results are presented in the table below.

Table 2 Analysis of Mundane Factors (source: own analysis)

Mudane Factors

<b>Price</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>price</i>	.337055	.1273988	2.65	0.008	.0873579	.586752
<i>cons</i>	-1.54149	.5701817	-2.70	0.007	-2.659026	-.4239548

<b>Information</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>information</i>	.5276098	.1389821	3.80	0.000	.2552098	.8000098
<i>cons</i>	-2.070398	.5459209	-3.79	0.000	-3.140384	-1.000413

<b>Convenience</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>convenience</i>	-.1433399	.1233225	-1.16	0.245	-.3850476	.0983678
<i>cons</i>	.5349872	.5924249	0.90	0.367	-.6261443	1.696119

## 4.2. Analysis of Communication Strategies

The next part of the results examines the impact of different communication strategies on participants' willingness to engage in sustainable tourism. Specifically, it was investigated whether changing the focus of advertisements on different features of sustainable tourism would influence participants' willingness to engage. As previously mentioned, the design of this part of the study was experimental, in which participants were randomly shown one of three different advertisements, and were then asked to rate their willingness to engage on the activity displayed on a scale from 1 (Not at all) to 7 (Very much).

The first advertisement emphasized the adventure aspect of sustainable tourism with the message, "Venture into the wild, embracing nature's marvels responsibly. Experience the thrill of

adventure. Experience new adventures!" The mean willingness score was 4.79 with a standard deviation of 1.55. The second advertisement focused on environmental conservation, stating, "Embark on a journey to save the planet, trekking sustainably. Each step supports ecosystems and safeguards our Earth. Help save the environment!" The mean willingness score for this group was 4.95 with a standard deviation of 1.32. The third advertisement, which focused on supporting the local economy, read "Embark on an adventure into the heart of the jungle, where excitement meets community preservation. Immerse yourself in local culture and develop local businesses. Support the local economy!" This group had a mean willingness score of 5.08 with a standard deviation of 1.45. All three advertisements used the same graphic elements and image; only the text differed (See details in Appendix I). Although the advertisement focusing on the local economy had the highest mean willingness score, the differences across the means were small, and all results were above the midpoint of the scale, indicating a general positive tendency for participants to engage in sustainable tourism activities after seeing these advertisements.

To determine if there were statistically significant differences in willingness to engage in sustainable tourism based on the advertisement focus, an ANOVA test was conducted. The results indicated no significant differences among the three communication strategies ( $F(2, 129) = 0.42, p = .65$ ), suggesting that none of the specific strategies was more effective than the others in influencing willingness to engage. While all advertisement strategies elicited positive responses, no single strategy showed a statistically significant advantage over the others. The detailed results are presented in the table below.

Table 3: Communication strategy Average willingness to engage in each condition (source: own analysis)

Communication strategy = adventure

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>will_engag~i</i>	39	4.794872	1.559006	1	7

Communication strategy = environment

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>will_engag~i</i>	40	4.95	1.319479	2	7

Communication strategy = local economy

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>will_engag~i</i>	51	5.078431	1.453866	1	7

Table 4: Anova Test (source: own analysis)

Number of obs = 130

R-squared = 0.0066

Root MSE = 1.44709

Adj R-squared = -0.0090

Source	Partial SS	df	MS	f	Prob>F
<b>Model</b>	1.7778281	2	.88891403	0.42	0.6550
<i>communica~y</i>	1.7778281	2	.88891403	0.42	0.6550
<b>Residual</b>	265.94525	127	2.0940571		
<b>Total</b>	267.72308	129	2.0753727		

#### 4.3 Exploratory Analysis of Sociodemographic Variables

We also exploratorily examined the effect of sociodemographic variables on engagement in ecotourism. Specifically, we ran a logistic regression with the question: "In the last 12 months, have you taken part in any sustainable tourism activities?" as the dependent variable and the variables gender, age, education, and subjective social class as covariates. Our findings revealed that only subjective social class had a positive and significant effect on sustainable tourism engagement ( $\beta = 0.55$ ,  $SE = 0.25$ ,  $p < 0.05$ ). This coefficient indicates that individuals place themselves higher in the social class spectrum are more likely to have participated in sustainable tourism activities within the past 12 months. On the contrary, other factors such as gender, age, and education did not significantly influence engagement in sustainable tourism. These variables

showed no statistical significance ( $p > 0.05$ ), indicating no meaningful impact on participation in sustainable tourism activities.

## **5. Discussion**

### **5.1 Theoretical Implications**

This study delves into the relatively underexplored intersection of sustainability and tourism, shedding light on Generation Z's attitudes and behaviours towards ecotourism activities. While sustainability has gathered considerable attention in the recent years, its application within the tourism sector remains a relatively less explored area. This study contributes to the existing literature by revealing that, despite a general awareness of sustainability and environmental concerns in general, the awareness about sustainable tourism options is substantially lower, with most participants stating that the topic is for them “slightly familiar” or “neutral”. Moreover, not all Generation Z individuals exhibit a willingness to take part in available sustainable tourism options (as above stated, 53,08% of participants haven't taken part in any sustainable tourism activity within the last 12 months).

Consistent with prior research, our findings show the significance of psychological and mundane factors in shaping consumers' decisions regarding sustainable tourism engagement. Psychological factors, mostly subjective norms and materialism, emerge as influential determinants of consumer behaviour in this context (Lee & Jan, 2018; Holden & Sparrowhawk 2002). Furthermore, mundane factors such as price, and accessibility to information are revealed to be pivotal in influencing consumers' willingness to engage in sustainable tourism activities. Previous studies have highlighted the importance of price considerations in sustainable tourism (Pinto & Castro, 2019). Additionally, knowledge and information accessibility enhance individuals' understanding and appreciation of sustainable tourism initiatives (Wehrlia et al., 2014).

The findings regarding the impact of different communication strategies on consumers' willingness to engage make an important contribution to the theoretical understanding of sustainable tourism marketing and promotion. The lack of statistically significant differences in the effectiveness of marketing strategies suggests that sustainable tourism engagement may not be driven by a single and universally optimal communication approach. This challenges the notion that a "one-size-fits-all" messaging strategy can effectively motivate the participation.

Instead, the results imply that consumers respond positively to a range of communication cues. This diverse appeal of sustainable tourism messaging indicates that future research could explore how different demographic or psychographic segments respond to various aspects of sustainable tourism, potentially identifying niche markets or more personalized promotional strategies. Additionally, the effectiveness of communication strategies may depend on other variables, such as the medium of delivery, frequency of exposure, or the combination of different messaging approaches. While the current study focused on willingness to engage, future research should also examine actual engagement behaviours and long-term commitment to sustainable tourism practices, providing a more comprehensive understanding of the impact of communication on sustainable tourism participation.

In conclusion, this study contributes to the theoretical understanding of consumer behaviour in sustainable tourism contexts, offering valuable insights for businesses, organizations, and policymakers seeking to promote sustainable tourism practices. Understanding the connection between these factors can be helpful in the development of targeted strategies aimed at enhancing consumer engagement and advancing ecotourism initiatives on a broader scale.

## 5.2 Practical Implications

The research findings provide valuable insights that can inform practical strategies for the tourism industry to effectively engage consumers, particularly Generation Z, in sustainable tourism practices. A key takeaway is the significant influence of social norms and materialism on sustainable tourism engagement - this shows the importance of social psychology in understanding and incentivizing eco-conscious consumer behaviour. Marketing efforts should capitalize on the power of peer behaviour and social trends, such as the growing popularity of ecotourism, highlighting the increasing normalization of sustainable travel among relevant reference groups. At the same time, messaging should appeal to less materialistic values by emphasizing the intrinsic rewards, personal fulfilment, and transformative experiences of eco-friendly travel. Highlighting the sense of adventure, opportunities to immerse in nature, and the emotional benefits of responsible tourism can resonate with Generation Z's preferences for meaningful, authentic experiences over material possessions. This dual approach of leveraging

social influence and addressing materialistic mindsets can be an effective way for tourism operators to promote sustainable tourism engagement.

Pricing and information availability also emerge as important factors. Tourism operators can justify premium pricing for sustainable offerings by clearly communicating the unique benefits, environmental impact, and positive contributions to local communities. For instance, highlighting how premium prices fund conservation efforts, support local economies, or provide exclusive, low-impact experiences can justify the higher costs. Furthermore, enhancing the availability and accessibility of information about sustainable tourism options can significantly improve engagement. Comprehensive online guides detailing eco-friendly accommodation, transportation, and activity options, coupled with educational content on the principles of sustainable travel, can help equip consumers with the knowledge to make informed, eco-conscious decisions. Strategic partnerships with travel agencies, platforms, and influential sustainability advocates can also serve as effective channels to raise awareness and spread information about sustainable tourism alternatives.

Moreover, our study emphasizes the relevance of communication strategy in prompting participation in ecotourism activities. Specifically, the survey results suggest that tailored communication approaches positively influence consumers' willingness to engage in presented activities. By resonating with the values and preferences of Generation Z, businesses and organizations can effectively enhance consumer engagement and encourage participation in sustainable tourism activities (Tolkes, 2020). This highlights the importance of strategic communication in promoting ecotourism initiatives and fostering sustainable practices within the tourism industry. Interestingly, the study found that a diversified communication approach, highlighting various aspects of sustainable tourism, may be more effective than a single, universal strategy. This underscores the need for a more nuanced, audience-specific approach to sustainable tourism marketing, where different promotional techniques can be tailored to resonate with the diverse preferences and motivations of the target consumer segment. These insights contribute to the theoretical development of sustainable tourism research by revealing the complexities involved in effectively communicating the value proposition of sustainable tourism to potential consumers and provide a foundation for the design of more impactful and targeted promotional campaigns.

Additionally, the higher engagement observed among the more affluent social class indicates an opportunity to target premium sustainable tourism experiences to this segment. While demographic factors like gender, age, and education did not significantly impact participation, understanding the general profile of the young, educated Generation Z consumers can help guide tailored marketing on digital platforms. Ultimately, by integrating these practical insights into their strategies, tourism operators can better attract, engage, and retain eco-conscious consumers, contributing to the growth of the sustainable tourism industry.

### 5.3 Limitations and Future Research

While this thesis provides insights into the willingness of Generation Z to engage in sustainable tourism activities, it is important to acknowledge certain limitations inherent in the study.

**Sample Composition:** The composition of the sample in this study consisted of Generation Z individuals. While this demographic group offers valuable insights into contemporary attitudes towards sustainable tourism, it's essential to recognize that findings may not be universally applicable. Given their younger age demographic, it's important to note that participants may have limited financial resources compared to older groups of individuals. This financial constraint may influence willingness to participate in ecotourism activities, highlighting a potential limitation in the study's generalizability.

**Geographical Distribution:** An additional limitation lies in the geographical distribution of participants, with the majority hailing from Europe. This regional concentration raises concerns regarding the generalizability of findings to other global regions. Travel trends, sustainability awareness, and the availability of ecotourism options vary significantly between countries and continents. Hence, it's important to exercise caution when extending the study's conclusions to various regions. Cultural nuances and variations in outdoor adventurousness across societies should also be noted.

**Socioeconomic and Educational composition Factors:** The majority of participants were from higher perceived social classes and possessed higher education levels, with most holding a

bachelor's or a master's degrees. This demographic skew may affect the findings, as individuals from middle and upper-middle-class backgrounds and with higher education levels may have different attitudes and financial capabilities regarding sustainable tourism compared to those from lower socioeconomic and educational backgrounds. Consequently, the results may not fully capture the perspectives and constraints of the broader Generation Z population, particularly those with lower income and education levels.

**Additional Influential Factors:** While the study comprehensively explored psychological, mundane, and communication factors influencing ecotourism engagement, it is essential to acknowledge the potential influence of additional variables. Cultural norms, personal experiences, and perceived barriers to participation represent critical factors that may not have been fully captured in this study. Future research could benefit from a more profound examination of these factors to enhance understanding of Generation Z's decision-making processes regarding sustainable tourism.

Recognizing these limitations is crucial for maintaining the integrity and validity of the study's findings, offering clear insights into its scope and relevance. It also serves as a foundation for future research, helping to address these gaps and expand our knowledge of Generation Z's engagement with sustainable tourism. Moving forward, future studies could explore alternative forms of ecotourism beyond activities, such as accommodations and transportation. Investigating customer preferences for specific ecotourism features and characteristics could offer deeper insights into sustainable tourism preferences. Additionally, examining the role of technology, including digital platforms and social media influencers, in shaping sustainable tourism choices represents a promising avenue for future research. Considering Generation Z's heavy reliance on technology, understanding the impact of digital marketing strategies on ecotourism engagement could bring valuable insights for industry stakeholders.

## **6 Conclusion**

The phenomenon of sustainable development has gained significant traction within modern society, prompting important changes in various industries, including tourism. As one of

the fastest growing sectors within the tourism industry, ecotourism has emerged as a key area of focus, with its potential to minimize negative environmental impacts and contribute to the economic well-being of local communities. In this context, understanding the consumer perspective, particularly among the influential Generation Z demographic, is crucial in informing effective strategies to promote sustainable tourism engagement.

The current study aimed to provide a comprehensive understanding of the factors influencing ecotourism engagement among Generation Z consumers. By investigating the connection between psychological determinants, mundane factors, and the effectiveness of communication strategies, the current research offers valuable insights that can inform practical strategies for the tourism industry. A key finding is the significant impact of social norms and materialism on sustainable tourism engagement. This reveals the importance of social psychology in understanding and incentivizing eco-conscious consumer behaviour. The results suggest that marketing efforts should leverage the power of peer influence and social trends, highlighting the increase of sustainable travel among relevant reference groups. At the same time, appealing to less materialistic values by emphasizing the intrinsic rewards, personal fulfilment, and transformative experiences of eco-friendly travel can resonate with Generation Z's preferences for meaningful, authentic experiences.

Additionally, the study identified pricing and information availability as crucial factors. Tourism operators can justify premium pricing for sustainable offerings by clearly communicating the unique benefits, environmental impact, and positive contributions to local communities. Furthermore, enhancing the availability and accessibility of information about sustainable tourism options can significantly improve engagement, as comprehensive, educational content can equip consumers with the knowledge to make informed, eco-conscious decisions.

Interestingly, a diversified communication approach, that highlights various aspects of sustainable tourism, may be more effective than a single, universal strategy. This shows the need for a more specific approach to sustainable tourism marketing, where different promotional techniques can be tailored to resonate with the diverse preferences and motivations of Generation Z. It also highlights the importance of strategic communication in promoting ecotourism and fostering sustainable practices within the tourism industry. Furthermore, study revealed that the more affluent social classes exhibit higher engagement in sustainable tourism, indicating an

opportunity to target premium sustainable tourism experiences to this segment. While demographic factors like gender, age, and education did not significantly impact participation, understanding the general profile of the young, educated Generation Z consumers can guide tailored marketing on digital platforms. Investing in these strategies and changing the approach to better understand the customer could make Generation Z individuals have a more positive perception of the activities or initiatives offered, as well as a more favourable perception of the companies that offer them. This can lead to increased levels of trust, satisfaction, and loyalty in the future. The fact that ecotourism activities would be chosen over traditional tourism not only enhances the economic results of those companies but also helps in environmental preservation and the spread of sustainable practices, ultimately contributing to the overall well-being of the planet.

In conclusion, the study's findings offer valuable theoretical and practical implications for the tourism industry, particularly in the context of engaging Generation Z consumers in sustainable tourism practices. By integrating these insights into their strategies, tourism operators can better attract, engage, and retain eco-conscious consumers, contributing to the growth of the sustainable tourism industry. However, the study's limitations, such as the sample composition and geographical distribution, should be considered, and future research should explore additional factors and innovative approaches to further advance the understanding of this important domain.

## 7 Appendix

### Appendix I - Survey Questionnaire

Consent Form

Hello,

In this study coordinated by Martina Kedziora, master's student at FGV/EBAPE, you will be asked to fill out a few questions about tourism. The study will take about 10 minutes to be completed.

This survey is part of a Double Degree's Master Thesis at FGV EBAPE Rio de Janeiro and Católica Lisbon.

Your participation in the study is entirely voluntary. You may choose not to participate or may withdraw your consent at any time without penalty.

The benefit you may expect from participating in this study is the opportunity to contribute to scientific research. The researchers do not foresee any important risks regarding your participation in this study.

The information you will provide about yourself will be completely anonymous and confidential. Only averages and general patterns among variables will be shown in publications.

Below you can find the contact information of the researchers involved in this project:  
- Martina Kedziora, Master Student at FGV EBAPE and Católica Lisbon (e-mail: [s-mkedziora@ucp.pt](mailto:smkedziora@ucp.pt)).

By clicking on the arrow below, you confirm that you understood the goals, risks, and benefits of your participation in this research, and that you agree to participate.

--- Page Break ---

#### **Instructions**

On the next screens, you will read a definition of sustainable tourism (or ecotourism) and will be asked to answer a few questions about your perceptions regarding this subject. Please answer as honestly as possible, there is no right or wrong answer, we just want to know a bit more about your perceptions.

#### **Definition of sustainable tourism:**

Please read this definition of sustainable tourism and ecotourism:

Sustainable tourism is tourism which is developed in the area in such a manner and at such a scale that it continues to be sustainable over an indefinite period and does not degrade or alter the environment in which it exists to such a degree that it prohibits the successful development and wellbeing of other activities and processes.

Ecotourism is regarded as part of sustainable tourism concept. It is characterized by small-scale operations, minimal environmental impact, and a focus on promoting environmental awareness among both tourists and hosts.

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## **Factors that influence engagement in sustainable tourism**

### Psychological factors:

#### ***Taste for Nature***

Please indicate the extent to which you agree or disagree with each of the following statements:  
(1 = completely disagree , 4 = neither agree nor disagree, 7 = completely agree)

- I enjoy being in nature more than I enjoy being in towns and urban areas.
- I am more of a city person than a nature person. (R)
- I am more of a city person than a nature person. (R)

#### ***Social Norms***

Please indicate the extent to which you agree or disagree with each of the following statements:  
(1 = completely disagree , 4 = neither agree nor disagree, 7 = completely agree)

- Most people who are important to me would engage in sustainable tourism.
- Most people who are important to me would think that I should engage in sustainable tourism.
- The people who influence my decisions would think that I should engage in sustainable tourism.

#### ***Social Identity***

Please indicate the extent to which you agree or disagree with each of the following statements:  
(1 = completely disagree , 4 = neither agree nor disagree, 7 = completely agree)

- I think of myself as an environmentally-friendly consumer.
- I think of myself as someone who is concerned with environmental issues.
- I would be embarrassed to be seen as having an environmentally friendly lifestyle. (R)
- I would not want my family and friends to think of me as being concerned with environmental issues. (R)

#### ***Desire for Novelty***

Please indicate the extent to which you agree or disagree with each of the following statements:  
(1 = completely disagree , 4 = neither agree nor disagree, 7 = completely agree)

- I want to experience new and different things on my vacation.
- I want there to be a sense of discovery involved as part of my vacation.
- I feel a powerful urge to explore the unknown on vacation.

### ***Materialism***

Please indicate the extent to which you agree or disagree with each of the following statements:  
(1 = completely disagree , 4 = neither agree nor disagree, 7 = completely agree)

- I usually buy only the things I need. (R)
- Buying things gives me a lot of pleasure.
- I put less emphasis on material things than most people I know. (R)

### ***Environmental values***

Please indicate how important are the values below as a guiding principle in your life:  
(1 = not at all important , 4 = neutral, 7 = extremely important)

- To prevent pollution: protecting natural resources
- Respecting the earth: harmony with other species
- Protecting the environment: preserving nature

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### **Economic/Non-psychological factors:**

Please indicate your agreement with each of the statements below:

- I am willing to pay a premium for sustainable tourism services.
- I feel that I am fully aware of the sustainable tourism activities available to me.
- I prioritize convenience over sustainability when making travel decisions.

(1 = completely disagree , 4 = neither agree nor disagree, 7 = completely agree)

--- Page Break ---


### ***Communication Strategies:***

Thank you for completing this part of the questionnaire. Now we would like you to imagine that you were considering travelling to another city in your country. You will read an advertisement for one travel option and will then be asked a few questions about it.


Please click on the button below to proceed.

--- Page Break ---

Environmental preservation condition




EMBARK ON A JOURNEY TO SAVE THE PLANET, TREKKING SUSTAINABLY. EACH STEP SUPPORTS ECOSYSTEMS AND SAFEGUARDS OUR EARTH.




HELP SAVE THE ENVIRONMENT!

Adventurous activities. condition

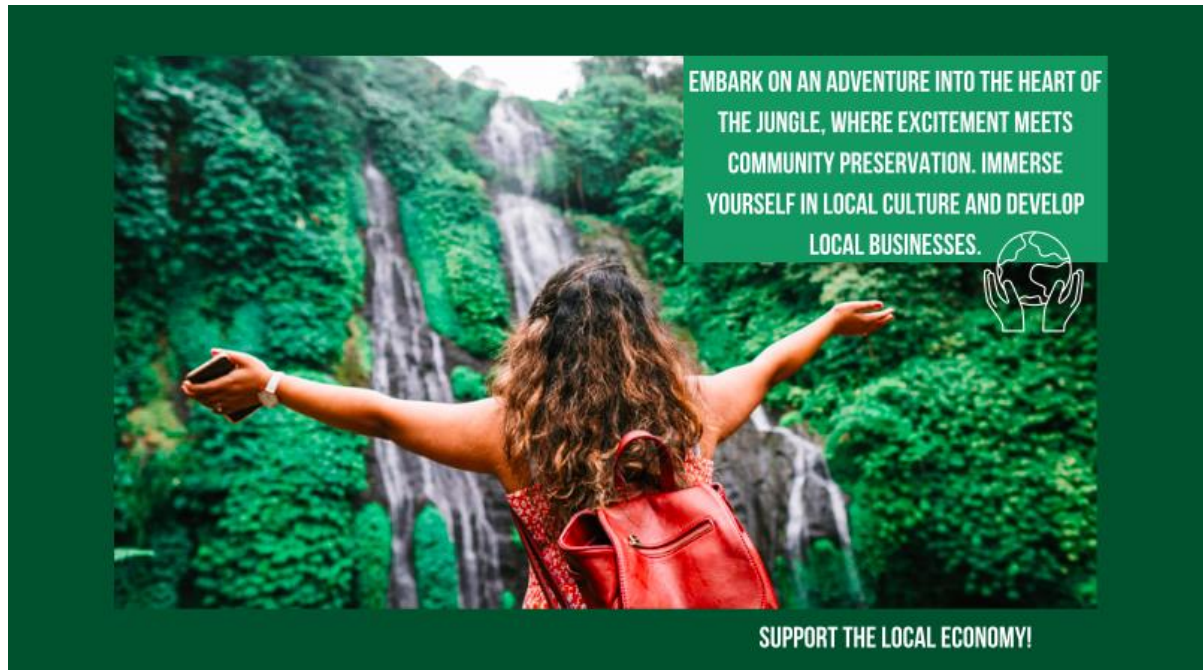


VENTURE INTO THE WILD, EMBRACING NATURE'S MARVELS RESPONSIBLY. EXPERIENCE THE THRILL OF ADVENTURE.



EXPERIENCE NEW ADVENTURES!

## Local economy condition



After you have seen this advertisement how willing would you be to engage in this activity?  
(1 = not at all, 4 = neutral, 7 = very much)

--- Page Break ---

### **General Questions About Sustainable Tourism**

Have you engaged in any form of sustainable tourism within last 12 months?

- yes
- no

How aware are you of sustainable tourism initiatives around the world?

- Not at all familiar
- Slightly familiar
- Neutral
- Somewhat familiar
- Very familiar

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### **Sociodemographic Questionnaire**

Now, please respond to some demographic questions:

What is your gender?

- Male
- Female
- Other

How old are you?  
[open ended]

Please provide information about your personal educational history (highest educational attainment):

- No formal education
- Less than high school
- High school diploma
- Some college credit, but less than 1 year of college
- Bachelor's degree
- Master's degree or higher

Where would you place yourself on the following social class scale?

- Upper class
- Upper-middle class
- Middle class
- Lower-middle class
- Lower class

Where are you from?

- Europe
- North America
- South America
- Africa
- Asia
- Australia & Oceania

## 8. References

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## 9. List of Tables

Table 1 Analysis of Psychological Factors (source: own analysis)

Psychological Factors

<b>Taste for nature</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>taste_nature</i>	.0793671	.133592	0.59	0.552	-.1824685	.3412027
<i>cons</i>	-.5198238	.6909961	-0.75	0.452	-1.874151	.08345037

<b>Social Norms</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>social_norms</i>	.6550001	.1924489	3.40	0.001	.2778072	1.032193
<i>cons</i>	-3.064732	.8862204	-3.46	0.001	-4.801692	-1.327772

<b>Social Identity</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>social_identity</i>	.104041	.1735814	0.60	0.549	-.2361723	.4442543
<i>cons</i>	-.682255	.9498793	-0.72	0.473	-2.543984	1.179474

<b>Desire for novelty</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>desire_for_novelty</i>	.2313136	.1759269	1.31	0.189	-.1134967	.5761239
<i>cons</i>	-1.498081	1.064233	-1.41	0.159	-3.583939	.587777

<b>Materialism</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>materialism</i>	-.3762416	.1751445	-2.15	0.032	-.7195185	-.0329648
<i>cons</i>	1.307824	.6880454	1.90	0.057	-.0407199	2.656368

<b>Environmental Values</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>env_values</i>	.1116682	.1855757	0.60	0.547	-.2520534	.4753899
<i>cons</i>	-.7736442	1.095995	-0.71	0.480	-2.921756	1.374467

Table 2 Analysis of Mundane Factors (source: own analysis)

Mudane Factors

<b>Price</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>price</i>	.337055	.1273988	2.65	0.008	.0873579	.586752
<i>_cons</i>	-1.54149	.5701817	-2.70	0.007	-2.659026	-.4239548

<b>Information</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>information</i>	.5276098	.1389821	3.80	0.000	.2552098	.8000098
<i>_cons</i>	-2.070398	.5459209	-3.79	0.000	-3.140384	-1.000413

<b>Convenience</b>						
<i>engagement</i>	<i>coef.</i>	<i>std.err.</i>	<i>z</i>	<i>p&gt; z </i>	<i>[95% Conf.</i>	<i>Interval]</i>
<i>convenience</i>	-.1433399	.1233225	-1.16	0.245	-.3850476	.0983678
<i>_cons</i>	.5349872	.5924249	0.90	0.367	-.6261443	1.696119

Table 3: Communication strategy Average willingness to engage in each condition (source: own analysis)

Communication strategy = adventure

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>will_engag~i</i>	39	4.794872	1.559006	1	7

Communication strategy = environment

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>will_engag~i</i>	40	4.95	1.319479	2	7

Communication strategy = local economy

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>will_engag~i</i>	51	5.078431	1.453866	1	7

Table 4: Anova Test (source: own analysis)

Number of obs = 130  
 Root MSE = 1.44709

R-squared = 0.0066  
 Adj R-squared = -0.0090

Source	Partial SS	df	MS	f	Prob>F
<b>Model</b>	1.7778281	2	.88891403	0.42	0.6550
<i>communica~y</i>	1.7778281	2	.88891403	0.42	0.6550
<b>Residual</b>	265.94525	127	2.0940571		
<b>Total</b>	267.72308	129	2.0753727		