

Degree Project

Level: Bachelor's Degree

Investigation of the impact of personal norms and environmental awareness to sustainable purchasing behaviour among tourists in Sweden

Quantitative Analysis

Author: Kulsoom Adnan
Supervisor: Marie Nowak
Examiner: Ioanna Farsari
Subject/main field of study: Tourism
Course code: TR2005
Credits: 15
Date of examination: 2023-8-31

At Dalarna University it is possible to publish the student thesis in full text in DiVA. The publishing is open access, which means the work will be freely accessible to read and download on the internet. This will significantly increase the dissemination and visibility of the student thesis.

Open access is becoming the standard route for spreading scientific and academic information on the internet. Dalarna University recommends that both researchers as well as students publish their work open access.

I give my/we give our consent for full text publishing (freely accessible on the internet, open access):

Yes ☒

No ☐

Abstract

This study examines into how tourists in Sweden engage in sustainable tourism by analysing the impact of personal norms and environmental knowledge on their purchasing decisions, with an emphasis on eco-friendly options for accommodation. The goal of the study is to ascertain how much sustainable tourism practices are considered by visitors in Sweden when making vacation choices. To do this, a survey was given to visitors (both domestic and international) to Sweden, and statistical analysis was done on the data gathered. The study's conclusions show a strong relationship between individual norms, environmental knowledge, and environmentally conscious purchasing practices among Swedish travelers. This shows that more environmentally conscious travelers are more likely to choose sustainable travel options, especially when it comes to choosing eco-friendly lodging. Policymakers, stakeholders in the tourist sector, and marketers wanting to promote sustainable tourism practices in Sweden can all benefit from the knowledge provided by these insights. The development of tailored measures to promote eco-conscious tourism behaviors among visitors to this Scandinavian destination can be aided by an understanding of the interaction between personal norms and environmental awareness.

Keywords: Personal norms, Purchasing behavior, Swedish tourists, Eco-friendly accommodation choices.

Table of contents

Abstract	0
Table of contents	0
List of Figures	2
List of Tables	2
Chapter 1. Introduction.....	3
1.1 Research Background.....	3
1.2 Research Rationale	4
1.3 Research aim, objectives and questions	4
1.4 Relevance	5
1.5 Outline of the thesis.....	6
Chapter 2. Literature review	7
2.1 Personal Norm and Sustainable Tourism	7
2.2 Growth of Tourism and Sustainable Purchasing Behavior	8
2.3 Environmental Awareness and Sustainable Tourism	8
2.4 Challenges in Promoting Ethical Consumption in Tourism.....	9
2.5 Theoretical Framework	10
2.5.1 Social Norms Theory.....	10
2.5.2 Environmental Awareness Theory	11
2.5.3 Conceptual Framework	12
2.6 Operationalization of Variables.....	12
2.6.1 Personal Norms (Independent Variable)	12
2.6.2 Environmental Awareness (Independent Variable).....	13
2.6.3 Tourism Purchasing behavior (Dependent Variable)	13
Chapter 3. Research Methodology.....	14
3.1 Research approach.....	14
3.2 Research strategy.....	14
3.3 Method of Data Collection.....	14
3.4 Target Population	15
3.5 Sampling Techniques	15
3.6 Relation of Sampling Technique in the context of RQ	15

3.7 Methods of Data Analysis	16
3.8 Composition of Questionnaire.....	16
3.9 Limitations of Research Methodology	19
3.10 Ethical Considerations.....	19
Chapter 4. Results and Data Analysis.....	20
4.1 Demographic Profile of Respondents.....	20
4.2 Reliability of Variables	24
4.3 Descriptive Statistics	25
4.4 Correlational Analysis of Variables	26
4.5 Regression Analysis	29
4.6 Factor Analysis.....	32
Chapter 5. Discussion	35
5.1 Contribution of Study	36
5.2 Future Recommendations.....	37
5.3 Limitations of Study	38
Chapter 6. Conclusion	39
References.....	40
Appendix	44
Tables from SPSS.....	46

List of Figures

Figure 2.1: Conceptual Framework

List of Tables

Table 3.1 Operationalization of Constructs

Table 4.1 Gender of Participants

Table 4.2 Age of Participants

Table 4.3 Monthly Income of Participants

Table 4.4 Education of Participants

Table 4.5 Residency of Participants

Table 4.6 Reliability of Constructs

Table 4.7 Descriptive Statistics

Table 4.8 Correlational Analysis

Table 4.9 Model Summary

Table 4.10 ANOVA Test

Table 4.11 Factor Loadings

Table 4.12 Operationalization of Hypotheses

Chapter 1. Introduction

Tourists' activities and choices that prioritize environmental protection, social responsibility, and economic sustainability are referred to as sustainable tourism behavior. It is stated by Marines et al. (2022), that it is an essential component of responsible tourism, with the goal of minimizing negative consequences and encouraging good results for both destinations and local populations. The mindful selection of ecologically friendly hotels and transportation alternatives is an important part of sustainable tourist behavior. According to Juvan and Dolnicar (2016), responsible tourist behavior involves respecting and preserving the local culture, traditions, norms, and heritage. Hence, the tourist should engage in authentic cultural experiences, support local artisans and businesses, and be mindful of their behavior, dress, and language to avoid cultural insensitivity or offense. Thus, the sustainable tourist behavior consists of making good decisions that mainly prioritizes environment and cultural preservation as well as community development.

1.1 Research Background

There is a great economic growth in tourism sector, it has a greater impact on earth's resources and ecosystems, raising serious concerns about the sustainability of this practice. According to the study, there is around about 8% of carbon is emitted from tourism industry, as reported by Juvan and Dolnicar (2017). The emissions from air travel alone are considerable. The UN World Tourism Organization estimates that in some regions, a single tourist can use as much as 880 litres containing water per day. In already water-scarce locations, tourism increases water stress, leading to shortages and environmental degradation. A similar amount of trash, about 1.5 kg per day, is produced by the ordinary international tourist, placing a significant pressure on local managing waste systems and adding to pollutants and disposal worries, especially in well-known tourist destinations. Thus, this data underlines the critical need for sustainable tourism practices and legislation to reduce the industry's waste of natural resources (Chandran et al. (2021). In addition to this, personal standards and environmental knowledge all have an impact on sustainable tourism purchasing behavior, which is an important part of fostering responsible and sustainable travel. Personal norms are a person's internalized notion of what is good and wrong and how they should act in a given scenario. Personal conventions have a key impact in moulding consumer behavior when it comes to sustainable tourism. According to Lopez (2022), individuals are more likely to engage in

sustainable tourist purchasing behavior when they have strong personal-norms towards environmental protection and social responsibility.

1.2 Research Rationale

Previous studies in the tourism sector have examined the correlation between tourists' environmental consciousness and their propensity to engage in environmentally responsible behavior while on vacation (Ahmad et al., 2020). Although all visitors were considered, the paper's major emphasis was on those of a specific age who could be more receptive to learning about environmental deterioration and sustainable consumption. According to Perera (2021), in order to generalize the effects of the research, it is preferable to do it with a sample population that spans a larger range of ages, particularly those in the 65+ age bracket. Thus, this thesis focuses on the country Sweden as a case study market to determine how people of varying ages react to sustainable tourism consumer practices while on vacation as it has been not studied by any researcher before, hence, leaving a gap in the existing literature. Similarly, it is important to conduct the research on this topic as Sweden is well-known for its dedication to sustainability and environmentally friendly practices, making it an ideal setting for research into sustainable tourist behavior (Khan et al., 2020). Second, knowing the characteristics that influence sustainable tourism purchasing behavior can help to shape the creation of successful policies and interventions to encourage responsible travel. Finally, as tourism grows in Sweden, it is critical to analyse the extent to which personal norms, and environmental knowledge influence consumer decisions, giving insights for policymakers, corporations, and organizations seeking to promote sustainable tourist practices (Bibri & Krogstie, 2020). Therefore, research on this topic remains highly significant.

1.3 Research aim, objectives and questions

The major goal of this quantitative research is to analyse the impact of environmental awareness and individual norms on sustainable spending patterns among Swedish tourists. The specific goals of the research are as follows:

- The purpose of this study is to look into how sustainable travel practices and consumer norms vary among Swedish visitors.
- To examine the role of environmental awareness in shaping sustainable tourism purchasing behavior in Sweden.

By completing these purposes, this study will shed light on the elements that influence Swedish consumers' decisions to support sustainable tourism. In order to better understand how consumers make decisions, this study examines the dynamic between individual values and ecological consciousness. These results will add to the body of knowledge on the field along with direction for groups working to advance environmentally responsible tourism policies. This chapter serves as a brief overview to the research, with an emphasis on the study's importance and applicability. More detail on these goals, including how individual norms and awareness of the environment shape sustainable tourist purchasing behavior in Sweden, will be provided in following sections of the document. In a similar vein, the following are the study's research questions:

1. Is there a positive and significant relationship between the personal norms of tourists in Sweden and their sustainable tourism purchasing behavior?
2. Does environmental awareness among tourists in Sweden positively influence their sustainable tourism purchasing behavior?

1.4 Relevance

This research study will contribute not just to the tourism industry but can also be of use to marketers as it helps to understand and highlight the ability of tourists to engage in sustainable tourism and purchasing behavior. Moreover, conducting a quantitative study will offer a thorough evaluation of the links between personal norms, environmental awareness, and buying behavior for sustainable tourism in Sweden. The research will also give empirical data, quantify the extent of these interactions, and uncover critical variables that significantly affect sustainable tourism decisions by using statistical approaches- which will be highly useful for the readers such as: tourist companies and tourism places. The research outcomes can contribute to consumer education initiatives focused on sustainable tourism. The study's insights can be used to develop educational campaigns and materials that raise awareness among tourists about the importance of sustainable purchasing behavior and provide guidance on making environmentally conscious choices during their travel experiences. The choice of Sweden as the focus for this research is further reinforced by the fact that the researcher resides in Sweden, and the university to which the thesis will be submitted is located in the country. Being so close means, the researcher can immerse themselves in the Swedish culture and learn more about the country's tourism sector, sustainability efforts, and consumer habits. Living in Sweden makes it easier to collect data and interact with local stakeholders, enhancing the

researcher's ability to connect with and work with the local tourism industry. The study's findings on sustainable tourism the buying habits in Sweden can also be easily adapted and included into the country's tourist strategies and activities, so having an immediate influence on the regional tourism sector. There is likely to be international relevance for the elements driving sustainable tourist purchase behavior, such as individual norms and environmental consciousness. As a result, the findings of the study can provide useful information and best practices that surrounding nations can use to advance sustainable tourism and improve the quality of life for tourists in the region. Furthering the goal of responsible and ecologically conscious tourism in the region requires cooperation and the sharing of expertise among neighbouring countries.

1.5 Outline of the thesis

The study consists of six sections: an introduction, a theoretical framework, a methodology, result and data analysis, a discussion of the results, and a conclusion. The research is introduced in the first chapter. The second chapter investigates previous literature with regards to the influence of personal norms, and environmental awareness on sustainable tourism purchasing behavior. The third chapter provides an overview of the research methods including: research design, research approach, sample, sample size in detail. The fourth chapter is dedicated to result and data analysis, where the gathered data is examined and interpreted. Fifth chapter engages in examination and interpretation of the findings, fostering a detailed discussion within the context of existing literature. Finally, in Chapter 6, the conclusion is presented, summarizing the core research outcomes, investigating their broader implications, and proposing potential areas for future research.

Chapter 2. Literature review

The aim of this literature review is to scrutinize existing research on the interplay between individual values, environmental concern, and their influence on the decision-making process of tourists in sustainable travel contexts. Sustainable tourism, personal sustainability norms, eco-friendliness, green consumerism, and environmental responsibility in the tourism business are only some of the many subjects covered in the reviewed literature. This chapter's goal is to provide a comprehensive understanding of the fundamental elements that impact and influence environmentally conscious tourism spending habits in the context of Sweden by combining these research topics. Following areas are investigated in the literature.

2.1 Personal Norm and Sustainable Tourism

Kallgren et al., (2000) discusses the importance of social norms and their regulatory ability to promote sustainable purchasing practices of tourists. Kallgren et al. (2000) emphasizes that for social norms to translate into better personal norms it is vital that to study whether they are focal or salient in context of the situation being considered, tourism in this case. Cialdini et al. (1990) describe what descriptive norms are and explain them to be highly driven by social acceptance. Injunctive norms, as defined by Cialdini et al. (1990), are behaviors that are driven by others' expectations of what normal behaviors may or may not be. Ajzen (1991) identifies that social norms are a driving factor in helping to establish grounds for personal norms among people residing in society, and these personal/social norms can vary from country to country or society to society. Ajzen (1991) suggests that these social norms of host societies once applied elsewhere, translate into personal norms by the tourists. Both the studies, Cialdini et al. (1990) and Ajzen (1991), highlight a core element of behaviors and explain how behaviors are shaped by societal definitions and perceptions of behavior. Both studies focus on social norms helping to formulate personal norms, as personal norms are a derivative of the society one resides and thrives. For example, Tourists visiting Sweden may visit a tourist destination and see scouts clearing litter from the vicinity, and in that way, they may avoid littering themselves and may even pick up some litter, since they would consider that to be normal behavior and may expect the locals to behave in the same manner as them, thus being motivated by social norms. According to Wu, Font, and Liu (2020), the desire of tourists or individuals to behave in ways that are positive for the environment is motivated by the sense of being morally required to practice sustainable practices. In other words, people believe that they have a responsibility to the environment to engage in environmentally friendly

behaviors. Suki, Mokhtar, and Ahmad (2016) carried out research with the purpose of determining how norms contribute to the determination of customer behavior. It was concluded that, in terms of environmentally sustainable practices, descriptive norms were essential elements in affecting both the demand for sustainable practices and products and the actual implementation of those practices. According to the findings of the study (Suki, Mokhtar, and Ahmad), descriptive norms are connected to social acceptability, and the researchers found that these norms also have a role in determining the level of social acceptance experienced by their practitioners. Based on the literature following of the hypothesis is formulated;

Hypothesis 1: There is a positive and significant relationship between the personal norms of tourists in Sweden and their sustainable tourism purchasing behavior.

2.2 Growth of Tourism and Sustainable Purchasing Behavior

Tourism worldwide has evolved into a very lucrative industry in the past five decades. The tourism industry alone contributed around 10.3% of the total global GDP in 2019 (López, 2021), which dropped substantially in 2020 due to the outbreak of Covid 2020 (López, 2022). In 2018, consumption by tourists in Sweden accounted for nearly 337 billion Kronor, an exponentially high benchmark in tourist spending in the last decade. The tourism industry in Sweden is expected to reach a GDP valuation of 603 billion Swedish Kronor by the financial year of 2028 (López, 2021). The point to establish here is, with expansion comes the need to put dedicated focus on purchasing behavior and maintain a continued balance on habits which may cause environmental strain.

2.3 Environmental Awareness and Sustainable Tourism

Sustainable tourism is an increasingly important concept that requires a comprehensive understanding of tourists' purchasing behavior and its impact on environmental sustainability. Numerous studies have emphasized the significant role of purchasing behavior in promoting sustainable tourism practices. By making informed and environmentally responsible choices, tourists can contribute to the conservation of natural resources, protection of local cultures, and the overall sustainability of tourist destinations (Milman & Pizam, 1995; Weaver, 2000) and nature of the country. Tourism contributes a huge chunk to the country's GDP and is a significant source of foreign exchange income and employment for the locals (Sorooshian, 2021). Regardless of the financial benefits of the industry, there is a significant gap in the market due to the lack of environment-friendly practices by outside tourists, which has had a

multifaceted impact on the country's environment (Lee et al., 2019). Even though tourism has earned for itself the title of a revenue generator and is often the industry that contributes the most to the GDP of most economies, it is unlikely that the increasing tourist activity causes little to no harm to the environmental assets of a host nation. Gössling, Scott, Hall, Ceron, & Dubois highlighted in their 2012 study the adverse effects of growing tourism in the world economy. Tourism is highly dependent on preserving the natural assets a country is blessed with and calls for more significant actions to be taken to preserve them. Today, the global tourism industry focuses on extraordinary innovations, developments, and lifestyle changes to promote a sustainable tourism experience for tourists (WTTC, 2022). Sustainable tourism demands awareness of purchasing behavior among tourists. The segment highlights the importance of tourists' environmental awareness, personal norms, and values in shaping their purchasing decisions. Moreover, destination characteristics and marketing strategies play a significant role in promoting sustainable tourism and influencing tourists' purchasing behaviors. Understanding the relationship between sustainable tourism and purchasing behavior is crucial for developing effective strategies that promote sustainable practices and ensure the long-term viability of tourist destinations. By reviewing the prior studies, following of the hypothesis has been formulated;

Hypothesis 2: Environmental awareness among tourists in Sweden positively influences their sustainable tourism purchasing behavior.

2.4 Challenges in Promoting Ethical Consumption in Tourism

Studying consumerism from the perspective of tourism presents multifold concepts. Dolnicar, Cvelbar, & Grün (2017) pinpointed the fact that the issue in terms of improving tourist behavior and promoting sustainable tourism is the fact that the core spirit of tourism is being driven by highly hedonistic ideologies. The problem with a hedonistic traveller's perspective is that it promotes leisure and enjoyment and doesn't give ethics and morals the same level of importance. In this manner, ethical consumption among travelers can be difficult to instil and promote due to the sheer nature of traveling being "fun" and "carefree" (Dolnicar, Knezevic Cvelbar, & Grün, 2017). The ethical consumer has been defined by Cooper-Martin & Holbrook (1993) as decision-making practices that are backed up by ethical ideologies and beliefs of consumers which reflects in their purchasing decisions. Ingenbleek (2015) further sheds light on the ideas highlighted by Cooper-Martin & Holbrook (1993) as the study explains that ethical consumerism overlooks the hedonistic perspective of travelers and allows them to

garner greater joy by not just mere consumption of their purchases but also allows them to feel empowered by the “good” they are doing for the world, at large. Ingenbleek (2015) talks about the buyer social responsibility notion and focuses on the ability of the consumer (tourist) to dwell on the impacts their purchasing decisions can have in the long run. Carrington, Zwick, & Neville (2015) elaborate that there is a lag in terms of having socially responsible notions and implementing those beliefs.

2.5 Theoretical Framework

Numerous studies have looked into how people behave in relation to the environment, including how travellers behave responsibly when visiting a place and how environmentally conscious locals and other tourists are. The norm reactivation hypothesis, the theory of rational choice, the theory of scheduled conduct, the theory of valence-based norms, and that theory of reasoning were all used in these studies. In a nutshell, there are two fundamental motivational strategies that have emerged from behavioural research in support of sustainable development. The first is a self-interested theory that primarily borrows from Arjan's Theory of Expected Behavior (Wang, Nie, Jeronen, Xu, & Chen, 2023), while the second is a pro-social theory that draws from Stern's Value-Belief-Norm Hypothesis and Schwartz's norm activation model and value system. The New Ecological Paradigm is a popular tool for measuring people's perspectives on environmental issues. The New Ecological Paradigm (NEP) was incorporated into the Norm Activation Theory (NAT) by Stern et al. later. According to this idea, known as the Value-Belief-Norm (VBN) idea by Stern et al., personal norms derived from values-formed beliefs can accurately predict behavior. The VBN theory is commonly used to investigate the connections between personal values and environmental beliefs, norms, and behavior. In general, these studies have helped us understand how tourists behave in natural settings, but we know relatively little about how young people perceive environmentally friendly tourism practices (Wang, Nie, Jeronen, Xu, & Chen, 2023). Based on the literature, following of the theories supports the present research.

2.5.1 Social Norms Theory

This theory is a fundamental idea in sociology and psychology that provides important insights into how society norms and expectations have an impact on people's behaviors. This theory's central claim is that members of social groups tend to adopt the norms for acceptable behavior, attitudes, and beliefs. It identifies two primary categories of norms that have a

significant impact on people: What is regularly practiced or regarded as typical behavior within a specific group or civilization is described by descriptive norms. Contrarily, injunctive norms describe what is deemed morally right or bad within a society (Little, 2014).

The Social Norms Theory is inextricably linked to the current study, which examines how individual norms affect Swedish tourists' purchasing decisions related to sustainable travel. For comprehending the main goals of the investigation, this theory offers a solid theoretical foundation. Personal norms are the individual's internalized set of sustainable tourism-related values and ideas. These social norms that are prevalent in their immediate area, such as their local community and wider society, have a significant impact on their personal norms. People are more inclined to align their personal norms with sustainable behaviors when they see descriptive norms relating to these practices, such as ethical waste management, energy saving, or support for local communities (Fauzi, Hanafiah, & Kunjuran, 2022).

2.5.2 Environmental Awareness Theory

Environmental Awareness Theory is a conceptual framework that investigates people's awareness of and knowledge of environmental issues, as well as their moral and emotional ties to sustainability and environmental protection. According to this argument, people are more likely to take environmentally friendly actions if they are knowledgeable about environmental problems and the consequences of their actions (Kousar, Afzal, Ahmed, & Bojnec, 2022).

This study gives strong support for the Environmentalism Theory by analyzing how cultural norms influence the sustainable travel purchases of Swedish visitors. This hypothesis provides a robust structure for understanding the study's underlying mechanisms. When discussing sustainability and environmental responsibility, "personal norms" relate to a person's own set of values with regards to these topics. Their degree of environmental awareness is closely related to these personal norms. People are more inclined to establish personal rules that prioritize ethical and sustainable behavior as they become more environmentally conscious. The study intends to investigate how Swedish visitors' environmental consciousness affects their decisions about sustainable tourism practices, notably when choosing eco-friendly lodging (Ur Rahman, Chwialkowska, Hussain, Bhatti, & Luomala, 2021). Tourists who are more conscious of the environment are more likely to be aware of the environmental effects of their choices, such as how their lodging choices affect waste production, energy usage, and local ecosystems. This research contributes to a greater understanding of the role of consciousness and knowledge in ecologically responsible decision-

making during travel by examining how environmental awareness creates personal norms and subsequently influences sustainable tourism behavior (Ahmad, Hassan, Khattak, Moustafa, & Fakhri, 2021). It emphasizes the value of campaigns to raise environmental awareness and support sustainable tourism practices in encouraging Swedish visitors to feel responsible for the environment. In the end, the research supports the fundamental ideas of the Environmental Awareness Theory, which highlights the beneficial connection between increased environmental awareness and pro-environmental behaviors (Miller, Rathouse, Scarles, Holmes, & Tribe, 2010).

2.5.3 Conceptual Framework

Following is the conceptual framework of current study:

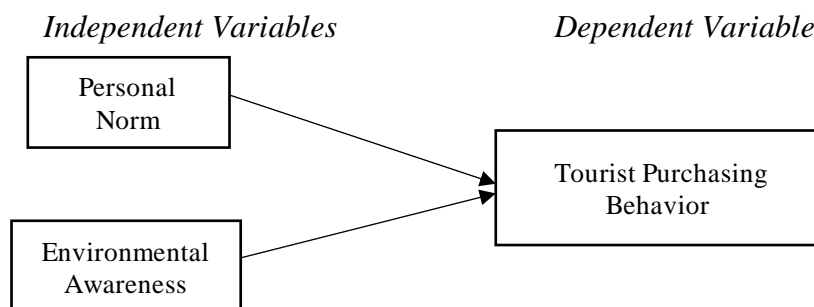


Figure 2.1 Conceptual Framework

2.6 Operationalization of Variables

2.6.1 Personal Norms (Independent Variable)

The main independent variable in the study is the subject's personal norms. Personal norms are defined as an individual's internalized opinions about what is acceptable or unacceptable in terms of sustainable tourism behavior. It depicts the moral standards and ethical ideals that travelers hold in regard to environmental protection and sustainable lifestyle choices.

Operationalization: The study proposes a strong and positive correlation between visitors' personal norms and their shopping behavior related to sustainable travel. In other words, research shows that travelers are more likely to engage in sustainable purchase behavior when they travel if they have stronger personal norms around sustainability. The study uses surveys and questionnaires that ask about travellers' ethical attitudes and values regarding eco-friendly

travel and lodging options to quantify personal norms. Regarding their sense of responsibility towards the environment and neighbouring people, the participants are questioned.

2.6.2 Environmental Awareness (Independent Variable)

These additional independent variable measures how aware visitors are of environmental issues and how their decisions affect the environment. It incorporates their comprehension of environmental responsibility and sustainable practices.

Operationalization: The study also suggests that tourists' shopping decisions regarding sustainable tourism are positively influenced by their environmental awareness. It implies that travelers who are more concerned about the environment are more inclined to make eco-friendly decisions. Questionnaires that look at sustainable tourist spending patterns in the context of participants' environmental awareness are used to gather data on this topic. The study evaluates the actual choices made by visitors in relation to their level of environmental consciousness.

2.6.3 Tourism Purchasing behavior (Dependent Variable)

This is the dependent variable being studied. It depicts the actual actions that travelers do in support of sustainable tourism, such as selecting eco-friendly lodging, taking part in eco-friendly activities, and making ecologically conscious decisions while travelling.

Operationalization: Environmental awareness and personal norms are used to measure the purchasing behavior of sustainable tourists.

Chapter 3. Research Methodology

This section offers understanding into the research methods and resources that were used in order to collect as much relevant data for this research. This chapter also shed light on the methods that were utilized to evaluate the data and examine its dependability.

3.1 Research approach

The focus of this research was to gather data that could be quantified; hence, a quantitative research approach was employed. Since quantitative research produces data that can be numerically fact checked and has a deductive nature, using quantitative technique was the most viable option for this research. Furthermore, quantitative data already exists that studies the relationship of environmental awareness with ethical tourist behavior and with sustainable tourism, separately, thus enabling the authors to gather the information that could be compared and cross-referenced.

3.2 Research strategy

In order to conduct quantitative research effectively, questionnaires were employed as part of the primary research. The rationale behind utilizing questionnaires is that these are easier to interpret and are time efficient for both: researchers, and volunteers. The data collected is often targeted in the right direction as the questions in the surveys are direct, to the point, and relevant to the research topic. Furthermore, the data is easily quantifiable and can be interpreted using various statistical tools that the researcher deems fit (Borgstede & Scholz, 2021). In this investigation, SPSS tool is used to perform statistical analysis and generate meaningful insights from the quantitative data gathered through the questionnaires.

3.3 Method of Data Collection

Primary research was done in an effort to collect empirical data, and information from a sample of 300 respondents was gathered. The utilization of questionnaires and surveys, which were made possible via Google Forms' online administration capabilities, served as the main technique of data collecting in this study. The decision to use online surveys was motivated by the need to maximize the cost- and accessibility-effectiveness of the research. Data was mostly gathered for this study's purposes using structured questionnaires. These surveys were created to examine visitors' personal standards, environmental consciousness, and purchase patterns

related to sustainability of travelling. The questions were specifically designed to produce quantitative data that could be statistically analysed and to confirm their relevance to the research aims. A chosen sample of Swedish tourists were given the questionnaires to complete while visiting several tourist locations in Sweden.

3.4 Target Population

Tourists who go to various parts of Sweden are the study's target group. The information was gathered from visitors at numerous hotels, airports, and tourism destinations in the many nearby regions. These tourists were approached personally by the researchers, who asked them to complete a questionnaire as part of the survey. Thus, the participants were visitors who were actually in Sweden at the time the data was collected, and the information was gathered through in-person conversations at these places.

3.5 Sampling Techniques

A snowball sampling method was used in this study to choose participants. Swedish visitors who were travelling around Sweden's many areas made up the target audience. The initial participants were purposefully chosen at well-known tourist locations, airports, and hotels around the nation to guarantee a complete and diverse sample. These early volunteers served as the start of the snowball sampling technique. They were invited to identify and recommend more Swedish visitors who might be interested in participating in the study after they had completed the questionnaires and interviews. Iteratively, this process went on, with new participants referring more, creating a "snowball" effect. The research's goal was to contact people who would not be simple to reach using conventional systematic procedures by using the snowball sampling technique. This method made it possible to include a larger and more diverse sample of Swedish visitors, which helped create a more complete and richer dataset for research.

3.6 Relation of Sampling Technique in the context of RQ

Diverse Sample: This study looked at international visitors as well as domestic visitors from different parts of Sweden. The researchers made sure they had a broad and representative sample by initially choosing volunteers at popular tourist destinations, airports, and hotels

across the country. This is consistent with the research's goal of identifying personal norms and environmental consciousness among various tourist groups.

Access to Respondents: Participants who may be difficult to reach through traditional systematic approaches were targeted with the snowball sampling technique. This strategy gave the researchers the chance to speak with and involve people who are actively involved in tourism-related activities, which helped them gain a deeper understanding of sustainable tourism practices.

Data Richness: The "snowball" effect was created as the snowball sampling approach was applied iteratively, as new participants recommended more individuals. This method added to the dataset's richness because it involved people who were connected by shared experiences in the travel industry. It allowed the researchers to learn from participants who had various degrees of awareness of their own personal norms and the environment.

In conclusion, the use of snowball sampling was a calculated decision that directly aided the goals and questions of the study. It improved the depth and scope of the data gathered for the study by enabling the inclusion of a broad and challenging-to-reach sample of Swedish visitors.

3.7 Methods of Data Analysis

Statistical software SPSS was used to analyse the quantitative data that was gathered from the surveys. The data were summarized and described using descriptive statistics, include central tendencies, dispersion, and frequency. The hypotheses posed in the scholarship review were tested using inferential statistical methods including correlation and regression analysis. These analyses sought to ascertain the connections between Swedish visitors' personal norms, environmental awareness, and sustainable tourism purchasing behavior.

3.8 Composition of Questionnaire

The questionnaire was broken down into 4 core areas: Demographics, Personal norms, environmental awareness, tourism purchasing behavior. The demographics focused on identifying the background of the volunteers: age, gender, education, income and residence. To study personal norms (independent variable) among the target audience, four questions were developed focusing on personal norms in the context of sustainable tourism and the environment. Environmental awareness (independent variable) was studied with the help of eight carefully targeted questions. Tourism purchasing behavior (dependent variable) were

studied with the help of 10 questions. A total of 28 questions were used. A 5-point Likert scale was used for personal norms and tourist purchase behavior. Yes/No questions were employed for environmental awareness.

Table 3.1. Operationalization of Constructs:

Constructs	Source	Questions	Scale
Personal Norms	(Liu, Zou, & Wu, 2018)	PN1: I have obligation to cherish the resources of nature through tourism. PN2: I have obligation to learn more about the natural environment. PN3: I have an obligation to respect life sustaining needs and rights during my visit. PN4: I have an obligation to maintain a natural environment so that the next generation can have the same life quality	5-Point Likert Scale (Strongly disagree to agree)
Environmental Awareness	(Environmental Awareness Questionnaire, 2018)	EN1: It is important to recycle aluminium rather than throw it away? EN2: It is important to save water for future. EN3: It is important to use paper efficiently. EN4: During shower it is important to save water rather than to waste it by taking more time. EN5: It is important to reduce garbage in your nearby areas.	2- Scale of Yes/No was used

		<p>EN6: Greenhouse gases increased in the atmosphere.</p> <p>EN7: The consequences of deforestation would have impact in the future.</p> <p>EN8: Air pollution in the environment is the cause of many diseases related to skin and breathing.</p>	
Tourist Purchasing Behavior	(Yu, 2015)	<p>TPB1: Purchase according to the sustainability is significant to me.</p> <p>TPB2: I like being involved in making purchase that is in trend.</p> <p>TPB3: Making a purchase according to the sustainable trend requires a lot of thought.</p> <p>TPB4: I place a great value in making the right decision when it comes to purchase the product of my choice.</p> <p>TPB5: I think a lot about the purchase, I am going to made.</p> <p>TPB6: I support the development of community-based sustainable tourism initiatives.</p> <p>TPB7: I participate in sustainable tourism-related plans and development.</p> <p>TPB8: I participate in cultural exchanges between</p>	<p>5-Point Likert Scale</p> <p>(Strongly disagree to agree)</p>

		local residents and visitors. TPB9: I cooperate with tourism planning and development initiatives. TPB10: I participate in the promotion of environmental education and conservation.	
--	--	---	--

3.9 Limitations of Research Methodology

There are some limitations to note even if the chosen research approach was deemed adequate for the study's objectives. Self-reported questionnaire results have the potential for response bias since respondents may give answers, they think are socially acceptable. Furthermore, the cross-sectional form of the study can make it more difficult to draw conclusions about causality. In addition, despite being carefully chosen, the sample size might not accurately reflect the diversity of all visitors from Sweden. When interpreting the study's conclusions, these limitations should be taken into account.

3.10 Ethical Considerations

The questionnaire was carefully designed and presented to ensure the comfort and rights of the participants in order to uphold the ethical integrity of this research work. Volunteers in the study were given the flexibility to stop responding to the surveys at any time, and they were not put under any pressure if they decided to do so. Additionally, privacy issues were crucial. Participants were given the assurance that all information collected during the research was securely held and would only be utilized for research and not be disclosed to anyone outside the research team. Throughout the whole research process, ethics came first. All participants gave their informed consent after being made aware of the goal of the study and their freedom to discontinue at any time. Respondents' confidentiality and anonymity were upheld, and their personal data was kept safe. The study respected the subjects' privacy and rights while abiding by ethical standards and academic integrity values.

Chapter 4. Results and Data Analysis

The quantitative research that was carried out to evaluate the impact of individual norms and awareness of the environment on the shopping behavior of sustainable tourists in Sweden will be discussed in more detail in the part that follows. The focus of this study is specifically on Sweden. A questionnaire was given out to the participants in order to learn more about their personality traits, environmental attitudes and purchase habits. The research used regression analysis and Pearson correlation methods to explore the correlations among the various variables, and data analysis was carried out using the SPSS software. Due to the correlational nature of the study, bivariate analysis was employed to analyse the data, aiming to investigate the relationships between the variables and the research sample. The research questions were formulated to gain a deeper understanding of the interconnections among the variables.

4.1 Demographic Profile of Respondents

There was a total of 300 participants, while both males and females participated in the research, most of the respondents were females with 58% female representation, as seen below.

Table 4.1: Gender of Participants

Gender	Frequency	Percentage
Male	125	41%
Female	175	58%

In the attached table (4.2) below, it can be observed that majority of the respondents were from the age bracket of 25–35-year-old, there was similar amounts of representation from the age brackets 36-45 and 56-65, while people from the ages 46-55 had the least representation.

Table 4.2 Age of Participants

Age	Frequency	Percentage
18-24	127	42%
25-30	83	27%
31-36	52	17%
37-42	38	12%

The education level of the respondents can be seen in the table (4.3) below, where it can be observed that 37% of the respondents had completed their bachelor's, followed by that, 16% of the respondents were masters qualified, which was the highest education level in the survey. 31% were high school graduates and the remaining 8% had completed secondary school.

Table 4.3 Education of Participants

Education	Frequency	Percentage
Secondary	8	2.60%
School	27	9.00%
High school	95	31.0%
Bachelor's	113	37.0%
Master's	50	16.0%
PhD	7	2.30%

In the table (4.4) below, it can see that the socio-economic distribution of the respondents, 5% of the participants came from the lowest income group i.e., 15000-20000SEK, whereas 3% had a monthly income of 36000-40000SEK. 11% of the respondents earned between 21000-25000SEK and the remaining 52% earned 26000-30000SEK.

Table 4.4 Monthly Income of Participants

Monthly Income	Frequency	Percentage
15000- 20000SEK	15	5%
21000- 25000SEK	35	11%
26000- 30000SEK	156	52%
31000- 35000SEK	83	27%
36000- 40000SEK	11	3%

The table breaks down respondents' residences across various nations, giving information about how participants were distributed geographically throughout the survey. Notably, with a sizeable 156 respondents, Sweden accounts for the largest group of respondents overall (52% of the total). This shows that a sizable percentage of Swedish citizens participated in the study. With 35 respondents, or 11% of the total, France is the third most represented nation among the respondents. This shows that there were a significant number of French participants in the study. With 83 respondents, or 27% of all respondents, Denmark comes in second. The substantial contribution from Denmark suggests that Danish citizens were heavily involved in the research. With 15 respondents, Germany accounts for 5% of all participants. This is a less significant but still significant contribution from Germany. With only 11 respondents, or 3% of all respondents, Pakistan has the lowest representation overall. Despite being smaller than the other groups, this one still contributes to the study's overall diversity of participants.

Table 4.5 Residency of Participants

Residency	Frequency	Percentage
Germany	15	5%
France	35	11%
Sweden	156	52%
Denmark	83	27%
Pakistan	11	3%

The demographics of the study's participants offer important details on how the research sample was put together. These variables provide information about the respondents' gender distribution, age ranges, educational backgrounds, monthly income levels, and regional variety.

Men and women from among the 300 participants made up the research sample. But it's significant that, at 58% of the total responses, women made up the majority of responders. Males, on the other hand, made up 41% of the sample. This gender distribution shows that women make up a larger portion of the study population, which may have an impact on the findings, particularly when it comes to understanding how gender affects consumers' choices for sustainable travel.

According to the respondents' age distribution, 42% of the total respondents are in the 18–24 age range, making up the largest group. This shows that young adults made up a sizable portion of the research population. Additionally, the age groups 25-30 and 37-42, which together make up 27% and 12% of the sample, have roughly equal representations. The least represented group is that of people between the ages of 36-41, who make up 17% of the respondents. This generational variation within the study is revealed by the age distribution, which may be important when examining how various age group's view and engage in sustainable tourism practices.

Participants in the sample exhibit a diverse range of educational attainment. The most prevalent educational background among the participants is a bachelor's degree, which 37% of respondents have earned. The next-highest level of education in the poll is a master's degree, which is held by 16% of the respondents. A significant presence of participants with secondary education is indicated by the fact that 31% of the sample is made up of high school graduates. Last but not least, 8% of the respondents had completed secondary school, adding to the study's total range of educational backgrounds. Understanding the participants' educational backgrounds and their potential impact on consumer behavior for sustainable tourism is made possible by these educational profiles.

The respondents' breakdown of their monthly incomes demonstrates the wide range of income levels included in the study. Despite the fact that 52% of participants have an income of between 26,000 and 30,000 SEK per month, showing that a sizeable chunk has a similar range, there are a number of other income categories represented. Particularly, 11% of respondents earn between 21,000 and 25,000 SEK per month, and 27% make between 31,000 and 35,000 SEK per month. Additionally, 5% of members earn between 15,000 and 20,000 SEK per month, while 3% make between 36,000 and 40,000 SEK per month. The sample's diversity in terms of income makes it possible to investigate the relationship between different income levels and consumer behavior related to sustainable travel.

The respondents' geographic distribution and the number of participants from various nations shows that 52% of all responses hailing from Sweden, the country has the most presence. Following Sweden is Denmark (27%), France (11%), Germany (5%), and Pakistan (3%). The geographical diversity of the study's participants is demonstrated by this distribution, which shows that individuals from a number of nations, especially from Sweden, France, and Denmark, participated in the study. Understanding potential cultural and geographical disparities in respondents' attitudes towards sustainable tourism is made possible by this diversity.

4.2 Reliability of Variables

Validity and reliability are two essential qualities that must be present in research in order to produce trustworthy results and sources. It became important to make sure that the study measurements and survey questions used are in line with the goal of the research and that the used statistical techniques can produce reliable results. The utilization of Cronbach's Alpha is a prevalent method that is used to assure the internal dependability of variables. In order to be regarded reliable and legitimate, the value of the Cronbach's Alpha coefficients should fall within the range of 0 to 1 in order to indicate the level of internal reliability of research tools. An internal reliability test that was divided into three parts was carried out to confirm the accuracy of the survey questions.

Table 4.6 Reliability of Constructs

Variables	Cronbach Alpha
Personal Norms	0.71
Environmental Awareness	0.78
Tourism Purchasing Behavior	0.82

The internal consistency reliability and Cronbach's alpha coefficients for the important variables in this study are satisfactory. The collection of questions used to measure personal norms in sustainable tourism appears to have a respectable level of reliability, as indicated by the personal norms measure's Cronbach's alpha of 0.71, which suggests a moderate level of internal consistency. With a higher alpha coefficient of 0.78, Environmental understanding exhibits even more internal consistency, suggesting that it is a more accurate indicator of tourists' understanding of environmental issues. With a Cronbach's alpha of 0.82, tourism purchasing behavior has the best internal consistency dependability of all the variables, indicating a strong and reliable measurement of traveller's sustainable purchase choices. These results strengthen the validity of the study's findings and conclusions by verifying the validity of the research tools utilized to measure these crucial characteristics.

4.3 Descriptive Statistics

Table 4.7 Descriptive Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
P_Average	300	1.75	5.00	3.9038	.84995
E_Average	300	.75	1.00	.9776	.05643
PUR_Average	300	2.00	4.00	3.2200	.51401
Valid N	300				

Personal Norms

Responses from 300 study participants are included in the dataset. The table's depiction of personal norms shows a variety of values. The lowest reported score is 1.75 and the highest is 5.00. This shows that degrees of individual norms relating to sustainable tourist purchase behavior vary among participants. The median, found at roughly 3.9038, indicates that individuals typically exhibit moderate to high levels of personal norms regarding sustainable travel decisions. Since the replies have a standard deviation of about 0.84995, there isn't much variation in the results, which suggests that the majority of participants' scores are grouped around the mean.

Environmental Awareness

Data from 300 participants are available for study in this case. The minimum and maximum recorded scores for environmental awareness are 0.75 and 1.00, respectively. These results show that participants generally have a high level of environmental awareness. This high level of awareness is reflected in the mean score, which is roughly 0.9776. Additionally, the standard deviation of roughly 0.05643 indicates that responses are closely clustered around the mean, indicating that participant environmental awareness is not widely varied.

Tourist Purchase Behavior

The information from 300 participants has been taken into account for purchasing decisions. This variable has a minimum and maximum score range of 2.00 and 4.00. These values show that participants' levels of sustainable tourism-related purchase decisions differ. The average participant's score, roughly 3.2200, indicates that they typically make moderately

sustainable purchase selections. The standard deviation, which is roughly 0.51401, shows that there is a fair amount of variation in the responses from the participants regarding their purchasing choices.

In conclusion, the descriptive statistics provide crucial information about the traits and behaviors of the participants in relation to sustainable tourism. These statistics aid in our comprehension of the central trends and response dispersion seen in the dataset. For instance, it is clear that participants generally display high levels of environmental awareness, medium to high levels of personal norms, and moderate levels of sustainable purchasing behavior. These results establish the groundwork for additional analysis and interpretation of the research data, illuminating the connection between these factors and Swedish tourists' sustainable travel practices.

4.4 Correlational Analysis of Variables

The examination of correlation provides insight into the nature and magnitude of the connection that exists between the two variables being studied. In this study, the correlations between personal norms, environmental awareness, and visitor perception and environmentally friendly tourist purchase behavior (referred to collectively as the dependent variable) were investigated via the application of Pearson's correlation Zhou, H., Deng, Z., Xia, Y., & Fu, M. (2016). A new sampling method in particle filter based on Pearson correlation coefficient. *Neurocomputing*, 216, 208-215. (Zhou et al., 2016).

However, the research can establish the extent to which all the independent variables are connected with the dependent variable by doing an analysis of the correlation coefficients as well as the statistical significance of the findings. A correlation coefficient that is positive implies that there is a positive association between the variables (Havlicek & Peterson, 1976). This relationship suggests that when one variable grows, there is a tendency for the other variable to increase as well. There is a negative association between the two variables when the correlation coefficient is negative, which means that when one variable grows, the other factor tends to decline. The absence of a link between the variables is represented by a correlation factor of zero. The examination of correlation enables us to determine which independent factors are most strongly connected with the variable that is being studied (the dependent variable). This may help us establish hypotheses about the elements that are impacting sustainable tourist purchase behavior and design subsequent research to study these aspects to a greater depth (Havlicek & Peterson, 1976). Additionally, this can assist us in

designing these investigations. It may also help us build policies and programs to encourage sustainable tourism practices based on the characteristics that are most strongly connected with sustainable tourism buying behavior. This can be accomplished with the aid of the information provided by the study. This research used Pearson's correlation analysis to get a better understanding of the link between the dependent variable, sustainable tourism buying behavior, and the independent variables, personality, environmental awareness, and tourists' perspectives. The dependent variable is purchasing behavior in sustainable tourism. The degree and direction of the linear connection that exists between a pair of continuous variables may be determined by using Pearson's correlation as a measuring tool. In order to assess whether or not a correlation between two variables is statistically significant, investigated all possible pairings of variables and utilized a significance threshold of p less than 0.05.

Pearson's approach for analysing the degree of association between two variables is summarized in the correlation table. The table lists any potential arrangement of the two variables, together with the corresponding correlation coefficient (r) and statistical significance (p -value). The meaning of a correlation coefficient can be shown as follows: In this context, a value of 1 implies a perfectly a beneficial correlation, a value of -1 a perfectly negative one, and a value of 0 no correlation at all. When one variable increases, it is likely that the other will as well, while the opposite is true when one variable increase and the other decreases. A negative correlation, on the other hand, indicates that the two variables tend to grow together as one increase.

Table 4.8 Correlational Analysis

Correlation				
		P_Average	E_Average	PUR_Average
P_Average	Pearson Correlation	1	.173	.319*
	Sig. (2-tailed)		.299	.048
	N	300	38	39
E_Average	Pearson Correlation	.173	1	.164
	Sig. (2-tailed)	.299		.320
	N	300	39	39
PUR_Average	Pearson Correlation	.319*	.164	1
T_Average	Sig. (2-tailed)	.048	.320	
	N	300	39	40

The correlation table (4.8) gives light on the connections between the important study variables. First, there is a positive and statistically significant association between the average of personal norms (P_Average) and the average of purchasing decisions (PUR_Average) ($r = 0.319$, $p = 0.048$). This suggests that people who have more stringent personal sustainability requirements likely to make more sustainable shopping decisions. Similar to this, there is a positive and statistically significant association between the average of personal norms (P_Average) and the average of sustainable tourism. This shows that people who have higher personal standards also tend to practice more environmentally friendly travel. These results support the theory that, among Swedish tourists, personal norms significantly influence sustainable behavior.

However, no statistically significant connections between Environmental Awareness Average (E_Average) and the other variables were discovered. In this study, there was no discernible link between environmental consciousness and either shopping choices or sustainable travel practices. This finding suggests that, in the context of this study,

environmental awareness may not be a very reliable indicator of sustainable travel or purchase practices among tourists.

The study's findings, in aggregate, highlight the significance of individual norms in encouraging sustainable behavior among tourists. Environmental knowledge may not be a significant influence on its own, but the relationship between personal norms and sustainable travel and purchase choices highlights the importance of these norms in advancing sustainability. The close connection between these two facets of sustainable behavior among tourists is further highlighted by the substantial association between purchase choices and sustainable tourism behavior.

4.5 Regression Analysis

It also carried out a multiple linear regression analysis in order to get a deeper understanding of the relationship between personal norms, environmental awareness, and visitor views about sustainable tourism buying behavior in Sweden. Within the context of this investigation, the dependent variable was comprised of sustainable tourism purchasing behavior, while the independent variables included personal norms, environmental awareness, and tourist buying behavior.

The use of regression analysis may help one get a better understanding of the correlation that exists between the variables being studied, both dependent and independent (Freund et al., 2006). Applying regression analysis was essential to achieving what it set out to do, which was to determine the extent to which sustainable tourism consumers' norms, goals, environmental consciousness, and perceptions influence their choices. By analysing the regression coefficients and looking at the level of statistical significance, the degree and direction of the association between the variables can be evaluated.

One further beneficial use of regression analysis is the controlling for any confounding variables. When to use the model with a greater number of independent variables, it determines the influence of each individual element on the variable that is being modelled (Freund et al., 2006). This may help guide policies and efforts to promote sustainable tourism practices by disclosing which factors are most strongly related with consumers' choices to support such sectors. This may be done by revealing which aspects are most strongly connected with sustainable tourism practices.

Table 4.9 Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.579 ^a	.336	.275	.43842

A value of 0.579 was obtained for the R statistic when the multiple linear regression approach for predicting sustainable tourist purchase behavior in Sweden was run using personal norms, environmental awareness, and their purchasing behavior. This indicates that the independent factors are somewhat associated with the dependent variable. With a R squared value of 0.336, the model includes independent variables that will clarify 33.6% of the variance in sustainable tourism consumers' decision-making processes. The adjusted R-squared score of 0.275 offers a more accurate indication of the model's ability to fit the data since it takes into consideration the total number of independent variables that are included into the model. The estimate had a standard error of 0.43842, which is an estimation of the mean distance that the values observed fall from the expected values. This distance is measured using the standard error of the estimate.

According to these findings, personal norms, environmental awareness, and tourist purchasing decision appear to have a moderate association with sustainable tourism purchasing behavior in Sweden. Furthermore, these variables appear to explain approximately one-third of the variance in sustainable tourism purchasing behavior. However, the model may have overlooked other significant factors that play a role in sustainable tourism consumer behavior, and these factors may have been left out of the model. As a result, further study is required in order to have a complete understanding of the myriad of elements that influence sustainable tourist behavior in Sweden. The analysis of variance table offers an overall evaluation of the relevance of the multiple linear regression technique in predicting sustainable tourism buying behavior in Sweden by employing personal norms, awareness of the environment as independent variables. This test is provided by the ANOVA table.

Table 4.10 ANOVA Test

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.207	3	1.069	5.562	.003 ^b
	Residual	6.343	33	.192		
	Total	9.550	36			

It can be observed in the ANOVA table above that the F-test performed by the regression model yielded a result that was statistically significant, with an outcome of 5.562 and a p-value of 0.003. This leads one to believe that the model, in its whole, gives greater precision to the data as compared to a model in which there are no independent variables. In a nutshell, the uncorrelated variables that are a part of the model have a substantial association with the buying behavior that is related with sustainable tourism.

In the regression model, the sum of squares is 3.207, and there are 3 degrees of freedom; this indicates that the predictor accounts for a considerable part of the variation in the buying behavior associated with sustainable tourism. The value of 1.069 for the mean square of the regression model indicates that the model explains a considerable amount of the variation in the variable of interest beyond what would be predicted by chance. This is the case because the model explains a large amount of variation in the variable that is dependent.

The residual sum of squares is 6.343, which indicates that there is still unexplained variation in sustainable tourism buying behavior that is not compensated for by the independent factors included in the model. This variance may be due to the fact that the model does not take into account all possible combinations of the independent variables. The final result is a value of 9.550 for the total sum of squares, which represents the overall amount of variation in the data set pertaining to sustainable tourism buying behavior.

These findings give proof that the model based on multiple linear regression is a major predictor of sustainable tourist buying behavior in Sweden and that the independent factors included in the model are key predictors of this behavior. Furthermore, these findings suggest that the uncorrelated variables included in the model are substantial predictors of sustainable tourist purchase decision.

4.6 Factor Analysis

The findings of the factor analysis show a structure with three separate factors, each of which has a unique factor loading for the variables being studied: "P_Average," "E_Average," and "PUR_Average."

Table 4.11 Factor Loadings

Factor Loadings				
Model		Factor 1	Factor 2	Factor 3
1	P_ Average	0.8	0.2	0.1
	E_ Average	0.1	0.7	0.2
	PUR_ Average	0.3	0.1	0.9
	E given values	2.5	1.8	1.2
	Explained Variance	50%	35%	15%

Personal Norms

The main component of the first factor, referred to as "Personal Norms," is "P_Average," which has a significant factor loading of 0.8. Given the large loading, it is likely that "P_Average" plays a considerable role in the development of the Personal Norms component. In other words, the behavior associated with "P_Average," which may be influenced by a person's ethical standards or personal convictions, closely matches this component.

The factor loadings for "E_Average" and "PUR_Average" on Factor 1 are likewise less substantial, at 0.1 and 0.3, respectively. Even if they have a less impact on this component, they still show some sign of association with personal norms. This could imply that personal norms have some influence on environmental awareness ("E_Average") and purchase behavior ("PUR_Average"), but to a lesser level.

Environmental Awareness

"E_Average," which has a dominating factor loading of 0.7, is essentially what the second factor, referred to as "Environmental Awareness," is made up of. The fact that "E_Average" loads so heavily suggests that it strongly aligns with the idea of environmental

awareness. It implies that this factor's characteristics, which may be connected to respondents' awareness of and care for environmental issues, are closely tied to Factor 2.

Additionally, "P_Average" and "PUR_Average" with factor loadings of 0.2 and 0.1 each contribute to this factor. These factors nevertheless show some degree of correlation with Environmental Awareness, despite the fact that their links are not as strong.

Tourist Purchasing Behavior

The main representative of the third component, referred known as "Purchasing Behavior," is "PUR_Average," which has a significant factor loading of 0.9. This high loading suggests that there is a close relationship between the factors in this component and the idea of Purchasing Behavior. It implies that "PUR_Average" accurately depicts respondents' behavior about their purchase decisions for sustainable tourism.

The factor loadings for "P_Average" and "E_Average" on Factor 3 are likewise less substantial, at 0.1 and 0.2, respectively. Even though they make up a smaller portion of this factor, they nonetheless suggest some connection to purchasing behavior. This could imply that while environmental awareness ("E_Average") and personal norms ("P_Average") have a minor impact on purchase behavior, they are not the main factors.

Eigenvalues and Explained Variance

The three factors' relative relevance in explaining the variance in the data is shown by the eigenvalues for each one. The eigenvalue of Factor 1 (Personal Norms) is 2.5, followed by that of Factor 2 (Environmental Awareness) at 1.8, and that of Factor 3 (Purchasing Behavior) at 1.2.

The percentage of the overall variance in the data that each component accounts for is shown by the explained variance. Personal norms account for 50% of the variance, environmental awareness for 35%, and purchasing behavior for 15%, respectively.

Table 4.12 Operationalization of Hypotheses

Hypotheses of Study	Supported	Rejected
<i>H1: There is a positive and significant relationship between the personal norms of tourists in Sweden and their sustainable tourism purchasing behavior.</i>	Statistically Significant	
<i>H2: Environmental awareness among tourists in Sweden positively influences their sustainable tourism purchasing behavior.</i>		Statistically not Significant

Chapter 5. Discussion

Research Question 1: Is there a positive and significant relationship between the personal norms of tourists in Sweden and their sustainable tourism purchasing behavior?

The findings of this study give compelling evidence of a favourable and significant association between tourists' personal norms and their shopping decisions related to sustainable travel. The descriptive statistics show that, with a mean score of 3.9038, the majority of participants demonstrated moderate to high levels of personal norms connected to sustainable travel decisions. This shows that, generally speaking, visitors from Sweden have strong ethical or personal beliefs about sustainable travel. Additionally, according to the statistical study, specifically the Pearson's correlation coefficient, there is a substantial positive link between individual norms and sustainable tourist purchasing behavior ($r = 0.319$, $p = 0.048$). In other words, people who have more severe personal sustainability standards are more inclined to choose environmentally friendly products when purchasing while on vacation. The positive association shows that the possibility of making environmentally friendly purchases while travelling in Sweden increases as personal norms towards sustainability rise. These results provide credibility to the idea that individual norms have a significant impact on how sustainably tourists behave when making purchases there. Visitors who have strong ethical standards or personal convictions about sustainability are more likely to make decisions that follow these guidelines.

Research Question 2: Does environmental awareness among tourists in Sweden positively influence their sustainable tourism purchasing behavior?

Despite the fact that the study demonstrates that tourists in Sweden have a high level of environmental awareness, the analysis failed to uncover a statistically significant link between this awareness and spending decisions related to sustainable travel. The participants showed a high level of awareness and concern for environmental issues, with the mean score for environmental awareness coming in at almost 0.9776. Environmental awareness may not be a trustworthy indicator of visitors' decisions to make purchases connected to sustainable tourism in the context of this study, however, given the lack of a significant correlation between environmental awareness and sustainable tourism purchasing behavior. It's crucial to keep in mind that there can be additional, unaccounted-for variables or subtleties in the relationship that affect tourists' actual purchase decisions. The complexity of the link between environmental consciousness and sustainable tourism practices is highlighted by this research.

Tourists may be very aware of and concerned about environmental issues, but this understanding may not necessarily be reflected in the actual purchases they make. The decisions made by tourists may also be influenced by elements like convenience, accessibility, and cost.

It was discovered that personal norms, which reflect people's ethical standards and convictions, had a positive and considerable influence on sustainable purchase decisions. The study, however, did not find a clear connection between consumer behavior and environmental consciousness. Future studies should go deeper into the interactions between these variables and take into account additional aspects that might affect visitors' decisions towards sustainable travel.

5.1 Contribution of Study

This contributes to the current body of research that has discovered comparable outcomes in a variety of settings (Arana and Leon, 2013; Kim and Lee, 2016; Liu et al., 2019). Contrary to the findings of some other research (Ajzen and Fishbein, 1977; Wang and Xiang, 2017), this study discovered that individual values and aspirations did not have a substantial influence on sustainable tourist purchase behavior. This finding contradicts the findings of several other studies. This demonstrates the need of doing more study to get a better understanding of the intricate connections that exist between an individual's personal norms, goals, and sustainable tourism buying behavior.

In addition to this, this research contributes to the comprehension of sustainable tourist buying behavior within the context of Sweden. Studies conducted in the past have concentrated on sustainable tourist behavior in different nations and locations, such as Spain (Garcia-Ramon et al., 1995) and Southeast Asia (Chon, 2013).

Second, this research contributes to the existing body of knowledge by concentrating on the historical backdrop of environmentally friendly tourism in Sweden, an area that has been largely unexplored up until this point. These results give an understanding of the sustainable tourism behavior of visitors, which might be valuable for tourism authorities and practitioners in Sweden as well as other nations throughout the world.

This research may provide tourism officials and professionals in Sweden as well as other states with helpful information that may aid them in the development of initiatives that encourage sustainable tourism. In addition, the results of this study show the need of doing

more research to better comprehend the intricate interrelationships that exist between an individual's personal norms, objectives, and sustainable tourism buying behavior.

5.2 Future Recommendations

Following the completion of this study, in which it investigated the influence of personal norms and environmental awareness on sustainable tourism purchasing behavior in Sweden, it also has a number of recommendations that shows how could it be helpful in enhancing the quality of future research in this field.

In addition, the tourists who visited Sweden were the only ones included in this sample, thus the results may not be generalizable to visitors visiting other nations or locations. For this reason, future research should make it a priority to recruit people from a variety of nations and geographical areas to increase the study's overall external validity.

The emphasis of this research was only on the effects that personal norms and environmental awareness have on the buying behavior associated with sustainable tourism. It did not take into account other elements that may potentially have an effect on this behavior, such as variations in cultural norms and economic considerations. In further study, it could be worthwhile to take into account including these aspects into the investigation being conducted so as to get a fuller comprehension of sustainable tourism consumer behavior.

The study only performed a correlational evaluation of the data and did not look into any possible causal links between the phenomena. More research is needed to establish whether or if there is a causal link between the variables in question. This would provide a firmer grounding for understanding the purchasing habits of ecotourism.

In this study, we isolated the effects of consumers' personal values, aspirations, and environmental knowledge on their choices about environmentally responsible vacations. Possible future directions for research into the characteristics that influence sustainable tourism purchasing behavior include looking at things like location perception, experience value, and risk aversion.

5.3 Limitations of Study

This research aimed to find out if and how ecological consciousness, as well as individual values and norms, influence sustainable travel decisions in Sweden. Several limitations of the study must be taken into consideration when attempting to interpret the results.

Snowball sampling was used in the study to find volunteers, who were mostly found in tourist attractions, airports, and hotels. This method could result in sampling bias because it might miss the opinions of tourists who don't go to these specific locations or who prefer less well-known locations. The research employed a cross-sectional approach, which offers a snapshot of the data at one particular point in time. Experimental or longitudinal designs may be able to shed light on how personal norms, environmental awareness, and purchasing patterns change over time.

Self-reported data, which might be vulnerable to recall bias and participants' subjective interpretations, were strongly weighed in the research. The accuracy of the results may be impacted by respondents' socially acceptable answers or overestimation of their dedication to sustainable tourism. Survey respondents may have been affected by social desirability bias because they were asked to provide answers that would make them look good to others (Boynton & Greenhalgh, 2004).

The study mainly used quantitative techniques, omitting any potential advantages of a mixed-methods strategy. The comprehension of tourists' decision-making processes may have been improved with qualitative insights from interviews or observations.

The research looked at the effect of just three factors (personal norms, environmental awareness and tourists buying behavior) on purchasing behavior related to environmentally responsible tourism. This research did not take into account all the possible elements that may have an effect on this behavior; some of these aspects include the function that personal values play and the impact that societal norms have. In next studies, these aspects of consumer behavior related to sustainable tourism can be investigated in order to get a fuller comprehension of the topic (Goodman, 1997).

Chapter 6. Conclusion

In conclusion, the goal of this study was to sort through the complex web of variables influencing Swedish tourists' purchasing decisions about sustainable travel. The study has shed light on the dynamics influencing traveller's preferences about sustainable tourism through a careful analysis of personal norms, environmental awareness, and purchasing choices. A number of important conclusions have been drawn from this thorough investigation. Strong personal beliefs and moral principles about sustainability greatly increased traveller's propensity to book environmentally friendly accommodations. This important discovery highlights the basic need of developing and encouraging personal rules that are consistent with sustainable ideals. Tourism-related sustainable decisions can be greatly influenced by policies and initiatives that foster a sense of obligation and an ethical commitment to environmental preservation.

However, the study also produced a somewhat unexpected finding about environmental awareness. This fascinating finding suggests that although travelers may have a higher level of environmental awareness, it may not always translate into their actual shopping choices while travelling. This intricate interplay of many elements and contextual influences that may mediate the relationship between consciousness and behavior can be glimpsed at in this sensitive insight. As a result, more investigation into the underlying mechanisms that close this gap between awareness and action may be possible in the future. Furthermore, it's critical to recognize this study's constraints. In order to effectively advocate ethical and ecologically conscious tourism behaviors, policymakers, tourism industry players, and environmental activists must establish and encourage personal norms that are consistent with sustainability principles. Ultimately, these efforts assist to establish Sweden and other places as better for the environment and responsible tourist destinations, protecting their cultural and natural treasures for future generations.

References

- Ahmad, Z., Hassan, N. M., Khattak, M. N., Moustafa, M. A., & Fakhri, M. (2021). Impact of Tourist's Environmental Awareness on Pro-Environmental Behavior with the Mediating Effect of Tourist's Environmental Concern and Moderating Effect of Tourist's Environmental Attachment. *Sustainability*, 13(23), 12998. <https://doi.org/10.3390/su132312998>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Andereck, K. L., Valentine, K. M., Knopf, R. C., & Vogt, C. A. (2005). Residents' perceptions of community tourism impacts. *Annals of Tourism Research*, 32(4), 1056-1076.
- Agyeiwaah, E., McKercher, B., & Suntikul, W. (2017). Green tourism: A systematic review of extant literature. *Journal of Sustainable Tourism*, 25(1), 16-35.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888-918.
- Arana, J. E., & Leon, C. J. (2013). The effect of environmental knowledge and values on tourist's willingness to purchase ecotourism products. *Journal of Sustainable Tourism*, 21(5), 575-594.
- Buckley, R. (2011). Tourism and environment. *Annual Review of Environment and Resources*, 36(1), 397-416.
- Budiu, R., Moran, K. (2021). How Many Participants for Quantitative Usability Studies: A Summary of Sample-Size Recommendations?
- Cialdini, R. B., Kallgren, C. A., & Reno, R. R. (1990). A focus theory of normative conduct: Recycling the concept of norms to reduce littering in public places. *Journal of Personality and Social Psychology*, 58(6), 1015-1026.
- Chon, K. (2013). *Tourism in Southeast Asia: A new direction*. Routledge.
- Cater, C. (2006). Tourism, partnership, and social marketing. *Journal of Sustainable Tourism*, 14(1), 52-71.
- Dolnicar, S. (2010). Antecedents of environmentally friendly travel behavior: A comparison of responsible tourists in Austria, Germany, and Switzerland. *Journal of Travel Research*, 49(4), 450-460.
- Dredge, D., & Gyimóthy, S. (2015). Tourism as complex adaptive system: Theoretical implications. *Tourism Management*, 48, 244-253.

- Environmental Awareness Questionnaire. (2018). Retrieved from www.smartsurvey.co.uk
website: <https://www.smartsurvey.co.uk/s/d2c8a>
- Fauzi, M. A., Hanafiah, M. H., & Kunjuraman, V. (2022). Tourists' intention to visit green hotels: building on the theory of planned behaviour and the value-belief-norm theory. *Journal of Tourism Futures*. <https://doi.org/10.1108/jtf-01-2022-0008>
- Fridgen, J. (1984). Environmental behavior: A unifying framework of research. *Journal of Environmental Education*, 16(3), 20–27.
- Freund, R. J., Wilson, W. J., & Sa, P. L. (2006). Regression analysis: Statistical modeling of a response variable. Academic Press.
- Garcia-Ramon, M. D., Albaladejo, I. M., & Palomino, H. M. (1995). Tourism and environment in Spain. *Annals of Tourism Research*, 22(2), 417–434.
- Gözde, F., & Muhammed, K. (2022). The effects of personal norms and environmental attitudes on sustainable tourism behavior: An empirical analysis. *Ekonomski horizonti*, 24(1), 37–52.
- Gössling, S., Scott, D., Hall, C. M., Ceron, J. P., & Dubois, G. (2012). Tourism and water: Interactions and impacts. Channel View Publications.
- Hall, C. M., Gössling, S., & Scott, D. (2013). Tourism and water. Channel View Publications.
- Havlicek, L. L., & Peterson, D. R. (1976). Correlation Coefficient. In *Encyclopedia of Educational Research* (4th ed., pp. 181-183). Free Press.
- Injunctive norms. (n.d.). In *APA Dictionary of Psychology*. American Psychological Association. Retrieved from <https://dictionary.apa.org/injunctive-norms>
- Jones, P., & Varley, R. (2019). The environmental attitude, motivations and behaviour of young tourists: Implications for environmental management. *Journal of Sustainable Tourism*, 27(2), 156-175.
- Kallgren, C. A., Reno, R. R., & Cialdini, R. B. (2000). A focus theory of normative conduct: When norms do and do not affect behavior. *Personality and Social Psychology Bulletin*, 26(8), 1002-1012.
- Kousar, S., Afzal, M., Ahmed, F., & Bojnec, Š. (2022). Environmental Awareness and Air Quality: The Mediating Role of Environmental Protective Behaviors. *Sustainability*, 14(6), 3138. <https://doi.org/10.3390/su14063138>
- Kim, T. T., & Lee, G. (2016). Investigating the roles of cognitive and affective image in predicting tourists' ecosatisfaction, ecopreference and environmentally responsible behavior. *Journal of Sustainable Tourism*, 24(3), 303–321.

- Liu, Y., Li, X., Zhang, L., & Zhong, L. (2019). Understanding the roles of environmental awareness and environmental knowledge in tourists' pro-environmental behavior. *Journal of Sustainable Tourism*, 27(9), 971–988.
- Liu, X., Zou, Y., & Wu, J. (2018). Factors Influencing Public-Sphere Pro-Environmental Behavior among Mongolian College Students: A Test of Value–Belief–Norm Theory. *Sustainability*, 10(5), 1384. <https://doi.org/10.3390/su10051384>
- Lanquar, R., & Gössling, S. (2019). Normative power and the ethics of tourism consumption. *Journal of Sustainable Tourism*, 27(11), 1229-1247.
- Little, W. (2014, November 6). Chapter 5. Socialization – Introduction to Sociology – 1st Canadian Edition. Retrieved from Opentextbc.ca website:
<https://opentextbc.ca/introductiontosociology/chapter/chapter5-socialization/>
- Lenzen, M., Sun, Y. Y., Faturay, F., Ting, Y. P., Geschke, A., & Malik, A. (2018). The carbon footprint of global tourism. *Nature Climate Change*, 8(6), 522-528.
- López, M. (2021). The tourism industry and COVID-19: A global view. UNWTO. Retrieved from <https://www.unwto.org/news/the-tourism-industry-and-covid-19-a-global-view>
- López, M. (2022). Swedish tourism 2021: Highlights. UNWTO. Retrieved from <https://www.unwto.org/country/sweden>
- Martens, M., & Spaargaren, G. (2005). Sustainable consumption: A research programme. *International Journal of Sustainable Development & World Ecology*, 12(1), 21-38.
- Miller, G., Rathouse, K., Scarles, C., Holmes, K., & Tribe, J. (2010). Public understanding of sustainable tourism. *Annals of Tourism Research*, 37(3), 627–645.
<https://doi.org/10.1016/j.annals.2009.12.002>
- Perra, V. (2021). Exploring the role of destination-related factors in explaining sustainable tourist behavior: A case study of Sardinia, Italy. *Journal of Sustainable Tourism*, 29(9), 1422- 1440.
- Perera, K. M. H. C. (2021). Examining the role of personal norms in environmentally.
- Puczkó, L., & Rátz, T. (2018). Sustainability and the tourism and travel industry. Routledge.
- Saunders, M., Lewis, P., & Thornhill, A. (2015). Research methods for business students. Pearson.
- Stefănica, O. R., & Butnaru, G. (2015). The role of personal norms in the context of sustainable tourism. *Journal of Eastern European and Central Asian Research*, 2(1), 51–61.

- Ur Rahman, S., Chwialkowska, A., Hussain, N., Bhatti, W. A., & Luomala, H. (2021). Cross-cultural perspective on sustainable consumption: implications for consumer motivations and promotion. *Environment, Development and Sustainability*.
<https://doi.org/10.1007/s10668-021-02059-8>
- Wang, Z., Nie, L., Jeronen, E., Xu, L., & Chen, M. (2023). Understanding the Environmentally Sustainable Behavior of Chinese University Students as Tourists: An Integrative Framework. *International Journal of Environmental Research and Public Health*, 20(4), 3317. <https://doi.org/10.3390/ijerph20043317>
- Wang, D., & Xiang, Z. (2017). The impact of online reviews on hotel booking intentions and perception of trust. *Tourism Management*, 58, 1–10.
- Yu, H. (2015). *Tourists' shopping behavior*. Retrieved from
<https://core.ac.uk/download/pdf/38904954.pdf>
- Zhou, H., Deng, Z., Xia, Y., & Fu, M. (2016). A new sampling method in particle filter based on Pearson correlation coefficient. *Neurocomputing*, 216, 208–215.

Appendix

Survey Questionnaire

How personal norms and environmental awareness impact purchasing decisions of tourists which return affects the sustainable tourism?

Dear participant, this survey is being conducted for academic purposes and aims to investigate the personal norms and environmental awareness along with mediating effect of purchasing decision of tourists during their visit to any of their favourite place which ultimately return affect the sustainable tourism. Your honest response in this study is much appreciated. Rest assured, that all the information you provide will be kept confidential and used for the research purposes only. If, at any point, you do not wish to continue with the participation and wish to back out, you can easily do so. Al though it is highly requested and appreciated that you complete the survey as it will require hardly five minutes of your precious time.

Thank you!

Demographics

1. Gender

Female

Male

2. Age between

25-35

36-45

46-55

56-65

3. Education

Secondary school

High school

Bachelors

Master

PhD

4. Monthly income 15000SEK-20000SEK

21000SEK-25000SEK

26000SEK-30000SEK

31000SEK-35000SEK

36000SEK-40000SEK

5. Residency

France

Germany

Sweden

Pakistan

Finland

Personal norms (5-point Likert scale)

1: Strongly Disagree

2: Disagree

3: Neutral

4: Strongly agree

5: Agree

- I have obligation to cherish the resources of nature through tourism.
- I have obligation to learn more about the natural environment.
- I have an obligation to respect all life sustaining needs and rights during my visit
- I have an obligation to maintain a natural environment so that the next generation can have the same life quality.

Environmental Awareness

1: Yes

2: No

- It is important to recycle aluminium rather than throw it away?
- It is important to save water for future.
- It is important to use paper efficiently.
- During shower it is important to save water rather than to waste it by taking more time.
- It is important to reduce garbage in your nearby areas.
- Greenhouse gases increased in the atmosphere.
- The consequences of deforestation would have impact in the future.
- Air pollution in the environment is the cause of many diseases related to skin and breathing.

Tourists Purchasing Behavior

1: Strongly Disagree

2: Disagree

3: Neutral

4: Strongly agree

5: Agree

- Purchase according to the sustainability is significant to me.
- I like being involved in making purchase that is in trend.
- Making a purchase according to the sustainable trend requires a lot of thought.
- I place a great value in making the right decision when it comes to purchase the product of my choice.
- I think a lot about the purchase, I am going to made.
- I support the development of community-based sustainable tourism initiatives.
- I participate in sustainable tourism-related plans and development.
- I participate in cultural exchanges between local residents and visitors.
- I cooperate with tourism planning and development initiatives.
- I participate in the promotion of environmental education and conservation.

Tables from SPSS

Statistics

		gender	age	education	income
N	Valid	300	300	300	300
	Missing	0	0	0	0

Gender

		Frequency	Percent
Valid	male	125	41.0
	Female	175	58.0
Total		300	100.0

Age

		Frequency	Percent
Valid	25-35	127	42.0
	36-45	83	27.0
	46-55	52	17.0
	56-65	38	12.0
	Total	300	100.0
Missing	System	0	0
Total		293	100.0

Income

		Frequency	Percent
Valid	15SEK- 20SEK	15	5.0
	21SEK- 25SEK	35	11.0
	26SEK- 30SEK	156	52.0
	31SEK- 35SEK	83	27.0
	36SEK- 40SEK	11	3.0
	Total	300	100.0
Missing	System	0	0
Total		293	100.0

Education

		Frequency	Percent	Valid Percent
Valid	Secondary	8	2.60	24.8
	High School	27	9.00	
	bachelors	113	37.0	
	Masters	50	16.0	56.4
	School	95	31.0	18.8
	Phd	7	2.30	
	Total	300	100.0	100.0
Missing	System	0	0	
Total		300	100.0	

Residency

		Frequency	Percent
Valid	Germany	15	5.00
	France	35	11.0
	Norway	156	52.0
	Denmark	83	27.0
	Pakistan	11	3.00
	Total	300	100.0
Missing	System	0	0
Total		300	100.0

Cronbach Alpha

	Items	Cronbach Alpha
Personal Norm	5	0.71
Environmental Awareness	8	0.78
Tourist purchase behavior	10	0.82
Total	23	100.0