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MASTER'S THESIS

**AN EXPLORATORY STUDY OF TOURISTS' MOTIVATIONS
REGARDING ACTUAL PRO-ENVIRONMENTAL BEHAVIOUR**

Ljubljana, July, 2021

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Abstract

Pro-environmental behaviour is a well-studied subject, numerous socio-psychological researchers have analysed it and are constantly updating frameworks, models and predictors. However, considerably fewer studies have focused on pro-environmental behaviour in the tourism sector. Furthermore, most research is based upon perceived behaviour and so the reliability of these studies can be questioned, considering most people tend to oversell their environmental behaviour. This thesis focuses on actual tourist behaviour and, in specific, tries to apprehend what incentivizes tourists to ‘decrease or stop flying for environmental reasons’. For this purpose, underlying factors and motivational factors were analysed. Results support the assumption that the main motives for flight-free tourists to engage in pro-environmental behaviour are (1) to contribute to something bigger and preserve the planet ecological well-being long-term, (2) to stay consistent with their personal values, and (3) because it makes them feel good. This explorative study was made during the epidemic of Covid-19 and thus takes into consideration how a health crisis affects the motivational factors of flight-free tourists. Furthermore, the research contributes to the ongoing discussion of trying to define and understand the internal and contextual factors that define an Environmental Friendly Tourist.

Keywords: *tourists’ pro-environmental behaviour, behavioural change, environmental sustainability, avoid air travel, flight-free tourists, motivational factors.*

1 Introduction

Humankind had always to deal with global environmental challenges to be able to survive. Over the years this has not changed with the difference that now it seems that more natural disasters stemming from climate change are taking place (Donmez-Turan & Kiliçlar, 2021; Ferguson & Branscombe, 2010). The Earth is getting warmer, ice caps are melting, sea levels are rising, water shortages are more common, loss of biodiversity is increasing and earthquakes are happening on a regular basis. New climate changes caused (at least in part) by human behaviour (Steg & Vlek, 2009) are being noticed every day. All this is affecting the lives of humans (Donmez-Turan & Kiliçlar, 2021). The alarm clock is ringing and the world's attention has been caught.

In 2019, the climate change movement started to dominate international media's attention. Key public figures such as Greta Thunberg, together with movements like Fridays for Future (a worldwide climate strike during weeks), ignited a new increase in awareness (Fridays for Future, 2021) and brought in a sense of urgency that had been missing so far. It became clear that change is needed if resolutions for these problems are going to be achieved. The importance of protecting the environment is the message that is being spread, while concepts like sustainability become more popular.

This has led to a stronger promotion of pro-environmental behaviour (PEB) in general and resulted in more decision-makers paying attention to environmental protection (Stern, 2000). These environmental issues are challenges that need to be tackled from different dimensions, namely through policies, organizations, institutions, and behaviour (Benner, 2020). These four dimensions are interrelated and overlapping, however, the latter three are mostly directed towards people's longings that pro-environmental behavioural change should become a norm in the near future, not an option after awareness-raising.

The tourism industry benefits from the environment while pressuring it at the same time. Although tourism generates income for a destination, this global industry has been critically examined for its negative impact on the environment. Most destinations are aware of what is going on (Carvache-Franco et al., 2019; Rangarajan & Rahm, 2011) and have proven to contribute to the existing knowledge about sustainability. They have been showing clear efforts in regards to informing tourists about ways to contribute to a greener world, nevertheless, there seems to be a gap between awareness and action (Juvan & Dolnicar, 2014; McKercher et al., 2010).

Altered consumption patterns in the industry are needed to achieve a reduction of carbon emissions. However, tourism is characterized by the particularity that people going on a holiday tend to want “a break”, “an escape” from everything, including their environmental “duties” (Miller et al., 2015). ‘Going on a holiday’ seems for a lot of people to be a well-deserved right and not a problem for the environment (Barr et al., 2010). Researchers have been trying to understand how this psychological phenomenon works and concluded that environmental knowledge does not necessarily lead to more environmental behaviour, there seems to be more to it. Nevertheless, the message has not been transmitted clearly as most environmental communication campaigns and strategies are based on this simplistic assumption. Campaigns for awareness regarding climate change are increasing (Evans et al., 2013) and creating public social norms (Budeanu, 2007) while social marketing is being used as a tool for transitioning from knowledge to attitude (Kollmuss & Agyeman, 2002).

The actual environmental cost and contribution of tourism to a destination is however not clear and difficult to be measured (Wang et al., 2018). It has been predicted that the use of the current resources will double within the upcoming decades (Juvan & Dolnicar, 2017). That climate change is a major issue has become clear and so, the tourism industry will have to reduce its carbon emissions. In these lines, mitigating the problem will have to be part of the upcoming trends (Gössling & Hall, 2008). According to Juvan and Dolnicar (2017), tourists’ role will only continue to grow in the reduction or damage of natural resources. They further stated that “... stopping travel altogether is not feasible, and would hurt destinations economically and socially” (Juvan & Dolnicar, 2017, pg. 880).

During a long period, it seemed unimaginable to stop the tourism industry completely. Up to 2019, tourism all over the world was growing as a sector, people were travelling more and to all types of destinations. 2019 seemed to be a top year as tourist arrival numbers were hitting peak numbers never seen before. In February 2019, this situation changed unexpectedly. With the spread of the COVID-19 virus, a world pandemic broke out and people were forced to stay at home. Almost 4 million people have died as a result of the pandemic (John Hopkins Coronavirus Resource Center, 2021), unemployment is growing, a global economic depression seems to advance and healthcare systems are being overloaded (The World Health Organization, 2021).

Tourism was one of the first sectors to be hit, businesses had to adapt and if they could not do it, they closed down. For the first time, after the financial crisis in 2008, it was possible to see what the economic, social and environmental aspects of tourism are and what benefits or negative impacts it may bring to a destination. It seemed for a moment that by stopping or decreasing human activity, the world was allowed to breathe. Several images were posted on

social media about how places, like Venice, were clearing up and regenerating problems such as overtourism, although the factual accuracy of most images remains questionable (Crossley, 2020). Although the social and economic consequences of several places were dramatic in some cases, it seemed that the decrease of human activity reduced air pollution (Hernandez, 2020), giving hope to several environmentalists.

Researchers and activists are arguing that the current situation might lead to less consumption (Cohen, 2020) now that people experienced a different lifestyle without luxuries such as holidays. On the other hand, conservationists have stated that this does not seem like the start of a new green world but merely a short period that showed that humans do have an impact on the environment and what can happen if activity decreases. Trembath and Wang (2020) argue that there could equally be an increase in consumption, including tourism. Once the situation resolves and restrictions are lifted, countries will want to re-establish their economy and individuals will want to experience what they have not been able to. This was already the case in some countries, during the summer of 2020 and will most likely happen in 2021 where the gradual easing of lockdown led to an increase in pollution and an increase in the use of disposable materials such as masks and gloves (Loureiro et al., 2021). This further develops into an apparent desire for environmental reparation among people who are experiencing a feeling of loss and distress regarding environmental degradation (Crossley, 2020). However, these calls for action did not result in immediate ambitious action from political and industry leaders. Most of the time, these stakeholders excuse the lack of regulations and action for the climate crisis due to consideration for the economy. Therefore, research needs to be updated for both academics and practitioners.

1.1 Research Focus & Gaps

From a holistic perspective, the tourism industry brings positive and negative consequences to a destination, in terms of social, economic and environmental factors. For the purposes of this study, only the environmental aspect will be of concern, otherwise, the research would either be too generic or become far too complex and far-reaching. When looking at the environmental aspect of tourism, research has pointed out how travelling, if moderated, can help preserve the environment. However, mass tourism poses mostly a negative impact, environmental risk and environmental degradation (Cohen, 1978; Han & Li, 2019). Specifically, the tourism industry causes 5% of global CO² emissions, mainly from transportation, accommodation, among other tourism-associated activities that involve energy consumption from fossil fuels (UNWTO & ITF, 2019). Transport has shown to be one of the most polluting tourism activities, with emphasis on the aviation industry which represents around 75% of the overall emissions on the sector (UNWTO & ITF, 2019). Nonetheless, it is said that if managed sustainably, the sector

would manage to reduce its emissions, and thus a good leadership and management are key to achieve that goal (UNEP and UNWTO, 2005). Moreover, the studies made regarding tourism and its relation to carbon emissions are scarce and the ones that do exist are rather of a general nature, jeopardizing the validity of the findings and making it harder to draw solid conclusions (Paramati et al., 2017).

Van Der Linden (2015) further stated that ‘how to make positive behaviour change stick is one of the most pressing policy-relevant (but under-researched) questions in social science today.’ (p. 612). Yet, clear policies remain underdeveloped (Gössling & Hall, 2008). Most existing research regarding PEB has been made with a broad overview and mainly focused on domestic habits (Miller et al., 2015; Xu et al., 2020). Over the years, numerous amounts of research was made to understand what the best ways are to motivate people to change their behaviour (Kozak & Kozak, 2013). It remains unclear why only a small amount of people is willing to change their behaviour on a holiday in favour of more equal and sustainable tourism development (Budeanu, 2007) and thus, more research in terms of willingness to actively participate is necessary.

A vast amount of research has been made when looking at pro-environmental behaviour as a study topic. It presents a high level of complexity because when dealing with human beings, many variables must be taken into consideration, such as attitudinal factors, demographic factors and the contextual factor not to mention the different types of actions that can be executed. Measuring these actions adds even more to the complexity, as most of them are executed in a private environment and on a voluntary basis. That is why different studies are focused on people’s perceptions regarding these insights and actions. Furthermore, numerous research has stated the lack of focus and measurement of intentional and actual pro-environmental behaviour (Juvan & Dolnicar, 2016). This questions the reliability of these studies and can lead to big discrepancies between what people report as doing, and what behaviour is actually measured (Gatersleben et al., 2002; Moser, 2015).

1.2 Research Question

This exploratory study aims at shedding light on a specific type of tourists’ pro-environmental behaviour, namely reducing or stopping taking the airplane for environmental reasons. For the last 20 years airplanes became a popular means of transportation, in particular since the appearance of low-cost air companies. Travelling from one location to another for leisure became as normal as taking the bus to go to work. What motivates or incentivizes people then to stop taking the airplane for environmental reasons?

Having in mind the above-described research gap and focus, the following research question was formulated:

What incentivizes tourists that intentionally and assuredly acted in pro-environmental behaviour?

Objective:

- To analyse what influences and motivates tourists to engage in actual pro-environmental behaviour.

The research question was formulated to foster discussion on pro-environmental behaviour in the current tourism industry which has been going through drastic changes. The question does not intend to seek a definite answer, but to better understand actual behaviour and what motivates and inspires people to selflessly contribute to a greater purpose such as the environment in particular when (travelling) on holidays. By analysing and better apprehending these behaviours that have been relatively little researched, it is possible to confirm or reject the motivators of the current research as well as contribute to the ongoing discussion and discover and develop new drivers and models. A qualitative research method was applied for this explorative study. 19 semi-structured interviews were conducted and analysed.

Keywords: pro-environmental behaviour, tourists' environmental practices, behavioural change, environmental sustainability.

1.3 Structure of the Study

This study is organized into six chapters. The first chapter introduces and explains the relevance of the research topic and states the problem that needs to be looked at. The introduction goes more into detail on where the focus of the research lies and what research gaps must be taken into consideration. The research question is stated and the chapter concludes with an overview of the study structure.

The second chapter starts with a review of the literature to have a general understanding of the concept of pro-environmental behaviour. Afterwards, the different types of PEB are analysed and the main factors and drivers to engage in pro-environmental behaviour are presented. Also, the PEB predictors are presented, followed by the Models and Frameworks for Analysing Pro-Environmental Behaviour. After looking into PEB in general, the literature review goes more in-depth on the tourists' role in practising environmentally friendly behaviour. The main definitions, predictors and motivators on this topic are presented, as well as the types of Tourists'

Pro-Environmental Behaviour. All these subjects are looked at from multiple perspectives and applied in the analysis and discussion.

In the third chapter, the methodology and theoretic approach are presented. The constructivism paradigm is described and applied to the present research topic. Subsequently, the population and sampling methods are explained. The methodology goes further into details on how the data was collected through semi-structured interviews and what this consist of and how the data was analysed. The chapter ends by explaining the limits of the research.

In chapter four the results of the conducted interviews are presented. Chapter five reviews and discusses the abovementioned elements. The conclusions of the study are presented in chapter six. The study ends with recommendations and limitations for further research.

2 Literature Review

This chapter presents and reviews key elements, concepts and models of existing literature on how human behaviour plays a role in environmental issues and how it interconnects with tourism. The review provides a framework for the study and helps grasp a better understanding of Pro-Environmental Behaviour (PEB), in specific, tourists' perspective. Understanding what the past and current research are about and what upcoming topics of relevance are is essential for a thorough analysis and discussion of the research made.

2.1 Pro-Environmental Behaviour

What do people think about the environment?

Why do people care about the environment?

Why do people stop eating meat?

Why do people change their behaviour?

Why is it extremely hard to change habits?

Why do people act environmentally friendly?

What are the barriers to engage in pro-environmental behaviour?

These are only some of the questions that are out there being asked and discussed by many researchers. For many years, researchers in the field of psychology and sociology have attempted to predict and understand the complexity of human social behaviour in particular situations, mainly to create the most effective interventions to help change these behaviours, from trying to quit smoking, choosing candidates at elections, to leisure behaviour.

A noteworthy amount of ground-breaking work that can be traced back to the '70s, says this can be linked to the ongoing fear of energy security that has been growing over the years as consumption keeps increasing (Brown, 2017). However, many pro-environmental studies have had a limited social impact. This is partially due to the fact that most studies are characterised by individualism while focussing on mental processes (Li et al., 2019), attitudes and decision-making, subsequently forgetting to take into consideration the role of individuals in regards to society as a wider construct (Brown, 2017). Kollmus and Agyeman were notoriously seen for their widely read paper in 2002, where they made a thorough review of existing frameworks and theories, as well as presented their own. Yet, times keep changing and so environmental educators and researchers are continuing to discuss old, current and new models while working on new assumptions and practices of these issues (Siegel et al., 2018).

Venhoeven et al., (2013) took a deeper look at the definition of sustainability which includes 'to bring a better quality of life' in the long run and stated accordingly how pro-environmental behaviour will only be sustainable if it does not interact with people's wellbeing. Having in mind that acting environmentally friendly is often perceived as difficult, aggravating, and potentially threatening one's quality of life, most people would not act on it out of self-interest. This might be limiting more people to engage in this friendly pro-environmental behaviour.

On the other hand, research has shown that those who do act on it seem to gain benefits and improve their lives, have higher overall life satisfaction, experience more happiness and personal well-being (Venhoeven et al., 2013). Having in mind that correlation research was made and the result is always interdependent, a perpetual discussion is going on that defends both sides and what the differentiating elements are.

It is fair to say that PEB does not necessarily have to result in a decrease in personal well-being. But for that, literature proposes that acting pro-environment needs to be seen by people as the correct thing to do, and the feeling to do so needs to be voluntarily and willingly. This influences issues such as policy-making, especially if laws obliging people to act in a certain way are implemented as this might lead to a counterproductive result if increasing overall wellbeing is the main aim of policymakers. Adding to this, Van Der Linden (2015) further noted that doing good, most of the time results in physical and psychological benefits.

For policymakers to be able to implement PEB, it is important that research regarding the subject is clear, straightforward and simplified so that the right measures can be taken. Taking into account the complexity of these issues, the problems in defining PEB, the factors and drivers of PEB, the motivators of acting environmentally friendly and the existing tools to predict PEB,

the next section will go more into details to help get a better understanding of Pro-environmental Behaviour in general.

2.1.1 Defining Pro-Environmental Behaviour

What exactly is environmentally friendly behaviour? This is the question that has been out there for quite some time and to this day remains difficult to answer. Various researchers have tried to define this concept that has adopted various interpretations and terms like environmentally responsible behaviour, environmental activism, green behaviour, environmentally friendly behaviour, among others. A review of some of these definitions is presented in the following table.

Table 1: Defining Pro-Environmental Behaviour over the years

PRO-ENVIRONMENTAL BEHAVIOUR			
Designation	Definition	Author	Year
Pro-social Behaviour	Voluntary intentional behaviour that results in benefits for another: the motive is unspecified and may be positive, negative or both.	Nancy Eisenberg and Paul A. Miller	1987
Pro-Environmental Behaviour	Behaviour that intentionally pursues reduction of the negative impact of people's actions on the natural world.	Paul C. Stern	2000
Pro-Environmental Behaviour	Behaviour that consciously seeks to minimize the negative impact of one's actions on the natural and built world.	Anja Kollmuss and Julian Agyeman	2002
Pro-Environmental Behaviour	Pro-environmental behaviour refers to behaviour that harms the environment as little as possible, or even benefits the environment	Linda Steg and Charles Vlek	2009
Environmentally responsible behaviour	An action by an individual or group that promotes or results in the sustainable use of natural resources.	Haywantee Ramkissoon, Liam Smith, Graham David and Betty Weiler	2013
Pro-Environmental Behaviour	Behavior that has a positive impact on "the availability of materials or energy" and behavior that positively "alters the structure and dynamics of ecosystems or the biosphere".	Yong-ki Lee, Sally Kim, Min-Seong Kim and Jeang-gu Choi	2013
Pro-Environmental Behaviour	Behaviour that is enacted by an individual or collective of companion species that diminishes	Lisa Siegel,	2018

PRO-ENVIRONMENTAL BEHAVIOUR			
Designation	Definition	Author	Year
	harm and contributes to the ecological health of the Earth.	Amy Cutter Mackenzie- Knowles and Anne Beller	

Source: own compilation

These definitions of the concept of PEB were all addressed in various types of studies each of them made in an unlike context and therefore differ slightly, but “... they all try to explain basically the same phenomenon and provide a better understanding of the behaviour towards protecting the environment” (Donmez-Turan & Kiliclar, 2021, p. 3).

Kollmuss and Agyeman (2002) define PEB as the sort of behaviour ‘that consciously seeks to minimize the negative impact of one’s actions on the natural and built world ...’ (p. 240). They provided a study that reviewed most theories and considered those when presenting their definition. Until this day it remains one of the most used definitions (Dono et al., 2010; Poortinga et al., 2004; Siegel et al., 2018), however, there is already research stating that by trying to take the complexity away of the concept, they might have provided a too simplistic view of what environmentally-friendly behaviour is.

According to Stern (2000), an all-encompassing definition needs to be adopted in the literature when exploring PEB. This definition should include an intent-oriented definition that is based on attitudinal factors and thus, focuses on people’s beliefs and motives among other variables that change behaviour. The definition should also include an impact-oriented definition that explains PEB by its alteration and impact on ecosystems and the environment. It seems that this idea has not been explored as much in the literature. Perhaps one definition of PEB will not be encompassing enough to develop further frameworks and models, and thus the researcher might need to focus more on complementary definitions. The definition of Lee et al. (2014) is one of the few that follows this line of thought.

Adding to this, there seems to be also some confusion regarding the concepts ‘action` and ‘behaviour’. When taking a deeper look into the differences, it is possible to say that ‘behaviour’ refers only to personal actions that have a clear intention to improve the environment and thus, PEB becomes a sub-category of environmental action. It is important to keep in mind that actions that influence behaviour can be direct or indirect and this makes basic definitions like the ones previously mentioned neglectable to a certain extent (Jensen, 2002).

For ease of empirical research, the definition of PEB made by Siegel et al. in 2018 seems to be more reliable, at this time. Although the definition of Lee et al. may be more complete, Siegel et al. presented an extensive research study that takes into account multiple views and is updated according to a more actual and modern ecological worldview, which also fits better with the scope of this exploratory study.

2.1.2 Types of Pro-Environmental Behaviour

Having in mind that PEB is a dispersed concept, it is necessary to take into consideration the different types of environmentally friendly behaviours that are out there (Ramkissoon, Graham Smith, et al., 2013). While there is a considerable amount of research regarding PEB, it seems that research is lacking regarding its different types and how they influence each other (Lee et al., 2014). Taking all different types of actions into one big group might hamper defining PEB in general and establishing predictors. Different names have been given to the various types. In this section, some different types and interpretations of pro-environmental behaviour are presented.

According to Stern (2000), it is possible to categorise pro-environmental behaviour types generally into environmental activism, nonactivist behaviour in the public sphere, private sphere activism, and other types of environmentally significant behaviour. According to Homburg and Stolberg (2006), environmental activism includes the active involvement in environmental organizations; non-activist behaviour is for example petitioning on environmental issues; private sphere environmentalist includes energy-saving and purchasing recycled products; behaviour in organisations includes product design. Environmental activism is more seen as a kind of sub-category of pro-environmental behaviour.

Pro-Environmental behaviour can be differentiated between direct and indirect actions, according to various researchers (Kollmuss & Agyeman, 2002; Siegel et al., 2018). Direct environmental actions have an immediate impact on the environment and include actions such as minimising consumption of energy/resources, producing less waste, recycling, purchasing organic food and driving less, among others. Indirect environmental actions include monetary donations to or volunteering for environmental causes, environmental education or environmental writing (Kollmuss & Agyeman, 2002). This research and definition of Kollmuss and Agyeman were widely recognized among researchers. Nevertheless, it can be argued that their view of direct and indirect actions might be lacking some more in-depth explanation considering the recognized complexity regarding the subject of PEB (Siegel et al., 2018).

According to Yong-ki Lee, Sally Kim, Min-seong Kim and Jeang-gu Choi (2014) pro-environmental behaviour can be categorised into three types: (1) green purchase behaviour; (2) good citizenship behaviour; and (3) environmental activist behaviour. They state the importance of not looking into the different types of PEB but also what their interrelationship is, a particularity that seems to be overlooked having in mind how most people who lead an environmentally friendly lifestyle execute various types of actions.

Another way to differentiate between different types of actions is through a collective or individual perspective. When acting from a collectivist's perspective, individuals feel part of a group and place the group's interest and success before their own (Lee et al., 2014). It seems that when people are more inclined to prioritise the collective view, they tend to engage in more environmentally friendly activities.

Not only is it difficult to establish the different types of actions of environmental behaviour, but also measuring them might not always be a straightforward process. Rajecki (1982) identified the attitude-behaviour measurement to compare and measure attitude and behaviour, in particular, he clarified that only one particular attitude should be measured according to the specific behaviour it leads towards. If this is not taken into consideration, most of the time, it is possible to find recurring flaws in the research methodology and different results which complicates constructing theories and frameworks. Moreover, focusing on an individualistic perspective, together with most studies focusing on small actions such as refusing a plastic bag in the supermarket, makes it difficult to measure the overall impact on the environment.

2.1.3 Factors and Drivers of Pro-Environmental Behaviour

It is clear that changing behaviour towards a more environmentally friendly lifestyle is a complex endeavour and is determined by various drivers and factors that are composed by the individual and their external environment (Blankenberg & Alhusen, 2018; Maio et al., 2007). Supposedly, the stronger the individual level of intention to engage in behaviour, the stronger the willingness to perform a certain behaviour should be. However, it has been shown that the performance of a certain behaviour is likewise linked to non-motivational factors. It seems various causal variables are influencing behaviour, such as attitudinal factors (including values and beliefs), contextual forces, personal capabilities, and habits or routines (McFarlane & Boxall, 2003; Stern, 2000). Whether the focus should lie on internal or external factors to generate more PEB is a topic open to discussion (Moser & Kleinhüchelkotten, 2018), but it seems more probable that it is a combination of all factors. Bamberg and Möser (2007) characterize PEB in regards to self-interest and pro-social motives, as well as contextual factors such as infrastructure, facilities and availability of resources and opportunities. The importance

of availability was already pointed out by Ajzen (1991) and continues to be a relevant element in the more current research bundle (Vicente-Molina et al., 2013). According to Gatersleben and his colleagues (2014) explaining and predicting environmentally sustainable behaviour is strongly related to general and pro-environmental values and identities, however, little research regarding the relations between these concepts has been made.

Kollmuss & Agyeman (2002) took into consideration the following factors that have a positive or negative influence on PEB: demographic factors; external factors including economical, institutional, social and cultural elements; and internal factors such as motivation, pro-environmental knowledge, awareness, values, attitudes, emotion, locus of control, and responsibilities and priorities. Having in mind that all factors are interconnected and related, it seems that simplifying these categorisations does not necessarily contribute to the understanding of PEB as a whole.

Siegel and her colleagues (2018) presented a model that focuses on how the influential factors are intertwined. They accentuate the interconnectedness of humans with nature and take on a more holistic and post-humanistic perspective. The relations and connection between these two elements have been underestimated regarding behaviour. They introduce gender, culture, ethnicity, education, religion, age, economic class, and dispositions as a new basis of values that lead to PEB. They have incorporated these elements in a model that is based upon the construction of a forest. There are trees and plants as a part of micro-and mega systems of energy interchange, which is made up of intention, self-discipline, and a sense of competence. Although this new perspective does add to the more integrated presentation of PEB, this model has not been applied considerably and so further research regarding this perspective would be needed. Having all of these elements in consideration, and the fact that there is a coherency missing among the already existing data (Hares et al., 2010), a more classical approach will be used for the purpose of this study. The details of these factors and drivers will be explained more comprehensively in the following sub-sections. It is important to understand that while some factors are drivers of PEB, like for example the motivational factors in some cases, other factors like social norms can also be barriers to PEB. Since all factors have a high level of interconnectedness, the following sections may overlap and intertwine.

2.1.3.1 Demographic Factors

With the upcoming awareness regarding an environmental concern, companies, organizations and destinations have been trying to understand what the profile of the new ‘green’ consumers is so that they can construct and target the right marketing approaches and build their image and brand accordingly as a part of their overall corporate strategies (Patel et al., 2017). Looking into

the variables of the demographic factor, the following can be identified: age, gender, place of residence, marital status, education and personal economic situation (Li et al., 2019).

When exploring Pro-Environmental Behaviour, it is not always evident to identify the type of consumers that are exercising these actions. Green consumers in general are not always easy to categorise and analyse. Demographics and psychographic profiles do not seem to be the main influence (Laroche et al., 2001; Trivedi et al., 2015) and so Paço and Raposo (2009) identified the following variables to segment green consumers, besides the socio-demographic approach: environmental concern, perceived behaviour control, environmental knowledge, environmental affect, environmental commitment, ecological consciousness, subjective norms, activism, information search and recycling practices and habits. Also, Kollmuss & Agyeman (2002) pointed out the importance of habits and how old habits can present a strong barrier to behavioural change. Research regarding this topic also seems to be limited.

This variable gives the impression to be a better predictor of change due to its relation to politics, education, culture, societal and natural system (T. Braun et al., 2018). Research has also shown that women show more interest in environmental issues as well as highly educated younger individuals, although there is some controversy in the discussion (López-Mosquera et al., 2015; McFarlane & Boxall, 2003; Patel et al., 2017; Vicente-Molina et al., 2013). It also appears that married couples show more interest in the environment as they seem to care more about the next generation's future (Dupont, 2004) 2004).

2.1.3.2 External Factors

When looking at the external or non-motivational factors of pro-environmental behaviour, it is possible to distinguish between the influential factors, respectively the institutional, economic, social and cultural factors (normative factors). However, all factors are interlinked and show no clear boundaries in terms of definitions.

Social norms have been studied by various researchers and once again, a commonly agreed on definition or interpretation seems to be lacking (Farrow et al., 2017). Nevertheless, social norms can be seen as societal approval or disapproval of some rules of conduct (Elster, 1989). On the other side, there are also personal norms which can be explained as the moral need to act accordingly to one's internal value system, which will be explained further in detail as an internal factor (Schwartz, 1977). It is argued though that social norms influence the moral and personal norms including attitudes, consequently leading to an indirect impact on environmental behaviour (Clark et al., 2003; Li et al., 2019). Others argue that social norms have a direct influence on environmental behaviour (Vining & Ebreo, 1992). They defend that people identify

themselves as socially responsible and will act accordingly in an altruistic way as they feel a societal pressure to fit in, want to avoid societal disapproval, and seek social esteem (Lakhan, 2015; Li et al., 2019; Schwartz, 1977).

In terms of economic factors, research has shown that those with a higher income are more likely to participate in environmentally friendly behaviour while people with a lower income are less likely to contribute to public goods (Clark et al., 2003; Valero-Gil et al., 2017). Lack of financial resources can be classified as an external factor, yet at the same time, it is also an internal barrier to more PEB. More about internal factors will be explained in the next subsections.

2.1.3.3 Internal Factors

So why is it that even if a person has time, money, and information – the supposed necessity for changing behaviour – lack of change and inaction is still the most common outcome when it comes to engaging in pro-environmental behaviour? The inconsistency between general concern and personal engagement is usually blamed on political inaction and lacking government participation. This goes hand in hand with the belief that most people hold, namely, that one individual's contribution to the environment will not lead to substantial change (Budeanu, 2007) and so personal acts become meaningless, resulting in inaction (Lorenzoni et al., 2007). Sometimes people believe that having a positive attitude in pro-environmental behaviour or the intention of acting environmentally friendly is already enough, and so linking attitudes and behaviour seems to be quite tenuous (Dunlap & Van Liere, 1978). According to Antimova and colleagues (2012), the barriers that prohibit most people from acting are rooted in individual as well as social opinions and beliefs and therefore need to be examined on both levels.

The individual level includes motivation, values, beliefs, attitudes, emotion, social norms, intentions, and the correlation you have regarding trust and social networks, while the community level involves communication, media, societal norms, and culture and so on. Having this in mind, Anable and colleagues (2006) stated that effort for change will be most effective and long-lasting if instead the focus shifts from individual efforts to stimulate a common action on a group level. When researching the topic of Pro-environmental Behaviour, other correlated concepts must be taken into consideration, like environmental awareness, environmental knowledge, environmental identity, sense of personal responsibility and priorities, motivation, self-efficacy, self-control and other factors and concepts that keep arising while new research continues to be made. For example, Redondo & Puelles (2017) also took a look at the gaps between environmental attitudes and behaviours and found that a higher level of personal self-control in eating habits positively related to higher levels of pro-environmental behaviour.

The influence of personality traits and character on PEB is another important variable that needs to be taken into contemplation but that is extremely difficult to analyse. Internal factors or psychological factors include not only motivational factors, attitudinal factors, as education but also values, beliefs, and personal norms. Beliefs, personal norms and values, essentially derived from the institutional and social structure. Environmental identity can be defined as the psychological connection between a human and a non-human natural environment (Kashima et al., 2014). Kashima, Paladino and Margetts (2014) further found that the development of environmental identity and high involvement of PEB is positively correlated. More about these factors will be explained in the following sub-sections.

Environmental Knowledge and Awareness

Research in Pro-Environmental Behaviour is replete with elaborate debates and discussions regarding its relation to knowledge. According to Matteson (2013), a person's environmental concern is strongly related to the amount of information known about the subject. Lack of information has been identified as a major obstacle in executing pro-environmental behaviour (Plank, 2011) and so, supposedly, more knowledge would lead to more behavioural change. The relation between knowledge, awareness and behaviour was thoroughly researched and discussed through linear models (see predictors of PEB) where it has been made clear that the linear progression from knowledge to behaviour is too simplistic. It seems that knowledge can be identified as a subcategory of awareness. That said, people may also not always be aware of their actions but still have a pro-environment type of behaviour (Gatersleben et al., 2002). The mean of technology has influenced this differentiation as well, now that through the internet, access to information has changed the way we learn, as well as the way we act upon the information we process (Siegel et al., 2018).

To be able to fully apprehend the complexity of PEB, different levels of knowledge need to be established (Kollmuss & Agyeman, 2002). Jensen (2002) put environmental knowledge in a more ample definition where action-oriented knowledge is distinguished between four dimensions, namely: (1) knowledge about the existence of parameters of an environmental issue; (2) knowledge about the root causes of the issues; (3) knowledge about possible solutions and change strategies; and (4) knowledge about personal strategies for achieving those solutions. Frick, Kaiser, and Wilson (2004) noted that action-related and effectiveness knowledge has a direct effect on PEB while system knowledge has an indirect effect. Furthermore, it is also possible to differentiate between an objective/actual type of knowledge which refers to what an individual knows about a product, issue or object; and a subjective type of knowledge, which is what an individual perceives as knowing (Vicente-Molina et al., 2013). All researchers do

conclude on the note that a wider definition of environmental knowledge would narrow the gap between knowledge and behaviour (Siegel et al., 2018).

Attitudinal Factors

Supposedly, attitudes are about how individuals are inclined to act in a certain way (Stern, 2000). Initially, Ajzen (1985, 1991) stated that attitudes directly influence intentions first and consequently behaviour – the ABC theory. Later, Stern (2000) elaborated on the ABC theory, saying that the theory predicts that attitudes that reflect the different types of predispositions underly the wish to participate in pro-environmental intent which possibly might lead or influence a certain type of environmentally friendly behaviour. Most environmental behaviour is not obligatory and depends mostly on goodwill. Having this in mind, the importance of attitudes increases depending on contextual factors such as more or less how time-consuming, costly, or difficult a certain behaviour is perceived to be (Ertz et al., 2016). Attitudes and these contextual factors are constantly interacting and influencing each other (Steg & Vlek, 2009).

According to Ertz and colleagues (2016), attitudes are to be considered as a behaviour-specific belief (attitudinal factors). Defining attitudinal factors might be one of the more complicated elements of pro-environmental behaviour. Environmental attitudes can be seen as the intermediary element between knowledge and behaviour. It can be interpreted as an environmental concern (Jones & Dunlap, 1992) or defined as a psychological tendency to evaluate the natural environment positively or negatively (Milfont & Duckitt, 2010). However, the correlation between attitudes and environmental behaviour seems to be divided, while some claim to find a positive correlation, others have proven the opposite (Vicente-Molina et al., 2013). Drawing conclusions from this ongoing discussion, it can be said that focusing only on attitudinal factors as predictors of intentional pro-environmental behaviour is not recommendable (Vermeir & Verbeke, 2006). It is however important to have these factors into consideration as they help fill the research gap between knowledge and behaviour.

Motivational Factors

As previously mentioned, it is not clear whether the focus of behavioural change should be intent-oriented or impact-oriented, yet, socio-psychologists have shown deep interest in what the motivational factors are that influence behavioural change and “what individuals intend to do to protect the environment as seen through their own eyes” (Moser & Kleinhüchelkotten, 2018, pg. 627). Motivation is a strong internal stimulus that can determine several behaviours (Vicente-Molina et al., 2013). Accordingly, motivation is shaped by intensity and direction and

can determine a chosen behaviour as well as why. Other than that, it has not been made clear whether motivation is more related to altruistic values or a more egoistic orientation. Also, research has only recently broadened its focus from specific green actions to a more general pro-environment type of lifestyle (S. Moser & Kleinhüchelkotten, 2018).

In terms of motivational factors, it seems that price is a key motivation for consumers. Lack of money has been, accordingly, stated as a constraint for consuming green. The correlation between consumers that are highly sensitive to price and a lower pro-environmental behaviour seems to be quite high (Vicente-Molina et al., 2013).

Lindenberg & Steg (2007) developed a goal-framing theory for motivations, also known as multiple motives with the aim of better understanding environmental behaviour. The theory suggests that goals are the setting of how people process information and follow up on it. The frame includes three goals, namely a hedonic, which is about putting personal pleasure first; gain, what personal gain is in it; and normative goal frames which refer to the moral obligation of acting accordingly to social and personal values. Miao & Wei (2013) listed how normative motives have been used in numerous studies regarding PEB such as in disposal of garden waste, energy conservation, recycling, travel transportation choice, and pro-environmental purchase behaviour.

Adding to that, the concept of Locus of control adds to the complexity of motivational factors. This concept characterises an individual's perception about their ability to contribute to change through their behaviour. This means that if you have a strong locus of control, you believe that your actions will bring about a change while on the other hand, people with a low locus of control believe that their actions or behaviour will not make a difference, they feel insignificant and believe it is up to the big players to make a change (Bodur & Sarigöllü, 2005; Kollmuss & Agyeman, 2002; Madrigal, 1995; Trivedi et al., 2015).

Filling the gaps

It is possible to differentiate different types of gaps between knowledge and behaviour, including the Awareness-Attitude Gap, the Attitude-Behaviour gap and the Behaviour-Impact Gap, among others. At first, these terms might seem confusing but when looking into the psychological aspects of the concepts, their meaning becomes clear. One common definition for each concept does not exist but the meaning behind the gap can be explained through the fact that knowledge might lead to a certain type of attitude one holds in regards to the current environmental issues, for example: a person was informed about the current issues, researched them and accepted that change needs to be made, consequently, they tried changing their attitude

towards the issue by stating they will act more environmentally friendly and consider a different lifestyle, but in the end, the person does not act more pro-environmental in the long term. This is because changing habits and behaviour are something that takes time and involves greater challenges and difficulties one might suspect (Antimova et al., 2012; Miller et al., 2015). And so, it is important to keep in mind that attitudes do not directly affect behaviour but influence indirectly the intention regarding environmental behaviour (Antimova et al., 2012). Informing the public and raising awareness are not the only actions that need to be implemented for societal behavioural change. These actions need to go together with an increase in accessibility and availability of environmentally friendly options, having in mind every type of lifestyle, so that the world can live more sustainably.

Not only does it seem that increased awareness and attitude do not equal increased behavioural change, but research (Hares et al., 2010; Higham & Cohen, 2011; McKercher et al., 2010) has also shown that the opposite can also be true, that people with greater awareness are less likely to change their behaviour. Due to this confusion, it remains unclear which theoretical approaches are the most useful tools to bridge the gap between environmental awareness and behaviour (Antimova et al., 2012). If this is the reality, and some tourists are unwilling to change, is there a benefit in addressing this group? Should authorities focus more on those that are interested in addressing these environmental issues? Nevertheless, it seems that in the irony of the situation, hypocrisy seems to result in a motivational factor to align people and their behaviour (Stone & Fernandez, 2008).

2.1.4 Predictors of Pro-Environmental Behaviour

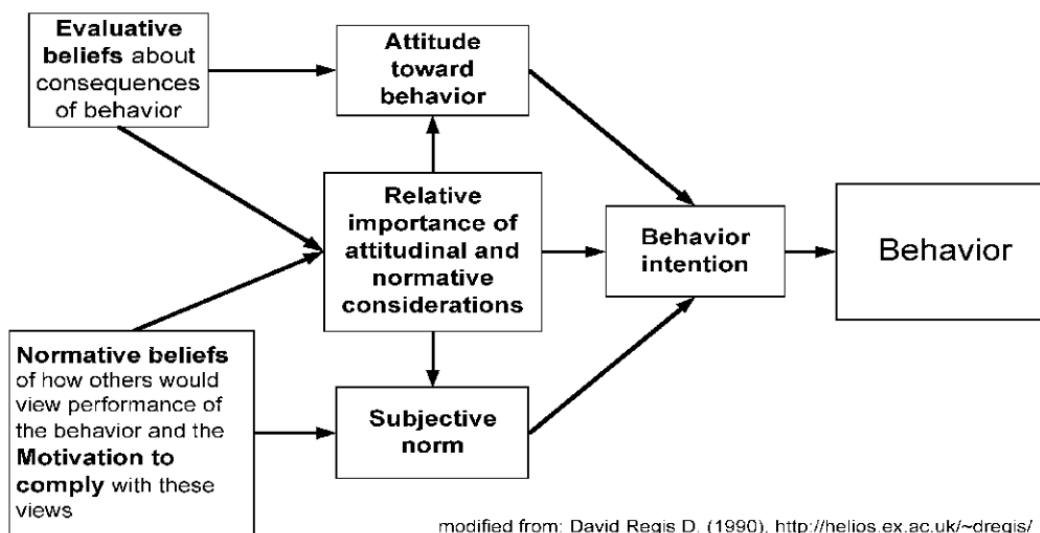
All of the previously mentioned factors, drivers and barriers are eventually researched to be able to predict people's behaviour and to understand how it is possible to influence individuals and to act accordingly having in mind the environmental issues that are currently developing. Because of the complexity of the topic, new data is introduced regularly which makes it substantially more difficult to have a clear overview of PEB and its meaning. Consequently, research regarding PEB, although extensive, results in being less coherent and disperse.

Most research is based upon the theory of reasoned action that was developed initially in 1974 by Ajzen and Fishbein, and the Norm Activation Theory by Schwartz in 1977. The theory of reasoned action was further developed by Ajzen into the more renowned Theory of Planned Behaviour (TPB) (Madden, Ellen & Ajzen, 1992). These theories are explained generically in the following section. Also, the Social Cognitive Theory, the New Environmental Paradigm as well as some other renowned models and frameworks for analysing Pro-Environmental Behaviour are introduced.

2.1.4.1 Theory of Reasoned Action

The theory of reasoned action (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980) focuses on the importance of the intention of performing a particular green behaviour (Sawitri et al., 2015). According to the theory, behavioural intentions are the immediate antecedents to behaviour and are a part of an individual's belief about the chances that performing a particular behaviour will lead to a certain outcome (Madden, Ellen & Ajzen, 1992). In this context, the concept of belief of behavioural intention is divided into (1) behavioural beliefs where the belief underlies an influence on the attitude towards the execution of behaviour; and (2) normative beliefs that influence an individuals' subjective norm about executing this certain type of behaviour (Madden, Ellen & Ajzen, 1992). And so Ajzen and Fishbein pointed out that a high correlation between attitude and behaviour is only present when the attitude towards an according behaviour is measured (Kollmuss & Agyeman, 2002).

Figure 1: Theory of reasoned action (Ajzen & Fishbein, 1980)



source: Image retrieved from Kollmuss & Agyeman (2002)

The model has been one of the most influential attitude-behaviour theories due to the mathematical equation they constructed that allowed for other researchers to execute empirical studies based on the model (Kollmuss & Agyeman, 2002). However, the theory is limited by the assumption that people are rational and will act accordingly. Figure 1 is an exemplification of how the different elements are interconnected.

2.1.4.2 The Norm Activation Theory

The Norm Activation Theory (NAT) was originally developed in the late '60s by Schwartz. Over the years, he refined the model in a series of articles (Sawitri et al., 2015). The Norm Activation model was founded for research of pro-social intentions and behaviours and focused initially on one specific type of behaviour, namely altruistic behaviour (Klößner, 2013). According to the theory, the antecedents of pro-social behaviour are (1) awareness of consequences, (2) ascription of responsibility, and (3) personal norms (Sawitri et al., 2015). In the environmental context, the model has been extensively applied to a variety of studies that focused on recycling, conserving energy, willingness to pay for conservation, among others (Steg & de Groot, 2010; Turaga et al., 2010).

The main idea of the model is that altruistic behaviour is expected to come from personal norms. In specific, social behaviour is influenced by the intensity of one's moral (personal) obligation towards executing or abstaining from a certain action that helps others. This feeling is generated by the individual's respective and societal norms and values depending on the relevance of the obligation (Schwartz, 1977). In other words, the individual must be aware of the consequences of their actions that are directed towards the welfare of others (Turaga et al., 2010). In this sense, it is argued that PEB is an altruistic type of behaviour (Gatersleben et al., 2014; Trivedi et al., 2015). And so, the more people are conscious about what type of environmental problems their behaviour causes, the more they will take responsibility and accept that their behaviour does have an impact in trying to mitigate environmental problems, eventually resulting in changing their personal norms. However, this might not always be true, as it can be hard for individuals to behave as expected, to improve their resources, or to match their worldview with their norms (Donmez-Turan & Kiliclar, 2021), keeping in mind the relation of the mutual dependence of personal and social norms. Steg & de Groot (2010) pointed out that awareness is the key determinant for this model and needs to be increased to strengthen personal norms and involve prosocial intentions. Until these days, the theory continues to be commonly well-accepted (Turaga et al., 2010).

2.1.4.3 Theory of Planned Behaviour

The theory of planned behaviour is an extension of Fishbein and Ajzen (1975) theory of reasoned action by Ajzen (1985). The theory was further developed once perceived behavioural control became a new variable that needed to be included and that attitudes by themselves cannot act as the main component of predictors of behaviour (Plank, 2011).

The theory argues similarly that intentions and actions are based upon personality traits, subjective norms, perceived behavioural control and other variables (including e.g. past behaviour). Accordingly, perceived behavioural control together with behavioural intention lay at the basis to predict actual behavioural achievement (Ajzen, 1991, 2011; Juvan & Dolnicar, 2014). Behavioural intentions are driven by the following influential factors (Albayrak et al., 2013; Klöckner, 2013; Sawitri et al., 2015; Unsworth et al., 2013):

- (1) How favourable the attitude is towards a particular behaviour, namely whether you think it is a good thing to do. According to the theory, supposedly attitudes among other factors influence behaviour (Juvan & Dolnicar, 2014). Attitudes are seen as a sum of all behavioural beliefs about a specific behaviour that was executed in a certain situation. A belief is about expecting that a certain behaviour will have an outcome, the probability of this outcome happening and how favourable that outcome would be. Attitudes become accordingly a measuring tool of how favourable a specific behaviour is for an individual.
- (2) The perception of norms and conventions regarding the behaviour, in other words, whether others think you should do it. Subjective norms are seen as the perceived expectation pressure of others (society) about which type of behaviour should be performed.
- (3) The extent to which the behaviour is perceived as in their control, meaning whether you think you can do it. Perceived behavioural control is a tool that measures the degree to which people have the opportunity to perform a behaviour and to which extent they are able to.

The theory focuses more on human social behaviour and not human environmental behaviour, just like the theory of reasoned action. Although, more recently the theory has been applied to pro-environmental behaviours (Plank, 2011), also in the tourism industry, the theory has been applied to predict sustainable behaviour (Juvan & Dolnicar, 2014). Yet, research regarding this link stated that environmentally friendly attitudes towards the environment, in general, do not influence tourist's travel experience necessarily. Other critics of the theory argue that the link between behavioural intentions and actual behaviour is rather weak, underrepresenting morality as an impactful factor and lacking in predicting repeated behaviour (Juvan & Dolnicar, 2014; Klöckner, 2013).

2.1.4.4 New Environmental Paradigm

The New Environmental Paradigm (NEP) scale was developed by Dunlap and Van Liere (1978) as a measure for pro-environmental orientation. The scale is based upon the New Environmental Paradigm that "... focuses on the relationship between people and nature, and sees humans as a part of the natural environment" (Geng et al., 2015, pg. 1), in specific, it takes into consideration the damaging effects and overall problems and consequences human activity has on the

environment (Donmez-Turan & Kiliçlar, 2021) as well as the limits to growth for human societies (Dunlap et al., 2000).

The paradigm was later revised by Dunlap and colleagues (2000). This version takes into consideration a more ample and updated definition of an ecological worldview as well as the pros and cons that have been unravelled over the years through research. The NEP scale has become a widely used measure of environmental concern, as well as environmental attitudes, beliefs and even values. Some problems associated with the scale are the lack of necessary information that is provided by most studies, making the result less reliable when compared to other studies; also the sample type most of the time differs and although this does add to the diversity of the theory, again the result becomes less reliable when compared to other; and a variation in scale length and item content was also observed which make the results less coherent (Hawcroft & Milfont, 2010). It is important to keep in mind that defining one global worldview is not easy as each country or even continent has its norms (Albrecht et al., 1982) and adding to that, that worldviews keep changing over years, decades (Dunlap, 2008); and so, the NEP scale can continue to be applied as long as its definition of an ecological worldview continues to be updated regularly.

2.1.4.5 The Value Belief Norm Theory

Stern (2000) developed the value-belief-norm model which is based upon the Norm-activation theory, having in mind the different types of Pro-Environmental Behaviour. The model proposes that certain values (e.g. egoism), beliefs (e.g. ascription of responsibility), and personal norms (e.g. sense of obligation) influence which types of action are taken (Stern, 2000; Stern et al., 1999). The two main beliefs that are affecting PEB via norms are (1) the awareness of what the consequences are of a certain type of behaviour regarding something the individual values; and (2) the acknowledgement of responsibility towards that what they highly value. Awareness of consequences in this context is related to a general ecological worldview which is measured by the New Environmental Paradigm (Klößner, 2013). Moreover, value refers to what value people hold towards themselves and the environment, including people but also plants and animals. The values then lead to different attitudes, which eventually lead to different behaviours (Geng et al., 2015). Values seem to be a better predictor than attitudes as they are more grounded in the intrapersonal system, suggesting values determine attitudes.

It seems that increasing incentives regarding these beliefs lead to also an increase in pro-environmental behaviour (Juvan & Dolnicar, 2014). After multiple studies were based upon this framework, a 35% variance was established, from an academic perspective, this number is fairly

high (Unsworth et al., 2013), implying some factors might be missing from the model, like how individuals see and identify themselves (Udall et al., 2020).

In terms of tourism, although the theory seems to have a good basis to predict green behaviour in the industry, the model has not been applied significantly. This can be blamed on the fact that people do not seem to link climate change and their travels and thus do not take responsibility for these issues. Having this in mind, the theory helps to explain the attitude-behaviour gap. Until these days, the theory continues to be extensively used and supported (A. Gupta & Sharma, 2019).

2.1.4.6 Social Cognitive Theory

The Social Cognitive Theory (SCT) was initially established by Bandura (1986), and further developed over the years in a series of articles that applied the theory to various topics (Bandura, 2005). SCT argues that motivation and action are deeply determined by forethought. This means that an expectation might be set up and then might lead to a specific type of action. According to the theory, the main influential factors of behaviour are perceived self-efficacy, outcome expectancies, goals, perceived impediments and facilitators. Self-efficacy is about someone's belief regarding their capability to execute a certain action that is necessary to achieve the desired outcome (Luszczynska & Schwarzer, 2015).

Research that uses the Social Cognitive Theory to explain PEB is considerably less than the other frameworks (Sawitri et al., 2015). The theory has been set up holistically and generically but when applied to environmental psychology, the theory defends those favourable contextual conditions together with a high environmental self-efficacy judgement will have a more positive outcome while at the same time their expectations and goals are more challenging, consequently engaging more in PEB, in comparison to individuals with lower perceptions of self-efficacy.

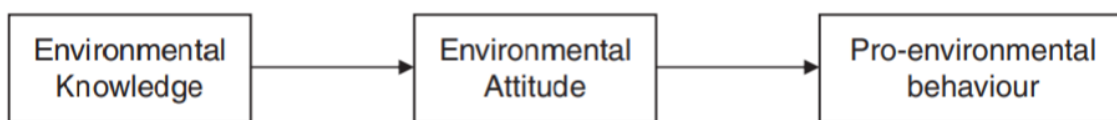
2.1.5 Models and Frameworks for Analysing Pro-Environmental Behaviour

Contemplating the previously mentioned definitions, factors, drivers and predictors of Pro-Environmental Behaviour, researchers have taken this information and channelled it in models that frame all of this knowledge and help explain the interrelation of most concepts regarding PEB. The following section presents how these models have evolved.

2.1.5.1 Linear progression models to understand PEB

Early research regarding PEB was based upon simple linear progression models. This research defends that before one can act upon their beliefs, the person in question needs to first be informed, otherwise, how can they know about the good or bad behaviours they are performing and whether or not a change needs to be implemented. Specifically, the models stated that more environmental knowledge would lead to environmental awareness and concern (environmental attitudes) and consequently lead to pro-environmental behaviour (Kollmuss & Agyeman, 2002).

Figure 2: Early Linear progression models to understand PEB



Source: Image retrieved from Kollmuss & Agyeman (2002)

Over the years, research revealed that there seemed to be a discrepancy between what people say and what they actually do (Stone & Fernandez, 2008). Starting in the '70s, frameworks and models were constructed to explain this gap and further literature stated that environmental knowledge and pro-environmental behaviour seem to not correlate, more information of PEB does not result in more PEB, and PEB can be executed without the knowledge of doing so (Kollmuss & Agyeman, 2002). Although both perspectives have been opinionated and supported, the question lies in what type of education and form of knowledge is given as well as in which way they are given and perceived (Jensen, 2002).

Other than that, other explanations for the gap have been found, Rajecki defined in his book 'Attitudes, Themes and Advances' in 1982 the following causes: (1) Direct experiences will have a stronger influence versus indirect experiences which comprises a weaker correlation between attitude and behaviour; (2) Normative influences like social norms, cultural traditions, and family customs will strongly determine PEB; (3) Temporal discrepancy which refers to the fact that people's attitudes change over time; and (4) Attitude-behaviour measurement which leads to discrepancies in results as most of the times broader attitudes are measured in comparison to actions (T. Braun et al., 2018; Kollmuss & Agyeman, 2002; Trivedi et al., 2015).

The theory of reasoned action and the theory of planned behaviour attempt to address this gap between attitude and behaviour. Research according to Ajzen and Fishbein (1980) also clarified that attitude does not determine behaviour directly but affect behavioural intention which

consequently defines our actions. This is mainly because actions are not the only determinant of behaviour, social norms and pressure also play a role among other factors.

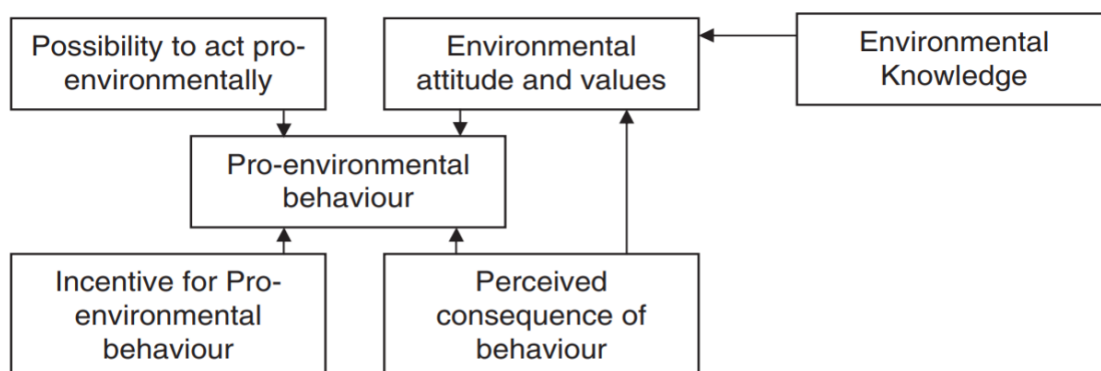
2.1.5.2 Altruism, empathy and pro-social behaviour models

In a later stage, environmental behaviour was identified as an altruistic type of behaviour (Trivedi et al., 2015). Pro-social behaviour is defined by Eisenberg & Miller (1987) as ‘voluntary intentional behaviour that results in benefits for another: the motive is unspecified and may be positive, negative or both’ (pg. 92). This led to a different type of perspective when analysing PEB and so new theories and models were built upon these ideas. Adding to this, numerous of these models have as a foundation the hypothesis that (1) persons with a strong selfish and competitive orientation are less likely to act environmentally, and (2) people’s whose basic needs are satisfied are more probable to act environmentally friendly (Borden & Francis, 1978; Kollmuss & Agyeman, 2002). Having more resources like time, money and energy allow them to care about greater, less individual, social and pro-environmental issues and consequently act (more) environmentally friendly. However, further research did show that richer nations and countries have a higher environmental impact than poorer, and so it shows that more resources do not necessarily lead to more ecological behaviour.

2.1.5.3 Sociological models

In terms of sociological models, it is possible to highlight the model of ecological behaviour from Fietkau & Kessel (1981) that explains PEB not only through sociological but also psychological factors. The variables mentioned in the model (figure 3) are independent of each other except for environmental knowledge that influences environmental attitudes and values.

Figure 3: Model of ecological behaviour by Fietkau and Kessel (1981)



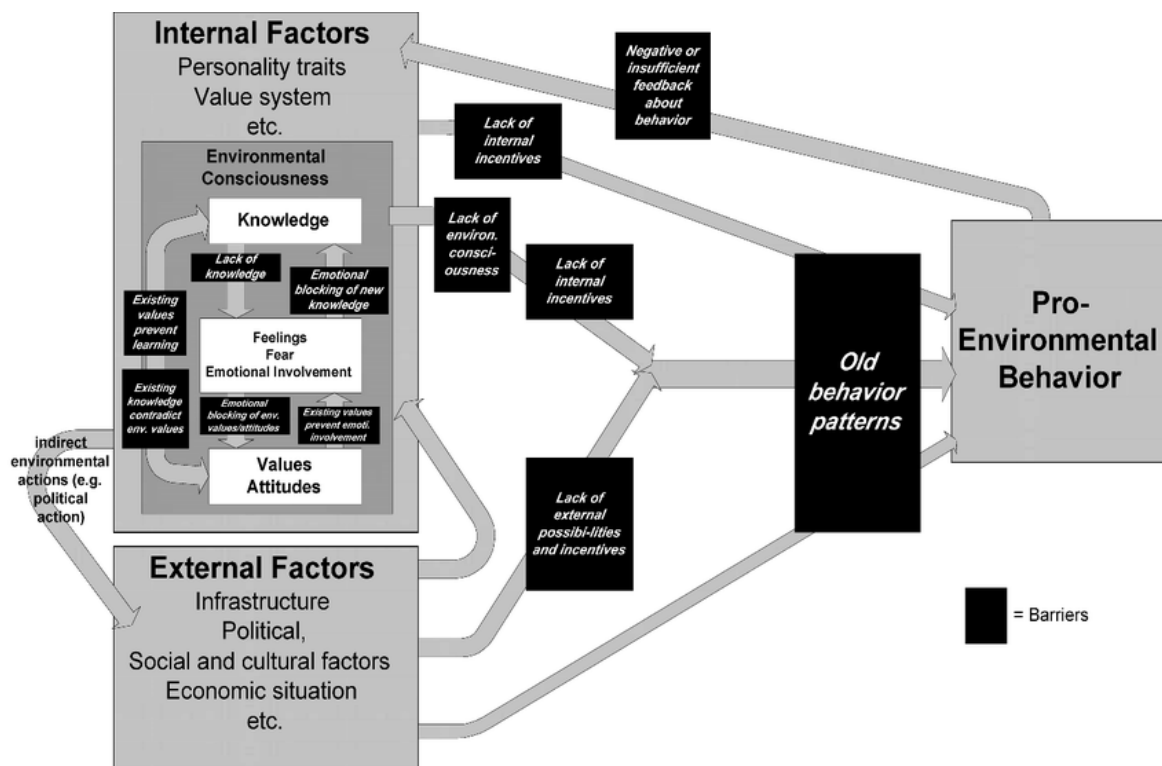
Source: Image retrieved from Kollmuss & Agyeman (2002)

According to his theory though, important individual, societal and institutional constraints were ignored, and so the gap between attitude and behaviour was also failed to be addressed (Shamuganathan & Karpudewan, 2015).

2.1.5.4 Clusters

The models explained in the previous section can be considered as the basis of Pro-Environmental Behaviour but since their development, they have already been questioned and adapted extensively, so that they can be applied to current times. Bamberg and Möser (2007) stated that researchers who interpret environmental behaviour's motives more pro-socially, use the norm-activation model from Schwartz (1977), while those who view self-interest as the more central motive frequently take on the theory of planned behaviour from Ajzen (1991). Among all these studies, Kollmuss and Agyeman (2002) are yet considered as the most relevant in more recent literature. They have highlighted the most influential theoretical frameworks to understand PEB, and consequently constructed their own:

Figure 4: Model of Pro-Environmental Behaviour by Kollmus and Agyeman (2002)



Source: Image retrieved from Kollmuss & Agyeman (2002)

Kollmuss & Agyeman (2002) stated that “[...] the question of what shapes pro-environmental behaviour is such a complex one that it cannot be visualized in one single framework or diagram.” (p. 248). There are so many variables that influence these models and change their outcome, these frameworks are generalized and so depending on the industry they are applied to and link PEB to consumer behaviour, the outcome may always vary (Trivedi et al., 2015). Having this in mind, Kollmuss and Agyeman (2002) did construct a diagram including all different models to illustrate the complexity of the subject of PEB, its components and externalities as well as its barriers (see figure 4).

Most of the models that lay as the basis of PEB were developed in a period when recycling and buying organic food were not considered common behaviours and were accordingly categorised as a high-level action of PEB, while nowadays this has become a habitual behaviour, together with actions such as buying energy-efficient light bulbs and recycling (Siegel et al., 2018). Although Kollmuss and Agyeman’s model has already received some criticism, like being too simplistic, there seems to be no new or more updated model that takes into consideration the significant number of factors that keep evolving over time.

2.2 Tourists’ Pro-Environmental Behaviour

When the tourism industry started growing in the ‘60s, mainly due to the democratization of prices and the introduction of the aviation industry as a new type of travel transport, tourism’s influence on the environment became more impactful and environmental awareness as a concept grew alongside the industry (Hounsham, 2006; Li et al., 2019; McFarlane & Boxall, 2003). In the 21st century, tourists in general became conscious of how travel impacts a destination and thus, different types of niche markets developed that adopted a more sustainable and environmentally friendly ideology, like environmental tourism, eco-tourism, green tourism and nature-based tourism, among other terms. However, it remains unclear to what extent these types of tourism contribute to the environment in a sustainable way (Wang et al., 2019).

With this forthcoming consciousness, these niche markets are slowly becoming upcoming trends and awareness started to shift to the more general public. The tourism of masses started to adopt a more proactive position in terms of protecting the environment and trying to minimize its pressure. Yet, very few marketing and promotional campaigns focused on tourism with a lower environmental impact were divulged (Budeanu, 2007). Also, it seems to be only a minority of individuals that are actually changing their behaviour according to these issues, while in the meantime people keep travelling because of their individual desires and cultural factors (Buckley, 2012).

“Environment is seen as belonging to environmentalists. Only when it is seen as belonging to all of us, will it move into the mainstream.” (Hounsham, 2006, p. 1). What is stated here by Hounsham is a sentence that holds extreme power behind its words, especially if we apply it to the tourism industry. Besides from tourists wanting to escape or forget about their environmental concerns when going on a holiday (Barr et al., 2010; Miller et al., 2015), most of the times individuals do not perceive themselves as tourists (Week, 2012). When subjects like overtourism are brought up, most people identify there is a problem, yet they do not include themselves as the cause of the issue, even if they do visit places that suffer from this phenomenon. The word ‘tourist’ seems distant and has lately received a relatively bad connotation, people tend to prefer to identify themselves as ‘traveller’ or ‘explorer’ (McCabe, 2005). All of these factors have complicated engaging people in pro-environmental behaviour during their holidays. As long as the majority does not choose to be more environmentally friendly, tourism will continue to have a direct negative impact on air, water, soil through consumption of water, energy and waste production; and an indirect impact from manufacture and transport on atmospheric emission. All these issues damage the environment, cause loss of vegetation and disturb wildlife (Alessa et al., 2003; Buckley, 2012).

Some deny or might not act according to what is going on, but since these environmental concerns and issues became more pressing, with climate change being more noticeable, change is being made and policies to enforce those changes are being implemented. This has pressured also the tourism sector in acting more green (Grazzini et al., 2018). From 2017 onwards, research regarding environmental behaviour in the tourism sector has increased significantly (Loureiro et al., 2021; Sharpley, 2000). This can be linked to the climate change movement that was gaining popularity around the same time. The more recent research states that environmental tourists as consumers are demanding a shift of values in enterprises and are asking for a change that is more focused on the pillars of the sustainable tourism industry (Gupta & Chopra, 2014; Loureiro et al., 2021). Organizations and companies are now forced to adapt to the consumer’s needs and are already starting to change their ethics and practice. Although, problems such as Greenwashing come along at the same time. Even with the increased pressure of environmentalists all over, it seems that changes are not happening rapid enough and not everyone is as motivated about these questions as it might seem at first hand.

Despite the recent increase in tourists’ pro-environmental behaviour research, the number of studies is still limited when compared to other areas of study. Consequently, TPEB is based mostly on general socio-psychological theories and studies (Dolnicar et al., 2017). However, most research made regarding general PEB has been applied to a domestic environment, while tourism is always outside of the residential area. Research regarding the relation and spillover effect between the two contexts has been lacking (T. H. Lee et al., 2013; Xu et al., 2020).

“This link is critical to establish because it is only when individuals are able to transfer their behaviours between contexts, as part of an embedded set of lifestyle practices, that it will be possible to argue that ‘sustainable lifestyles’ can and do exist.” (Barr et al., 2010, pg. 475)

Most people separate their travel behaviour from their daily lifestyle. However, having in mind what Barr and colleagues said, a sustainable lifestyle is a general term that should apply overall. It sounds strange to say ‘I am sustainable, but when I travel, I am not’. It is normal that not every day achieves the same environmental standards because of various factors, but it is important to apply an overall unified way of thinking if people wish to be coherent in their values and behaviour. But what shows to be easy in theory, clearly seems to be more complicated in practice.

Theories regarding environmentalism and sustainable tourist behaviour as a concept and its dynamics are lacking coherent and explicit understanding in the current research. This leads to complications and incoherency when trying to progress in the development and implementation of sustainability as well as in the understanding of how to change environmental behaviour in a tourism setting (Budeanu, 2007; Stern, 2000). Other than that, environmental tourism research is mainly spread in the following topics: hotel, reuse and reduce; place attachment and visitors; individual awareness; behavioural intention; nature activities-wildlife/outdoor; organization and employees’ behaviour; local community awareness; and travel transportation (Loureiro et al., 2021).

Having in mind the focus of this study, the next section will go more into detail about the definition of Tourists’ Pro-Environmental Behaviour, the different types and variables that are identified, as well as about the importance of the type of travel transportation.

2.2.1 Defining Tourists’ Pro-Environmental Behaviour

Academics seem not to agree on one definition of “environmentally friendly tourism” and “pro-environmental actions”. Consequently, this complicates defining pro-environmental tourist behaviour. Tourists have been categorised into different types of groups, yet the number of sublevels that exist or potentially can exist is what makes research regarding this topic blurry. What is the difference between an eco-tourist and an urban tourist behaving eco-friendly? Is urban sustainable tourism another type of eco-tourism or is it a subtype? And do all these classify as tourists engaging in pro-environmental behaviour? These are only some of the many questions that arise and are open to discussion when looking into more details.

Acott et al., (1998) elaborated on some of these questions and confirmed that it is possible to be environmentally aware independent of the place, you can be an eco-tourist in the city and a non-ecotourist in a natural environment. Stern (2000), López-Sánchez and Pulido-Fernández (2016) stated the importance of defining tourists based on their ‘sustainable intelligence’ for policymakers. In Table 2, several definitions of Pro-Environmental Tourist Behaviour are presented.

Table 2: Defining Tourists’ Pro-Environmental Behaviour over the years

TOURISTS’ PRO-ENVIRONMENTAL BEHAVIOUR			
Designation	Definition	Author	Year
Eco-tourist	The tourist who selects a certain travel experience and destination, that has nature-oriented experiences in a natural environment.	Eagles	1992
Eco-tourist	Members of society who have an interest in spending some of their holidays in the next 12 months increasing their understanding and appreciation of nature.	Blamey and Braithwaite	1997
Eco-friendly behaving tourist	Eco-friendly behaving tourist (also referred to as pro-environmental or green) is an individual that aims to minimize his/her detrimental impacts on the natural environment and otherwise contribute to environmental protection.	Sara Dolnicar, Geoffrey I. Crouch and Patrick Long	2008
Green tourist	An individual who is known to behave in an environmentally friendly manner when on vacation.	Sara Dolnicar and Katrina Matus	2008
Environmentally sustainable tourist	An individual who behaves in an environmentally friendly manner and consequently does not have to be reeducated when arriving at the destination. (pg. 6)	Sara Dolnicar and Patrick Long	2009
Eco-tourist	Eco-tourists are individuals who visit a natural setting and are more aware of the importance of protecting the environment and/ or more engaged in environmentally-based activities. In other words, eco-tourists differ from mass tourists in terms of the benefits they seek from nature and therefore primarily travel with the	Garima Gupta and Pooja Chopra	2014

TOURISTS' PRO-ENVIRONMENTAL BEHAVIOUR			
Designation	Definition	Author	Year
	intent of observing, experiencing and learning about nature.		
Environmentally sustainable tourist behaviour	"... is tourist behaviour which does not negatively impact the natural environment (or may even benefit the environment) both globally and at the destination." (pg. 31)	Emil Juvan and Sara Dolnicar	2016
Green tourist	" ... those who consider the availability of environmentally-friendly transportation, practices or labels as important for their choice of holiday destination and accommodation." (pg. 1033)	Martin Falk and Eva Hagsten	2019
Responsible tourist	"...looks out for the interests of both locals and tourists and is based on the notion of responsible practices in social, environmental and economic aspects of products." (pg. 162)	Omer Sarac, Orhan Batman and Vahit Oguz Kiper	2019
Pro-Environmental Tourist Behaviour	TPEBs are tourists' behaviors (e.g. on holiday) that promote environmental protection and avoid harming natural ecosystems, including selecting environmentally-friendly travel modes and products	Feifei Xu, Lei Huang and Lorraine Whitmarsh	2020

Source: own compilation

What makes it hard to define pro-environmental tourists is that the terms overlap many meanings, and to narrow them down to one all-encompassing definition is not self-evident (G. Gupta & Chopra, 2014). It seems that nature-based tourism and ecotourism literature are more carefully defined, and several TPEB research and definitions end up being based upon ecotourism literature. However, eco- and nature-based tourism are only a subset of environmentally friendly tourism (Dolnicar et al., 2008). Other researchers (Sirakaya et al., 1999; Wight, 1993) attempted to identify more all-around definitions that embrace several criteria and go further than the nature-based type of tourist (Dolnicar, 2006). Though, using a definition such as sustainable tourist might be considered too broad, as the environment is only a part of sustainability.

Several terms have been defined but it is clear that one model or all-inclusive definition seems to be missing. It is thus better to accept that market segmentation is an exploratory subject that

does not lead to one single solution but depends on each case and its varied data, resulting most of the time in different outcomes (Dolnicar, 2019).

2.2.2 Factors, Drivers and Predictors of Tourists' Pro-Environmental Behaviour~

Just like general PEB research, TPEB is also affected by many (internal and external) factors. In terms of tourists, internal factors refer to the influence individual factors have on their environmentally friendly behaviour; and external factors are about the local characteristics, local intention, tourism involvement, among others (Zhu & Lu, 2019). Particularly, patterns of values, attitudes, beliefs, norms, past and present behaviour, socio-economic, demographic, psychographic and also trip characteristics have extensively been used to try to understand the travel behaviour of the green tourist (Gupta & Chopra, 2014; Kvasova, 2015). All these factors make it extremely complex to identify and segment these types of tourists and to analyse and predict their environmental behaviour (Dolnicar, 2006; G. Gupta & Chopra, 2014).

In the tourism context, it seems that psychographic variables should be more explored considering that the other variables are more limited in explaining why people travel. Some research has examined these variables by taking a deeper look at travel motives, personality, personal values, benefits sought, travel philosophy and travel product preferences (G. Gupta & Chopra, 2014; Madrigal, 1995; Morrison et al., 1994). Travel motivations and the purpose of the holiday have shown to be strong influential factors (Dolnicar & Grun, 2009). Drivers of behaviour differ significantly with the behaviour, the actor and the context (Juvan & Dolnicar, 2017). How different types of tourism and actions have different drivers and different impacts on the environment remains an ongoing discussion (Juvan & Dolnicar, 2017; Stern, 2000).

Tourist pro-environmental behaviour (TPEB) research is mainly based upon the PEB theories explained in section 2.1, like the theory of planned behaviour (Ajzen, 1985, 1991), the value belief norm theory (Stern et al., 1999), the environmentally significant behaviour (Stern, 2000), among others. While these theories emphasise different elements and particularities of PEB, all of them are interlinked and defend that PEB is a complex phenomenon that, also when applied to tourism, is influenced by one's habits, practicalities, general knowledge, awareness of issues, priorities, and travel motivation (Juvan & Dolnicar, 2017; Miller et al., 2015). These theories have been used to study tourists' pro-environmental behaviour by various researchers separately (Esfandiar et al., 2020; Han et al., 2018; Peng & Lee, 2019) as well as combined formulations (Grazzini et al., 2018; Loureiro et al., 2021). Grazzini et al. (2018) stated that the relation between moral obligations and TPEB has been widely studied and that VBN has been less adopted in tourism compared to other studies. A new theory that is focused specifically on the environmental context seems to be a research opportunity (Loureiro et al., 2021).

Again, it is important to mention that despite the increase in studies regarding TPEB, they have mostly been focused on behaviour intention, perceived behaviour and self-reported past behaviour with research that measures actual behaviour being limited (Cvelbar et al., 2017; Dolnicar et al., 2017; Grazzini et al., 2018), and so it remains unclear whether or not all these factors influence TPEB in the same way if actual behaviour were to measure in most of the cases.

2.2.2.1 External factors

It has been made clear that the context/environment is a significant influential factor of peoples' levels of PEB. An individual feels more responsibility for a place where they live compared to a destination where they are on a holiday that is supposed to be worry- and responsibility-free. Or they feel that the infrastructure is not provided to execute the same level of PEB (Dolnicar & Grun, 2009). The emphasis lies on the fact that the individual is not in their usual habitat. It seems that the choice of destination does not seem to be directly related to TPEB (Dolnicar, 2006). In the tourism sector, a direct positive relationship between social norms and pro-environmental behaviour is identified (Doran et al., 2017; Han, 2015). Interestingly, research regarding social and personal norms analysed conjunctly as influential factors of PEB has been limited (W. Han et al., 2018).

Additionally, technology has changed the tourism sector significantly over the last few years. All-inclusive trips can be planned and booked at home by the visitor who is free to include any wish he/she desires. Also, in terms of marketing and reputation management, technology has shown to be useful. In specific, looking at social media and how this has changed the travellers' experience, more attention to this issue has been paid, and research has been widely discussed (Leung et al., 2013). However, studies remain limited, especially in regards to how practitioners can use social media to influence environmental consumers' decision-making processes. Furthermore, research has stated that social media influences one out of three travellers in their purchase decisions (Ayeh et al., 2012). However, further research regarding social media impacts on pro-environmental behaviour or intentions in the tourism sector is needed to complement these statements (Han et al., 2018).

2.2.2.2 Demographic variables

Just like general PEB, demographic characteristics, including age and gender, can be studied as the root cause of certain actions (Gössling et al., 2019; Ramkissoon & Mavondo, 2015). Since the research of PEB applied to tourism is much more limited, studies show more contradicting results. In the opinion of Ballantine and Eagles (1994), ecological tourists can demographically

be profiled as “middle-aged, educated and high-income tourists” who demonstrate an interest in learning more about the environment. According to Dolnicar and Long (2009), the socio-demographic segmentation is not significant to understand environmental friendly tourists. They suggest destination preferences, travel behaviour and willingness to pay as more reliable variables.

Nationality seems to contribute little to explaining and predicting TPEB, whereas country of residence has shown to be considerably more impactful. Mainly due to the social context and habits that are associated with a certain culture and people usually tend to adapt to the context they are in. Nevertheless, this does not take into consideration that someone might have grown up in a specific place and moved later, or someone who recently decided to move to another continent. These types of changes usually tend to need some time before someone adapts to their new environment. This adds to the complexity of external factors.

Moreover, it seems to also matter whether or not someone is living in the countryside or in the city. People living in urbanized places can feel more detached from nature due to efficiency improvements, habitat loss, and reduced workforce in natural resource-based industries (Kim et al., 2018). And so, with the increase of population in urban areas, a considerable amount of people have lost a regular interaction with nature and consequently their connection with it, leading to a decrease in paying attention to environmental issues and problems (Kim et al., 2018). Ecotourists are more likely to have a strong emotional affinity towards nature and consequently show this in their daily habits (by, for example, recycling water and waste, transportation use, willingness to sacrifice comfort, etc.) (G. Gupta & Chopra, 2014). Research states that increasing the sense of responsibility towards the environment also increases the development of pro-environmental social norms (Turaga et al., 2010).

2.2.2.3 *Internal factors*

The influence of environmental knowledge regarding PEB has been addressed in various studies where it was concluded that solemnly environmental knowledge does not necessarily lead to individuals behaving responsibly. Olga Kvasova (2015) pointed out the importance of personality traits as an influential factor of eco-friendly tourist behaviour. However, there will always be some differences that exist between individuals that cannot necessarily be explained and are most likely due to independent latent variables dependent on the context or the interindividual (Dolnicar & Grun, 2009). Emotional responses and attitudes towards nature need to be determined to be able to analyse the relationship between environmental knowledge and behaviour (Kals et al., 1999; Kim et al., 2018). Along the same lines, emotions seem to be a relational variable that is missing in most models, as well as its definition is somehow

fragmented. Emotional and psychological states include love, fear, delight, fear, pride and a feeling of awe as well as guilt, delight, altruism, memory and nostalgia (Kim & Stepchenkova, 2020; Loureiro et al., 2021; Malone et al., 2014; Wu et al., 2020).

2.2.2.4 Motivational factors

In terms of tourism, motivation is about the psychological needs for tourists that provoke and direct a behavioural action (Pearce, 2013). Research has shown a positive relationship between tourist's motivations to travel and their environmentally friendly attitudes and behaviour. Also, tourists' tourism motivation is affected by intrinsic values. When "pro-environment" is the main motive for tourists to travel, they will have a more positive attitude, compared to when tourists have "consuming nature" as their main motivational factor, their attitudes will have a more negative impact (Zhu & Lu, 2019).

Self-development, interpersonal relationships, reward building personal relationships, escape, ego-defensive function, nature appreciation and self-interest are some motivational factors that have been taken a closer look at in the tourism industry (Evans et al., 2013; Lee et al., 2014 as cited in Carvache-Franco et al., 2019)

2.2.3 Types of Tourists' Pro-Environmental Behaviour

Reducing carbon emissions can be achieved through buying locally, choosing sustainable transport modes, avoiding long-haul flights, or purchasing carbon offsets, among many other ways. Also, environmental certificates can help tourism businesses attract a bigger target audience and help tourists to choose greener options, but most people who retain a minimum of environmental knowledge rarely rely on environmental certificates to choose a certain type of accommodation or activity. What seems to be more effective in terms of environmental sustainability is minimizing or avoiding consumption of unnecessary resources and damaging behaviours, by for example avoiding taking the plane, avoiding boat- and four-wheel drive tours, avoiding plastic, avoid taking part in harmful activities, take fewer vacations, hike on designated trails etc. (Budeanu, 2007; Juvan & Dolnicar, 2017). Contributions to environmental conservation and/or preservation efforts, decrease negative impacts on the natural resources and acting responsibly during participation in recreational activities are some of the PEBs tourists can execute. Furthermore, at the destination, preserving natural resources, respecting local culture and decreasing their interference with the natural environment can be effective actions to try to minimize tourists' impact on their environment (Kim et al., 2018).

Grazzini et al. (2018) pointed out how different studies have been made to understand what encourages tourists to engage in sustainability programs. However, research seems to be unclear in how to identify and classify different types of TPEB. In general, it is possible to classify them according to the level of involvement needed, from soft to hard types of behaviour. In other words, from eco-tourists to urban tourists acting responsibly (Miller et al., 2015). Acott et al. (1998) pointed out the difference between shallow ecotourism versus deep ecotourism. Literature focuses mostly on eco-tourists and thus there seems to be less understanding of TPEB in mainstream tourism. It seems to be easier to focus on those who have a strong motivation regarding the environment compared to those who don't.

Gupta & Chopra (2014) clustered pro-environmental tourists in their study according to three different groups, namely eco-visionaries who might aid in the wildlife protection; environment conservators that may help educate the community; and wastage avoiders who might be involved in cycling events.

Miller et al. (2015), identified recycling, green transport use, sustainable energy and material use, and green food consumption as the four categories that PEB can be divided into. Important to mention is that they also explored the antecedents of these types of behaviour, namely habitual behaviour, environmental attitudes, facilities available, a need to take a break from environmental duties, and a sense of tourists' social responsibility.

Bodur & Sarigöllü (2005) grouped pro-environmental individuals in three different groups according to nine variables that indicated a pattern of PEB. The groups are (1) active concerned, (2) passive concerned, and (3) unconcerned individuals. Criticism towards this study is that the researchers did not consider different contexts which affect the reliability of the results (Dolnicar & Grun, 2009).

All these various types of TPEB differ depending on the context and the researcher. It is not surprising that again scholars do not agree on one common definition or goal. Perhaps, socio-psychological research should not be generalized, but analysed case by case.

Having in mind the research focus and question of this study, the type of TPEB that will be focused on is the relation between *Air travel and pro-environmental tourist behaviour*.

Tourism is defined by the movement of people to countries and places outside their residential area (UNWTO, 2008). The choice of transportation is thus a crucial step in the decision-making process of planning a trip. In terms of the environment, some modes of transport are considered more green than others, yet avoiding air travel seems to be the most straightforward suggestion

(Alcock et al., 2017; S. Kim et al., 2020; Loureiro et al., 2021). Interestingly, tourists who chose to reduce air travel voluntarily, are believing that their behaviour contributes to climate change and so they avoid the plane based on their ethics, contrarily to those who continue to fly and believe that they have a relatively small impact (Büchs, 2017).

Research regarding the type of travel transport linked to TPEB has had surprising results. It might seem straightforward to say that sustainable tourists tend to choose a greener option, but this does not always seem the case (Dolnicar, 2004). Several studies have pointed out that a pro-environment type of tourist behaviour is controversial in the sense that despite being aware that flying is a negative action towards the environment, they still choose to fly (Mkono, 2020).

Attitudes, norms, and behaviour-specific self-identity have shown to lead to a decrease in air travel. When looking at how values influence (holiday) air travel, literature shows that there is no direct relation and that further research regarding this topic should be made (Büchs, 2017).

Bamberg (2006) executed a surprising study about residential relocation and the study proved that when individuals move to a new location, a particular action, namely providing the new residents with a free public transport ticket and individual schedule recommendation was leading to an increase of public transport use. It was not, the provision of the ticket itself that contributed to this change. The potential change-maker is the combination of changing location with the offer of a free public transport ticket. With more research looking into this type of actions, it would be likely that the research could be applied to an environmentally friendly tourism context (Dolnicar & Grun, 2009).

Adding to this issue, Kim, Filimonau and Dickinson (2020) pointed out the importance of the increase of technology efficiency purposed to save travel time, reduce travel costs as well energy efficiency resulting in the rebound effect. Meaning that the positive effect of improving pro-environmental technology might be negated by a potential increase in consumption if people start to believe it is 'less bad' for the environment.

3 Methodology

Research regarding environmental psychology and sociology has a different type of approach compared to other scientific research. Socio-psychologic inquiries present a more complex and intertwined discourse. Having that in mind, it is important to apply the right methodological approach. In this chapter, the paradigm selection is presented, followed by the research method that is explained more in detail, namely through the population and sample method, the way

data was collected and how it was analysed. This chapter closes with the delimiting of the explored topic of pro-environmental tourist behaviour.

3.1 Paradigm selection

When exploring a topic, multiple approaches can be used to help guide the research (Strauss & Corbin, 1998). Mills et al. (2006) stated that a strong research design must be based upon a paradigm that is in accord with the researcher's philosophy and belief of their reality. The paradigm allows not only the researchers to frame its study but also supports the reader in understanding the researcher's perspective and the method in which the information is provided. A paradigm's belief is grounded upon an ontology, epistemology and methodology (Guba & Lincoln, 1994).

For this exploratory study, the constructivist paradigm was selected. Constructivism as a philosophy, in terms of ontology, is based on relativism and implies that multiple realities and interpretations are possible and that they are based on a mental construction (Guba, 1990; Jennings, 2001). It further states that individuals are allowed to be subjective, having in mind that various truths and interpretations are possible. The epistemology of constructivism, meaning how we know things, is that through investigation knowledge is established, and also that the relationship between the researcher and the participant are intertwined (Guba & Lincoln, 1994). In terms of methodology, a qualitative approach is practised for collecting and analysing data to construct the needed concepts, frameworks and ideologies (Guba, 1990; Jennings, 2001).

The paradigm is not only a philosophical tool that is described but this perception is applied to the entire study, including the research question. The formulated research question allows for multiple realities and outcomes to be explored and does not aim to define one outcome but to critically assess, question and contribute to the ongoing or to a new discourse. Constructivism further entails that the researcher accepts that the paradigm selection can be questioned, considering how reaching one all-encompassing type of conclusion or resolution of our view might be somewhat ambitious (Mills et al., 2006; Osborne, 1996). The research method allows for students to construct their own perceptives by acknowledging them as active learners that are capable of developing knowledge (Stauffer et al., 2006).

Criticism towards the paradigm is aimed at the fact that this view focuses strongly on the social and psychological elements and leaves out a more detailed analysis of the natural environment (Osborne, 1996), which in this study is presented as a main focal point, even though it is human behaviour that is being analysed.

3.2 Research Method

When looking at the existing research regarding PEB, most studies used a quantitative method, specifically surveys made to understand people's perceptions about environmental issues and how they act towards this, compared to a very small amount of research that preferred qualitative methods (Loureiro et al., 2021). There is a high level of variance in this type of method which complicates the generic knowledge about this topic. Nevertheless, it seems that interest in qualitative research in the tourism industry is growing (Mars et al., 2016).

A qualitative research method allows to discover new truths through the perspective of an insider and to understand how the population perceives the meaning of a particular concept and how they perceive the experience without understanding the underlying facts. It allows the researchers to look at all these elements as pieces in a broad view and thus providing a more holistic comprehension. Qualitative methods have been applied extensively to various scientific areas of Socio-Psychological research. However, regarding Transportation Planning and Engineering, like travel behaviour, it is still more common to find quantitative approaches (Mars et al., 2016). Quantitative approaches have been preferred in tourism research, as they at first hand seem to portray a more scientific and objective method, contrary to qualitative research, where researchers sometimes find themselves in a position where they feel the need to prove that their research is solid enough (Decrop, 1999).

For this study, a qualitative approach was purposefully chosen. Human behaviour is rather difficult to measure, analyse and generalize, considering the significant number of elements that influence it and need to be taken into consideration when dealing with social and psychological related topics. This determines the research method and has also influenced the way the data was collected and analysed. And so, a qualitative approach reveals various advantages, like, opening up a discussion where different values of truth (Krefting, 1991) arise and where sharing experiences lead to new elements of the research, that might not have been taking into consideration if a more strict and objective measurement tool was used. This allows for the creation of new theories or the inclusion of new key elements in current frameworks as well as to draw a conclusion that can contribute to a more all-inclusive framework regarding pro-environmental travel behaviour. Nevertheless, to be able to draw generic conclusions from this study, a bigger sample is needed, or more research based on actual behaviour must be made to confirm or disagree with what is analysed in this study.

It is important to mention that the research made is part of an exploratory study. Exploratory studies have been increasingly advocated in social sciences, especially when addressing an already studied topic from a different perspective. In this case, actual behaviour is being

addressed, having in mind potential new elements that need to be included in the overall frameworks (Mason et al., 2010). While in the field of tourism, this type of research has been insignificant. This is mainly due to the “lack of guidance on how to conduct such research” (Mason et al., 2010, pg. 432). Explorative study aids to investigate a problem, however, it does not lead to definite conclusive results.

3.2.1 Population and Sampling Method

The survey population was delimited in function of the research question “what incentivizes tourists that intentionally and assuredly acted in pro-environmental behaviour” and of a type of actual behaviour that relates to the question, namely ‘people who decided to decrease or stop flying for environmental reasons’. This is a high-effort, high-impact group and it seems that literature has not focused significantly on the motives that underlie this type of profile. Learning from those who have succeeded to change their belief, attitudes, and behaviour in favour of the environment might lead to new values, theories, and frameworks that can help to better understand and develop the gap between knowledge and behaviour.

Data regarding those who fly and those who do not are not exact. Statistics are based on predictions and are not always reliable. In 2020 it was estimated that 3% of the global population takes a flight regularly (Timperley, 2020). Reliable statistics regarding those who flew and have now decreased or stopped flying are more complicated to find, or just non-existing. Due to the ongoing situation, organisations all over the world have arisen to offer a means for people to officially ‘pledge’ that they have decided to stop flying for environmental reasons. The pledge is worth for the duration of one year. The Flight Free World organisation has 10423 pledges registered in 2021, until today, (World, 2021). This number however does not include people who have made the vow ‘unofficially’, and it also does not consider people who decided to decrease their consumption, neither is the difference between travel motivations stated.

Having in mind that most authors agree that demographics are of lesser importance when it comes to explaining pro-environmental behaviour compared to factors such as knowledge, values and attitudes (Laroche et al., 2001), it is not necessary to delimit the population of the research by nationality or continent, yet research did show that the country of residence might be of more importance. In terms of gender, it seems that women are keener in engaging in a pro-environmental lifestyle (López-Mosquera et al., 2015; McFarlane & Boxall, 2003; Trivedi et al., 2015; Vicente-Molina et al., 2013).

The survey sample must represent the population in terms of characteristics and composition (Altinay & Paraskevas, 2008) but when it comes to qualitative data collection and analysis other

factors can be taken into consideration. For example, sample sizes that are overall relatively small are determined by the saturation point, when no new data seems to be introduced that is of relevance for the study objective. A non-probabilistic method was applied, in specific, a combination of the purposive and snowball technique. This means that the participants were deliberately chosen due to some characteristics they hold (Ilker et al., 2016), namely that they decided to decrease or stop flying for environmental reasons. The snowball technique was applied as by getting in contact with a couple of interviewees through acquaintances they were able to put me in touch with others who complied with the requirements (Mason, 2002). With the above in mind, a total of 19 semi-structured interviews were made until the saturation point was reached.

The 19 interviewees were composed of 13 women and six men, with an age range between 20 and 63 years and all currently residing in a European country. More details about the interviewees' demographics can be seen in table 3. Regarding ethics and protection of personal data, the interviewees gave their oral consent to be audio recorded and anonymously quoted. This question was asked before each interview started; no interviews were conducted if the participant did not wish to be recorded. They were informed that the data collected would be used only for the purpose of this study and would not be used for any other reason.

Table 3: Defining the population sample

Sample								
Total	Gender		Age		Nationality		Country of Residence	
19	Women	13	20 to 25	8	Belgian	8	Belgium	8
					French	3	France	2
			26 to 30	6	Portuguese	3	Germany	1
					German	1	Portugal	6
	Men	6	31 to 40	3	USA	1	Switzerland	1
					Italian	1	The Netherlands	1
			Above 60	2	Dutch	1		
					German/ Spanish	1		

Source: own work

3.2.2 Data collection

A qualitative research method can be executed through primary and secondary data collection. Primary data is new data that is collected for a specific research topic and secondary data is a compilation of peer-reviewed data gathered by other researchers (Patton, 1990). In this

dissertation, a mix of both methods was used in a non-systematic search approach. Primary data was collected through semi-structured in-depth interviews and complemented by existing secondary data that is mainly derived from online journals and newspapers. Secondary data was used as the basis of the literature review, primary data was used to complement the existing research and is presented in the analysis. The in depth-interviews consisted of unprompted, open-ended questions where the interviewee was free to express their own opinion, without there being a 'true' or 'false' answer to the question. In this sense, both their opinion and feelings regarding the topic were expressed and consequently analysed. By implementing a semi-structured setting, it is guaranteed that there is a consistency between the research objectives and the data collection while allowing for new truths to be unravelled Braun & Clarke, 2006).

The 19 interviews were conducted in a period of more or less one month and for practical reasons were made in English, Dutch and Portuguese, according to which language was easier for the interviewee to speak. After around one hour the interview would usually hit a saturation point, as no new relative information would come up, allowing the discussion to come to an end. The saturation point is thus theoretical and not based upon statistics (Nico et al., 2007). 17 out of 19 interviews were conducted via the online platform Zoom, while two interviews were conducted in person. All interviews were audio-recorded and afterwards transcribed in the original language to facilitate the process of analysis.

The main questions were pre-designed to guide the conversation during the interview and to make sure that the interviewee was directed to the right topics that needed to be discussed. Follow up questions were also included in the interview preparation. After data collection, it was possible to categorise the questions into the following different themes:

1. Understanding of environmental perception, knowledge and attitudes of tourists who avoid air travel
2. Understanding how tourists – who avoid flying – travel
3. Understanding of other types of Pro-Environmental Behaviour tourists who avoid air travel execute
4. Understanding the process of tourists who decided to avoid air travel
5. Understanding the internal factors that encourage tourists to avoid air travel
6. Understanding the external factors that influence tourists who avoid air travel
7. Understanding how the crisis situation of 2019 affected tourists who avoid air travel

3.2.3 Data Analysis and Presentation of Results

Grounded theory together with content analysis was used as analytical, methodical tools for this research. Both tools share similarities in that they both are based on naturalistic inquiry when identifying themes and patterns (Cho & Lee, 2014). Through the combinations of both these tools, the data collection and analysis are interconnected and are usually happening simultaneously.

Grounded theory has been growing in popularity in tourism research (Matteucci & Gnoth, 2017) and can be used as a method or methodology (Cho & Lee, 2014). Grounded theory allows for a socio-psychological research phenomenon to be interpreted and studied through various perspectives and to generate a new theory or contribution of the chosen topic. These new theories are based upon information that was obtained and analysed systematically and comparatively, and then explained descriptively (Nico et al., 2007). Through this process of induction, new categories might be discovered and consequently analysed. Using semi-structured interviews is therefore not uncommon in a grounded theory perspective, as these two methods combined allow for new categories and themes to be explored and introduced in the existing literature. Grounded theory allows for a constant comparison of data in the form of statements, stories and incidents that are compared with other similar data, it is usually a cyclical process (Matteucci & Gnoth, 2017). It is not very common to find grounded theory as a data analysis tool in combination with a constructivist research paradigm, but research has proved that they can be a fitting combination (Levers, 2013). Loureiro et al. (2021) recommended that more research should be encouraged to use grounded theory as an analytical tool.

Content analysis is a method that allows to analyse and evaluate observational research content of all forms of recorded communication in a systematic mode (Kolbe & Burnett, 1991). In this case, the transcriptions (texts) of the interviews were used as analytical content. This type of method further allows for patterns, characteristics, themes, among others to be identified. The data is then consequently presented through quotations extracted from the interviews.

Six interviews were conducted in English and thus no meaning will be lost in translation. Of the other interviews, three were conducted in Portuguese and nine in Dutch. The interviews were analysed in their original language and only direct quotations are translated in the most objective way possible. The original language will always be indicated. All interviews were transcribed and attached to the study to guarantee the validity of the findings.

3.3 Scope Delimitation

It is important to specify and delimit the focus of this study so that further research can be based upon the same elements and no doubts, contradicting interpretations or wrong conclusions are drawn. Especially when dealing with very broad and vast topics such as environment and behavioural change. Nevertheless, as this study was written from a constructivist perspective perception, the definition or descriptions provided of TPEB remain open to interpretation.

The concept of sustainability is built around three pillars: social, economic and environmental. This study is based on the environmental pillar of sustainability. ‘Environmental’ can refer to a broader perspective that touches also upon the social and economic factors of tourism, which evidently are always interlinked. When ‘environmental’ is mentioned in this study, it is linked to environmental issues that affect the climate, including natural areas, zones and areas of activity we are surrounded by, and not the broader sense of ‘environment, like the social environment someone can find themselves in. This does not mean that the importance of the social and economic aspects is not high and that research should not look more into how they correlate from a more all-inclusive perspective. And although they are still inevitably touched upon, there is no need to go into details, as it would not contribute to the bigger picture of this specific study.

Different wordings of ‘Pro-Environmental Behaviour’ may be used, such as environmentally behaviour, sustainable behaviour, green behaviour, ecological or eco-behaviour, environmentally concerned behaviour, environmentally significant behaviour, environmentally responsible behaviour, but they all refer to the same concept.

PEB is influenced by so many different factors and types of attitudes, actions and behaviours, it would be unrealistic to try to take all these different factors and actions into consideration for analysis. Accordingly, only the specific action of trying to decrease or stop flying for environmental reasons is taken into consideration when ‘actual behaviour’ is mentioned in the analysis and discussion. Nevertheless, since semi-structured interviews based upon a grounded theory were applied, different topics were also touched upon that might not be directly related to ‘decreasing or stop flying for environmental reasons’ but that indirectly contribute to engaging tourists’ in pro-environmental behaviour and thus still had to be taken into consideration. Another delimitation regarding this topic is that ‘decreasing’ flying habits was not defined in detail and thus variations of interpretation of this action were included and analysed. This means that also those who just decided to decrease flights for environmental reasons are considered qualified participants. This consequently adds to the overall perspective of this action that consists of different levels of engagement and involvement. Everyone needs

to start somewhere and so, at first hand, some might not seem environmentally friendly, yet do classify as a 'right' candidate who fulfils the needed requirements, consequently contributing to the more holistic topic of behavioural change.

4 Results

Of the 19 interviews made, all participants were identified as individuals who decided to reduce or stop flying for leisure activities or to go on holidays. This was the only requirement and the partakers were aware that the interview was going to be regarding this subject. This chapter provides some examples of the most important information regarding environmental knowledge, perception and motivation, internal and external factors that were shared during the 19 hours of recorded conversations.

4.1 Environmental Understanding

The first part of the interview helps to understand what is the environmental knowledge, perception, attitude and general awareness that the interviewees hold as well as how they inform themselves.

4.1.1 Environmental Perception

Almost all interviewees stated environmental issues and climate change to be one of the biggest problems humanity is facing nowadays and that is not reflected in society yet: "Thinking about the environment and the climate is one of the most difficult exercises we will have to do in the next decades. [Translated from Dutch]" or "But I think climate change is actually going to be the thing that impacts us all the most." and "That it is going in the wrong direction and that it is not yet seen as the biggest problem we have today [Translated from Dutch]", also "My perception is that it is still not taken seriously enough [Translated from Dutch]". They sounded very alarmed "Because climate change is probably the biggest challenge of our generation."

A couple of the interviewees believe that environmental awareness is growing steadily in our society and that most people have become aware of what is going on, "Saying to someone you're vegan or you're not flying... It's not that you have to explain them. They know, maybe they question it but they know why." And "Five years ago, saying that you want to go abroad, all the time, was not a problem. And now you feel that people try to justify themselves or are trying to find other ways to travel." Other interviewees complemented these statements by saying that infrastructure is being adapted as well as policies are being implemented and so change is coming whether people want it or not.

Another common statement among the interviewees was that they do not necessarily mind other people living a less sustainable life, but that they need to be aware of it “It's just about being aware of what the effect of your actions is and then in an informed way, making your choices. [Translated from Dutch]”. Most of them do not point a finger at anyone and respect other peoples' choices “I don't believe in blaming individuals. Then we are just arguing and there is no point. [Translated from Dutch]”

4.1.2 Environmental Knowledge

Nine of the interviewees choose to deepen their knowledge by choosing an environmental-related study area or job. This has had a profound impact on their environmental knowledge.

When asked about their environmental knowledge, what was most mentioned was that there are plenty of issues currently contributing to environmental pollution, this involves big corporate companies that need to change and policies that need to be implemented, especially fossil fuels are named to be the cause of many problems, also in the tourism industry. But that there are some actions individuals can execute.

When asked about how tourism and environmental problems relate, the answers were very similar and most interviewees commented on how tourism is impacting the environment and destinations and how plane travels are one of the biggest contributors: “Well, I think that travelling by plane has a very big impact. [Translated from Dutch]” and “Yes, the fuel is very harmful. I think, especially regarding airplanes. [Translated from Dutch] or “The most obvious impact is on the type of transport used, in this case, the plane, which is a very polluting type of transport [Translated from Portuguese]”. Also, the non-environmentally friendly behaviour of tourists during their travels was mentioned: “I think that for some people going on a city trip is often linked to not making environmentally friendly choices. [Translated from Dutch]”

4.1.3 Environmental Attitude

When asked about environmental concerns and perceptions they explained a bit how they position themselves regarding these issues. The following statements exemplify:

- “I think I try to live my life to not solve the problem, because I know I can't solve the problem. I try to be better like, I'm vegetarian, I work on a farm. So, because I think it's important.”
- “I try to change things in my life. Like to be better about this subject. Because I feel very concerned about it.”

- “Very committed. That's the first thing and I think it's one of the most important problems we face in this day and age and I fear for quite some time to come.” [Translated from Dutch]
- "I do try to keep my impact as small as possible myself because I do think there's power in those little things that you can do as a consumer. ... And I also just try to do my best. [Translated from Dutch]”
- “I've been working on it very actively for about five years, to keep my emissions as small as possible or keeping my carbon footprint as small as possible.” [Translated from Dutch]

Nine interviewees chose an environmental-related study area or job. This reinforced how they are trying to dedicate themselves to these issues not only in their personal life but in an overall perspective:

- "... pretty concerned about that. About the state of the Earth in general, and so including environmental issues and so we do try to engage with it, both in our free time and in our work. [Translated from Dutch]”
- “I studied biology, undergraduate and now I'm doing my master's in marine ecology ... These are topics that interest me a lot so I always have to be informed about these things. [Translated from Portuguese]”
- “I'm very much concerned. I did studies in biology, but also in ecology. So I know a bit about this issue. And I think I would say that I'm trying to fight against this. I'm also involved in some associations. I am pretty scared about this question. So it's something that really matters in my life, and I'm really taking it into account in my daily personal life.”

Other reasons mentioned regarding environmental attitudes were related to the love they feel for hiking and nature, and how this creates a closer connection to the natural environment: “I am aware of climate change because I can feel it when I'm going hiking. Because in the mountains, in the glaciers, there you can feel it.” and “Then I also joined the Scouts and I had a phase of my life very much connected with nature.”

4.1.4 Source of Information

The interviewees were asked about how they find information regarding environmental issues and if this type of information is provided by governmental institutions and if not, how they inform themselves.

Asides from the people who have studies or jobs related to these issues that provide them with updated information daily, the opinions were divided. Some stated how they needed to look up the information themselves because it is not present in society “I think that the government is

not properly informed about it because there is a lot of advertising on the Internet about flying. [Translated from Dutch]” and “This is mainly information that you have to look up yourself. [Translated from Dutch]” while others, stated that you can find the information in the media, but that it is something you need to show interest in “If you are interested in it, you can find the information very easily. [Translated from Dutch] ” and “The fact that a concept like flight shame even exists says a lot. [Translated from Dutch]” is proof that the topic is growing in media. “So you are informed, or at least more than you used to be, I have the feeling it is growing. [Translated from Dutch]”

Mostly the younger interviewees stated that they were concerned with environmental issues already in high school and that this impacted their current lifestyle “I do remember that in my secondary school, we talked about this during natural sciences. And because of that lesson, I started thinking about eating vegetarian and doing so [Translated from Dutch].”

Other sources of information mentioned a couple of times were that they “inform themselves through the people they are surrounded by”. The interviewees mention also several times “a green bubble” they find themselves in: “Also the bubble I am in because I have a lot of people who are into environmental studies and so on.” Also mentioned was how they gained information regarding sustainable travels during their trips: “I learned a lot of this just by travelling” and “Actually, my environmental activism started during travelling because I had an internship abroad.”

4.2 Travelling environmentally friendly

An important part of the conducted interviews was dedicated to understanding how the interviewees travel with a pro-environmental attitude. Several subtopics arose and were repeated frequently such as accommodation, type of travel and destination, the choice of transport, influential factors such as time and concepts like slow tourism and individual factors including identity, among others.

- Regarding the sense of identity, all men were very clear in this and affirmed it is part of their identity: “Yes, completely. It is part of my meaning, the meaning of my life.” or with a simple “yes”, besides from one who stated that “No, it doesn't feel like that to me. It feels more like a rational choice [Translated from Dutch]”. Other opinions were unclear whether or not they believe that behaving environmentally is part of their identity: “But whether that is really part of my identity, I don't know. They are kind of principles that I have and that are also rather difficult to maintain [Translated from Dutch]” and “Identity maybe not but it is a characteristic of my behaviour [Translated from Dutch]” “I hope not, but a little bit

[Translated from Dutch]”. Some were very certain: “Yes, without a doubt, I’m that person that if I see rubbish in the street I’ll pick it up and I don’t care if it belongs to others or not [Translated from Portuguese]” or “Yes, without a doubt, it’s really part of my identity and one of the things my friends always joke and make fun of [Translated from Portuguese]” and “For my friends, I’m like the ecologist, the one who cares about that stuff, the vegan”. With a couple of them stating they don’t like the “label”.

- A topic that was not included in the questionnaire but arose in the majority of the interviews was slow tourism. Which is a concept that includes “long journeys and you need the time for that too, of course”. Most of them prefer this type of travel which is “not that stressful” and “more sustainable”. And since some are a student or others have “smart contracts” they can take more time off to go somewhere, but it makes it harder “to find someone who thinks the same way and wants to get as much out of it” to go along. So some of them stated that they travel alone a couple of times: “Sometimes I also travel alone if I have a specific plan because it’s hard to try to find people to travel with for a long time.”
- In terms of accommodation, more or less half of the interviewees stay in campings. Some because of “price”, others because of “nature” or because they “like it”.
- The interviewees travel mostly by train, followed by the bus, car, bike and hiking. Most interviewees do not own a car, some rent electric cars when they decide to drive. The train is the most popular type of transport and although some people can benefit from discounts, the elevated price is mentioned as an inconvenient factor: “I start to watch the train first, and most of the time I take the train but sometimes it’s too expensive or too complicated.” Other than price, important factors are “comfort”, “duration of the journey” and “environmental impact”.
- When looking at the type of travel and destination the interviewees choose, they seem to have a relatively coherent and similar pattern. Since most of them do not fly or exceptionally, they have mainly decided to travel in Europe, a destination that is relatively easy to access. Within Europe, they stay more in Central Europe, as more time is needed to go more to the East, having in mind most participants are located in either Portugal, France or Belgium. A famous destination seems to be France and “staycations” to go “on a hike” or “into nature”. A couple of them mentioned going on a “road trip” or “city trip” for future travels. The older interviewees mentioned how they prefer staying home if they do not have a particular destination in mind that they want to see, or if they do not have enough time because “ten days is not long enough”

- It seems that travelling with other people does not necessarily influence their TPEB: “I think in general my friends there are a bit on the same page [Translated from Dutch]”. Most of them travel either with friends who have more or less the same ideas, or a partner that shares the same values. Those who do travel with less sustainable people agree that sometimes it is necessary to compromise but most of the time it is about respecting each other's choices: “It's like this, I don't adapt in the sense that I'm not going to leave my environmental values because others don't do it, but I also don't force anyone to adapt to what I think is correct, I respect everyone and that everyone takes different decisions concerning the environment. [Translated from Portuguese]” or “I do have a group of friends with whom I travel and they dare to not sort things out and I find that difficult sometimes. I try to influence them but it doesn't always work [Translated from Dutch]” and “Neither I influence them nor do they influence me, each one assumed their own practices and respects them. [Translated from Portuguese]” or in some cases “I go by bus and they go by plane.”

4.3 Other types of Pro-Environmental Behaviour

Although the type of transport is the main topic, the interviewees showed extreme interest in other PEB during their travels as well as at home and stated to try to have the same type of behaviour and actions. However, it is not always possible on a holiday as the context would not always allow them “In some places, it was hard for me to know where to buy things”.

Other PEB that were mentioned are “avoid plastic”, “less water and energy consumption”, “I try to cook a lot and I don't like to buy processed food”, “what is important to me is what is in the package and not how it is packaged”, “I do everything on foot when I am in a city”, “not eating meat”, “buy local products”. Also, technology was mentioned as an upcoming unsustainable action “the data storage for our internet is also very harmful to the environment [Translated from Dutch]”. Most of them are aware that their impact increases during their holidays “So I continue to do it when I do tourism, sometimes it is more difficult, for instance, avoiding plastic.” and “I consume more, and I have more impact when I am doing tourism than when I am at home, but I still do my best to take care.”

I asked the interviewees if due to decrease or stop flying, they perhaps compensate in other less sustainable behaviour since they already avoid a big impact on the environment. The answers were divided. Some stated that they apply their values to their entire lifestyle and on different aspects: “It is just an intrinsic motivation that I want to do my best in all these different aspects. So I don't have to combine one with the other.” And “Oh, yeah it doesn't stop. All the consumption decisions I take, I try to make the ones that have the least impact on the climate.” Most of them engage in PEB because of personal choice: “I do what I want, I am a free person,

so I don't think I need a reward for something that comes from my initiative and that I enjoy and care about, so I don't think I would compensate in any way with other things.” Others did admit to having a feeling of compensating once in a while: "I've been living super green all my life so I can take a bath for once” and “I would like to say I wouldn't, but yeah, definitely” or admitted that they do not necessarily keep the same green habits on a trip “I guess honestly, no.” Having in mind “availability” and that “a lot of things are not that difficult to do but you just have to look it up a little bit and then it turns out that you can do it with a reasonably small effort [Translated from Dutch].”

To better comprehend the interviewees and their reasons for not travelling by plane or decreasing flights, I asked them if they feel the same type of satisfaction from other PEB compared to flying. The answers were divided: “I know better the type of impact I have when I do fly, and when I don't fly I don't contribute to it” and “I think I just do the best I can, but I don't think [I compensate] because I haven't flown for a year, that's not consistent either [Translated from Dutch]” compared to “I did feel kind of accomplished, more accomplished than recycling which is a daily habit” and “Because flying does have a huge impact, there is a kind of pride involved. [Translated from Dutch]”. Others expressed they feel the same type of satisfaction.

4.4 Becoming Green

The environmental behaviour interviewees engage was most of the time the result of a process: “It was more of a process, little awareness-raising events [Translated from Dutch]” and “I think it was a conversation I had with more people”. In this topic, we can subdivide the conversation into past environmental, current and future prospects of their PEB lifestyle and past, current and future prospects of the specific action of decreasing or stop taking the plane.

4.4.1 Past, current and future pro-environmental habits

Regarding the process of becoming more pro-environment, most interviewees mention how it started with their parents who would educate them regarding those issues “I was brought up that way, my parents are both vegetarian and my mum is also very freaky with leftovers and sorting and gardening, in terms of biodiversity. [Translated from Dutch]”. For those whose parents were not that influential, they started to think about these issues at a later stage, between 20 and 25 years of age “No, I had no notion when I was little until I was 20 [Translated from Portuguese]”. Also, because a lot of participants became more aware due to their (university) studies “when I started doing this master degree is when I started to get aware of it.” Some participants also state

how they started to get more aware because of all the travelling they had done, “It is also true that I have been travelling for a very long time [Translated from Dutch]”

Regarding prospects of their pro-environmental lifestyle, those who are still more at the beginning of their process show more concern in growing “I would like to still grow in those aspects [translated from Dutch]” compared to others who state that they are “not perfect” but that they do their best and that it is also about “balance” and not judging yourself when you do something less green.

4.4.2 Past, current and future of flying habits

Regarding the past behaviour of some of the interviewees, particularly, it was mentioned a couple of times how when growing up they did not travel (or very little) by plane with their parents, not necessarily because of environmental reasons but more because they could not afford it. Others did fly a lot as a child “I used to fly a lot as a child with my mum and my dad. [Translated from Dutch].”

The majority of the interviewees stated how it was a relatively slow process for deciding not to take the plane but, once the decision was taken, it was very drastic in the sense that they stopped from one day to another. “From the moment I received this information, I could not remain indifferent and felt that I should act according to what I think is more correct [Translated from Portuguese]”. This is probably due to “I think I was able to change my behaviour so quickly because I was already doing it in many other areas of my life [translated from Dutch]”. Some of the interviewees have not flown for 4 or 5 years. Regarding the decisive moment of deciding on this action, it seems that several interviewees came to this conclusion because of either their trips “When I returned, I decided to immediately change my lifestyle [Translated from Portuguese]” or because they calculated their environmental impact on a site where flying was stated as one if not the most impactful action: “My sister showed me a website where you can count how much CO² you use per year. She explained to me how even if you walk or go by bike in India for two weeks, you use more petrol than a person that goes to work by car every day.” and “I looked it up, what were the actual numbers in pollution.” The feeling of “guilt” also seemed to contribute significantly to the decision-making process “I felt so bad about it”. Interestingly, most interviewees do not like taking the plane in general, they describe it as “stressful”, “uncomfortable”, “time-consuming, if you take into consideration you need to be there a certain time before [translated from Dutch]”, “packed” and “unpleasant”.

Regarding the future prospect of their flying habits, not one interviewee stated that they “will never fly again”. Most of them do not exclude this from their future. Some stated they still have

a specific trip they want to do that requires a flight because of the distance “I really do want to go to Canada at some point, but it has to be for a longer period and it needs to be well planned”, others mention wanting to travel with their kids in the future “But if it ever comes to it with my children later, I want to pass on that message and make sure it doesn't become an annual trip. [Translated from Dutch]”, the most important message in all cases is that the individual who travels is aware of their actions and the impact these have. Most of them do not wish to travel by plane for leisure but they do mention if there is a specific event they will analyse it carefully and decide: “And then I always try to find a balance between what I want to achieve and what is the impact” and “As a PhD student, I might have to take part in meetings and conferences, but I hope I won't have to take the plane.” Or “A friend of mine got married during a period I had very little days off [Translated from Dutch]” or very extreme cases “In case a family member dies, I would consider it” so “if there's not a clear reason, then I won't fly”. There were a couple of interviewees, who stated they would still consider a low-cost flight “It depends on how difficult it is to get there by plane but I would consider it”.

4.5 Internal Factors

In terms of internal factors, several motives and motivations came up that incentivize these individuals to live their green lifestyle and to avoid taking the plane. The conversation was divided into the motivational factors for a green lifestyle, the motives for not taking the plane, individual values and norms and economic motives.

4.5.1 Motivation for a pro-environmental lifestyle and for not taking the plane

Some motivational statements for a pro-environmental lifestyle that complement all the previous motivation are presented and can be categorised as follows:

- To stay consistent with my personal values: “That wouldn't fit with my values because, as I said, I deal with that in different aspects of my life [Translated from Dutch]”; “Yes I think just to stay consistent in my principles. I am a very principle-driven person and I am proud that I can not fly and be sustainable and that it is not at the expense of a nice trip or a nice time”; “I have a lot of motivations I can mention but that in the end are related to if I don't act for this, I feel either sad or useless”; “I know I do a lot of things, just for me, so I can't blame myself. [Translated from Dutch]”; and “Because I am really convinced that my contribution does help, even if it is nothing, I couldn't live with myself if I don't live climate- and environmental-friendly. I feel good about that.”

- You don't have to go far to see beautiful things and relax: "this feeling of I have to see lots of countries and I have to travel, I don't have it anymore, because you don't have to go super far to feel on a holiday and feel relaxed"; "I think if you start to do it, then you'll realize beautiful things are not too far. You realize that there are other types of transportation. When I'm travelling by bike, three hours from home, I don't feel like I'm missing something"; and "There are so many beautiful places nearby that are easy to get to"
- To contribute to something bigger and preserve the planet long-term: "I am not really considering other forms of life. I just think it's important that we leave the world for the other generations to come and that we don't spoil things. It feels better, it makes me happier and I feel that I can contribute something and yes, burden the earth as little as possible, even though I live in the Netherlands and therefore already have a fairly large impact." and "The fact that I contribute to something bigger ... because that's all we have in the long run, our earth and all the rest doesn't really matter, that's really the priority [Translated from Dutch]"; "I think the climate is our biggest problem because otherwise, we might just not be here anymore. Then we won't be able to live on this earth. And that is not a maybe but a certainty"; "It is wanting to continue on this planet with all its species and everything good about it, for me, for my children and for all the generations to come, it is preserving and maintaining the species [Translated from Portuguese]", "I wish the world could live a little longer, I do. And I also have children, they are people of your age, you are going to live longer than me [Translated from Dutch]"; and "I think a person makes a difference, it may not be for everyone, but it can always be for someone or something [Translated from Portuguese]".

4.5.2 Personal benefit

I asked the interviewees if they feel that this green lifestyle, including avoiding flying, contributes to a personal benefit. The biggest response was that it gives them psychologically and "morally" "a good feeling" and "mental rest", they find it "fun to do" and "very pleasurable" also "it allows me to sleep at night with a rested heart", "it makes me happy", "to keep my conscious clear", "to feel better about myself", "I feel more balanced with myself and with my own ideologies", "To be able to sleep at night and to look myself in the mirror and to be okay with my principles." as well as "it gives me a little peace of mind". In terms of travelling, "it's more fun", "it makes me feel calmer" and it "makes me feel less guilty. They also state that those feelings are what motivates them to have this lifestyle on a daily basis "I think that is also the most important thing, to keep on enjoying something and that it fits who you are".

4.5.3 Individual impact

What is important to mention here is how most interviewees argue that change should be made by governmental organizations and how top-down approaches are the main way to finally attack climate change and other environmental problems. The responsibility lies with “those companies, mainly, but also among consumers [Translated from Dutch]” also “I don't want to deny people their holidays at all, but a different policy is needed that gives other opportunities [Translated from Dutch]”. Further “the changes we need, need to be more structured. It has to come from the politics and the big companies and not from individuals like me.” And “Even if everybody tried to do the best, I think it's not going to solve the problem because it's a global issue.” Or “I think you can't really put the blame on just the consumers”.

However, this does not take away that, for them, individuals should be part of the solution. Individuals should change their behaviour, especially because in the future we will be forced to adapt. And interviewees point out this importance “If the whole population is not supporting it, it doesn't make sense if there are any regulations” and “I think you can't ask other people to do it if you cannot do it yourself”. The two main elements in terms of the individual impact that they pay the biggest attention to are “stop or decrease eating meat” and “the mode of transport you choose”.

In general, none of the interviewees judges other people who are less environmentally friendly, they point out the freedom to choose to live the way you want “Because I also don't think that everyone should live like me if a large proportion of people make an effort, that's already something. [Translated from Dutch]” and “I do what I do for me and I wish everyone could do it for the world, which is good, but it doesn't affect me, I don't react either positively or negatively [Translated from Portuguese]”.

Also, publicity was mentioned a couple of times and how “it should be used to advertise already existing public transport programs that are cheap”. Also a “flying tax”, “good infrastructure” and “subsidizing the train and bus companies and raise taxes on carbon dioxide” were suggested a couple of times.

4.5.4 Economic motives

I asked the interviewees if they feel their lifestyle, including travel, is more expensive compared to a less sustainable lifestyle and trips. Most interviewees stated how the price of other types of transport is significantly higher compared to the airplanes: “Yeah, with transportation it's visible” and “Yes, it can be a bitter pill to swallow, but you just take it as a given”. Some stated

how this is sometimes a demotivating factor yet they try to compensate and save on other things like “consuming less”. Others said that the train can be expensive but that “there are a lot of options people do not know about” and “interrail is not expensive at all if you are younger than 27”.

Others stated how in terms of travelling it definitely “doesn’t have to be more expensive” because for example, “with a tent you don’t have to pay for accommodation”, “with a bike you don’t need to pay transport” and “if you cook your own food, you can save a lot of money”. Compared to “you can also travel to Thailand for two weeks and spend all your money there on food and expensive accommodation”. Contrary to some who stated that if they would travel by plane, they would look for the cheapest option as well so it might be cheaper “Because if I were to take a plane, I would also look for the cheapest flight of the day [Translated from Dutch]”. It seems to also depend on the type of travel “I have a simple way of travelling which costs almost nothing.” and “If you try to travel the same using trains then definitely it will be more expensive.” The factor of time also plays a role sometimes “That's also something, I can take more time to travel because I can afford it. Because working time is also money.” and “But I am sure that there are cheaper alternatives, but you just have to do a lot of research, which takes time [Translated from Dutch]”.

When the topic would come up, almost all interviewees stated how they believe that the prices of the flights are not politically correct and how prices of public transport should be lowered. Nevertheless, opinions are divided, some of the interviewees state how although the flight prices should be higher, they do not agree with an increase because it involves restricting people with a lower income and benefitting the rich: “I was thinking rather that it should be made more expensive but the disadvantage of that is... that those who have money and are rich benefit [Translated from Dutch]” and “But at the same time I don't want to make flying a luxury because then it becomes mega exclusive again. I think it's just important to make the other alternatives cheaper, like the train or the bus [Translated from Dutch]”.

In terms of a daily green lifestyle, the answers are very divided. Some interviewees do find it more expensive at the moment while others say you make “more investments” that pay off long-term and that it is also “about prioritizing the money principles”.

4.6 External Factors

During the interviews, some external factors that influence their motivation came up. It is possible to identify social media, social norms and culture, including social pressure.

- Social media was another topic that initially was not very elaborated. However, interviewees, especially the younger ones, stated how this relatively factor can be quite influential in a positive way because it helps to find new information such as where to shop, go on a hike or travel: “When I was in the process of taking more green steps, I used to follow a lot of blogs [Translated from Dutch]”. And “Yes, especially on Instagram I often see videos of sustainable living or package-free shops, which has influenced me in a very positive way [Translated from Dutch]”. One interviewee did mention how it was negatively affecting her and how “Without social media, I don't really need to travel because I don't need to show all the people where I am, although I'm still doing a lot.” Sometimes social media has a demotivating effect, “when you see pictures or you see movies, sometimes you really want to go there”.
- In terms of social norms and culture, it seems that growing up in the countryside had a positive effect “So I think this comes from that I grew up in the countryside, close to nature with a garden, there was a lot of forests around and I got attached to it and I want to preserve it.” Others stated how living in a privileged society allows them to think about these issues “To some extent, I know that it depends on our privileges. It is easier for us to think about our (non-)environmental behaviour because we can. I'm someone who has a job, I have a house...” and “We are very privileged, that we can think about that and that we can travel”. Some do not necessarily pay much attention to culture, because they consider it not very sustainable “Belgians are very conservative [Translated from Dutch]” and “Personally, I do not attach much value to culture [Translated from Dutch]”. For some, “It doesn't affect my behaviour at all [Translated from Portuguese]” compared to those who do feel an influence “It plays a huge role”, “Yes, big, I think [Translated from Dutch]” and “Yeah, a lot.”
- Another topic of discussion was if they feel a certain type of social pressure. This topic can be split into two subtopics. Some referred to social pressure from society as a whole, while others referred to the pressure they receive from their friends. In general, the answers are quite divided. Regarding social pressure from society, the answers varied from “But so when I do things that I know are not fully good for the environment then I can feel social pressure” and “Yes, I think so, it definitely exists. It's the question of public shaming [Translated from Portuguese]” or “Yes, sometimes I have the feeling that if I buy something like in a plastic package [Translated from Dutch]” to “Maybe there is, but maybe I'm the one doing the pressuring to the others.” compared to “I no longer feel this because I know, now I know it comes from me, but maybe there was a time when it did [Translated from Portuguese]” and “I don't feel that way, maybe subconsciously [Translated from Dutch]” or “I wouldn't say a societal pressure. I think we're finally seeing a little bit more of a push and people being more aware.” Others were very clear and felt “No, absolutely not [Translated from Dutch]”

or “No, I don’t feel that. It comes from myself and what I feel is important [translated from Dutch]” compared to “There is no social pressure [Translated from Dutch]”. Regarding social pressure from friends, three interviewees stated that they do feel some pressure from friends “A little bit, in my social circle. [Translated from Dutch]”.

4.7 Health Crisis

More than half of the interviewees mentioned the current pandemic situation at the beginning of the interview, spontaneously. When the topic would come up, I would ask them “How did the covid-19 pandemic influence your view on environmental issues?” and “How do you think it has changed others in their behaviour and beliefs”. Also, regarding travel behaviour, “How did the covid-19 pandemic influence your perspective about travel?”

4.7.1 Covid-19 and the Environment

Most interviewees responded how in the beginning they thought that something might change in terms of global environmental concern, especially because images on the internet and real-life were showing how quickly the environment changed with the sudden decrease of human activity. But the pandemic might have “taken on for too long”, and so people started to get tired or started to get anxious to go “back to their old habits”. They answered that now they don’t believe that it is going to change anything anymore as it is already visible how the majority wants to get back to business as usual as quickly as possible “People were saying, oh, maybe there is an afterworld and people will consume less because they were used to consume less and see that they don't have to consume to feel good and whatever. But actually, it was exactly the opposite.” Or “Not really. I have the feeling that they don't always see the link between this crisis and the fact that we destroy the environment. So I have the feeling that's it's pretty much the opposite.”

For most of them who have already been living this lifestyle for a couple of years, it didn’t necessarily change anything in their environmental concerns as they are already very used to not taking the plane among other PEB: “I have the feeling that concerning me, it almost didn't change anything because I was already in this slow travelling, and this ecological world and in the same way of seeing things” or “I honestly am not sure that I've changed that much. Because I already had certain habits.” And “Not for me. Not concerning the environmental things I was doing before. I don't have a feeling that it impacts me a lot because I was already far away, deep in my reflections.”

Also, some interviewees did affirm that although they were already very concerned with the environment, the pandemic situation reminded them about how important it is to take care of the planet. “Yes, I think so. Again, in multiple ways, because you were forced to stay in your own environment, then you also become more aware of that environment and maybe you want to care for it more [Translated from Dutch]” and “that you give even more attention to how important it is for that environment to be green and nice. That has something to do with me as well [Translated from Dutch]”.

Others did mention how most people were forced to discover nature again and how this might affect their attitude towards more environmentally friendly travel. Especially the group of interviewees that have just started to decrease flying and changing their behaviour towards their values: “It made me reflect on the way I live and the way [I realized that] some things are unnecessary in terms of mobility [Translated from Portuguese]” and “I also noticed that since corona, in the ecological shop that I worked, that there were more new customers ... also just really out of awareness and choice.”

While the last group stated how it did not and will not change anything. “Not really, even less. Because COVID has been taking all of the attention.” And “Normally you should reduce and adapt and we are only adapting to it, adapting to the situation by using even more plastic.”

4.7.2 Covid-19 and Travelling

More than ten interviewees confirmed that although they were already used to staying closer to home, the fact that they visited their own country again reminded them of how you do not need to go far away to be able to relax and enjoy the view. The positive relation between travelling closer to home and their attitude towards not flying was strengthened during the lockdowns: “I think it just really reinforced my feeling that you don't have to go super far to find your peace because for me travelling involves finding peace and I am still able to do that [Translated from Dutch]” and “So now, I think it's with the help of the Covid that I only travel in Europe” Or “Yeah, for myself, I think I enjoy more my country and the place I live because of this. Because I had no choice. So I learned to really appreciate even just my city” And again “Yeah, actually, I took the decision of travelling closer before but I think that corona helped me to appreciate it because I had no choice” as well as “I do want to travel very much as well, and I do feel like going on a trip. But it doesn't have to be far or even long. For me, it doesn't even have to be outside of Belgium [Translated from Dutch]”

Other than that, some interviewees stated how on a bigger scale, most people are anxious to start travelling again. And although a lot of people discovered the pleasure of staying closer to home,

they want to go far away to in a way compensate for the time that was supposedly lost: “I feel like people really suffered through this pandemic and taking a flight, going on vacation is something that relaxes people so I think what we will see is a huge boost as soon as you can travel, more people than ever will travel” and “Unfortunately, if Corona is finally away then it will start being business as usual.” also “Yeah, they were frustrated not to consume anymore, that they even consumed more than the normal. So I'm pretty much concerned about this behaviour. I have the feeling that people will just take this occasion to travel even more” Consequently, “they see Corona just as a timestamp” and although just a couple interviewees complemented this information by stating that there is a societal change visible “Now, in the sense that the times are changing” others said that as long as €5 flight tickets exist and travelling to an all-inclusive destination is promoted as the dream, change will be very hazardous.

A couple of the interviewees felt the need to travel as well, “As soon as it's allowed again, we'll be off [Translated from Dutch]” and “After all that sitting inside and working with the two of us in that apartment, we also had something like I just want to go outside [Translated from Dutch]” but most people stated how they were fine to continue the way they have been travelling, there was one exception “But I also feel this urge to fly somewhere”.

5 Discussion

With reference to the literature review and the analysis of the interviews that were executed, a serious amount of information, questions and implications can be discussed in an effort to find some answers to the research question that is at the basis of this study. It is possible to highlight some aspects that are interlinked in the following subthemes.

5.1 Understanding of environmental perception, knowledge and attitudes of tourists who avoid air travel

In terms of environmental knowledge, it was very clear that all interviewees are very well informed about environmental issues as well as how the tourism sector affects environment. They stated that they are the ones who mostly search for this type of information because they like to stay informed. In this study, it is not the aim to try to understand how environmental knowledge links to attitudes and consequently, actual behaviour. Nevertheless, understanding the level of information the interviewees have, where they get their information from and how regularly they keep informed does contribute to understanding if there is a link between environmental knowledge, attitudes and behaviour in the flight-free tourist segment. In this particular case, it seems that the bigger the positive attitude towards the environment, the more informed the person is.

A couple of interviewees mentioned how the decisive moment for their flight-free travels was after they had calculated what their environmental footprint was, while others mentioned that they became more informed about sustainable tourism through their past trips. Although the specific destinations or ways were not mentioned, this information does align with Carvache-Franco et al. (2019) and Rangarajan & Rahm (2011), who confirmed that tourism destinations have been contributing increasingly in trying to inform tourists about a more environmentally friendly way of travelling.

In these two cases, the decisive moment did derive from self-acquired environmental knowledge and so knowledge does seem to sparkle a certain type of attitude and behaviour. Another finding worth mentioning that complements the previous statement is that too much information can at times be discouraging for individuals and so, sometimes they choose not to read or see every piece of information that they come across. And so, more information, or access to more information, will indeed not necessarily lead to more pro-environmental behaviour in that case.

5.2 Understanding how tourists – who avoid flying – travel

Another main element that the findings point out was that tourists who decided to avoid travelling by plane for environmental reasons seem to have a similar type of travelling. By analysing it, it adds to a better comprehension of the flight-free tourism segment that likes to partake in slow tourism and is willing to pay more for a greener product. This can be of extreme relevance for the tourism supply-side to start taking into consideration, having in mind that this is a growing population segment and especially when looking into domestic tourism, they become extremely important. In addition, due to the covid-19 pandemic forcing people to stay at home, an increasing number of tourists will continue to travel closer to home, although this might be also for other motives than just environmental reasons.

5.3 Understanding of other types of Pro-Environmental Behaviour tourists who avoid air travel execute

One of the main elements that can be highlighted in terms of other types of PEB the interviewees engage is that almost all of them have stopped consuming meat, besides from two or three that decreased substantially. This element was not included in the literature of this study but seemed to be of extreme importance for the interviewees. Including this element in further research might contribute to a better understanding of this market segment and their underlying motivations.

5.4 Understanding the process of tourists who decided to avoid air travel

Through the interviews, it quickly became clear that the different levels of involvement and engagement of avoiding air travel do result in different answers and thus different types of behaviour. In an attempt to extrapolate behaviour from the information collected through the interviews, tourists could be split into three categories, the first being tourists who have completely stopped flying, secondly, tourists who decreased flying drastically and lastly, tourists who are avoiding flying recently. Therefore, these different categories of tourists find themselves in different phases of the process. Interestingly, the question remains whether or not, all these categories can be considered pro-environmental tourists, having in mind that research has not established an exact number of how many times (not) taking a flight is part of being a (non-) environmental tourist.

5.5 Understanding the internal factors that encourage tourists to avoid air travel

The majority of the interviewees felt as individuals that have a small impact in general, they focus on their individual actions and do not feel the need to convince others with words, rather act according to their environmental ethics. Nevertheless, they did have the feeling of being part of a collective, they questioned if other people think and act like them, besides from their close group of friends and relatives. Surprisingly, it was quite easy to track this type of tourist through the help of social media and applying the snowball effect. In a relatively small period of time, it was possible to identify a relatively large group of people from different ages, backgrounds, countries and nationalities that have similar beliefs and values.

One of the main key elements of this section links to Büchs (2017). Flight-free tourists were very clear in stating that, although they are aware that the impact of one individual is minimal, they truly believe that it does make a difference to climate change and so they avoid the plane to act consistent with their ethics.

In addition, although they are aware that the price of not flying is higher, they do not consider that an issue for them. They believe that those who can think about these issues, usually do have the resources, be it financial, time or just be creative in finding alternative solutions to act accordingly. Numerous research has stated that price is a demotivating factor, the flight-free tourists explained in detail how they can travel without spending much money by starting to see travel and the feeling of escape and relax in a different context.

5.6 Understanding the external factors that influence tourists who avoid air travel

Although research pointed out the importance of demographics in terms of pro-environmental tourists, it seemed not to influence the interviewees of this study much. Answers in terms of values and beliefs were similar, regardless of age, gender and education, nationality and place of residence. The few visible differences being that it was easier to find women interviewees and that they were more communicative, more willing to share their experience and views than men. The younger group (Below 30, with more emphasis on below 25) mentions the importance of social media and feel that these tools are a benefit in their lives. This calls out for more research regarding social media and flight-free tourists in specific, just like Ayeh et al. (2012) and Han et al. (2018) pointed out.

5.7 Understanding how the health crisis of 2020 affected tourists who avoid air travel

Having in mind that interviews were conducted during the Covid-19 pandemic, I had the opportunity to understand how some people who had already given up on air travel to some extent experienced these restrictions. Other than referring to the personal impact, it was a surprise that the situation also influenced the travel behaviour of some. Although research is still limited regarding environmental behaviour and Covid-19, it seems that the situation strongly re-affirmed the values and beliefs of the majority of flight-free tourists. In specific, it reaffirmed their feeling that it is not necessary to go far away to experience new landscaped and feel relaxed on a holiday. Regarding the interviewees who have only more recently (in the past two years) decided to stop airplane travel they consider the pandemic to be one of the reasons that incentivized them to take their decision and live a more environmental lifestyle, in a domestic context but also when holiday. Further research regarding how a crisis, be it sanitary or of other nature, inspires more environmental behaviour should be made to be able to fully understand this new motivational factor that should be included in upcoming research.

5.8 Synthesis

When analysing the behaviour of the interviewed flight-free tourists, it becomes clear that we are dealing with a very particular type of traveller. At a glance, the findings of the interviews point to the strong connection they feel with nature that led to the need of wanting to take care of the environment. This parallels what Acott et al. (1998) and Dolnicar (2006) pointed out, interviewees revealed how above their love for nature-related trips, they also like to partake in urban and cultural tourism and that they go further than the nature-based type of tourist. Most participants still live in urban areas and so there seems to be a contradiction to what Kim et al. (2018) proved. However, Turaga et al. (2010) ideas are reinforced and so it seems that increasing the sense of responsibility towards the environment does not only lead to an increase in the development of social norms but also, eventually, engaging in pro-environmental behaviour.

All this contributes to the ongoing discussion regarding the definition of a pro-environmental tourist and tourist's pro-environmental behaviour. The type of tourist researched in this study seems to correspond well with Xu et al. (2020) general definition of pro-environmental tourist behaviour, that is about promoting environmental protection and avoid harming natural ecosystems, including selecting environmentally-friendly travel modes and products. This allows further research to be based upon this definition and perhaps contributes to narrowing down the research gap Dolnicar (2019) pointed out, that one all-encompassing definition and generic models seem to be lacking. However, over the years, the definitions of these types of tourists seem to have left out some important elements of past research that have been reinforced by this exploratory study. . When crossing the definitions from the literature review and the data collected from the interviews one could say that for a person to stay encouraged and engage in pro-environmental behaviour when travelling on holidays (i.e. when being a tourist), two key elements must be present:

- **Voluntarism:** the tourist voluntarily engages in pro-environmental behaviour when travelling and staying outside their domestic sphere. Voluntary behaviour implies a level of conscientiousness towards environmental issues, it is doing more than what the existing regulatory framework asks for (e.g. even if there are regulations and infrastructure available, most people will only recycle if they wish to do it when on holidays).
- **Altruism:** a tourist engages in pro-environmental behaviour when travelling because he/she puts the well-being of the environment at a higher level or priority than their personal being. They believe that by acting pro-environmentally in general, they contribute to a healthy planet, where humans respect their natural environment and they are willing to do their part to achieve that.

By trying to understand the motivation of this study population, the findings show that the main motives for them to engage in TPEB are (1) to contribute to something bigger and preserve the planet long-term, (2) to stay consistent with their personal values, and (3) because it makes them feel good. The main motivational factors for this type of attitude seem to be that the person does not feel they are sacrificing anything, but on the contrary, that they enjoy this lifestyle, which is a conscious choice and provides a pleasant or desirable situational response (a feel-good state of mind).

Trying to understand these incentives for engaging in TPEB helped clarify another main element, namely that this specific segment of tourists fits in the small group of people that do maintain their PEB while on holidays (Dolnicar & Grun, 2009) and does not differentiate their

travel behaviour from their daily lifestyle (Barr et al., 2010). It contributes to the understanding of how to engage in habitual long-lasting PEB which was already pointed out as a crucial topic (Van Der Linden, 2015). And although this research does not resolve the 'Attitude behaviour gap', the underlying motivations that were explored, do contribute to a better comprehension of what encourages and incentivizes flight-free tourists to engage in actual tourism pro-environmental behaviour.

6 Conclusions, Recommendations and Limitations

Human beings are one of the few animals on Earth to have the capacity to somehow control and monitor their impact on the environment. The Anthropocene phase we live in entrusts humans to a certain level of responsibility for the changes being made (Cavicchioli et al., 2019). Environmental issues are about the interaction of humans with the natural world, and how human activities have changed the ecosystem, the changes brought about as well as future changes that may occur because of human activities. Being adaptable and face the challenges brought in by climate change, overtourism and other planetary threats seem to be the only alternative to survive as a species (Pickering & Owen, 2006).

It is difficult to estimate the actual environmental cost and contribution of tourism but it has become clear that the tourism industry must be creative and resourceful to reduce its carbon emissions without putting economic growth at risk, in other words, without stopping people from travelling - tourism being closely linked to people travelling, by car, train or airplane. The pressure of change lays on reducing CO² emissions of air travel which contributes up to 75% of tourism's emissions that contribute to 5% of global emissions.

Additionally, tourists do not practice the same type of habits when they are on a holiday and their perception of responsibility for the environment seems to change when they are away (Miller et al., 2015). It has been pointed out that research that bridges between different contexts (home versus tourism) is limited (Barr et al., 2010). The gap between knowing about environmental problems and acting towards a more environmentally friendly world keeps on prevailing.

Consequently, environmental advocates are calling out for more attention to these issues, to raise awareness and to implement sustainable practices (Gössling et al., 2012). Pro-Environmental Tourist Behaviour needs to be researched carefully to get a clear idea of what factors and elements lead to environmental behaviour and consequently, the right incentives are forwarded towards the right target groups and the right policies are created (Kothe et al., 2019).

Research regarding tourists' pro-environmental behaviour involves multiple variables such as attitudinal factors, demographic factors, internal and external contextual factors, motivational factors, among many other that add to the complexity of the topic. And, since these habits are difficult to be measured, most research is based upon people's perceptions regarding their behaviour. Most of the times when asked about pro-environmental behaviour, people tend to overstate which most likely leads to wrongful conclusions (Gatersleben et al., 2002; Juvan & Dolnicar, 2016; A. K. Moser, 2015)

Having this in mind, the presented thesis formulated the following research question: *What incentivizes tourists that intentionally and assuredly acted in pro-environmental behaviour?* To be able to answer to the research question, tourists that decided to decrease or stop flying for environmental reasons were chosen as the segment to be analysed. A qualitative research was applied and 19 semi-structured interviews were executed to be able to apprehend what it is that influences and motivates tourists to engage in actual pro-environmental behaviour.

Results of the analysis revealed that the main motives for flight-free tourists to engage in pro-environmental behaviour are (1) to contribute to something bigger and preserve the planet long-term, (2) to stay consistent with their personal values, and (3) because it makes them feel good. Also, what seems to be the main motivational factor for engaging in actual pro-environmental behaviour is that they 'do not feel they are sacrificing anything, but on the contrary, enjoy this lifestyle which is a conscious choice and provides a pleasant or desirable situational response (a feel-good state of mind)'.

Having in mind the explored topic, some implications for future research can be suggested. The sample was random and the size can be considered insignificant. Consequently, it is difficult to generalize results and thus future research should include a larger sample size to increase the reliability of the conclusions made. The study can however be used as a basis for other researchers that aim to execute a similar type of research. Only when more research regarding actual and specific types of pro-environmental behaviour is made, will it be possible to generalize conclusions and construct new adapted models and frameworks that apply to all different types of research.

It was critical to understand the already existing theories and predictors of the existing research for the underlying factors of what motivational factors are, nevertheless. Further research could focus more on how these theories also apply on actual behaviour. Other than that, only one type of behaviour was used as the main focal point and thus the same framework should be used on other types of actions to question the validity of the conclusions.

Given the exploratory nature of this study, the research made is not without limitations. Although there were no other pre-requisites regarding the population, other than being involved in avoiding air travelling for holiday purposes, all participants, except one (USA) were born in a European country and all of them live on the European continent, more specifically in Central Europe. Therefore, the outcomes of the study in an economical developed region may not be applicable to similar research made in a developing region.

Although, the participants were asked about how it is to engage in an actual type of environmental behaviour, other factors including environmental perception, awareness, values and norms are very difficult to measure in a study of this nature. Although only a perception of these factors was taken into consideration, the interviewees can still understate or overstate some of their attitudinal factors (Thøgersen & Ölander, 2006)..

Other than the fact that tourists are avoiding air travelling, there was no framework established for other actual pro-environmental tourists' behaviour for which this study could be applied to. This limits the possibility of generalizing and applying the empirical findings to other studies.

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