EXPLORING SUSTAINBLE TRAVEL BEHAVIOR FOR GENERATION Y AND Z

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EXPLORING SUSTINABLE TRAVEL BEHAIVOR OF GENERATION Y AND Z

Since the COVID-19 pandemic unexpectedly hit the world, the tourism industry has been impacted in every conceivable area. Environmental issues are recognized and considered essential to solve especially in the tourism industry. It is unavoidable that tourists bring both positive and negative impacts to a destination. Meanwhile, the tourism industry is eager to return to its pre-pandemic tourist numbers and levels of spending that traveler previously engaged in. The young generations, specifically Gen Y and Z, play an important role in the tourism market, and they often embody a mindset that takes into consideration issues of sustainability. However, they are not as active as expected in practicing sustainable travel behaviors. Sustainable tourism development and "green" travel practices are becoming increasingly necessary. The main purpose of this study is to identify the gaps between Gen Y and Z's intentions and their behaviors regarding sustainable travel. This study developed and tested a conceptual framework to understand this dynamic. This study identified two gaps: (a) the behavior-intention gap, which exists between Gen Y & Z's intentions and their behaviors in sustainable travel, and (b) daily life and sustainable travel gap, which is the gap between individuals' daily sustainable habits and sustainable travel behaviors. The results of quantitative study indicated the factors contributed to the gaps included: (1) individuals who have bachelor's degrees are more likely to conduct sustainable travel behaviors; (2) individuals who have daily sustainable habits; (3) individuals who have higher perceived consumer effectiveness. The implications of the study provide suggestions for destinations to promote sustainable travel and ways to encourage more sustainable traveling choices by travelers.

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Chapter One

Introduction

Tourism brings both positive economic and negative social/cultural and environmental effects to destinations worldwide. While tourism results in increased positive economic impact for destinations, it is unavoidable for travelers to have caused environmental impact on these destinations. One of the negative impacts is pollution which includes air emissions, noise, solid waste, littering, sewage, oil and chemicals, architectural/visual pollution and many more (Baloch et al., 2022). As a result, natural resources are over-consumed, service quality is degraded, and waste and pollution are exponentially increased (Andlib & Salcedo-Castro, 2021). Serious problems associated with tourism invariably exist, such as excessive energy consumption and increased negative environmental effects, including climate change (Streimikiene et al., 2021). Tourists' negligent actions, such as littering, spitting, creating too much noise, harming vegetation, and smoking have also caused problems to destinations (Ardoin, 2015). Finally, one notable major concern has emerged as the impact of travel on the environment (Gehlert et al., 2013). Due to global warming and climate change, researchers and agencies have been focusing with greater intensity on the increasing carbon emissions connected to the demands of travel (Shi et al., 2017). The adoption of sustainable development practices is becoming increasingly urgent in light of these significant global ecological and social challenges (Walsh, 2021). According to the World Tourism Organization and the United Nations Development Programme (UNWTO & UNDP, 2017), the tourism industry is required to continuously advance sustainable tourism practices and align their business operations and policies with

sustainable development goals. While trying to improve destinations' environmental sustainability, promoting sustainable travel requires tourists' compliance (Tolkes, 2020). By choosing ecologically-friendly holiday options and acting in a sustainable manner while at these destinations, tourists can help to lessen their detrimental impact (Juvan & Dolnicar, 2016; Kasim & Wickens, 2020).

Individuals identified in Generations such as Gen Y & Z are thought to have a mindset more focused on sustainability and its relevant issues (Pham & Hwang, 2021). Notably some studies demonstrate that this generation does not always necessarily engage in sustainable travel behaviors (Olga, 2013). Generation Y refers to people who were born between 1981 and 1993 (Zemke et al., 2000). Individuals born in 1994 and late 2000 are called Generation Z (Mandelbaum, 2016). The Gen Y generation is one of the largest consumer cohorts, with some of the highest levels of discretionary spending today (Leask, 2011). Various factors influence their behavior patterns, and these differ across segments (do Paco et al., 2019). When determining their environmental behavior choices, not all individuals will pay equal attention to sustainability-related issues (Golob & Kronegger, 2019). It is important to explore how different factors and characteristics may predict and influence such behaviors (Wang, 2017). More importantly, the ongoing dialogue between societal actors (e.g., media, policy makers, nongovernmental organizations, businesses) have assisted citizens in becoming aware of their individual responsibility in regard to the ecological crisis (Connolly & Prothero, 2008).

The tourism industry has long recognized that "sustainable tourists" have the least negative environmental impact, and that they have higher spending power than the average traveler (Dodds et al., 2010; Nickerson et al., 2016; Buffa, 2015; Hansla et al.,

2007). If destinations become more sustainable, tourists might be willing to pay a higher price to travel there and engage in activities that preserve the environment and the culture at these preferable destinations (Holmes, 2021). Tourism is inextricably linked with the environment; therefore, it is necessary to increase awareness among tourists, residents, and managers of tourist facilities of the critical need to adapt sustainable practices, so as to ensure its sustainable development (Hysa et al., 2021).

Problem Statement

As mentioned above, there has been gaps between the younger generations' mindset and actual behaviors regarding sustainable travel. Similarly, although there are studies (Si et al., 2020; Golob & Kronegger, 2019; do Paço et al., 2019) that have referred to this gap between intention and behavior; however, they have not been specifically targeted towards sustainable tourism. There has been little research conducted on the transformation of tourists' behavior in their day-to-day lives, including sustainability-related habits to their travel behavior (Tolkes, 2020). It is important for researchers and professionals to understand the gaps, so that sustainable tourism can be developed and marketing solutions can be made in order to promote sustainable travel behaviors among the young generations. This study tries to answer the following research questions:

- Are there gaps between Gen Y and Z's attitudes and behavior related to sustainable travel behavior?
- What are the major drivers of Gen Y & Z's enactment of sustainable travel behaviors?

Chapter Two

Literature Review

2.1 Sustainable Travel

Tourism is one of the fastest-growing industries around the world and the economic and environmental impact that the tourism industry has brought to countries has been considerable (World Travel and Tourism Council, 2020). Importantly, sustainable travel is more likely to contribute to the local economy of destinations and support local environmental and social initiatives (Nickerson et al., 2016, p. 176). The tourism industry is one of the largest economic sectors in the world, supporting one of every ten jobs (319 million) worldwide and accounting for 10.4% of the global GDP (Streimikiene et al., 2021). In 2019, tourism accounted for 7% of global trade, with USD 1397.6 trillion in expenses (UNWTO, 2022). However, there are negative impacts that tourism has brought to the environment. According to research published in 2018, tourism contributes to 8% of global carbon dioxide emissions (Lenzen et al., 2018).

After the global crisis of the COVID-19 pandemic, the negative impacts of tourism have been noticed as a significant influence on the environment (Nagaj & Žuromskaitė, 2021). During this time, other concerns were recognizing include renewable energy, carbon emissions, economic crises, and healthcare crises, as well as the spillover effects on global industries, including tourism and travel, which is the largest contributor to the service industry worldwide (Lepp & Gibson, 2003; Im et al., 2021; Abbasi et al., 2021; Abbasi et al., 2021a,b). As tourism has such a significant impact on society and the environment, governments, public institutions, and commercial

companies, these groups are increasingly recognizing the importance of highlighting tourism's positive effects and limiting its negative ones (Azam et al., 2018).

As *Independent Traveler* (2015) states: “sustainable travel is the process of traveling that minimizes negative environmental impacts and protects the natural and cultural resources of a destination by taking baby-step measures such as packing lightly, using public transportation, using reusable water bottles instead of plastic bottles, remaining on the path, and avoiding trampling.” Therefore, environmental problems related to tourism development need special attention, and this has been discussed in a number of significant studies (Lu & Nepal, 2009; Waligo et al., 2013; Pjerotic et al., 2017). Research has been conducted which focuses on issues related to sustainable tourism such as sustainable tourism development, tourism’s involvement, and destination competitiveness towards sustainability (UNWTO, 2017; UNWTO, 2014; Lu and Nepal, 2009; Alvarez and Cooper, 2014; Waseema, 2017; Pjerotic, 2017; Waligo et al., 2013; Delibasic et al., 2017). Various theories exist which help researchers to understand traveler's intentions towards certain behaviors and it is critical to understand the factors that influence sustainable travel.

2.2 Sustainable Travel Behaviors

In addition to the destination's efforts to contribute to sustainable tourism, the topic of environmentally responsible behavior has become an increasingly important topic on the part of tourists in more recent decades (Catlin & Wang, 2013; Leonidou et al., 2013; Peloza et al., 2013; Haws et al., 2014). Sustainable travel behavior refers to the phenomenon of when people willingly adapt their current travel habits to more environmentally friendly practices (Yin et al., 2016). Often this behavior is examined in

terms of specific actions. For instance, D. Miller et al., (2015) assessed tourists' pro-ecological behavior in four key categories: (a) recycling, (b) green transportation, (c) sustainable energy/material use, and (d) green food consumption.

Individuals' attitudes towards sustainable travel behaviors are important as well. Tourists who are environmentally conscious at home only engage in environmentally conscious behavior when traveling if it is convenient for them to do so (Holmes, 2019). Research has shown that people are becoming more aware and concerned about the environment, which results in an increased environmental attitude and has consequences for their behavior (Verplanken, 2018). Although many people demonstrate a favorable attitude toward the environment or intend to behave in an environmentally friendly manner, they do not actually practice sustainable behavior (Hanss et al., 2016; Peattie, 2010). According to Dolnicar & Leisch (2008) and Dolnicar (2010), there is an association between personal norms and environmentally sustainable tourism behavior (e.g., saving water, not littering, turning off the light or air conditioning, and using public transportation). However, Khoo-Lattimore and Prideaux (2013) emphasize that awareness and eventual changes in travel behavior are separated by a noticeable gap that has yet to be fully explained. Accordingly, it is essential to conduct research on actual sustainability behaviors in tourism (Budeanu, 2007; Gao et al., 2017), as well as investigate more extensively how perceptions of responsibility might actually influence behavioral change.

2.3 Attitude/Intention-behavior Gaps among Gen Y & Z

The intention-behavior gap can be influenced by both psychological and environmental factors. Psychological factors include such as motivation, emotions,

perceptions, and beliefs, influence the consumer's experience at every stage of this process, as do social factors, such as social status and reference groups (Crouch et al., 2004). Furthermore, environmental factors include stress, adaptation, environmental design, and work or leisure environments (Mullen & Johnson, 2013). Many studies have mentioned the attitude-behavior gap in sustainable travel and behaviors (Claudy et al., 2013; Nguyen et al., 2018; Jackson 2005; Lewin et al., 2011; Peattie, 2010; Stern, 2005; Gleim et al., 2013; Kelkar et al., 2014; Lan & Sheng, 2014; Miller et al., 2015). It has been pointed out by several authors that it is difficult for tourists to translate their attitude toward the environment into sustainable vacation behavior, regardless of how concerned they may be with the environment (Holmes, 2021; Kasim & Wickens, 2020; Si et al., 2020). Based on Ramchurjee and Suresha's (2015) research, it was found that even though tourists are aware of the impact their behaviors have on the environment, due to varying levels of education and low perceived benefits of protecting the environment, they are not necessarily prepared to put their environmental beliefs into action for positive change when visiting destinations.

Moreover, Juvan and Dolnicar (2014) investigated consumers who actively participate in environmental protection to examine cognitive dissonance and the attitude-behavior gap. Although respondents were involved with environmental organizations with daily tasks related to environmental protection or conservation, their behavior when traveling resulted in different outcomes. Those studies have shown the result of a gap between behaviors at home and travel behaviors. In order to change the way tourists behave, it is important to understand this behavior gap and to raise awareness about these issues. However, some studies only focus on the attitude-behavior gap, so it is important

to note the certain age range of tourists, such as Gen Y & Z. Because of the lack of studies, it has become increasingly difficult to understand why some travelers take "sustainable" tourist actions (López-Sánchez and Pulido-Fernández, 2017). Due to the fact that Gen Y & Z are perceived as future decision-makers in society, their awareness of sustainable travel will have a significant impact on tourism's sustainable development. In addition, travel motivations are shaped by various wants and needs, which play a significant role in how tourists select and enjoy their favored destinations (Meng et al., 2008).

2.4 Theoretical Background

This study used the theory of planned behavior (TPB) (Ajzen, 1985) as the leading conceptual framework. According to this theory (Fishbein & Ajzen, 1975), attitudes, social norms, willingness to participate and perceived behavioral control affect people's intentions to behave in a certain manner, which then leads to actual behavior. In the TPB theory, individuals tend to act through a change of attitude (Chu & Chu, 2013), which is a widely accepted and this model is used for predicting human behavior. Attitude indicates individuals' feelings associated with performing a behavior. Individuals form positive or negative attitudes toward engaging in human behaviors (Bianchi et al., 2017). In the tourism context, traveler attitude includes three components: cognitive, affective, and behavioral. The evaluation made in an attitude formation, while the affective component is a psychological reaction expressing visitors' preferences for a destination and the behavioral component indicates their intention to visit that destination (Lee, 2009).

TPB has frequently been used for investigating environmentally sustainable behavior in general, as it provides a useful explanation for behavioral intentions (Anable, et al., 2006; Bamberg et al., 2003; Chen & Tung, 2010; Fielding, McDonald, & Louis, 2008). Some of the key constructs in this theory, such as social norms and perceived behavior control, are suggested as possible reasons for attitudes not translating into behavior in this study (Juvan & Dolnicar, 2014).

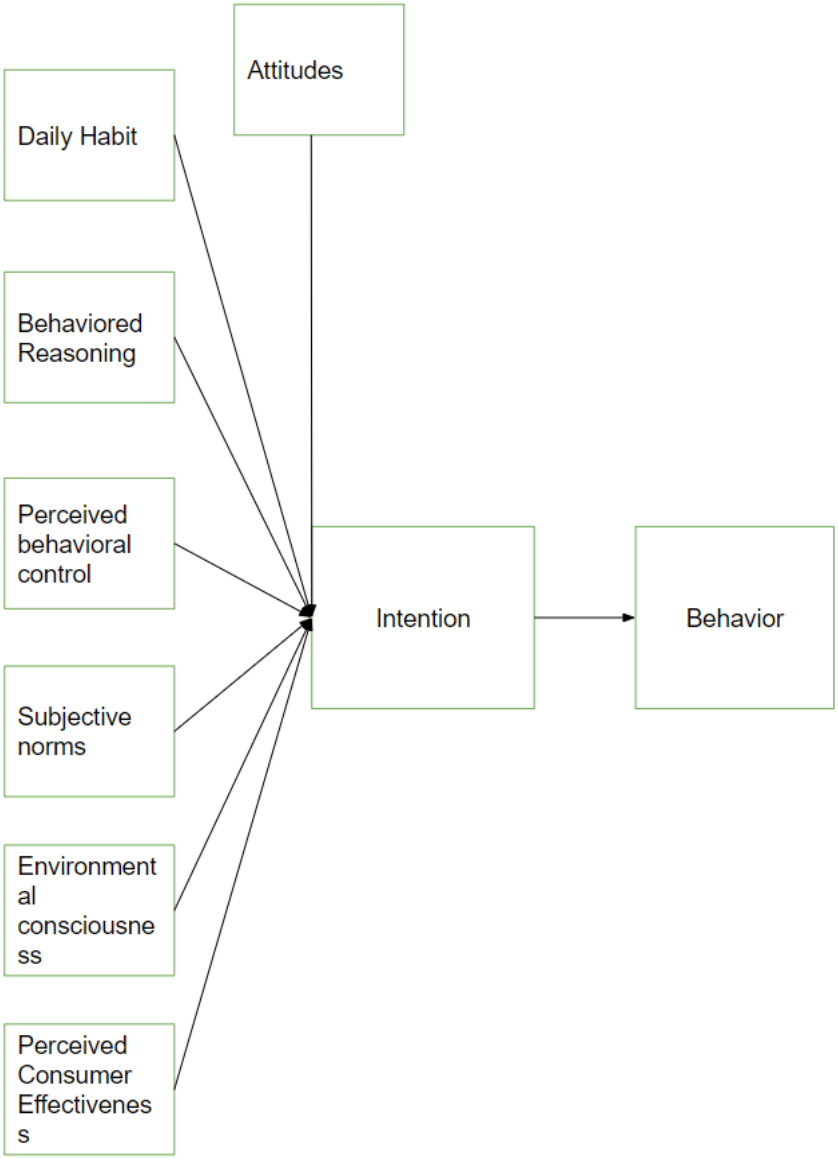
The prominent opinions of individuals play a critical role in generating the cognitive and affective basis for behavioral factors (attitude, subjective norms, and perceived behavioral control) in TPB (Lee & Back, 2007). Based on the theories, a conceptual model has been developed, which includes behavioral reasoning (Claudy et al., 2013) and environmental consciouses (Golob & Kronegger, 2019), arises from the intention to act in a particular way (Ostrovskiy, Garkavenko, & Rybina, 2019). There are some constructs included in this modified model, such as the willingness to pay more for sustainable products (Didier and Lucie, 2008); level of information seeking and evaluation of information sources (Oates et al., 2008); perceived value compatibility (Karahanna, 2006) and positive attitudes towards the environment (Claudy et al., 2013)

2.5 Conceptual Model

The purpose of this study is to have a deeper understanding of Gen Y & Z's sustainable travel behaviors. A conceptual model (Figure 1) was created for this study based on previous literature. The model consists of seven elements relating to Gen Y & Z's sustainable travel behaviors. These elements are intention, behavioral reasoning, perceived behavior control, subjective norms, behavior, subjective norms, daily habits and environmental consciousness. Behavior reasoning is defined as motivations that

influence individuals participate in sustainable travel behaviors (Claudy et al., 2013), such as perceived value compatibility (e.g., in line with individuals' personal values); perceived behavioral control is defined as the ability of conducting sustainable travel behaviors (e.g., have enough time and money) (Lee & Back, 2007); subjective norms is defined as that individuals receive support from others (e.g., families and friends' support, government's support) (Lee & Back, 2007); environmental consciousness is defined as attitudes towards overall environment (Nguyen et al., 2018) and individuals' attitude towards importance of sustainable travel (Golob &Kronegger, 2019); perceived consumer effectiveness is defined as consumers' evaluation of the extent to which their consumption can make a difference in the overall problem (Gleim et al., 2013: Gupta & Ogden, 2009); Daily habits include individuals' sustainable habits in their daily life (Holmes, 2021).

Figure 1. Conceptual Model



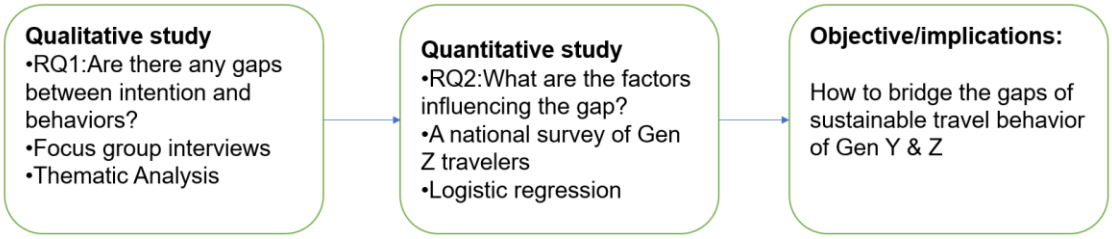
Chapter Three

Methodology

3.1 Research Design

This study utilized a mixed-method design, where the qualitative research informed the development of the quantitative study. The qualitative component involved focus-group interviews; quantitative research component included a national survey. Using mixed-methods research helps provide a better and deeper understanding of the phenomenon by providing a more complete picture that can enhance description and comprehension (Creswell, 2014). Researchers could also understand the questions from multiple perspectives (Johnson & Onwuegbuzie, 2004). Figure 2 below shows the flow of the research design.

Figure 2. Research Design



3.2 Qualitative Study

The qualitative study used focus group interviews with Gen Y and Z participants who have travel experience. As a method of exploring people's knowledge and experiences, focus group interviews are more convenient than other methods as they are more cost effective. Also, it is easier to engage and participate without the limitation of location comparing to in-person interviews (Reid & Reid, 2005; Schweitzer et al., 2012).

Three focus group sections were conducted in December 2022. Snowball and purposive sampling were used for this study. The researcher first recruited the participants by using the researcher's personal network to reach out to the potential participants. Then, researchers asked participants to recommend others to join the focus group. In order to participate in this study, the participants had to meet the following criteria: (1) be at least 18 years old, (2) born between 1981-2002, and (3) at least have taken two leisure trips in the past two years. A total of three focus group sections were conducted through Zoom. The average length of the focus group was 43.67 minutes.

There were six section of questions included in the focus group: 1) the demographics: age, gender, education level, and ethnicity. 2) their travel experiences such as: How often do you travel every year? / What type of destinations do you normally visit? / Who do you normally travel with? 3) interviewee's sustainable travel behaviors. Questions were asked, such as: How do you define sustainability? Do you think it is important? Do you practice sustainable travel behaviors when you travel? Why or why not? 4) motivations and attitudes toward sustainable travel. The researcher asked questions such as: What was your motivation? Why did you choose this style? What aspect of sustainable travel do you value the most? 5) gaps between your sustainable travel attitude and behaviors? Why or why not? / What's the biggest driver for you to participate in sustainable travel? 6) and the constraints of sustainable travel. These questions included: Why are you not involved with sustainable practices during your travel? Do you feel like you have sufficient knowledge in this area?

Thematic analysis was used to analyze the themes of the focus group data (Braun & Clarke, 2006). First, the research team transcribed the data, and the research team reviewed the transcripts highlighting texts that were interesting or assume significant meanings. These initial codes were then sorted into themes, which represent the meanings

and essence of the data. Secondly, the data collection stopped when there were no new themes found from the ongoing interviews. Following the identification of themes, the researchers wrote a write-up with summary that expressed the meanings present in the precipitants' accounts of their experiences and feelings. Thirdly, the research team reviewed the codes together, discussed differences, and finalized the coding scheme.

3.3 Quantitative Study

Based on the qualitative findings and the related literature, this study further developed a questionnaire. The participants were recruited through an online panel which was purchased from Qualtrics, an online survey company. To participate in the survey, the respondents need to meet the following criteria: (1) at least 18 years old, (2) was born between 1982 to 2002, and (3) at least taken two leisure trips in the past two years. The survey was entered via Qualtrics. A pre-test was conducted with 50 participants from the panel to ensure the clarity of the questionnaire. From that pre-test, it was decided that the final survey would use the same questionnaire. Then, a national survey was sent and conducted to collect data. The survey was conducted over two weeks in March 2023. In total, 439 individuals completed responses were collected and included in the analysis, with an average time of 8-10 minutes utilized to complete the survey.

Statistical analysis was conducted following the collection of data. With a quantitative approach, the survey has seven parts: (1) participants' general beliefs and environmental consciousness; (2) participants' daily sustainable habits and travel patterns: (3) participants' sustainable travel behaviors; (4) participants' attitude towards sustainable

travel; (5) their subjective norms and perceived behavioral control of sustainable travel; (6) constraints of sustainable travel; (7) the demographics of the participants.

3.4 Measurement

The outcome variable in this study was individuals' sustainable travel behaviors, and participants were asked to response to a series of sustainable travel behaviors and to indicate how frequently they engaged in these activities. Based on the level of respondents' engagement, the responses were further coded into a binary variable where "1= active participate in sustainable travel behaviors" and "0=inactive participate in sustainable travel behaviors". There are six key constructs. The first construct is individuals' general attitude towards the overall environment, measured by the scale developed by Nguyen et al (2018), with a 5-point Likert Scale.. The second construct is daily sustainable habits, measured by the scale developed by multiple authors (López-Sánchez & Pulido-Fernández, 2016; Juvan & Dolnicar, 2016; and Passafaro et al., 2015; Holmes, 2021). Focusing on participants' past daily sustainable habits by using 5-point Likert scale, 9 different items on daily sustainable habits were included In the same part, participants were asked about their travel pattern. Using multiple choices, the questions were listed as:

- Have you engaged in any sustainable behaviors during your trips?
- How many leisure trips do you take every year?
- Who do you normally travel with?
- Where do you normally get your travel information?

The third construct is sustainable travel behaviors. Using the same items as daily habits listed above with 5-point Likert Scale, 9 different items on sustainable travel

behaviors were presented. The fourth construct is perceived consumer effectiveness intention items, along with attitude towards sustainable travel items, measured by the scale developed by (Gleim et al., 2013; Gupta & Ogden, 2009), with a 5-point Likert Scale. Questions were designed to ask participants about the importance of sustainable travel, their willingness to engage in sustainable travel, and the impact of sustainable travel on the environment.

The fifth construct is subjective norms and perceived behavior control, measured by the scale of developed by Ajzen & Fishbein (2018); with 5-point Likert Scale. The sixth construct is constraints as barriers to sustainable travel, measured by the scale developed by Collins & Potoglou (2019)and Nguyen et al., (2018) using 5-point Likert Scale. The last construct was the demographics of one who participates in sustainable travel. Demographics include age, education, income, children, marital status, gender, and ethnicity.

To test the reliability of these constructs, a scale reliability test was conducted. Cronbach's *a* test had to be equal to or greater than 0.700 to be considered valid for this study. As showed in Table 1, all the included constructs satisfy the requirements and are deemed as reliable.

Table 1. Results of measurement scale reliability tests

Variable	*Mean*	*Std. deviation*	*Cronbach's a*
Environmental Consciousness	3.90	.742	.767

Humans are destroying the environment			
I am concerned about the environment pollution			
I am informed about environmental issues			
As an individual, I can play a role in protecting the environment at home			
Importance of Sustainable Travel	3.87	.784	.743
I think protecting environment is important			
Environmental issues have a direct effect on my daily life			
I'm willing to buy environmentally friendly products even if they cost a little more			
Daily Habit	4.01	.845	.817
I purchase local food products			
I choose to purchase green/eco-friendly products			
I choose to take public transportation (e.g., bus, subway)			
I use a refillable water bottle			
I choose to purchase recyclable products			
I respect local culture and traditions			
I purchase local products (e.g. artwork) to support the community			
I prefer biking/walking to get to nearby destinations			
I recycle as much as I can			
Perceived Consumer Effectiveness	4.23	.616	.883
Sustainable travel can have a positive impact on the environment			
Sustainable travel has a significant impact on the destinations' local community			

I prefer environmental friendly products			
Sustainable travel reduces air pollution			
Sustainable travel would improve the local environment at destination			
Sustainable travel help reduce my carbon footprints			
Subjective Norms	3.66	.673	.790
My friends/families support sustainable travel			
People around me encourage that I can travel sustainably			
The local government promotes sustainable travel at the destinations			
Perceived Behavioral Control	1.99	.996	.790
I'm confident that I can travel sustainably			
I have enough time to travel sustainably			
I have enough money to travel sustainably			
I have enough knowledge/information about sustainable travel			
Limited Information	3.27	.902	.832
Limited information about the sustainability at the destination			
Limited knowledge about sustainable travel			
I can't find out information on what sustainable practices			
I do not know what sustainable travel behaviors I should do			
Unavailability	3.759	.912	.776
The cost of sustainable travel is too expensive			
Committing to sustainable travel is time-consuming			
Sustainable travel behaviors are not something that I'm familiar with			
Sustainable travel requires too much efforts			

3.5 Data Analysis

All data was analyzed through the Statistical Package for the Social Sciences, known as SPSS. First, data was reviewed and entered with missing data removed by removing the missing data, including incomplete and unqualified responses. A descriptive analysis was conducted to report all sample characteristics. Next, examinations on the reliability of the constructs were conducted. Fourthly, run assumption tests for logistic regression analysis. Lastly, logistic regression analysis was conducted to identify the major drivers of the participants' engagement in sustainable travel behavior.

In the final regression, independent variables include environmental consciousness, importance of sustainable travel, sustainable daily behavior, perceived consumer effectiveness, limited information, unavailability of sustainable travel, subjective norms, perceived behavior control. Demographics were also included (college education, gender, ethnicity, marital status, number of children, income) as control variables. The dependent variable used for this regression was sustainable behaviors during travel.

Chapter Four

Results

4.1 Qualitative Study Findings

4.1.1 Focus Group Demographics

The main purpose of qualitative study is to answer the question that if there are gaps between Gen Y & Z's behaviors and intentions. A total of 13 participated in the focus group. Table 2 reports the participants' demographic information. The average age of the participants is 26 years old; the majority are female (n=8, 61.5%). Nearly half of them have bachelor's degree (n=6, 46.2%). Most of them travel at least once a year (n=12, 92.3%).

Table 2. Sample Profile for Qualitative Study

ID	Age	Gender	Education Level	Travel Frequency
1-1	24	Male	Bachelor	10 times a year
1-2	24	Male	Bachelor	3-5 times a year
1-3	23	Female	Bachelor	3-4 times a year
1-4	22	Female	Pursing Bachelor	3-5 times a year
2-1	18	Male	Pursing Bachelor	Once a year
2-2	22	Female	Pursing Bachelor	Twice a year
2-3	21	Female	Pursing Bachelor	Twice in two years
2-4	23	Female	Pursing Bachelor	Once a year
3-1	29	Male	Pursing PhD	5 times a year
3-2	35	Male	Pursing PhD	30 times a year
3-3	31	Female	Bachelor	Once a year
3-4	30	Female	Bachelor	2-3 times a year
3-5	31	Female	Master's	3-5 times a year

4.1.2 Behavior-Intention Gap:

The focus group findings revealed two major gaps. One is the behavior-intention gap, which shows that even though Gen Y & Z travelers have the intention of sustainable travel, they are also aware of the importance of sustainable travel, they still lack of practicing sustainable travel behaviors and they are not as active as expected in sustainable travel. One of the participants mentioned that:

"I'm willing to do so, but I don't know what to do when it comes into the real life."

"I have taken classes about sustainable travel, but I don't think I'm equipped with how to do so. When I travel, I don't think of sustainable travel that much."

"I'm definitely limited by the constraints of how you can actually travel, and then the cost that comes with it."

The other gap is between daily sustainable habits and sustainable travel behaviors. This gap indicates that there are sustainable habits that Gen Y & Z practice in their daily life; however, when they travel to destinations, they do not practice these habits as much. It's mentioned that although they do practice sustainable behaviors while they are at home, they would not think of doing the same things during their trips.

One of the participants stated that:

"I don't know if I can myself be a sustainable traveler, I would say that I'm a sustainable person. "

"I'm sustainable in my daily life, I recycle as much as I can, I have my own water bottle. But when I go travel, I just want to be comfortable, just want to have a nice hot shower and relax. So, I think I can definitely do better on that."

Another participant also agreed and said:

"Sustainability is important, and I think I do sustainable things at home, but I just don't know what else I could do when I'm traveling. And when you're staying at a hotel, it's hard for you really do a lot of sustainable things since everything is unlimited."

4.1.3 Factors Causing the Gaps

Limited resources and availability at Destinations

There are several factors that causes the gaps, which include limited resources and unavailability of destinations, cost factor and individuals have limited knowledge about sustainable travel. All the interviewees' attitudes towards sustainable travel are positive, interviewee 11 mentioned that *"I think sustainable travel is important and I do recognize the importance of it"*, interviewee 3 said "*I've heard about it, I have some knowledge about it. I think sustainability is very important especially after the pandemic".* While at destinations, interviewees mentioned that there're not a lot of resources that they could use for sustainable travel. There are not a lot of information or available resources for travelers provided at destinations, even though there are sustainable travel options or equipment such as public transportation, they are not used as much as expected. One participant said that:

> *"They should promote more, there's limited resources that I could use while I'm at a destination. I feel like it's not as well-known as they're not making themselves anywhere as much."*

Another participant agreed and said:

> *"I couldn't tell you at all what public transportation is there. I didn't learn about it; I've never taken it. They're not cities that are like New York. It's not like there's a whole system that's kind of in your face and everyone uses it. They really don't explain it. They don't show it. They don't advertise it. People come downtown, and they immediately call their Uber or their Lyft."*

Limited knowledge of sustainable travel

Although there is increased awareness about sustainable travel with younger generation, when it comes to practicing sustainable travel behaviors in real life, they still have limited knowledge of sustainable travel. Many participants have mentioned that what they know about sustainable travel is very limited. They know the concept but they don't know what else they can do.

"*I'm willing to do so, but I don't know what to do. I have limited knowledge about sustainable travel behaviors. I have the basic knowledge of a third grader when it comes to sustainability. I could definitely improve, or if someone or the Internet could give me better tips on how I can improve myself, I'm all ears."*

"I think I know some, but I don't know what to do when it comes into real life. I think it's just like ignorance about how I can do better, or even like I realistically like being a smart thing being."

"I don't even know how to start; how could I do this better?"

"Why do we have all those buses in public transportation? No one knows how to use them and how to get around."

Cost factor

Multiple interviewees have mentioned that the cost of sustainable travel is one of the biggest constraints of conducting sustainable travel behaviors. The cost of sustainable travel limits them from practicing more sustainable behaviors while they travel.

"I honestly just can't afford it. It's expensive to be sustainable. You have to pay extra for those recyclable bags. In small businesses, they charge pretty expensively."

"It's so expensive to get an electric car. And I'm just a broke college student, I can't afford all those options and just can't really go to those places. I can just do the bare minimum that I can do."

"I guess the biggest barriers to me currently are time and money. Again, if I pay an extra five to ten hundred dollars on my hundred-dollar trip of flight, I'm not sure if I'm willing to do that."

4.2 Quantitative Study Findings

4.2.1 Sample Profile

The final sample consisted of 439 individuals. The demographic characteristics as shown in Table 3, included age, gender, education level, race, marital status, number of children, and income range. The average age of participants was 26 (M=26.5), with 65.6% being female in gender, 40.5% having bachelor's degree, 64.5% being white in race, 39.2% married, 27.1% participants having children.

Table 3. Sample Characteristics

Variable		*N*	*Valid percent*
Age (M= 26.5; SD=2.121)			
Gender	Male	150	34.2
	Female	289	65.6
	Other	1	0.2
Education	High School	49	11.2
	College	121	27.5
	Bachelor	178	40.5
	Master/Professional	91	20.8
Race	White	283	64.5
	Others	156	35.5
Family Status	Married	172	39.2
	Widowed	2	0.5
	Divorced	16	3.6
	Separated	3	0.7
	Never Married	246	56.0
Have Children	No Children	276	62.9
	Children	163	37.1
Income	Less than 50,000	143	32.4
	>50,000, 80,000>	142	32.3
	90,000 and more	154	35.3

4.2.2 Assumption Tests

According to Lomax & Hahns Vaughn (2013), statistical assumptions were evaluated based on linearity relationship, independence of errors, nonzero cell counts for each categorical independent variable and the dependent variable, lack of influential data points, and noncollinearity. The results are reported in Appendix A and satisfy all the requirements. Therefore, logistic regression was employed.

4.2.3 Logistic Regression Testing Results

Logistic regression was conducted on one dependent variable: Gen Y & Z active participation in sustainable travel behaviors. The regression results are reported in Table 4 and broken down into three steps. The overall model was found to be statistically significant (Chi-squared value (3) = 288.023, $p<0.05$), with Nagelkerke R-squared value of .642. individuals who own bachelor's degree (chi-squared value 4.743, $p=0.029$), daily sustainable habits (chi-squared value 57.898, $p=0.000$), PCE (chi-squared value 3.883, $p=0.049$) were found to be statistically significant in predicting Gen Y & Z's sustainable travel behaviors.

Table 4. Logistic regression model

Dependent Variable: Sustainable Travel Behaviors

Model	*Variable*	*Standardize Coefficient Beta*	*SE*	*Odds Ratio*	*Significance P*
1	(Constant)				.693
	Male	.107	.205	.274	.601
	EduBachelor	.693	.221	9.822	.002*
	EduAdvance	.047	.204	.291	.859
	White	-.110	246	3.024	.590
	Married	-.428	.245	3.337	.082
	Have Children	.447	.262	0.031	.068
2	(Constant)		.227	4.135	.042*
	Male	-.564	.313	3.253	.071
	EduBachelor	.690	.325	4.516	.034*
	EduAdvance	.262	.304	.860	.482
	White	.282	.348	2.515	.354
	Married	-.552	.356	2.197	.113
	Have Children	.528	.373	.493	.138
	Overall Attitude	.154	.363	.180	.672
	Importance	.448	.330	1.847	.174
	Daily Habit	3.516	.462	57.961	.000**
	Perceived Consumer Effectiveness	.672	.334	4.040	.044*
	Subjective Norms	-.008	.266	.001	.976
	Perceived Behavioral Control	.289	.282	1.053	.305
3	(Constant)				.000**
	Male	-.531	.315	2.843	.092
	EduBachelor	.711	.327	4.743	.029*
	EduAdvance	.231	.305	.771	.542
	White	.268	.346	2.475	.380
	Married	-.545	.355	2.178	.116
	Have Children	.524	.379	.372	.140
	Overall Attitude	.149	.365	.167	.683
	Importance	.445	.331	1.811	.178
	Dailly Habit	3.556	.467	57.898	.000**

Perceived Consumer Effectiveness	.665	.338	3.883	.049*
Subjective Norms	.007*	.268	.001	.981
Perceived Behavioral Control	.261	.299	.763	.382
Limited Information	.169	.279	.367	.545
Unavailability	-.212	.277	.584	.445
(Constant)				.000**

*p<.5; **p<.01

Chapter Five

Discussion

5.1 Findings Overview

This study revealed two gaps that are related to Gen Y & Z's sustainable travel behaviors. The first gap is indicated as the gap between Gen Y & Z's sustainable travel intention and behaviors. The second gap is found as the gap between Gen Y & Z travelers' daily sustainable habits and sustainable travel behaviors.

The regression results showed that individuals who have bachelor's degree are more likely to conduct sustainable travel behaviors than other individuals who have high school degrees; individuals who have daily sustainable habits are more likely to conduct sustainable travel behaviors; and those who have higher perceived consumer effectiveness, that is, individuals who have more positive attitude towards sustainable travel are more likely to participate in sustainable travel behaviors.

Interestingly, the new findings from this study are: (1) the gap between Gen Y & Z's travelers' daily sustainable habits and sustainable travel behaviors; (2) factors that contributed to the gaps include education level of bachelor's degree, individuals' who have daily sustainable habits and individuals' who have higher perceived consumer effectiveness. There is little research about the gap between Gen Y & Z's daily sustainable habits and sustainable travel behaviors as well as the factors are newly found to be significant predictors of sustainable travel behaviors from this study. These new findings would provide travel agencies and researchers some new implications and marketing strategies.

5.2 Implications

5.2.1 Theoretical Implications

From a theoretical perspective, this study revealed the young generations' sustainable travel related behavioral gaps and causing factors that have not been fully explored in the past. From the interview findings, this study found that there is a gap between behavior and intention, which is aligned with the existing articles (Claudy et al., 2013; Nguyen et al., 2017; Jackson, 2005; Lewin et al., 2011; Peattie, 2010; Stern, 2005; Gleim et al., 2013; Kelkar et al., 2014; Lan & Sheng, 2014; Miller et al., 2015). Another new gap was also found, which lies between daily habits and participants' behaviors while at travel.

The second gap explicates that even though individuals have daily sustainable habits such as recycling, they do not necessarily perform these behaviors during travel. The focus group interviews further identified factors that contribute to this gap. Cost and limited knowledge about sustainable travel is found to be the main factors influencing young generations from engaging in sustainable travel behaviors. It was mentioned that sustainable travel options cost more than other travel options, which stops travelers from participating. Also, the findings also stated that individuals do not know what some sustainable travel behaviors are they could do during travel. Limited information about sustainable travel at destinations has caused a bigger than between daily sustainable habits and sustainable travel behaviors.

Lastly, this study advanced understanding of sustainable travel behavior by using regression analysis to identify the major factors driving participants' active engagement in sustainable travel behaviors. The following factors are found as significant predictors:

demographic of education, perceived consumer effectiveness (e.g., travelers' attitudes towards environment) and daily habits. Consistent with previous studies (Claudy et al., 2013), perceived consumer effectiveness has been proven to be a significant factor that can influence Gen Y & Z travelers' sustainable travel behaviors. Additionally, this study has found that individuals with bachelor's degrees are more likely to conduct sustainable travel behaviors. This study also has indicated that individuals who have sustainable daily habits are more likely to conduct sustainable travel behaviors while they travel.

Interestingly, some constructs of the conceptual models such as subjective norms and perceived behavioral control are not found to be as significant factors as others. These results are different from previous studies, as (Bianchi et al., 2017; Lee, 2009) mentioned TPB theory. This finding suggests the inapplicability of TPB to the current context and the necessity of having alternative theoretical approaches.

5.2.2 Practical Implications

Based on the findings of this study, various practical implications can be mentioned. First, the findings of this study showed that one of the causing factors of the behavioral gap involves unavailability and limited information about sustainable travel at destinations. To fill the gap, governments, destination marketing organizations (DMOs) and travel agencies should promote more information about sustainable travel and make knowledge of sustainable travel. Travel agencies and DMOs also need to promote sustainable travel. Different marketing tools can be used such as online platforms (e.g., Zoom webinars, YouTube videos, Facebook Pages). Second, this study finds that cost is another major contributor to the behavioral gap. Thus, travel agencies should work with

partners lower the prices of sustainable travel related products and make sustainable choices more affordable and available to purchase.

Thirdly, this study finds that daily habits are a significant predictor of the participants' active engagement in sustainable travel behavior. Thus, destinations should target individuals who have daily sustainable habits as their main market. Travel agencies should also go to universities to promote more about their sustainable travel options as individuals who have bachelor's degrees are more likely to conduct sustainable travel behaviors. Lastly, this study revealed some uniqueness of the current segment. As a result, destinations and related organizations could use marketing tools to target at individuals who have positive attitudes towards sustainable travel, such as conducting surveys to collect more data about potential market's information and preferences. Also, educating students or individuals about sustainable travel plays a huge role too. Travel agencies and organizations can collaborate with K-12 educations and help them teach best practices in sustainable travel. Develop awareness of the importance of sustainable travel, as well as educate individuals where to start with sustainable travel.

5.3 Limitations and Future Research

There are many limitations towards this study. Firstly, convenient sampling had a limited number of respondents without a variety of demographic responses. Therefore, in the future researchers should follow a random sampling method and set a wider range to reach out to more diverse participants. Secondly, this study relies heavily on self-reported data, which is subjective in nature. Data can be skewed and biased based on what responses they think they should answer and what is true. Thus, other approaches relying on secondary data can be applied to this research topic. Thirdly, in the future, more

analysis of the data can be done, the analysis of the data can be done in other research methods such as cluster analysis, path analysis etc.

Appendices

Appendix A: Assumption Tests

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13
Male		.011	-.007	-.037	.003	.014	.015	.128**	.040	-.046	.195**	-.012	.207**
Bachelor	.011		.025	.130**	-.009	.057	.052	.103*	.081	.076	-.013	.043	.002
White	-.007	.025		.069	.058	-.106*	-.142**	-.083	-.019	.071	-.095*	.033	-.149**
Married	-.037	.130**	.069		.552**	.015	-.014	-.027	-.008	.053	-.039	.054	.015
Have children	.003	-.009	.058	.552**		.007	.027	.022	.026	-.033	.052	-.017	
Overall attitude	.014	.057	-.106*	.015	.007		.779**	.525**	.657**	-.069	.323**	-.186**	.361**
Importance of Sustainable travel	.015	.052	-.142**	-.014	.027	.779 88		.582**	.691**	-.066	.409**	-.190**	.442**
Daily habit	.128**	.103*	-.083	-.027	.022	.525**	.582**		.602**	-.071	.532**	-.157**	.614**
PCE	.040	.081	-.019	-.008	.026	.657**	.691**	.602**		-.047	.438**	-.171**	.470**
Subjective norms	.195**	-.013	-.095*	-.039	.052	.323**	.409**	.532**	.438**	-,133**		-.174**	.747**
PBC	.207**	.002	-.149**	.015	.105*	.361**	.442**	.614**	.470**	-.277**	.747**	-.308**	
Unavailability	-.012	.043	.033	.054	-.017	-.186**	-.190**	-.157**	-.171**	.656**	-.174**		-.308**
Limited information	-.046	.076	.071	.053	-.033	-.069	-.066	-.071	-.047		-.133**	.656**	-.277**

** correlation is significant at the 0.01 level

*correlation is significant at the 0.05 level

Appendix B: Interview Guide

Interview Guideline

Introduction: Thank you for agreeing to participate in our study, the purpose of our study is to indicate travelers' motivations of sustainable travel. Also, this study will just simply ask you some questions regarding your sustainable travel experience. All your personal information will be confidential and protected.

Section 1: Demographic

To start off, could you tell me about yourself?

I. Age

II. Gender

III. Education Level

IV. Ethnicity

V. Travel Experiences

a. How often do you travel every year?

b. What type of destination do you normally visit – domestic, international?

c. What type of attractions do you usually like to visit? Nature-based, culture-based, events, heritage sites, You don't have any preferences.

d. Who do you normally travel with? Your friends, family's, and etc?

e. What type of travelers are you – independent, backpacker? Mass tourists?

f. How do you plan your travel? -- where do you get the primary information sources (e.g., social media, website, google search, friends word of mouth?)

Section 2: Sustainable travel behavior

I. How do you define suitability? Do you think it is important?

II. How do you define sustainability in travel? Do you think it is important?

--> if they say they don't know, ask if they have practiced any sustainable travel behaviors during their trips. Such as being energy efficient, bringing their own water bottle, respecting local culture, checking CO2 commission when booking flights

III. Do you think you are a sustainable traveler? Or say you practice sustainability behaviors during your travel? Why or why not?

IV. Do you want to be one? Why or why not?

--> if they say it depends—then ask them to explain further.

V. Can you share with me some of your sustainable travel experiences?

If they say they have, please proceed with the following questions:

a. What was your motivation?

b. Why did you choose the route/style?

c. Did you enjoy it?

d. How long you have been doing it afterwards?

e. What aspect of sustainable travel do you value the most?

f. What is the most important part of sustainable travel for you?

g. What things do you do for sustainable travel? (e.g. choice of hotels, usage of water)?

If they say they don’t' have much sustainable travel experiences, proceed with the following questions:

a. Why you are not involved with sustainable practices during your travel?
    - Poke with knowledge questions – do you feel like you have sufficient knowledge in this area?
b. Poke with constraints questions - do you think you are sustainable in regular life (e.g., recycling, energy reserving, and etc). What makes it hard for you to apply these practices while travelling?
c. What are the things that you thought you would do, but you didn’t?
h. What are some things that you didn’t think were important, but they were?

VI. Any other comments that you would like to add?

Appendix C: Survey Questions

Start of Block: Screening questions

Q1 **Were you born between 1982 and 2003?**

- O Yes, I am (1)
- O No, I am not (2)

Skip To: End of Block If Were you born between 1982 and 2003? = No, I am not

End of Block: Screening questions

Start of Block: Screening question 2

Q2 **Have you traveled in the past two years?**

- O Yes (1)
- O No (2)

End of Block: Screening question 2

Start of Block: Sustainable Travel behavior

Q3 **How often do you travel every year?**

- O 1-2 times (7)
- O 3-4 times (8)
- O More than 5 times (10)

Q4 **What type of destination do you normally visit?**

- O International (1)
- O Domestic (2)
- O Both (3)

Page Break

Q5 **What type of attractions do you usually like to visit?**

- O Nature-based (1)
- O Culture-based (2)
- O Events (3)
- O Heritage sites (4)
- O Have no preferences (5)

Q6 **Who do you normally travel with?**

- O By myself (1)
- O With my significant others (2)
- O Friends/Family members (7)
- O Classmates (3)
- O Co-workers/colleagues (4)
- O Others (Please specify) (6)

_____

Q7 **What type of travelers are you?**

- O Independent (1)
- O Backpacker (2)
- O Mass tourists (4)
- O Others (Please be speific) (3)

_____

Q8 How do you plan your travel? -- Where do you get the primary information sources?

- O Social media (1)
- O Website (3)
- O Google search (4)
- O Friends' word of mouth (5)

Q9 **Please indicate your agreement to the following statement**

	Strongly disagree (13)	Disagree (14)	Somewhat disagree (15)	Neither agree nor disagree (16)	Somewhat agree (17)	Agree (18)	Strongly agree (19)
I would point out unecological behavior to someone (1)	O	O	O	O	O	O	O
I would buy products in refillable packages (2)	O	O	O	O	O	O	O
I would buy seasonal produce (3)	O	O	O	O	O	O	O
I read about environmental issues (5)	O	O	O	O	O	O	O
I would talk with friends about environmental problems (7)	O	O	O	O	O	O	O
I look for ways to reuse things (8)	O	O	O	O	O	O	O
I encourage friends and family to recycle (9)	O	O	O	O	O	O	O
I conserve gasoline by walking or bicycling (10)	O	O	O	O	O	O	O
I chose tourism companies that proactively protect the environment (11)	O	O	O	O	O	O	O

I have made the decision not to travel to destinations where I believe the local culture is not respected (12)	O	O	O	O	O	O	O

End of Block: Sustainable Travel behavior

Start of Block: Sustainable Travel Attitudes

Q10 Please indicate your agreement with the following statement

	Strongly Disagree (29)	Disagree (30)	Somewhat Disagree (31)	Neither Agree nor Disagree (32)	Somewhat Agree (33)	Agree (34)	Strongly Agree (35)
I'm willing to compromises in lifestyle for the benefit of the environment (1)	O	O	O	O	O	O	O
I think protecting the environment is a means of stimulating economic growth (2)	O	O	O	O	O	O	O
I'm not willing to do anything about the environment if others don't do the same (9)	O	O	O	O	O	O	O
I think environmental impacts are frequently overstated (10)	O	O	O	O	O	O	O

I think policies about environmental issues should not cost me extra money (12)	o	o	o	o	o	o	o
I think environmental issues will be resolved through technological progress (13)	o	o	o	o	o	o	o

Q11 **How often do you engage in the following activities on social media?**

	Never (11)	Sometimes (12)	About half the time (13)	Most of the time (14)	Always (15)
Browse celebrities/influencers' posts (1)	O	O	O	O	O
Check my friend's updates (2)	O	O	O	O	O
Post about my own experiences (3)	O	O	O	O	O
Search exhibition/event-related information (4)	O	O	O	O	O

End of Block: Sustainable Travel Attitudes

Start of Block: Demographics

Q12 **What is your age?**

_____

Q13 **What is your gender?**

O Male (1)

O Female (2)

O Prefer Not to Answer (3)

Q14 **What is the highest level of school you have completed or the highest degree you have received?**

- O Less than high school degree (1)
- O High school graduate (high school diploma or equivalent including GED) (2)
- O Some college but no degree (3)
- O Associate degree in college (2-year) (4)
- O Bachelor's degree in college (4-year) (5)
- O Master's degree (6)
- O Doctoral degree (7)
- O Professional degree (JD, MD) (8)

Q15 **What is your current zip code?**

_____

Q16 **Choose one or more races that you consider yourself to be:**

- ☐ White (1)
- ☐ Black or African American (2)
- ☐ American Indian or Alaska Native (3)
- ☐ Asian (4)
- ☐ Native Hawaiian or Pacific Islander (5)
- ☐ Other (6) _____

Q17 **Are you now married, widowed, divorced, separated, or never married?**

- O Married (1)
- O Widowed (2)
- O Divorced (3)
- O Separated (4)
- O Never Married (5)

Q18 **Information about income is very important to understand. Would you please give your best guess?** Please indicate the answer that includes your entire household income in (previous year) before taxes.

- O Less than $10,000 (1)
- O $10,000 to $19,999 (2)
- O $20,000 to $29,999 (3)
- O $30,000 to $39,999 (4)
- O $40,000 to $49,999 (5)
- O $50,000 to $59,999 (6)
- O $60,000 to $69,999 (7)
- O $70,000 to $79,999 (8)
- O $80,000 to $89,999 (9)
- O $90,000 to $99,999 (10)
- O $100,000 to $149,999 (11)
- O $150,000 or more (12)

Q19 **How many children do you have?**

- O 0 (1)
- O 1 (2)
- O 2 (3)
- O 3 and more (4)

End of Block: Demographics

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Curriculum Vitae

Huilin Bao

Education

Masters' Degree in Event Tourism, Indiana University - Purdue University, Indianapolis, IN, 2023
Bachelor's Degree in Tourism, Events, and Sports Management, IUPUI, IN, 2021
Business Foundations Certificate, Kelley School of Business at Indiana University, Indianapolis, IN, 2021

Research Experiences

- Event Tourism Institute, Indianapolis, IN August 2021 - present

Graduate Assistant

- Completed 5 research projects by undertaking a study on a specific subject and partnering up with my mentor.

GWTTRA conference, Indianapolis, IN October 2022
Presenter

- Presented the research project by outlining the rationale behind the topic selection, explaining the methodology, and providing conclusions.

CentralCHRIE 2022 Summit, Indianapolis, IN September 2022
Presenter

- Presented my research project in front of many DMOs and industry professionals by gathering important data and describing the research procedure and results.

ETI Webinar, Indianapolis, IN February 2022
Metaverse Presenter

- Performed a 30 minutes webinar presentation by exploring the connection between Metaverse and the event industry and providing insightful information.

5th International Conference, Indianapolis, IN November 2021
Presenter

- Delivered a comprehensive presentation about the topic by describing the methodology and results.

6th World Research for Tourism and Hospitality, Indianapolis, IN December 2021
Presenter & Best Paper Award

- Delivered a presentation focused on resilience in the hospitality industry by engaging with my mentor and conducting an extensive study.

UROP Summer Program at IUPUI, Indianapolis, IN June 2020
Student Researcher

- Completed the research of ''What's Between Traditional Exhibitions and Generation Z?'' by evaluating the results of month-long interviews and a national survey.

- Provided conclusions about motivation for and constraints of attending exhibitions by examining and interpreting Generation Z's beliefs alongside my mentor.

UROP Summer Program at IUPUI, Indianapolis, IN June 2019

Student researcher

- Completed the research ''Travel Motivation and Decisions Correlations to Fear of Missing Out: An Exploration of Generation Z'' by establishing the method that involved conducting the interviews, performing the theme analysis, and then writing the paper.