



**Linnéuniversitetet**  
Kalmar Växjö

Master Thesis

# **Environmental values as a motivation of cycle tourism**



*Author:* Ling Hu

*Supervisor:* Marianna Strzelecka

*Examiner:* Stefan Gössling

*Academic term:* Spring 2018

*Subject:* Tourism and Sustainability

*Level:* Master Degree 1 year

*Course code:* 18VT-4TR50E



## Content

---

Acknowledgements.....	3
Abstract.....	4
1. Introduction.....	5
1.1 Background.....	5
1.2 Case background: Kalmar as a popular cycle tourism destination .....	7
1.3 Aim of the thesis and the research goal .....	8
1.4 Significance of the thesis project .....	8
2. Conceptual framework: Environmental values.....	10
2.1 Defining values and environmental values .....	10
2.2 Pro-environmental behaviors .....	11
2.3 Environmental values: environmental concern and closeness to nature.....	12
3. Literature review .....	16
3.1 Motivations of tourism and cycle tourism .....	16
3.2 Environmental values .....	17
3.2.1 Values and environmental values and pro-environmental behavior.....	17
3.2.2 Environmental concern and pro-environmental behavior .....	20
3.2.3 Closeness to nature and pro-environmental behavior.....	21
4. Methodology .....	24
4.1 Positioning in relation to the philosophy of social science.....	24
4.2 Methodology/Research design/Data analysis .....	25
4.3 Ethical consideration.....	28
5. Results.....	29
5.1 Results of closeness to nature .....	29
5.1.1 Defining nature .....	29
5.1.2 Attitudes towards animals and plants .....	32
5.1.3 Time with nature and the relationship between nature well-being and personal well-being .....	32
5.2 Results of environmental concern.....	34
5.2.1. Pro-environmental activities .....	34
5.2.2 Attitudes towards environmental policy .....	36
5.2.3 Knowledge related to environmental issues .....	37



# Linnéuniversitetet

Kalmar Växjö

5.2.4. Attitudes towards environmental protection.....	38
5.2.5 Environment consideration for cycling tourism .....	39
6. Discussion.....	40
6.1 Human/Nature relationship.....	40
6.2 Environmental concern .....	41
6.3 Factors influencing environmental values .....	41
6.4 Environmental values and cycle tourism behavior.....	42
7. Conclusion .....	44
7.1 Implications for practice and theory .....	44
7.2 Limitations .....	45
7.3 Future research.....	45
Reference .....	46
Appendix.....	55
1. Interview Questions .....	55
2. Interview Results .....	56



## Acknowledgements

I wish to thank my respectable supervisor Marianna Strzelecka in the first place. Thank you for your tutoring and inspiring feedbacks, great patience in revision on my assignments and final thesis. You really impress me by marking and revising my draft versions for 5 times from the very beginning to the end sentence by sentence, and giving me immediate reply no matter how early or how late it is! It has been always helpful and pleasant to talk to you about my thesis.

Many thanks to my loving and amiable parents who are always there for me. Despite long distance away from each other, we talk and see each other almost every day online. You always send me Chinese “*hongbao* (cash gift)” online and comfort me whenever I feel sad and bored. Though I have been busy with my study and work in the past many years and maybe in the future, you are always my best friends. I want to say love you from the bottom of my heart.

I am grateful for my lovely and nice classmates, my roommates and friends from Linnaeus University. You make this year so colorful and special for me! I always feel so lucky to have you in my life! I cherish the memories with you and the time we spent together!

In addition, I wish to thank the help of the 13 interviewers who provided interesting data for this thesis research. You contribute to my thesis a lot!



## **Abstract**

The increasing popularity of cycling activities and events, and the need to encourage cycling to reduce tourism greenhouse gas (GHG) emission, require a better understanding of the motivations of cycle tourists. Cycle tourism is one kind of green sustainable tourism. While numbers of aspects of cycle tourism have been identified in previous studies, environmental values might be one of the factors to determine cycle tourism choice. Most findings show that personal factors are the main reason of cycling activity while environmental values play merely little role in the cycle tourism. This thesis project is aimed to study the motivations of non-club recreational cycle tourists in Kalmar, Sweden and the role of environmental values as a motivation of cycle tourism behavior. Qualitative exploration method has been adopted and 13 local cycle tourists have been interviewed for the project. By applying the environmental values framework, this thesis links two main factors of environmental values to the cycle tourism behavior, that is closeness to nature and environmental concern. The findings show that environmental values are good predictor of cycle tourism behavior. The role of environmental values as a motivation of cycle tourism is improving though still not the main motivation. More explicit attention to environmental related knowledge education may inform the operationalization and promotion of local cycle tourism development. As modern people may attach importance to hedonic experience for their cycle tourism activities, further researches are needed to understand the relationship of hedonic consumption values and cycle tourism behaviors.

**Keywords:** cycling tourism; motivation; qualitative; environmental values; closeness to nature; environmental concern



## 1. Introduction

---

### 1.1 Background

Tourism is a significant contributor to climate change by its use of fossil fuels and emission of greenhouse gas (Beckon & Patterson, 2006; Gössling, 2002; Gössling & Peeters, 2007). It has been estimated that tourism contributes 8% of global carbon dioxide emissions (Kelava, 2018). Furthermore, transportation, as an integral part of tourism, may be responsible for over 90% of tourism's overall contribution to global climate change (e.g. Gössling, 2002). Finally, more than one third of all traffic is leisure-related (Gössling, 2002). The aforementioned evidence suggests that tourism sector needs to progressively reduce its GHG contributions if it is to move onto a sustainable emissions path (Hares, Dickinson & Wilkes, 2010).

Cycling contributes to only small carbon footprint, and therefore it tends to be promoted as a sustainable choice of transportation. While bicycles are mainly used for daily commuting, cycling has become a trend in slow tourism that nowadays accounts for approximately 10% of the holiday market in Europe (e.g. Ho et al., 2014). With the growth of slow tourism, cycling is likely to receive even more attention from tourism sector in future. The integration of cycling, tourism and leisure helps to solve the mounting contraction between transportation and tourism demand, economic development and environment protection and thus it can contribute to more sustainable destinations through verifying the modes of transportation.

In recent years, growing are both: the cycling rate in established cycling countries in Europe (Pucher et al., 2011), and the number of the recreational cyclists in majority of car-oriented countries in Europe, North America and Australia (Heesch et al., 2012). Cyclists are supported by governmental policies that aim to improve accessibility of cycling and lay solid foundation for the growth of cycle tourism. In the first place, cycling routes, greenways and networks are being developed, such as the UK National Cycle Network (Cope et al., 2003), Greenway in Costa Brava (Palau et al., 2012) or Atlanta (Palardy et al., 2018). Secondly, cycling in cities has become more accessible due to sharing bicycle systems like Copenhagen (Kaplan et al., 2015), Mobike in Beijing or other major cities in Europe and China.

In defining contemporary cycle tourism, one must be clear that not all cyclists are tourists. An explicit definition of cycle tourist is an essential step towards the study of cycle tourism and the motivations for it. A widely accepted definition from the South Australian Tourism Commission (2005) suggests that that cycle tourists are part of the following market segments: single destination long days trips; day trips to cycling routes and trails for the purpose of



recreational cycling; or travel to cycling events, either as a participant or spectators (Ritchie et al., 2010, Weed et al., 2014). Based on these criteria, cycle tourism can be conceptualized as activities, while cycling or non-cycling, including the watching or cycling event as well, such as South Australia's Tour Down Under. Lamont (2009) adds cycle tourism are all trips away from an individual's home region, where both active and passive participation in cycling are considered the main purpose for that trip. This thesis project focus on the active cycle tourists only.

Cycle tourism, as a special interest tourism in academic field, has been studied from different perspectives. Among number of issues previous studies have identified, positive impacts of cycle tourism include a wide range of economic, social and environmental benefits to regional and the wider community (Ritchie, 1998; Weigand, 2008; Cope et al., 2003; Chang & Chang, 2003; Lumsdon, 2000). Cycle tourism is likely to benefit manufacturing / industry/ retail/ service, facilities (usually a trail) and economic valuation of trails from tax revenue (Weigand, 2008). Lumsdon (2000) suggested, for instance, that cycle tourism contributes to rural tourism economies by increasing demand for food and beverage. In terms of social benefits, health co-benefits and carbon reductions are realized. Other impacts like reducing expenditure of medical spending, the efficiency in getting to the destination within 10 km of city vicinity, efficiency of land use (Chang & Chang, 2003) and reducing the regional imbalance by improving facility in the relatively deprived areas (Cope et al., 2003) have been proposed. Lastly, environmental impacts of cycling include reusing of existing resources like watersides and derelict railways for cycling trails (Faulks et al., 2007; Lumsdon, 2000), reducing pollution and carbon dioxide and natural resource, improving environmental consciousness of residents (Chang & Chang, 2003) and reducing use of motorized transport (Weed et al., 2014).

It can be noted that scholar have directed attention especially to environmental benefits of cycling. The environment has a crucial effect on human cognition, action and well-being and has a far larger potential to aid humanity than it is generally realized. Moreover, it is the starting point to solve the problem of climate change and sustainable development (Uzzell & Moser, 2009). One challenge for environmental psychologists is to understand the cognitive, motivational and structural factors and processes that threaten environmental sustainability (Steg & Vlek, 2009). It has been generally accepted that individuals can contribute significantly to achieving long-term environmental sustainability by adopting pro-environmental behavior patterns (Steg & Vlek, 2009). Grob (1995), among other scholars, added that individual values



are likely to influence how much people understand environmental issues, and how much people their behavior is influenced by that understanding. Environmental values have been extensively studied by environmental psychologists in relation to pro-environment behavior (e.g. Stern & Dietz, 1994; Dietz, Fitzgerald & Shwom, 2005), who looked at, for instance, how values and attitudes determine choice of transportation mode (Arnold, 2010). Very little, however, has been done to link environmental values to cycling tourism.

For leisure tourists who use bicycle instead of other transportation modes, cycling is a form of green transport, and an alternative to any other motor vehicles. It is essential to understand what can encourage tourists to use bicycles, and thus what can motivate them, because of environmental benefits cycle tourism has. Motivation is a driving force for all behavior (Dolnicar et al., 2008) and a better understanding of motivations of cycle tourists is essential to effectively promote and manage cycle tourism (Ye, 2015). Thus far, however, limited research has been conducted about the motivations of cycle tourists (Faulks et al., 2008). This study responds to the need to further explore motivations of cycle tourists by that it explores the role of environmental values as a motivation for cycle tourism. The findings will serve to provide practical guidance for tourism policymakers and tourism practitioners on cycle tourism development in Kalmar.

## 1.2 Case background: Kalmar as a popular cycle tourism destination

Kalmar, a classy and compact city, boasts a long history with the only one Sweden's spectacular castle. Sheltered from the wild Baltic Sea by the island of Öland, Kalmar's maturity and medieval charm are immediately evident. Besides the castle, other local assets include Sweden's largest gold hoard, from the 17th-century ship Kronan, and the cobbled streets of its immaculately preserved Old Town. But the main reason people come by Kalmar – many of them totally unaware of the treasures that lie beyond the motorway – is to cross the whopping 6km-long Öland Bridge, to the mystical island of Öland, beyond. Kalmar has been chosen as the Summer City of Sweden for a few years consecutively and residents here welcome the arrival of tourists.

Biking around Kalmar is an excellent way to discover those hidden spots that make trip extra special. Tourists can bring your own bike, or rent everything they need on site. Kalmar is rich of forest but it is much more than just forests. Kalmar also have lakes and several cycle trails that take tourists around them. Special cycling maps are available. For example: Kalmarsundsleden (Kalmar Strait Route) is an easily accessible hiking and biking trail that



visits three municipalities. The trail is about 80 km long in total and follows forest paths, railway tracks, rural roads and coastal bridge paths.

Because of the sound cycling facilities and tourist friendly local residents, Kalmar now is one of the most popular places to host global Ironman event, in which cycling is an essential program. The inaugural Ironman event in Scandinavia took place in Kalmar in 2012 and the event has quickly become an athlete favorite. The swim course is in the Baltic Sea, the bike course is over the 6km long bridge to the island Öland, a popular spot for tourists from around the world, and the run course goes through central parts of Kalmar with the finish line located on the main square.

Moreover, there are still existing problems of public transportation in Kalmar, for instance, the old train trail which is criticized for the lack of efficiency, punctuality, the complicated connection and transferring system with other public transportation modes. It is essential to establish new and scientifically sound public transportation system in Kalmar. Moreover, local residents in hope of the prosperity of other industries could be brought up along with the Ironman and other events, so the overall sustainable development awaits for the improvement of both cycle tourism and public transportation.

### 1.3 Aim of the thesis and the research goal

Based on the above rationale, through this thesis project the author seeks to gain a better understanding of how environmental values motivate cycle tourists.

Research goal:

The specific research goals of this study is to explore the environmental values among cycle tourists by examining their closeness to nature and environmental concern together with environmental behaviors.

### 1.4 Significance of the thesis project

The study makes substantial theoretical and practical contribution in light of the existing body of literature on cycle tourism. First of all, even though the popularity of cycling, there is still limited understanding on motivations for cycle tourism. In particular, limited attention has been paid to environment consideration for this type of tourism. This study introduces environmental values as a motivational factor in the context of tourism sustainability.

Cycling tourism is an emerging type of green tourism, and most people have a limited understanding of it. In terms of practical contribution, therefore, the study of motivations for



cycle tourism will help the cycle tourism operators and administrators gain a better and more comprehensive understanding of cycle tourists' behavior by linking cycle tourism activities to their motivations. The findings may be used by tour operators, tourism management department and other tourism stakeholders who are responsible to evaluating the market potential for cycle tourism.

Moreover, the better tourism planning can guide planning for sustainable transportation and sustainable tourism in Kalmar. A better understanding of cycle tourism, improved environment awareness, together with feasible sustainable transportation planning, could also guide investment in the cycle tourism infrastructure. By improving infrastructure for this type of tourism, specific goals can be achieved, such as becoming more sustainable urban destination.



## 2. Conceptual framework: Environmental values

With the development of psychology, scholarship started to link environmental behaviors to certain psychological concepts in their researches, for instance, cultural values and environmental protection (Stern & Dietz, 1994), knowledge deficit and environmental protection (Schultz, 2002) and psychological connection between natural environment and identity (Clayton, 2003). This thesis project is to examine environmental values as one potentially usefully motivations of cycle tourism behavior and how to improve cycle tourism through advocating environmental values (Figure 1).

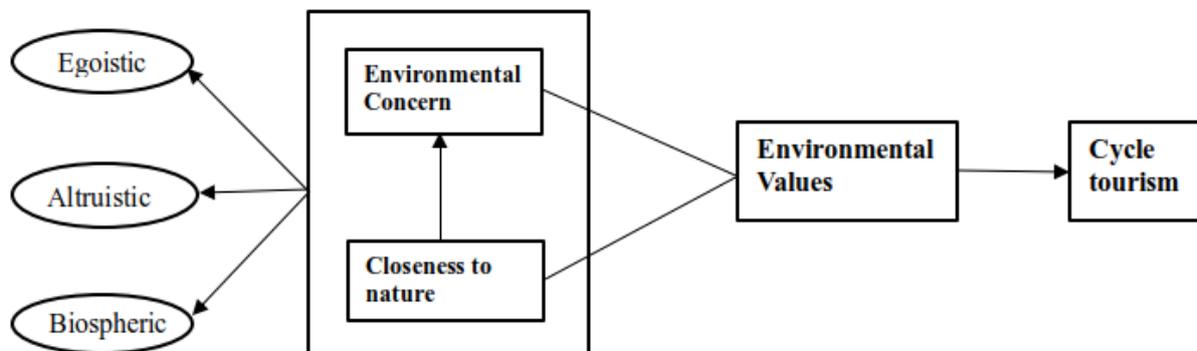


Figure 1: Conceptual framework of environmental values and cycle tourism behavior

### 2.1 Defining values and environmental values

Values are assumed to influence decision and values tend to be brought up in discussions of how to develop a more sustainable relationship with the environment (Dietz, Fitzgerald & Shwom, 2005). Scholars used different approaches to define values. For Caudto (1985), for instance, value is an enduring conviction that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite mode of conduct or end state of existence. Similarly, Hofstede (1984) described value as a broad preference for one state of affairs over others. Super (1980) regarded values as the self-and goals in various shape which could be a psychological state, a link or a material condition. The New Shorter Oxford English Dictionary offers one definition which is close to our concern as:

*"The worth, usefulness, or importance of a thing; relative merit or status according to the estimated desirability or utility of a thing. The principles or moral standards of a person or social groups, the generally accepted or personally held judgment of what is valuable and important in life."*

(Dietz, Fitzgerald & Shwom, 2005)



Schwartz and Bilsky (1987) concluded five features that were common to most of these definitions of values and proposed the definition of values are a) concepts or beliefs; b) about desirable end states or behaviors; c) that transcend specific situation; d) guide selection or evaluation of behavior and events; and e) are ordered by relative importance. This approach is widely accepted among scholars as it extends the understanding of values (Tang & Zhang, 2008) and this research adopts this understanding of defining values. What's more, reading between the words of these definitions, we can conclude that value which can guide the choice of behavior, is intangible and abstract thing that transcends specific behaviors.

Besides the complicated nature of values, value also owns a multi-dimensional structure. From different research methods and perspectives, scholars' opinions vary in values structure divisions. Rokeach (1973) and Caudto (1985), for example, presented two groups of values. They distinguished between values concerned with code of conduct called instrumental values (i.e. honesty, respect for the environment, which is central one in environment ethics (Dietz et al., 2005) and values involving end-states of existence, which are called terminal values (i.e. a world at peace, environmental quality).

Psychologists have formulated their views of how values are formed based mainly on the three theories: the psychoanalytic theory (mainly from Freud's work on the identification of the child with the parents in a process of cultural transmission of social values), social learning theory (like the child rearing practices having a direct bearing on value formation) and cognitive and moral development approaches (attaches importance intellectual and moral autonomy) (Caudto, 1985).

Values were found to have both direct and indirect effects on related behavior intentions (Stern et al., 1995). Similarly, environmental values have been reported as associated with pro-environmental behaviors directly or indirectly (Heath and Gifford, 2002). For instance, the majority of people, at least those in affluent industrial societies (Thøersen, 1996), view ecological or environmentally friendly behavior as part of the "moral domain" (Kaiser, 1997). Thus, this indicates the importance of environmental values and suggests that they should be included in explanation of why and when people act in an environmentally responsible way.

## 2.2 Pro-environmental behaviors

Environmental protection has become a major issue in many contemporary societies. Many scholars argue that human actions contribute to environmental problems, thus human behavior is a crucial element in mitigating environmental change (Leopold, 1949). Environmental



behavior can be defined as an intentional action of an individual or group to directly or indirectly affect changes in the environment or to benefit the environment (Stern, 2000). Steg et al. (2014) indicated that pro-environmental behaviors are often considered to be the appropriate thing to do, it is in many cases less profitable, less pleasurable, more time-consuming or more demanding than environmentally-harmful actions, and pro-environmental choices often imply that people need to sacrifice personal benefits to benefit the environment (Steg, 2003).

The New Environmental Paradigm (NEP) (Dunlap et al., 2000) and VBN theory (Stern, 2002) represent two widely used approaches to examine general environmental values, and analyze the relationship between environmental values and behaviors (Schultz, 1999). It was found that one factor environmental values can be influenced by environmental information received like climate change during tourism experiences (Kachel & Jennings, 2010). Kachel and Jennings (2010) point out the link between environmental values and travel experience in relation to climate change from a postmodern constructivist lens and suggest a research from a qualitative methodology instead of quantitative one.

As indicated above, environmental values can predict pro-environmental behaviors, next it is necessary to explain what environmental values consist of and in what way it has been used to predict environmental behaviors.

## 2.3 Environmental values: environmental concern and closeness to nature

As one kind of widely studied values, environmental values have not been explicitly defined, as far as the author knows. As explained by Poortinga, Steg & Vlek (2004), values are abstract whereas environmental concern refers to environmental problems or attitudes towards certain behaviors. It could be argued, therefore, that environmental values are likely to be reflected and manifested through environmental concern and how individuals relate to nature.

### *Environmental concern*

Mostafa (2007) noted that environmental concern appeared in late 1960 and early 1970 in west communities. Some of it is associated with society, industry and modern technology, partly as an impact of the first world's oil crisis (Grunnert & Juhl, 1995).

Dunlap and Van Liere (1978) defined environmental concern as a general attitude that could be defined both in a general way (i.e. attitudes towards targets or value orientation) and defined



more narrowly (i.e. attitudes towards specific pro-environmental behaviors) (Fransson & Gärling, 1999).

Several explanatory models have been applied to the study of environmental concern. Schwartz' norm-activation model of altruism explains altruistic behavior in terms of social and personal norms, awareness of consequences for the target, and ascription of responsibility to the self (Schwartz, 1973). Stern (1992) identified the central concern is called anthropocentric altruism: people care about environmental quality mainly because they believe that a degraded environment poses a threat to people's health. Joireman et al. (2001) also showed that altruism significantly predict behavior and behavioral intentions than biospheric and egoistic.

On the other hand, Thompson and Barton (1994) suggested a 2-dimension model of ecocentric attitudes (natural value for its own sake) and anthropocentric attitudes (natural valued for its contribution to humanity) from human and nonhuman structure. While, the more widely accepted model is the value-belief-norm theory (VBN) proposed by Stern, Dietz and Kalof (1993), which has distinguished three value orientations (Figure 2): egoistic, altruistic and biospheric concern corresponding with three value sources: 'self', 'other people' and 'all living things', that are the basis for environmental concerns (ECs). Several studies have provided support for the three-factor model (e.g. Stern, 2000). Stern and Dietz (1994) explained that people with an egoistic value orientation take into account only outcomes to self matter, personal costs and benefits, which is presumed to oppose individual environmental protection, but the exception exists as the egoists who believe environmental changes threaten them personally should be pro-environmental. On the other hand, altruistic value prioritize value on the basis of costs and benefits for a human group or all humanity. Finally, people with a biospheric value orientation takes into account costs and benefits to the ecosystems or the biosphere. Focus of the egoistic concerns were me, my future, my lifestyle, and my health. Individuals with altruistic concerns emphasized humanity, children, people in the community, and future generations. For biospheric concerns, the standardized coefficients were trees, marine life, birds, and animals. The factors were moderately correlated: egoistic with altruistic, altruistic with biospheric, egoistic with biospheric.

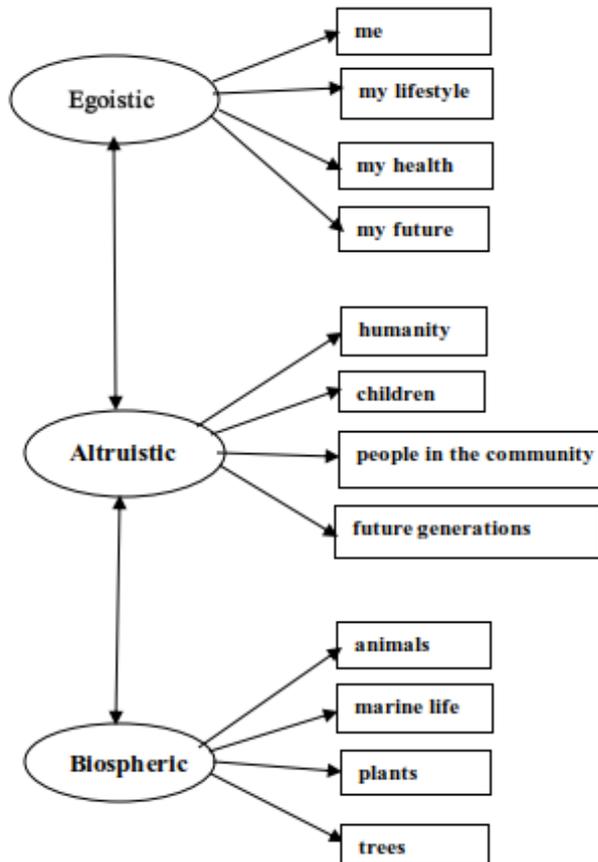


Figure 2: three-factor basis for environmental concern (Stern, Dietz & Kalof, 1993)

Three-factor structure for environmental concern is used to examine the relationship between environmental concern and environmental behavior. Egoistic concerns are negatively related to environmental behaviors, whereas biospheric environmental concerns are positively correlated with behaviors. This research will analyze environmental concern on the ground of this three-factor model (Stern, Dietz & Kalof, 1993).

Applying to cycle tourists, those with egoistic values should be primarily concerned with aspect of cycle tourism that match their self-interest: personal health, cheaper cost, and personal enjoyment and so on. While the altruistic values holders should have a stronger sense of otherness. While, the ones of biospheric values orientation cares biosphere which includes the environment and nature.

### *Closeness to nature*

Besides environmental concern, another concept which emerges with the popularity of environmental values and has been regarded to be closely related to environmental values is closeness to nature. Psychological closeness refers to something that is perceived as being



temporally, spatially, or socially close, and likely to occur (Liberman & Trope, 2008). As to closeness to nature, Snelgar (2006) and Bang et al. (2007) defined it as the extent to which individuals see themselves as "a part of" nature or "apart from" nature. Perrin and Benassi (2009) manifested that connectedness to nature is a kind of environmental attitude including environmental cognition and emotional connection.

The importance of closeness to nature has been recognized by both ecologists (Leopold, 1949) and ecopsychologists (Roszak, 2002), suggesting that closeness to nature is a key component of fostering environmental behavior. Leopold (1949) argued that, in order to solve environmental problems, it is essential to feel the integral relationship and oneness with nature. Roszak (2001) proposed that to increase environmental protection, it is a prerequisite to have a sense of belonging to the broader natural community.

Closeness to nature is linked to environmental concern. Schultz (2000) theorized that environmental concern is related to how a person defines oneself in relationship to other people and the natural world. Studies also found that connections with nature has a positive relationship with biospheric concern (Schultz et al., 2004) and the relationship closeness among humans expanding one's sense of self, which can be understood that destroying the nature means destroying oneself. Thus, the sense of closeness to nature can lead to more sympathetic and altruistic behavior (Mayer & Frantz, 2004). Similar to the environmental concern, the author argues that it is feasible to apply the three-factor basis: egoistic, altruistic and biospheric values to the examination of closeness to nature.

To sum up, this thesis project is to adopt psychological approach to analyze environmental behavior, linking environmental values to cycle tourism behavior. It proposes to examine the environmental values from two aspects: environmental concern and closeness to nature. Their relationships with environmental behaviors are to be examined respectively from the above conceptual framework.



## 3. Literature review

---

The literature review covers motivations and cycle tourists' motives for participating in cycle tourism. Additionally, as the research focuses on environmental values, the environmental values is also reviewed.

### 3.1 Motivations of tourism and cycle tourism

Motivation, as an important indicator for cycle tourism planning and marketing, has been widely studied. Motivations of tourism generally include escape, relaxation and regeneration, education and self-development, relationship and social interaction, and novelty (Faulks et al., 2008). Lumsdon (2000) draws to similar conclusion and holds that the significance of any given factor will vary according to different tourism market segments.

From the perspective of Dann (1977), recreation and tourism motivation includes push and pull factors. The push aspect of motivation refers to a set of internal needs, such as escape and learning, which is a central aspect of human behavior (Iso-Ahola, 1982). Internal needs drive visitors to be involved in leisure and recreation activities (Brooker & Joppe, 2013). We should notice that environmental values could be classified as one of the internal factors which drives environmental behaviors. Concurrently, the pull factors to visit particular areas play an important role as well, for instance, certain attractive destination attributes (e.g., accessibility, convenient facilities, and pristine natural settings). It is the pull factor that satisfy their push factors and both the two factors facilitate tourism (Dann, 1977).

In terms of motivations in cycle tourism context, Ritchie (1998) studies the motivations of cycle tourism from the geographical distribution, suggesting that international cycle tourists were motivated towards solitude and the ability to explore a destination thoroughly while domestic cyclists cycle to avoid the pressure of everyday life. On the other hand, Kaplan et al. (2015) promotes ideas that the cycle tourism behaviors are driven by favorable attitudes toward cycling, interest in bicycle technology (e.g. GPS), and perceived cycling ease. However, compared with motivations of normal recreational tourism, motivations for sport cycle tourism is different. Kulczycki et al. (2014) observes the high importance of opportunities to engage in social activities and interact with and enjoy nature and low importance of cultural activities and learning about the destination is not a strong motivation for sport event bicyclists. Similarly, Bull (2006) finds the time with friends and family is an important motivation. In addition, Shipwaya et al. (2016) notes that, in cycle tourism sport, authentic and memorable experience



are important, what's more, cycle events provide link between events and identity, a sense of belonging or membership.

## 3.2 Environmental values

### 3.2.1 Values and environmental values and pro-environmental behavior

Several scholars suggest that values develop a result of a socialization process (Caudto, 1985) and are shaped by means of experiences and learning (e.g. Kahle, 1996; Dietz et al., 2005). People who behave, for example, environmentally friendly, express their respect of nature by having a positive attitude towards activities like recycling and environmental protection (Fraj & Maritinez, 2006). In contrast, Struch, Schwartz and Van der Kloot (2002) believe that values are the special combination of individual biological gift and social experience and can change according to the culture. For instance, the Americans value freedom, the Australians value honesty, the Finnish value being cheerful and the Spanish value freedom and achievement (Schwartz and Bilsky, 1980). Various factors lead to this meaningful change (Struch, Schwartz & Van der Kloot, 2002).

In addition, Caudto (1985) argues that the influence of society upon the individual determines the proliferation of values. Some commonly recognized conveyors of value in society are: parents and home environment; teachers, administrators and the schools; peers; government; the work environment; mass media; literature and law (Caudto, 1985).

There is an increasing awareness of the effect of human actions on natural environment and many studies have examined the link between values and environmentalism (Gouveia, 2005). Schwartz (1992), based on the previous research, developed a universal value structure. He grouped values into three levels needs: individual level, group level and societal level, and grouped 10 types of values into four dimensions: self-transcendence (including value types called universalism and benevolence); self-enhancement (including value types called power and achievement); openness to change (including the value types of self-direction, stimulation, hedonism); and tradition (including value types labeled tradition, conformity and security).

One of the most popular theories linking environmentally friendly behavior with values is a value-basis theory focusing on environmental attitudes and behaviors derived from an awareness of the harmful consequences to valued objects (Stern and Dietz, 1994).

The more widely accepted mode is value-belief-norm theory (VBN) (Stern, Dietz and Kalof, 1993) which proposed a three value orientations model: egoistic, altruistic and biospheric



concern corresponding with three value sources: 'self', 'other people' and 'all living things'. Stern and Dietz (1994) have tested Schwartz's analysis by linking environmental beliefs and value theory and confirmed that links between environmentalism and certain basic human values, suggesting that all environmental relevant beliefs may be influenced by values.

However, there is a dispute as to the issue of whether altruistic and biospheric are separate concerns (Snelgar, 2006). Stern et al. (1995) suggested that the biospheric value orientation is part of general-altruistic cluster, the two together make up a general altruistic concern from the self and non-self structure. Gärling et al (2003) has found significant differences between pro-selfs and pro-socials in egoism, similarly, Schultz (2001) suggested the pro-selfs and pro-socials significantly differed on egoistic, but not biospheric or altruistic concern.

Some scholars, however, argues that it is reasonable to include concerns for species and ecosystem (and for related human practices) as well as concern for individuals (Attfield & Moller, 2005). Schwartz (1992) proposed a single cluster that included both altruistic and biospheric value orientations. Schultz (2000) have argued for recognizing individual differences in the degree of including nature within their cognitive representations of self. Given the broad construal, most environmental concern turns out simply to comprise a kind of altruism (Stern and Dietz, 1994). Altruism has been viewed as value orientation that is closely related with environmental values (e.g. Shukor et al. 2017; Stern, 2000; Stern et al., 1993). Individuals with an altruistic value orientation are substantially more likely to cooperate than those with other value orientations, therefore, in resolving environmental problems, social altruism is of special importance (Stern and Dietz, 1994).

Stern and Dietz (1994) noted the similarity between the universal self-enhancement cluster to egoistic value orientation and of the self-transcendence cluster to social altruistic orientation. Moreover, the self-transcendence cluster also includes items that reflect biospheric value orientation: unity with nature, a world of beauty, and protecting the environment.

Stern (2000) argued that values are the most stable determinants of environmentalism across the life course and they are also the hardest to change in the short run. However, it is possible that values change, in the long run and value shift can have major impact on decisions concerning the environment. In fact, Value-Belief-Norm theory (VBN) proposed that values have considerable indirect influence on environmental decisions (Dietz, Fitzgerald & Shwom, 2005; Stern et al., 1995). Gouveia (2005) added that different values underlay different type concern for the environment.



Values is assumed to influence behaviors (Schwartz, 2012). Dickinson et al. (2011) indicates that environmental values is central to some slow travelers and a key ingredient of slow travel, assuming that slow travel is to be meaningful in reducing tourism's carbon footprint. However, till now, there is scarce research explicitly identify environmental values as one motivation of cycle tourism. Ho et al. (2014) argued that pursuing for personal level of satisfaction are the priority for cycle tourists, while only less than 1% people do cycle tourism for environmental concern. The role of environmental values in cycle tourism have not been given much attention. Based on all these rationales, encouraging people to improve environmental values and focusing on environmental insights onto environmental issues and caring nature need to be explored. Further researches of the relationship between value and other psychological phenomenon (e.g. attitudes, motivations, needs and egoism) and relationship between values and specific behavior need to be done (Tang & Zhang, 2008). More to mention is that most previous studies dealing with environment value are in a primary quantitative manner because social science research on the environment is generally not well funded and the observation of individual behavior is expensive (Dietz, Fitzgerald & Shwom, 2005). Filling the gap in literature, this thesis project explored environmental values among cycle tourists from the qualitative perspective.

Kempton et al. (1995) asserts that American by large majorities ascribe intrinsic or non-utilitarian values to nature, support environmental protection and agree on the statement that "our obligation to preserve nature is not just a responsibility to other people but to the environment itself". Although the recognition of environmental values, constitutes "a significant positive step, the task of translating these values into effective action still lies ahead" (p.226). Kempton et al. (1995) also realized the inability to implement these shared values in reasonable and cost-effective ways. Nonetheless, appropriate environment education will improve positive pro-environmental behavior (Mayer et al., 2009)

In empirical studies, environmental values have been applied to some fields, mainly environmental consumer behavior (Fraj & Martinez, 2006), green transportation (Mertens et al., 2016). Fraj and Maritinez (2006) suggested that people were adopting new habits and customs that emphasize ecological aspects and respect towards the environment and they pointed out environmental behaviors were highly valued by individuals. However, research applying environmental values for the pro-environmental behaviors in tourism is scarce. Kachel and Jennings (2010) found out that some scholars linked the environmental values to



ecotourism and green tourism and environmental sustainability, like Sharpley and Duffy (2006), Swarbrooke and Horner (2007). To the author's best knowledge, there has been no research linking the concept of environmental values to the cycle tourism. Moreover, it should be noted that most studies of individual environmental values use surveys and not direct observations of environmentally consequential behavior because social science research on the environment has not been well funded (Dietz, Fitzgerald & Shwom, 2005).

Besides environmental values, the existing literature mentions other related concepts like "environmental concern", "environmental attitude", "environmental belief", etc. Both values and worldview are filters for new information (Stern & Dietz, 1994; Poortinga, Steg & Vlek, 2004), values are causally antecedent to worldviews. While values are situation-transcending beliefs about what is important in life, worldviews are general beliefs related to a specific domain of life. With values and worldview, congruent attitudes and beliefs which are more specific (i.e. concern about specific environmental problems or attitudes toward certain behaviors) are more likely to emerge (Poortinga, Steg & Vlek, 2004).

### 3.2.2 Environmental concern and pro-environmental behavior

Environmental values cannot be examined directly. Traditionally, environmental concern is regarded as an important element connected with environmental values and manifest environmental values.

As noted in the conceptual framework, environmental concern has basis in three types of values: egoistic, altruistic and biospheric value orientation. Values are critical motivators of behaviors and attitudes, it priorities influence our behaviors and attitudes (Schwartz, 2012). Environmental values lead to environmental behaviors, but the influence of the three value orientations on environmental behaviors varies. In general, the idea seems well established that values, especially altruism, are related to environmentalism (Dietz, Fitzgerald & Shwom, 2005). Quite a few theoretical models like VBN suggest personal values (e.g., altruistic values, egoistic values) are antecedents of environmental concern (Stern, 2000), and pro-environmental behavior (Stern and Dietz, 1994; Stern et al, 1993). Moreover, altruists will more likely express pro-environmental attitudes, whereas those with high self-interest less likely to pursue pro-environmental behavior (Dietz et al., 2002). Similarly, Schwartz's norm-activation theory (Schwartz, 1977) treated environmentalism as a type of altruism because it involves some sort of self-sacrifice (but not in the sense of implying sacrifice for other people) (Stern et al., 1993). In addition, Shukor et al. (2017) suggest that there is enough evidence that



altruism has a unique relationship towards environmental beliefs. Thus, it moderates the relationship between materialism and environmental belief. Altruistic value orientation takes into account costs and benefits of other people and other species, nature and environmental, which lead to environmental behaviors. To sum up, altruism is the value most closely related to environmentalism in both theoretical and empirical work (Dietz et al, 2002).

Fujii (2007) describes that environmental concern can be associated with the awareness of the consequences of a given behavior, such as knowing the consequence of producing carbon dioxide emission. Stern and Dietz (1994) supported the national differences in the nature of environmental concerns uncovered by Dunlap (Dunlap et al., 1993), also it is studied in relation to the variations in national distributions of value orientations that the Schwartz project is identifying (Schwartz, 1992). Some scholars have argued that environmental concern is a post-material value, which predicted that compared with wealthy countries, like US and European countries, should be more concerned about environmental issues than the developing countries (Schultz & Zelezny, 1999; Buttel, 1992).

All in all, environmental concern makes a widely recognized element to evaluate environmental values, especially the altruism, which is thought to be the central value that closely related to environmental values.

### 3.2.3 Closeness to nature and pro-environmental behavior

Compared to environmental concern, which has been widely studied as a direct environmental value, the role of closeness to nature as an indirect environmental attitude has long been overlooked in the academic field (Zhou, 2013). There is multiple of terms used for this literature as concluded by Restall and Conrad (2015), such as connectedness to nature, nature relatedness, connectivity with nature, emotional affinity toward nature, or inclusion of nature in the self.

A subject of human and nature relationship is the core research among scholars. Kempton et al., (1995) found three prevailing beliefs about nature, that is "nature as limited resource upon which humans rely", "nature as balanced and interdependent", and "society and nature". Another study carried out about environmental ethics by Berghöfer et al., (2008) in which various types of human-nature relationship were identified. They were named as "embedded relationship with nature", "cultivating relationship with nature" and a purely "resource-use relationship". Based on these studies, De Groot et al. (2011) concluded a four-tiered classification: mastery over nature, stewardship of nature, partnership with nature, and



participation in nature. These relationships were considered to cover the basic types of relationship between human and nature. De Groot et al. (2011) indicated there were different levels of adherence to the types of relationship, specifically, mastery over nature was strongly rejected, and stewardship was massively adhered to while the other two were thought to be less popular. Besides, some scholars study ecosystem and economics, focusing on utilitarian and anthropocentric perspectives of what people get from how people use nature and what people get from nature (Polasky & Segerson, 2009).

In recent years, more and more scholars have demonstrated interest in the connection between human and nature. Some of the measuring instruments are proposed, for instance, the widely acknowledged the new environmental paradigm scale (NEP) (Dunlap et al., 2000) which used quantitative questionnaire method and the implicit associations test (IAT) (Schultz et al., 2004). While, Mayer and Frantz (2004) presented a qualitative approach of the connectedness to nature scale (CNS). Through their research, Mayer and Frantz (2004) concludes feeling a sense of community, kinship, egalitarianism, embeddedness, and belongingness to nature are all aspects of a broader sense of feeling connected to it. Moreover, they suggested that personal well-being is linked to the strength and character of this connection to nature (Mayer & Frantz, 2004). This is similar to Leopold's (1949) long argument that connectedness to nature leads to concern for nature.

As to the factors impacting the closeness to nature, researcher found that situational factors and personal characteristics (Mayer & Frantz, 2004), natural activities in childhood (Guiney & Oberhauser, 2009) are important. However, with the development of urbanization, more and more people reduced contact with the natural environment, which leads to natural deficit and reduced environmental concern (Pyle, 1978). Thus, as disconnection from nature means trouble for the environment, it is essential to increase the connection between human and nature. What's more, Bang et al., (2007) found the connections with nature can vary across cultures. Giusti et al. (2017) developed a framework to guide the assessment of where people, especially children, experience significant nature situations and establish nature routines and they got similar findings. As to psychological variables, the relationship with nature has been discovered and demonstrates that individuals closely related to nature tend to score high in biospheric environmental values while score low in egoistic environmental values (Schultz et al., 2004).



To sum up this chapter, environmental values have been a hot point and widely evaluated from the aspect of environmental concern while more attention need to be paid to closeness to nature. This thesis project is going to analyze environmental values from the perspectives of both environmental concern and closeness to nature and link these two concepts to the motivation of cycle tourism.



## 4. Methodology

---

### 4.1 Positioning in relation to the philosophy of social science

#### Social constructivism

This study can be identified as social constructivism. Social constructivism is a sociological theory of knowledge according to which human development is socially situated, social interactions are critical and that knowledge is constructed through interaction with the environment and the others (Mc Kinley, 2015). Stump (2000) argues that all the beliefs are socially constructed and socially determined. Social constructivism seeks and values individual perspective.

Guba (1990) summarizes the constructivist belief system and shows the different stances from threefold organization of belief: ontological beliefs, epistemological beliefs and methodological beliefs. Ontologically, social constructivism takes a position of relativism. Reality exist in the form of multiple mental constructions, socially and experientially based. For Guba, knowledge and belief is dependent for their form as well as the content on the persons who hold them. Social constructivism focuses on an individual's learning that takes place because of his or her interactions in a group. One learns not only from the activity, but from the way within the group as a whole (McKinley, 2015). Epistemologically, social constructivism is subjective. Reality is co-constructed between the researcher and the researched and shaped by individual experience. Findings are the creation of the process of interaction between the two. Everything in human interaction is underpinned by beliefs in abstract constructs and ideologies. People may differ in their understanding in one thing because of different cultural context. Social constructivism holds that a person's cognitive development will also be influenced by the culture that he or she is involved in, such as language, history and social context. Methodologically, the constructivist proceeds in ways of two aspects: hermeneutics and dialectics. Individual constructions are elicited and refined hermeneutically, and compared and contrasted dialectically, with the aim of generating one (or a few) constructions on which there is substantial consensus.

Environmental values are social constructs (Groot et al., 2012) and through which social realities can be studied. As explained before, values vary from one to another, so environment and nature could be looked as a resource for humans to use, a power over humans and could be others. The following arguments can be presented to support the notion that social



constructivism is the philosophy of this study. In the first place, environmental values are formed on the basis of knowledge of values and the environmental protection trend worldwide. Perception of cycling, perception of cycle tourism and response against environmental challenges from different people. To be specific, for instance, people from different culture perceive cycling differently, which could be transportation tool, a way to do exercise, or for recreational purpose. As Guba (1990) holds that knowledge is a human construction, never certifiable as ultimately true but problematic and ever changing. People's understanding towards cycle tourism keeps changing with the interaction as well.

## 4.2 Methodology/Research design/Data analysis

Compared to quantitative approach applied by majority of authors in the research of environmental values, this research takes the qualitative approach. Creswell (1998) defined the qualitative research as:

*"Begins with assumptions and the use of interpretive/theoretical frameworks that inform the study of research problems addressing the meaning individuals or groups ascribe to a social or human problems. To study this problem, qualitative researchers use an emerging qualitative approach to inquiry, the collection of data in a natural setting sensitive to the people and places under study, and data analysis that is both inductive and deductive and establishes patterns or themes. The final written report or presentation includes the voices of participants, the reflexivity of the researcher, a complex description and interpretation of the problem, and its contribution to the literature or a call for change. (p.44)"*

In this definition, Creswell (1998) concluded specific characteristics found in qualitative research.

Environmental values are intangible which need to explore and cannot be easily measured. Moreover, the previous studies found the problem in quantitative approach to values assessment. Namely, scholars learned that the respondents may give unreliable answer to the questions about values. On the other hand, methods like qualitative interviews in a comfortable setting enabled the interviewee to gather up-close information by talking directly to respondents and interacting with them. Moreover, open-ended questions enabled interviewee to empower interviewers to share their own stories. Free talking also helps the interviewee have a better control of what is expected and to be more sensitive to what is not expected and what



information is especially interesting or unusual under the participants' meanings towards the problems and issues. What's more, quantitative measures and the statistical analysis simply do not fit the exploratory character of the research problem. Environmental values are not sensitive to issues such as gender difference, races, economic status and individual difference (Stern & Dietz, 1994; Kempton et al., 1995). Overall, qualitative approach is simply a better fit for this research.

This study looks for different values, different levels of closeness to nature and environmental concerns based on interview of 13 recreational cycle tourists over a time span of 2 weeks. A snowball sampling method (Goodman, 1961) was used to find respondents who could potentially contribute to this study. The seed interviewers were chosen from Kalmar sports center where Ironman training program is provided in April for the Ironman participants. Next the author asked the respondents to introduce more friends and to join the interview to talk about their motivations of cycle tourism activity. The initial targets of interviewers were all local residents in Kalmar. In this way, 8 participants were contacted, and emails with the project proposal were sent to the participants. Interview questions were designed and were under progress during that time. However, after interview questions were ready 2 weeks later, as many as 5 participants decided to withdraw for different excuses. Some were on holiday, and others were engaged with their daily activities. As we all know, spring is the best season for Kalmar, especially after a long dark and super harsh winter in 2018. Everyone seems were busy with enjoying the precious spring time in Kalmar. Therefore, the author looked for other potential respondents who were more willing to spare time to join the study. Via Facebook group in Linnaeus University, the author sent a Facebook message to seek for more participants. Besides, in order to increase the diversity of the respondents, the author visited a popular local bar to find more respondents by face to face chatting with the customers and stuffs there. Most of the participants then were targeted and joined the interview voluntarily.

Several respondent selection criteria were established. As mentioned before, Lamont (2009) defined cycle tourism are all trips away from an individual's home region, where both active and passive participation in cycling are considered the main purpose for that trip. The basic standard is that all respondents should consider themselves as active cyclist for leisure/recreational purpose at least once a week with the summer season approached in Kalmar since March 25. Kalmar is rich in forest and natural resources. For this research, cycle tourists who travel locally with family and friends were preferred. Moreover, the respondents have to



be over 18 years old to make sure the responsibility of the information and the incredibility. Respondents were selected from the age group between 22 and 76 years old. In addition, English is a must for the interviewers in order to make a comfortable interview. In this way, 13 qualified interviewers were found, including 4 students, 4 were from the sport center and their friends, and the other 5 were from the local bar. Though they were all living in Kalmar, they are 7 male and 6 female, and of 7 different nationality. Among them, there are Sweden (n=5), Greece (n=1), Eritrea (n=1), Colombia (n=1), Poland (n=2), Philippines (n=1), and China (n=2). Finally, all interviews with individual respondents were conducted in April and May 2018. The interview lasted roughly 20 minutes each in a comfortable time and a peaceful and relaxing environment like the library, cafe and the respondents' living places. Due to the time and other constrains, two of the interviews were done through emails of open-ended questionnaires.

Data were collected by in-depth interview consisting of 2 parts. Demographic information of gender and education background were collected. The interviews were recorded with the permission of respondents. Later data were transcribed. Then the transcriptions were categorized into different categories that emerge from the literature review above such as closeness to nature, environmental issues, environmental pollution, and maybe other interesting themes emerged during the interviews.

Braun and Clarke (2006) defined thematic analysis as: “a method for identifying, analyzing and reporting patterns within data.” Thematic analysis is a widely used method of analysis in qualitative research within psychology. Braun and Clarke (2006) state that thematic analysis is a foundational method of analysis that needed to be defined and described to solidify its place in qualitative research. It allows for flexibility in the researcher's choice of theoretical framework. Through this flexibility, thematic analysis allows for rich, detailed and complex description of your data. A theme captures something important about the data in relation to the research question and represents some level of patterned response or meaning within the data set (Braun and Clarke, 2006). In qualitative analysis, there is no hard-and-fast answer to the question of what proportion of your data set needs to display evidence of the theme for it to be considered a theme. A theme is something that many data items give attention to, rather than a sentence or two, and it captures something important in relation to the overall research question (Braun and Clarke, 2006).

In the first place, the author identified the research questions as: the role of environmental values in motivations of cycle tourism behavior. Then, the interview results were analyzed on



different levels, being selective reading and systematic analysis. The interview recording were classified. After this, selected reading will be used to study environmental values in particular.

### 4.3 Ethical consideration

In his book of "*Surviving your thesis*", Peter Steane (2004) points out that the informed consent has become an essential part of a research. All referring agents were informed of the research and they are going to be provided with an email about the study. So all the participants will be informed of the study and the method and consent to the dissemination of the findings. Participants have the rights to join or withdraw from the interview at their will. The participants in my research should know and agree to be involved, that my research findings will not harm them either physically or psychologically, and that your research design respect the integrity of the participants with confidentiality and anonymity if necessary. Specifically, all the data was stored safely to ensure security and prevent unwarranted outside access. Any identifying feature were removed.

Peter Steane (2004) also suggests that as researcher you may have to balance partial deception with respect for the participants and the requirement not to harm them, and you must show beneficence in the sense that the study, although using deception, results in some greater good to society.

Thus, during the interviews, the author was respectful of all the participants, including their transportation habits and environmental values they hold. Instead of judging the participants and pushing their transportation modal shift, the author approached the environmental values more carefully by asking their questions only without offense and made the participants to talk freely.



## 5. Results

---

### 5.1 Results of closeness to nature

The proposed closeness to nature was explored and analyzed by asking 5 questions (Appendix 1).

#### 5.1.1 Defining nature

When being asked the description of relationship with nature, there is apparent difference of respondents' way of description in the first place. Some responded with a general idea of nature, while the majority of the respondents referred to a personal experience with a series of specific activities and stories popped up from their brain naturally when mentioning this concept. The answers of general ideas are mostly like:

"pretty much close with nature", "we are good friend", "nature are everything around us", "nature is part of our life", "nature is the origin of life", "nature owns energy of everything", etc..

While some preferred to have a storytelling description of childhood life and specific activities, for instance:

*"I think my relationship is very close with nature because I grow up in Sweden... I grow up with my grandfather. My grandfather used to take me to pick mushrooms, go hunting, a lot of woodwork, like chopping down woods. Every year, we would have to go to the forest. At a very early age to know that if I took the wood to home and the house would be warm. Nature also means the seasonality, winter time skiing, and summer time swimming, and...I am just using nature." (Elwicia, 2018)*

Also, another respondent recalled:

*"I grew up in a small town in the countryside, my generation did not grow up with internet, TV or IPADS. I do not think those things even existed then. So naturally we kids in the neighborhood did everything outside, playing, building houses in the forest, going to the lake, fishing, we also had horses, so we rode together in the forest a lot. My grandma also took us on long walks picking mushrooms or berries in the autumn. For me, nature is a essential part of my life, I live in Kalmar for the moment but miss the raw*



*nature back home a lot! I especially love lake and mountains, the sense of calmness they give me. Also, when angry, sad or worried nothing help me more than going to the forest walking." (Matilde, 2018)*

The activities described by respondents included interacting with wild nature (woodwork, fishing, sunset, sunrise, sand beach bath, swimming, mushroom picking, vegetable picking, go to national park, hiking, running, water, grass, trees) and interacting with domestic nature (cows, different pets: spiders, Guinea pigs, rabbits, cats, dogs, rats).

A variety of factors appeared to influence respondents' initial interests in nature. The majority of the respondents owned it to their lifestyle and family influence which helped them cultivate an interest in and closeness to nature. About half of the respondents were in their childhood that they became interested in nature. One respondent said:

*"I would say I have nature inside me in a way. This garden...when I sit here, I feel I am in nature. Though I am not outside in the garden, I have it around me. That is a small world. When I run, jogging, I prefer jogging in nature than other gym. It is closer here. I lived in a city when I was young, but I go to the nature a lot. I liked it. Then I moved here when I was 25 for work. I bought this house with garden, and everything of it can go back to nature. The wood, the stone...everything." (Arne, 2018)*

For the categorization, a response was grouped as either "human a part of nature" or not. Only very a few separated human and other man-made products with nature by saying that:

*"I can live without nature. I can go to nature if I have time, but I can live without it by buying everything from the supermarket and go to work regularly" (Nee, 2018)*

Which positioned human apart from nature and regarded nature as something opposite to man-made artifacts. To the opposite, as recreational cycle tourists, some of the respondents preferred to include cycling as an expression of being part of nature, as one respondents said:

*"I am a part of nature, a part like plants. House will be back to nature. The wood, the stones, all the technical things. Cycle itself is a part of nature too. I like cycling. Cycling trip is very nice. They can stop. I can nearly reach nature and see more." (Arne, 2018)*



The majority of respondents have a good and close relationship with nature and regard themselves as a part of nature. Some even mention nature is superior to everything, nature is mighty which has all the energy, which reveals biocentric attitude to nature. Many respondents expressed dissatisfaction with their current contact with nature. For instance, a few mentioned the lack of contact due to living in the city. Others reported the nature in Kalmar does not satisfy their needs and they miss the contact with raw wild nature like forest and animals. This was reported despite the fact that most spoke highly of the urban nature of the city.

Nearly all the respondents indicated that nature was very important to them as well as they realized nature was crucial to their physical survival, mental health and spiritual enjoyment. As some explained:

*"As already mentioned, I do believe nature has a great impact on our wellbeing and health. Mentally, physically and in all imaginable ways. Because we depend on it, the tress, for oxygen. Human beings depend on the animals for...maybe for food, for recreation...and all these types of living connection. For example, in Africa, there is a lot of wild animal. Most of time, once we want recreation, we will normally go to national park. It also give you a sense of smile because when you get bored of your life, when you cycle in the nature, you feel fresh, less pressed, so it also helps you with a good life. We came from nature; we like cycling for recreation."* (Michell, 2018)

While, some also realized the bad impacts humans brought for the nature and showed sympathy towards nature. The respondents indicated that:

*"...you can also see, it is important to take care of nature. Human is bad, the nature has their own capacity to find their own rules about animals and plants to live together. Before man has routines, they can damage nature very much. Without humans, the nature can run very well... yes, even with catastrophe, earthquakes... nature fixes it though it may take year, but human has brought it chemical things. "* (Arne, 2018)

Some other respondents saw the bad impacts produced with the entry of modernization and industrialization age:

*"Our capital, Bogotá is contaminated, really exploited by the Spanish. The aboriginal people are Indians. Indians really understood the nature, but*



*since the Europeans came, the industry came and they started exploiting the nature and contaminating the environment. Now we make a lot of noises, consume a lot of resources from the nature, like the paper we use, which are made from the trees. Also in some way human in the history has been changing the environment. Sometimes make accidents like fire in the mountain, and the flood frequently..." (Fillipo, 2018)*

## 5.1.2 Attitudes towards animals and plants

The attitudes towards animals and plants varied among the respondents. Majority of respondents consider animals and plants are equal to human beings and both are part of the nature. Also, they held utilitarian view of nature in a sense that they believed in benefits provided by animals and plants for human beings. These benefits include, food, oxygen, spiritual happiness and recreational function. On the other hand, a few of the respondents looked at animals and plants just as something which are developed for human's convenience. They took it for granted that people were superior to animals and plants and humans had the right to use animals and plants for our needs, showing strong egoism and anthropocentric thinking. Just as one of respondents noted:

*"Animals provide good meat. That is essential for me. I like meat! They are the gift of food from the nature food chain system during the development of history. Animals eat animals too. We are just one of the chain. Of course we can eat and use them...Plants! They are medicine!" (Fillipo, 2018)*

Besides, there were still almost half of the respondents, who regarded human as animal protectors, noting that humans should take care of them, respect them and animals have their own rights of living, suggesting their strong altruistic and biospheric value orientation which took accounts of the animals, plants and future generation. Like one responded:

*"Animal and plant are around us and it is an important part of nature and ecosystem. To protect them from being destroyed is our responsibility. If we save them, our future generations can still enjoy them." (Lee, 2018)*

Relationship between human and nature varied, besides that people also may hold different views towards the importance of closeness to nature.

## 5.1.3 Time with nature and the relationship between nature well-being and personal well-being



When being asked the opinion of living in a house with a window facing the natural landscape, many respondents felt excited. They appreciated the benefits of nature gives them, for instance, peace, relax, quiet, freshness, happiness. Below is the example of such excitement and thankfulness for ability to be close with nature and enjoy it from their home:

*"I have been lucky because I have. First of all, I like the house facing water, if someone talk to me the nature, I will think of the sea, I like the coast for the sea is really important for me. But other than that, I really do not think I can survive in a city with a window with no trees. I need to go outside, I need to just look at the green stuff. I have a garden and everything, it was actually important when I found an apartment, I usually looking for one which has a garden, it means so much to me, even I share a house with somebody, in the garden we have followers and everything...we have apple trees." (Fia, 2018)*

Some respondents, however, did not see closeness to nature as something that is worthy. The following quote is the example of this negative attitude:

*"Oh, I like to see the nature sometimes. But living in nature? Opening the window just to see the fucking grass and cows? ! My...I still prefers to see the city chaos when I open the window every morning." (Michael, 2018)*

Interestingly, all the respondents unanimously admitted that their personal well-being depends on the quality of natural surroundings. This perspective can be seen in the following quote:

*"The air, the water, the nature...we depend on them. The healthier of the environment, the healthier of myself." (Alex, 2018)*

And

*"The more contact with nature I have, the healthier I am." (Lee, 2018)*

Especially for those who have experienced living in other cities which are relatively in worse environmental conditions than Kalmar or busy metropolis, the examples given like the London and Bogot ácontamination and big population, they value the clean nature and environment in north Europe more. For instance:

*"I really enjoy the nature in Sweden. Because it is so clean. I used to live in London for a short time, honestly, I felt something. In the*



*evening, when I blew my nose, it was black. I knew it was dirty, there were a lot of cars, people. But it was really bad, the smell of it." (Fia, 2018)*

Interestingly, people experience nature by using different senses. During their cycle tourism activities, most of respondents appreciated the nature by eyes, some felt the nature, while a few of the respondents preferred listening to nature and smelling the nature. One responded that:

*"I am sensitive to sounds. I always cycle to the beach. I stop my bicycle, close my eyes, lie down and I could hear the sounds around me. They are amazing, like music! The sea, the wind, the laughter of kids..." (Raphael, 2018)*

To sum up, the examination of respondents' closeness to nature are from perspectives of their definition of nature, human-nature relationships and attitudes towards nature. Respondents held different views towards nature. Nature could mean landscape far from the urban life, or represent everything around us including natural resources that lack clear-cut boundaries, such as air, water. Human being could be part of nature like other species, or human being separate from nature. Cycle and other technical man-made artifacts, physical phenomenon could be part of nature, or could not be included. Nonetheless, there was a quite consentaneous opinion that nature and cycle tourism bring physical, mental and spiritual benefits to human beings. Moreover, it is widely recognized that the wellbeing of humans depends on the wellbeing of nature.

## 5.2 Results of environmental concern

Closeness to nature is one key point for the examination of environmental values, while another point emphasized by the scholars is environmental concern. Interview questions of this research evaluated the environmental concern from the following perspectives:

### 5.2.1. Pro-environmental activities

When being asked the environmental activities in daily life done by the respondents, all the respondents reported they had adopted a variety of environmental actions. The activities the respondents listed included: recycling, cycling for short distance trip instead of driving, clean energy use for heaters and vehicles, household energy saving including electricity, water, using less disposable products and less plastic bags, eat less meat and buy eco and organic food locality. When travelling, the respondents noted that they preferred to live in local hotels instead of chain hotels, buy local products like milk, tomatoes and eggs.



Recycling has been most frequently mentioned. Only a very small number of respondents do not recycle at all. In terms of the reasons for recycling or some other kinds of environmental behaviors, almost participants mentioned it the habits of them. For instance:

*"I think it super weird that the recycling is not global! Because for me, I always do recycling for bottles, I mean I cannot remember a time when I would not recycle a bottle, and we can also get our money back. So, in my brain, when I see someone who don't recycle bottle, I think it is really weird."* (Basia, 2018)

*"I try to recycle. Recycling is quite natural for me, especially in Kalmar. We have a very good situation to separate the trash. It is very good. It had been a problem, but recycling for me, it is something daily life, but other than that, everyone is human, we can save the earth as much as we can."* (Nee, 2018)

*"I would like to do more, but for the moment I am recycling as much as I can! Back home we have recycling for food (compost, goes to my mum's flowers), soft plastic, hard plastic, metal, coloured glass, white glass, folium, batteries, porcelain etc."* (Matilde, 2018)

But still some more respondents do environmental behaviors for their own interest (money) or other social pressure. Respondents with a high level of social responding like judges from others, tended to change their behaviors and be more environment friendly. Some response listed below:

*"It is really good to recycle. In Sweden, we pay much (deposit for the bottles in the supermarket), so we always recycle (to get the money back). But in other countries where they charge no or less, I do not do recycling. It takes times. I think if they charge more, I will definitely do that. Haha..."*(Nikos, 2018)

*"I do not pay attention to the environmental stuff at all before I came. I even have not recycled before. But my roommates do and they always teach me and remind me. Also, they will turn off the light in the bathroom if I forget. It is embarrassing if I don't follow the right thing! It takes time for me to get used to it, but now it is in order."* (Nee, 2018)



Besides recycling, cycling as an environmental behavior had been regarded as a daily life, especially for short distance trips. The very significance of cycling to the environment is widely approved. However, respondents approached cycling activities differently. Some respondents' cycling activities were influenced by their personal opportunities. One respondent in favor of replacing driving with cycling, saying that:

*"You can smell the gas in the street. It is very bad. But cycling, you can see, it has nothing (bad). I cycle every day. I have no choice. I have no driving license. Cycling is a good for me, it is convenient, and also it is good for the environment. I think everyone should cycle in their daily life and use cycle more in their trips."* (Arne, 2018)

While some other treat cycling activities as a routine in their habits. One respondent said that:

*"Going cycling to the beach and having a BBQ and picnic there is important for me and my friends. It is like a ceremony. We will do it so often, especially for the spring and summer. We cycle around together, we can cycle far as we like. I do cycling with my family when I was a kid. As a kid, I just think it is fun, I enjoying cycling. But now, I value the environment more and feel happy to contribute to the environment."* (Elwircia, 2018)

The actual environmental behaviors of respondents could be conscious or automatic, or for the social pressure, while, for the environmental concern, it is also crucial to examine the respondents' attitudes towards environmental policies.

## 5.2.2 Attitudes towards environmental policy

The extent to which respondents' support government strategies for controlling environmental problems was examined by the question of opinions towards the deposit of bottles in the supermarket. These strategies are considered as measures for behavior that indirectly influence environmental concern.

For the strategies, great majority of the respondents positively support it and consider it good and effective way to help to improve environment condition. Some have noticed other environmental problems and even suggested deposits on other stuff which would cause pollution. Some advised that:

*"More products should be covered (for deposit charging), like milk boxes and plastic packaging."* (Nikos, 2018)



Plastic bags issue is a big concern for many respondents. While, only a few respondents objected recycling by saying that:

*"Nonsense! It should be abolished!"* (Raphael, 2018)

A few respondents supported movements towards pro-environmental behavior, like "Facebooks movement to pick up litters while jogging", and promote "Greenpeace on a monthly monetary basis".

While, some of the respondents showed their concern about difficulties to implement more 'green' policies, and they suggested to put it down in policies and in practice took time. The policies should be done after people adapting to it.

Respondents' attitudes towards environmental policies were different. As mentioned before, the attitude could change for many reasons, and one important factor is the information and knowledge one has received.

### 5.2.3 Knowledge related to environmental issues

Respondents felt that having knowledge related to environmental issues was important and had changed them a lot. Education was one of the most important reason for conscious environmental behaviors. Knowledge related to the environment was examined by asking transportation choice and green transportation knowledge. All the respondents have good knowledge of the fact that cars and airplane contribute a lot to the CO<sub>2</sub> emission.

The respondents with a good knowledge of environmental pollution and issue tend to reduce CO<sub>2</sub> emissions actively. Increasing knowledge and appreciation of environment was an important step to motivate respondents to reduce negative impacts of their daily transportation choice. They were more likely to take the environmental protection as a responsibility rather than a moral restraint. For example:

*"We are taught a lot in our school about the environment. As I know more, I do feel guilty when I drive or take planes. I am much more self-conscious nowadays about my behaviors. I think more of the hotels, whether it is local or international chain hotel. I rather take bicycle and other public transportations. Even when I take a car if I have to go somewhere far, I usually prefer to share with more people. I think about it a lot during the past year. I have learned a lot of environmental threat and future generations. It is a big change after that."* (Basia, 2018)



The significance of knowledge also manifested in other transportation choice as well. As one respondent reported:

*"I always choose the most environmental correct thing to do, when go back to Poland from Sweden, I can either go by plane, or I can go by boat. Boating is fascinating. But when I see the boat that I am going to take gives off so much CO<sub>2</sub>, so I just choose to take the plane. For me, either I pollute the air by CO<sub>2</sub>, or I pollute the water with CO<sub>2</sub> and waste. Cruise and ships are super, super bad."* (Michael, 2018)

The responsiveness of good environmental knowledge differed in comparison with the respondents without enough environment related knowledge. Maybe we can say that good knowledge gives them opportunity to make an environmentally friendly choice, while the ones without good knowledge tend to have a cognitive bias and make a choice without consideration of the environment. For instance, one respondent don't have CO<sub>2</sub> emission related knowledge say that:

*"I like cars, I like planes. They are technology in human history. They are big improvement! If I have a chance to take the cruise? That is great! Fantastic! It is my dream!"*(Fillipo, 2018)

#### 5.2.4. Attitudes towards environmental protection

Environmental values were examined from two aspects: environmental pollution issues and environmental protection. The attitudes towards environmental protection was examined by asking respondents' attitudes towards green transportation. All the respondents shared the opinion that they were in great support of green transportation. Half explained that they would adopt green transportation conditionally. Some responded that:

*"I cycle when I feel like cycle on a good day for short distance. I will use car. For long distance, I prefer planes rather than train, which is time-consuming...It is good to have green transportation sometimes. I think it's normal when I drive to office or for travel. Only the over-consumption makes me feel guilty."* (Nee, 2018)

Some showed interest in the new technology of bio-fueled or electrical vehicles but "I will not buy if they cost more". From the interview, I get to know that all the public buses in Kalmar are electrical now, and in the near future, it is expected that all the bus will be green fueled.



The Swedish government has been doing a lot to boost the green transportation development in the whole country for the attempt of environment improvement.

## 5.2.5 Environment consideration for cycling tourism

As all the participants were purposely selected among recreational cycle tourists, the extent of environmental consideration as the motivation of cycle tourism was directly asked. Many respondents just mentioned other motivations like personal health, cheaper cost, and better experience and so on. Less than half of the respondents suggested that they do cycle tourism for the environment. Usually the answer was like this:

*"For the environment? (Smile)...en, I think half half. I have to admit that the main reason is my personal pleasure, I like bicycle myself, and another reason is that cycling is better for the environment." (Lee, 2018)*

While the rest of the respondents showed limited attention of the environmental factor during cycle tourism activities. The interesting phenomenon was that some respondents tended to find excuses for themselves for their ignorance of the environmental consideration as a motivation for their tourism activities instead of denying it directly. Some defended for themselves that:

*"I do cycling consciously for environment in daily choice, but during tourism, honestly, I consider more of the fun with friends. You cannot demand too much. At least, I know, cycling is good for the environment...though it is at the very bottom." (Basia, 2018)*

It seemed that this kind of hedonic consumption values were widely held among the cycle tourists. Though increasing rate of environmental consideration has been found, but still, the majority of the respondents had no consideration of environment during cycle tourism activities.



## 6. Discussion

---

### 6.1 Human/Nature relationship

Respondents described nature and their relationship with nature in a general and specific way. De Groot et al., (2011) indicated that among the four-tiered classification---mastery over nature, stewardship of nature, partnership with nature, and participation in nature---stewardship or guardianship of nature, which had more ecocentric content, represented a massive mainstream concept agreed by the majority of people. In general, the findings of the thesis aligned with this theory. Majority of the respondents suggested to protect the nature and environment including other species. Also, partnership with nature and participation with nature are indicated by some respondents as "we are good friends", "humans are an integral part of nature" and "we should awe nature and respect other species". While, De Groot et al. (2011) also suggested that mastery over nature was strongly rejected. On the contrary, this research still found evidence of support of mastery of nature (e.g. some respondents claimed that the animals and plants are for human use...This is the results of history development. Nature resource is gift for human being...animals are meat and plants are medicine). Utilitarian notion still exists. On the other hand, for the human nature relationship, some respondents mentioned the human activities as external disturbances rather than participants in nature (e.g. chemical, noises, and too much exploitation).

Leopold (1949) emphasized that people need to understand, love and feel part of the natural world, in order to live responsibly with nature. Likewise, Wilson (1984) suggested that nature fulfills human needs more than mere survival, providing aesthetic, affective, intellectual, and spiritual benefits. Respondents in this research supported these benefits by giving examples. Respondents developed an interest in nature, mostly at a young age, still some became interested later for the work and lifestyle change. Almost half of them felt their implicit love towards nature by suggesting that closeness to nature had always been inside. The left half of the respondents have explicit closeness to nature for external reasons like stress reduction, social connection and landscape appreciation. Mayer and Frantz (2004) suggested that the sense of closeness can lead to more sympathetic and altruistic behavior. Leopold (1949) also argued that closeness to nature is a key component of fostering environmental behavior. Findings of this research proves these ideas showing that that both the innate implicit and explicit closeness to nature lead to concern for nature and environmental behaviors. This



research also corresponds with the opinion that personal well-being is linked to the strength and character of the closeness to nature (Mayer & Frantz, 2004).

## 6.2 Environmental concern

Respondents in this research showed different level of environmental concern but relatively high level of environmental behaviors. Schultz (2000) argued that environmental concern was related to the individual difference in the degree of including concerns for other species and ecosystem within their cognitive representations of self. Stern et al. (1993) proposed VBN theory, a three value orientations model: egoistic, altruistic and biospheric concern corresponding with three value sources: 'self', 'other people' and 'all living things'. These concerns are different in their understanding of relationship with the natural world. Focus of the egoistic concerns were me, my future, my lifestyle, and my health. Individuals with altruistic concerns emphasized humanity, children, people in the community, and future generations. For biospheric concerns, the standardized coefficients were trees, marine life, birds, and animals. The factors were moderately correlated: egoistic with altruistic, altruistic with biospheric, egoistic with biospheric (Stern, Dietz & Kalof, 1993). Egoistic concern (e.g. The respondent who regarded animals merely as meat and plants as medicine) pays attention to environment issue that threaten individual benefits (e.g. air pollution threatens individual health). Altruistic concern addresses that bad environmental conditions would threaten other people and later generation (e.g. using nature too much may threaten the future generation). Biospheric concern cares about nature and other species (e.g. we need to protect the ecosystem and protect animals and plants). Stern and Dietz (1994) suggested that most environmental concern turns out simply to comprise a kind of altruism. A general altruistic cluster includes biospheric values. In this research, almost all the respondents have conscious environmental behaviors. Some of the respondents are egoistic, for example, they do recycle for money, and they cycle for personal enjoyment. But also, it should be noticed that they have altruistic and biospheric concern as well. Respondents of altruistic and biospheric concern tended to have a higher level of environmental behaviors. The findings of the research align with the previous research that altruistic concern leads to environmental concern and environmental behaviors.

## 6.3 Factors influencing environmental values

This research also illustrates that there are several factors linked to the level of closeness to nature and environmental concern. Activities in childhood are important in developing environmental concern and closeness to nature (Guiney and Oberhauser, 2009). Pyle (1978) argued that urbanization and reduced contact with nature will lead to natural deficit and reduced



environmental concern. It should be noticed that closeness to nature and environmental concern could be developed in an older age with the lifestyle change and more contact with nature.

Closeness to nature and environmental concern are both constructs that differ across culture (Bang et al., 2007). Some scholars even claimed the national distributions of value orientations (Schwartz, 1992, Stern and Dietz, 1994) and argued that environmental concern in wealthy countries is higher than it in developing countries (Schultz and Zelezny, 1999; Buttel, 1992). Though the research shows that some of the respondents felt closer to nature, but that didn't seem to be directly related to their environmental behaviors. While one cannot conclude based on the above results whether the level of economic development of a country can relate to environmental value, this is something that has been discussed in literature (e.g. Buttel, 1992) and needs to be further examined.

What's more, the importance of education has been examined in the research. Mayer et al. (2009) noted appropriate education would improve positive pro-environmental behaviors. The findings of this research supported the idea. Nonetheless, we have to notice that though most of the well-informed respondents had a high level of environmental concern, their motivations of their actions are disputable. The level of environmental values also is influenced by other individual and social factors, their opportunities to do or the situational factors. For instance, some mentioned their incapability to take care of homeless pets because their parents did not want them. Some others mentioned their recycling activities were urged by their roommates. Thus, we may draw a conclusion that the relationship between environmental concern and environmental behaviors are not always positively related.

## 6.4 Environmental values and cycle tourism behavior

As to the environmental consideration of motivation of cycle tourism, the respondents with altruism and biospherism consider more of the future generations, other living things and the sustainability of the whole ecosystem, thus are more likely to do cycling actively and consciously for daily routines and travelling. It is a pity to find that environmental values are not the main motivation of cycle tourism for most respondents, however, it is noteworthy that the rate of respondents who do cycle tourism were motivated by environmental values seems increasing, which is a progress compared with the results of previous studies. The more increasing environmental values, the higher level of cycle tourism. These findings is in accordance with the theory that environmental values predicts cycle tourism behavior. Nonetheless, it should be noted that the examination of environmental values in the motivation



of cycle tourism does not explain all the environmental responsibility. Transportation is being used for multiple of ends, for instance, go to travel, go to work, go shopping and go travelling. More tolerance should be given to the view that motorized transport like cars and planes are perceived as indispensable for a convenient and varied life in our industrial modern society. After all, we don't mean to suggest replacing these high technologies and go back to agrarian age. But to our delight, more and more people are adopting green transportation consciously and all the respondents realize the environmental benefits of cycle tourism.



## 7. Conclusion

---

The aim of this thesis project was to investigate how environmental values motivate cycle tourism behavior. Through in-depth qualitative interviews of 13 participants from 7 international background, and with the application of thematic analysis, the research examined the closeness to nature and environmental concern, and the relationship of them with environmental behaviors and cycle tourism. The results of this thesis project show that environmental values is a useful framework for examining the motivational determinants of cycle tourism behavior. In general, the results show the increasing importance of environmental values in the motivational factors of cycle tourism behavior, rather than the previous study findings that environmental values were scarcely mentioned by the respondents. From the research, closeness to nature and environmental concern are positively related to environmental behaviors and cycle tourism behaviors, Education is an importance means to improve environmental values. While it should be noted that environmental behaviors and cycle tourism activities are co-determined by environmental values together with some other factors, like personal capabilities, opportunities and social influence. What is the most interesting is that respondents try to find excuses of their ignorance of environmental consideration during cycle tourism to stress their actual behaviors instead of denying it directly.

### 7.1 Implications for practice and theory

Theoretically, this thesis project contributes to the existing body of literature on cycle tourism from the perspective of environmental values. Also, this thesis introduces the angle of closeness to nature to evaluate environmental values besides the traditional concept of environmental concern and links the closeness to nature to the environmental concern. What's more, the thesis findings show the influence of other factors for the environmental concern on the environmental behaviors, which provide more comprehensive understanding of environmental concern.

As to the implication for practice, the findings could make tourism operationists to have a better understanding of the motivation of cycle tourism and thus manipulating the development of this emerging type of green tourism. Besides, from the interview, we know that Kalmar and Swedish government has put great effort to improve the environment and public transportation development. The thesis project also provides a reference and guidance for the sustainable local public transportation development in Kalmar, and maybe other places as the participants are



from international background. Other than that, the development of cycle tourism also stimulates the improvement of cycle tourism infrastructures, thus improving the overall economic and social sustainability.

## 7.2 Limitations

Although some of the results support the idea that environmental values lead to environmental behaviors and cycle tourism, several limitations need to be recognized. In terms of the research participants, total number of interviewees is 13 and 10 of them are students and well educated persons who have a master or PhD degree in at least one field, and only 3 exceptions (among them, 2 are high school graduate and 1 has an undergraduate degree). These elite samples from different cultures cannot represent the general held views of the others and the overall environmental values of the modern people or even hardly represent the views of general public in their own country. Moreover, the number of interviewees is too small to prove some theories. A second limitation is the language barriers. We should notice that not all the participants are from English speaking countries. Questions are designed in English and asked in English. The language may be an obstacle to express more explicitly for some of the participants and therefore the loss of information they want to convey.

Thirdly, the lack of close observation of the respondents' actual behaviors may lead to inaccurate reports. The participants are well educated and experienced adults, they could presumably be more culturally competent than the average public and maybe tend to establish a better image for themselves during the interview.

## 7.3 Future research

Future research could examine a big volume of participants from different education level and cultural background to determine the extent to which culture and environment influence the level of closeness to nature and environmental concerns. Furthermore, this research just focuses on the recreational cycle tourists who may have more contact with nature. For other types of cycle tourists like independent cycle tourists and event participants and spectators, environmental values may play a different role for their choice of cycle tourism. This is also a good point to study for the future researches. Besides, members of cycle tourist clubs may have a different tendency and views as well. In addition, the desire for hedonic travel experience seems spread among modern cycle tourists, later research focusing on the environmental values and hedonic consumption values linked to motivation of cycle tourism is recommended.



## Reference

- Arnold, S. (2010). Environmental decision making and behaviours: how to people choose how to travel to work? *Department of Economics Working Papers*.
- Attfield R., (2005). Altruism and Environmental Concern.
- Bang, M., Medin, D. L., & Atran, S. (2007). Cultural mosaics and mental models of nature. *Proceedings of the National Academy of Sciences of the United States of America*, 104(35), 13868-13874.
- Becken, S., & Patterson, M. (2006). Measuring national carbon dioxide emissions from tourism as a key step towards achieving sustainable tourism. *Journal of Sustainable Tourism*, 14(4), 323-338.
- Bentler, P. M., & Speckart, G. (1979). Models of attitude–behavior relations. *Psychological Review*, 86(86), 452-464.
- Bergh öfer, U., Rozzi, R., & Jax, K. (2008). Local versus global knowledge: diverse perspectives on nature in the cape horn biosphere reserve. *Environmental Ethics*, 30(3), 273-294.
- Braun, V. and Clarke, V. (2006) Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2). pp. 77-101. ISSN 1478-0887 Available from: <http://eprints.uwe.ac.uk/11735>.
- Buttel, F. H. (1992). Environmentalization: origins, processes, and implications for rural social change. *Rural Sociology*, 57(1), 1-27.
- Caudto, M. J. (1985). A guide on environmental values education. environmental education series 13. *Environmental Education*(13), 111.
- Clayton, S. (2003). Environmental identity: A conceptual and an operational definition. *Identity and the Natural Environment The Psychological Significance of Nature*, 45–65.
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: a review and avenues for further research. *Journal of Applied Social Psychology*, 28(15), 1429-1464.
- Cope, A., Cairns, S., Fox, K., ~Lawlor, D. A., Lockie, M., & Lumsdon, L., et al. (2003). The uk national cycle network: an assessment of the benefits of a sustainable transport infrastructure. *World Transport Policy & Practice*, 9(9).



Creswell, J. W. (1998). *Qualitative inquiry and research design :choosing among five traditions /John W. Creswell*. Sage Publications.

Dann, G. M. S. (1977). Anomie, ego-enhancement and tourism. *Annals of Tourism Research*, 4(4), 184-194.

De Groot, M., Drenthen, M., & De Groot, W. T. (2011). Public visions of the human/nature relationship and their implications for environmental ethics. *Environmental Ethics*, 33(1), 25-44.

Dietz, T., Fitzgerald, A., & Shwom, R. (2005). Environmental values. *Annual Review of Environment & Resources*, 30(30), 335-72.

Dolnicar, S., Woodside, A. G., & Martin, D. (2008). Market segmentation in tourism. , 12(1), 17-34.

Dunlap , R. E. , & Van Liere , K. D. (1978). The new environmental paradigm. *Journal of Environmental Education* , 9, 10 - 19.

Dunlap, R. E., Van Liere, K. D., Mertig, A. G., & Emmet Jones, R. (2000). Measuring endorsement of the new ecological paradigm: a revised nep scale. *Journal of Social Issues*, 56(3), 425-442.

Eagly, A.H and P. Kulesa (1997) ?Attitudes, Attitude Structure and Resistance to Change: Implications for Persuasion on Environmental Issues? In: Bazerman, M.N, D.M Messick, A.E Tenbrunsel and K.A Wade-Benzoni (eds.)

Environment, Ethics and Behaviour: New Lexington Press: USA.

Fahimeh, P., Mehran, R., & Monireh, A. (2014). Evaluating behavioral intentions of tourists in e-tourism.

Faulks, P., Ritchie, B., & Dodd, J. (2008). Bicycle tourism as an opportunity for re-creation and restoration? Investigating the motivations of bike ride participants. *New Zealand Tourism and Hospitality Research Conference* (Vol.paper 23, pp.1-27). Lincoln University, New Zealand.

Fishbein, M. (1980). A theory of reasoned action: some applications and implications. *Nebraska Symposium on Motivation Nebraska Symposium on Motivation*, 27(27), 65.



- Fransson, N., & Gärling, T., (1999). Environmental concern: conceptual definitions, measurement methods, and research findings. *Journal of Environmental Psychology*, 19, 369-382.
- Fraj, E., & Martinez, E. (2006). Influence of personality on ecological consumer behaviour. *Journal of Consumer Behaviour*, 5(3), 167–181.
- Fujii, S. (2007). Environmental concern, attitude toward frugality, and ease of behavior as determinants of pro-environmental behavior intentions. *Journal of Environmental Psychology*, 26(4), 262-268.
- Gärling, T., Fujii, S., Gärling, A., & Jakobsson, C. (2003). Moderating effects of social value orientation on determinants of proenvironmental behavior intention. *Journal of Environmental Psychology*, 23(1), 1-9.
- Giacomino, D. E., & Eaton, T. V. (2003). Personal values of accounting alumni: an empirical examination of differences by gender and age. *Journal of Managerial Issues*, 15(3), 369-380.
- Giusti, M., Svane, U., Raymond, C. M., & Beery, T. H. (2017). A framework to assess where and how children connect to nature. *Front Psychol*, 8, 2283.
- Goodman, L. A. (1961). Snowball sampling. *Annals of Mathematical Statistics*, 32(1), 148-170.
- Gössling, S. (2002). Global environmental consequences of tourism. *Global Environmental Change*, 12, 283-302.
- Gössling, S., & Peeters, P. (2007). “It does not harm the environment!” An analysis of industry discourses on tourism, air travel and the environment. *Journal of Sustainable Tourism*, 15(4), 402-417.
- Grob, A. (1995). A structural model of environmental attitudes and behavior. *Journal of Environmental Psychology*, 15(3), 209-220.
- Groot, J. I. M. D., Steg, L., Keizer, M., Farsang, A., & Watt, A. (2012). Environmental values in post-socialist hungary: is it useful to distinguish egoistic, altruistic and biospheric values?. *Sociologický Časopis*, 48(3), 421-440.
- Grunert, S. C., & Juhl, H. J. (1995). Values, environmental attitudes, and buying of organic foods. *Journal of Economic Psychology*, 16(1), 39-62.



- Guba, E. G. (1990). The paradigm dialog.
- Guiney, M. S., & Oberhauser, K. S. (2009). Conservation volunteers' connection to nature. *Ecopsychology*, 1(4), 187-197.
- Hayton, J. (2004). *Surviving your thesis*. Routledge.
- Hares, A., Dickinson, J., & Wilkes, K. (2010). Climate change and the air travel decisions of uk tourists. *Journal of Transport Geography*, 18(3), 466-473.
- Heath, Y., & Gifford, R. (2002). Extending the theory of planned behavior: predicting the use of public transportation. *Journal of Applied Social Psychology*, 32(10), 2154–2189.
- Heesch, K.C., Sahlqvist, S., & Garrard, J. (2012). Gender differences in recreational and transport cycling: A cross-sectional mixed-methods comparison of cycling patterns, motivators, and constraints. *International Journal of Behavioral Nutrition and Physical Activity*, 9(1), 106–117.
- Ho, C., Liao, T., Huang, S. & Chen, H. (2015). Beyond environmental concerns: using means-end chains to explore the personal psychological values and motivations of leisure/recreational cyclists. *Journal of Sustainable Tourism*, 23 (2), 234-254.
- Hofstede, G. (1984). The cultural relativity of the quality of life concept. *Academy of Management Review*, 9(3), 389-398.
- Huang, Y. C. (2009). Examining the antecedents of behavioral intentions in a tourism context. *Dissertations & Theses - Gradworks*.
- Iso-Ahola, S. E. (1982). Toward a social psychological theory of tourism motivation: a rejoinder. *Annals of Tourism Research*, 9(2), 256-262.
- Kachel, U., & Jennings, G. (2010). Exploring tourists' environmental learning, values and travel experiences in relation to climate change: a postmodern constructivist research agenda. *Tourism & Hospitality Research*, 10(2), 130-140.
- Kaiser, F. G. (1997). Motivational aspects of morality: Responsibility as a predictor of ecological behavior. Unpublished manuscript.
- Kaplan, S., Manca, F., Nielsen, T. A. S., & Prato, C. G. (2015). Intentions to use bike-sharing for holiday cycling: an application of the theory of planned behavior. *Tourism Management*, 47, 34-46.



Kelava, M., (2018, May 22). *The hidden climate change impacts of the tourism industry*. Retrieved from <https://theecologist.org>.

Kempton, W., Boster, J. S., & Hartley, J. A., (1995). *Environmental values in American Culture*. Cambridge: MIT Press.

Leopold, A. (1949). *A sand county almanac: with essays on conservation from round river*. New York: Ballantine Books.

Li, X., Liu, R. & Zhang, J., (2010). Review of environmental attitude abroad. *Psychological science* (6), 1448-1450.

Lieberman, N., & Trope, Y. (2008). The psychology of transcending the here and now. *Science*, 322(5905), 1201-1205.

Lieze Mertens UGent, Sofie Compernelle UGent, Freja Gheysen UGent, BenedicteDeforche UGent, J Brug, JD Mackenbach, J Lakerveld, J-M Oppert, TFeuillet, KGlonti, et al.(2016) *OBESITY REVIEWS*. 17(suppl. 1). P.53-61

Lin, S. P. (2015). Raising public awareness: the role of the household sector in mitigating climate change. *International Journal of Environmental Research & Public Health*, 12(10), 13162-13178.

Maloney, M. P., & Ward, M. P. (1973). Ecology: let's hear from the people: an objective scale for the measurement of ecological attitudes and knowledge. *American Psychologist*, 28(7), 583-586.

Maloney, M. P., Ward, M. P., & Braucht, G. N. (1975). A revised scale for the measurement of ecological attitudes and knowledge. *American Psychologist*, 30(7), 787-790.

Materialism, Altruism, Environmental Values, Learning Strategies and Sustainable Claim on Purchase Intention of Energy Efficient Vehicle (EEV) - A Literature Review. *Materials Science and Engineering Conference Series* (Vol.215, pp.012021). Materials Science and Engineering Conference Series.

Mayer, F. S., & Frantz, M. P. (2004). The connectedness to nature scale: a measure of individuals' feeling in community with nature ☆ . *Journal of Environmental Psychology*, 24(4), 503-515.

Mckinley, J. (2015). Critical argument and writer identity: social constructivism as a theoretical framework for efl academic writing. *Critical Inquiry in Language Studies*, 12(3), 184-207.



- Mostafa, M. M. (2007). A hierarchical analysis of the green consciousness of the Egyptian consumer. *Psychology & Marketing*, 24(5), 445–473.
- Palardy, N. P., Boley, B. B., & Gaither, C. J. (2018). Residents and urban greenways: modeling support for the Atlanta Beltline. *Landscape & Urban Planning*, 169, 250-259.
- Palau, R., Forgas, S., Blasco, D., & Ferrer, B. (2012). An analysis of greenways from an economic perspective. *Tourism Planning & Development*, 9(1), 15-24.
- Perrin, J. L., & Benassi, V. A. (2009). The connectedness to nature scale: A measure of emotional connection to nature? *Journal of Environmental Psychology*, 29(4), 434-440.
- Polasky, S., & Segerson, K. (2009). Integrating ecology and economics in the study of ecosystem services: some lessons learned. *Annual Review of Resource Economics*, 1(1), 409-434.
- Poortinga, W., Steg, L., & Vlek, C. (2004). Values, environmental concern, and environmental behavioral study into household energy use. *Environment & Behavior*, 36(1), 70-93.
- Pucher, J., Garrard, J., & Greaves, S. (2011). Cycling down under: A comparative analysis of bicycling trends and policies in Sydney and Melbourne. *Journal of Transport Geography*, 19, 332–345.
- Purchase Intention of Energy Efficient Vehicle (EEV) - A Literature Review. *Materials Science and Engineering Conference Series* (Vol.215, pp.012021). Materials Science and Engineering Conference Series.
- Pyle, R.M. (1978). The extinction of experience. *Horticulture*, 56 (1978), pp. 64-67.
- Restall, B., & Conrad, E. (2015). A literature review of connectedness to nature and its potential for environmental management. *Journal of Environmental Management*, 159, 264.
- Ritchie, B. W. (1998). Bicycle tourism in the South Island of New Zealand: planning and management issues. *Tourism Management*, 19(6), 567-582.
- Ritchie, B. W., Tkaczynski, A., & Faulks, P. (2010). Understanding the motivation and travel behavior of cycle tourists using involvement profiles. *Journal of Travel & Tourism Marketing*, 27(4), 409-425.
- Roszak, T. (2002). *The voice of the earth: an exploration of ecopsychology*. Phanes Press.
- Rokeach, M. (1973). Rokeach Values Survey. In *The Nature of Human Values*.



Schultz, P. W. (2000). Empathizing with nature: the effects of perspective taking on concern for environmental issues. *Journal of Social Issues*, 56(3), 391-406.

Schultz, P. W. (2002). Knowledge, information, and household recycling: Examining the knowledge-deficit model of behavior change. *New Tools for Environmental Protection: Education, Information, and Voluntary Measures*. <https://doi.org/10.17226/10401>

Schultz, P. W., & Zelezny, L. (1999). Values as predictors of environmental attitudes: evidence for consistency across 14 countries. *Journal of Environmental Psychology*, 19(3), 255-265.

Schultz, P. W., Shriver, C., Tabanico, J. J., & Khazian, A. M. (2004). Implicit connections with nature. *Journal of Environmental Psychology*, 24(1), 31-42.

Schultz, P. W., & Zelezny, L. C. (1998). Values and pro-environmental behavior: a five-country survey. *Journal of Cross-Cultural Psychology*, 29(4), 540-558.

Schwartz, SH. 1977. Normative influences on altruism. *Advances in experimental social psychology*, 10, pp. 221-279, edited by L. Berkowitz, New York, NY: Academic Press.

Schwartz, SH. 1992. Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. In M. P. Zanna (Ed.), *Advances in experimental social psychology*, 25, pp. 1-65, New York, NY: Academic Press.

Schwartz, S. H., & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality & Social Psychology*, 53(3), 550-562.

Schwartz, S. H. (2012). An Overview of the Schwartz Theory of Basic Values. *Online Readings in Psychology and Culture*, 2(1). <http://dx.doi.org/10.9707/2307-0919.1116>.

Scott, D., & Willits, F. (1994). Environmental attitude and behaviour: A Pennsylvania survey. *Environment and Behavior*, 26, 239-260.

Sharpley, R., & Duffy, R. (2006). Ecotourism: a consumption perspective. *Journal of Ecotourism*, 5(1-2), 7-22.

Snelgar, R. S. (2006). Egoistic, altruistic, and biospheric environmental concerns: measurement and structure ☆. *Journal of Environmental Psychology*, 26(2), 87-99.

Steg, L. (2003). Can public transport compete with the private car? *IATSS Research*, 27(2), 27e35.

Steg, L., & Vlek, C. (2009). Encouraging pro-environmental behaviour: an integrative review and research agenda. *Journal of Environmental Psychology*, 29(3), 309-317.



- Steg, L., Bolderdijk, J. W., Keizer, K., & Perlaviciute, G. (2014). An integrated framework for encouraging pro-environmental behaviour: the role of values, situational factors and goals. *Journal of Environmental Psychology, 38*(3), 104-115.
- Stern, P. C. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues, 56*, 407-424.
- Stern, P. C. (2002). New environmental theories: toward a coherent theory of environmentally significant behavior. *Journal of Social Issues, 56*(3), 407-424.
- Stern, P. C., & Dietz, T. (1994). The value basis of environmental concern. *Journal of Social Issues, 50*(3), 65-84.
- Stern, P. C., Dietz, T., Kalof, L., & Guagnano, G. A. (1995). Values, beliefs, and proenvironmental action: attitude formation toward emergent attitude objects. *Journal of Applied Social Psychology, 25*(18), 1611-1636.
- Stern, P. C., Kalof, L., Dietz, T., & Guagnano, G. A. (1995). Values, beliefs, and pro-environmental action: attitude formation toward emergent attitude objects 1. *Journal of Applied Social Psychology, 25*(18), 1611-1636.
- Struch, N., Schwartz, S. H., & Van, d. K. W. A. (2002). Meanings of basic values for women and men: a cross-cultural analysis. *Personality & Social Psychology Bulletin, 28*(1), 16-28.
- Stump, D. J. (2000). Social constructivism and the philosophy of science. *Isis, 95*(3), 538-539.
- Swarbrooke, J., & Horner, S. (2007). *Consumer Behaviour in Tourism (Second Edition)*.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behavior, 16*(3), 282-298.
- Syakir Shukor, M., Sulaiman, Z., Chin, T. A., Zakuan, N., & Merlinda Muharam, F. (2017). Materialism, Altruism, Environmental Values, Learning Strategies and Sustainable Claim on Purchase Intention of Energy Efficient Vehicle (EEV) - A Literature Review. *Materials Science and Engineering Conference Series (Vol.215, pp.012021)*. Materials Science and Engineering Conference Series.
- Tang, W., Q., & Zhang, J., F.(2008). Study of values in China and abroad. *Psychological Science, 31*(3), 765-767.



Thompson, S. C. G., & Barton, M. A. (1994). Ecocentric and anthropocentric attitudes toward the environment. *Journal of Environmental Psychology*, 14(2), 149-157.

Thøgersen, J. (1996). Recycling and morality: A critical review of the literature. *Environment and Behavior*, 28, 536-558.

Uzzell, D., & Moser, G. (2009). Introduction: environmental psychology on the move. *Journal of Environmental Psychology*, 29(3), 307-308.

Wang, G., Li, J. & Liao, s. (2010). Study of relationship between value, environment attitude and consumers' green purchase. *Soft Science* (4), 135-140.

Weed, M., Bull, C., Brown, M. ...et al. (2014). A systematic review and meta-analyses of the potential local economic impact of tourism and leisure cycling and the development of an evidence-based market segmentation. *Tourism Review International*, Vol. 18, pp. 37-55.

Weigand Lynn (2008). A Review of Literature: The Economic Benefits of Bicycling.

Wheeller, B. (1991). Tourism's troubled times: responsible tourism is not the answer. *Tourism Management*, 12(2), 91-96.

Willett Kempton, James s. Boster, and Jennifer A. Hartley (1995). Environmental values in American culture. The MIT Press. Cambridge, Massachusetts London, England.

Zhou, W., J. (2013). Study on the relationship between nature connectedness and environmental behavior. (Doctoral dissertation, Nanjing University).



## Appendix

### 1. Interview Questions

Questions include 2 main parts: closeness with nature and environmental concern.

For the closeness with nature is examined by the questions listed below:

1. Please describe your relationship with nature?
2. How do you feel about animals and plants?
3. How would you describe your 'time' with nature?
4. What do you think about living in an apartment with a window facing the natural landscape?
5. How do you think your actions affect the natural environment? For example, transportation, food, hotel....how do you feel cycle tourism affect nature?
6. What do you think about relationship between your personal wellbeing and the wellbeing of the natural world?

While the environmental concern, there are two segments to investigate: environmental protection and pollution issues. Questions include:

1. What is your opinion about required deposits on beverage containers, like beer, or other bottles? (To investigate the attitudes towards environmental behaviors)
2. How do you think about the strategies used to reduce pollutions and CO<sub>2</sub> emissions?
3. In which pro-environmental activities do you engage on everyday basis?  
(Recycling, petition and litter pick-up activities?)(To investigate their actual behaviors)
4. Do you feel guiltily when you drive or use other motor vehicles? What do you think of green transportation? (To investigate their awareness and responsibility, and how responsible the respondents for solving the pollution problems caused by transportation)
5. How do you think your cycling activities will affect CO<sub>2</sub> emissions? (To investigate their knowledge of environmental problems resulting from transportation)
6. During your cycle tourism activities, do you think about environment or just do it for other reasons?



## 2. Interview Results

Nationality (Name)	Gender	Closeness to nature	Environmental concern	Environmental behavior	environmental value as motivation of cycle tourism
Colombia (Fillipo)	M	abstract, egoistic, listen to nature	low good knowledge, not guilty	not recycle, like cruise ride bikes for fun, like the 2 meter bike used in US	never
Sweden (Elwircia)	F	concrete description; altruistic; implicit closeness to nature	high good environment consciousness, but influenced by family and social process	high not recycle all the time	50%
Eritrea (Michell M)	F	abstract, biospheric; implicit closeness to nature	high	high	never
Greece (Alex)	F	concrete; altruistic; egoistic	high	high, consider for self interest	never, but anyway cycling is good for environment
Sweden (Arne)	M	abstract and concrete, philosophical; altruistic; biospheric;	high	high	have no choice other than bicycle



Sweden (Fia)	F	concrete description;  biospheric	high	high	never
Sweden (Matilde)	F	concrete description; altruistic; biospheric	high	high, mention consider less during travel	never think of it during tourism, but do it in daily life
Philippines (Raphael)	M	general; altruistic; biospheric; egoistic; low closeness to nature	high	low	never
Poland (Basia)	F	concrete; altruistic; biospheric; low closeness to nature	high	high but for practical reasons	never
Poland (Michael)	M	abstract; altruistic	high	high	never
China (Lee)	M	abstract; egoistic; biospheric	high but low social desirability responding	high but practical	50%
China (Nee)	M	concrete; egoistic; biospheric separate human from nature;	high but low social desirability responding	high but practical	never
Sweden (Nikos)	M	abstract; biospheric; egoistic;	high but low social desirability responding	high but practical	50%