Travelling green

- Variables influencing students' intention to select a green hotel

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Abstract

Title: Travelling green -Variables influencing students' intention to select a green hotel.

Problematization: Tourism has a major impact on the environment. However, there is a conflict of interest making it difficult for the hotel business to decrease this impact. On the one hand, there is a pressure for environmentally friendly behaviour from society. On the other hand, the customers want to be pampered during their hotel stay. This makes it necessary to further investigate what influences customers' intention to select a green hotel. Therefore this thesis examines students' intention to select a green hotel. Since, it might make it easier for hotels to design and implement strategies to be greener, if they know what is important.

Purpose: The aim with this thesis is to examine how the variables *subjective norm, perceived behavioural control, perceived moral obligation* and *environmental awareness* influence students' intention to select green hotels. The main theory used is the Theory of Planned Behaviour (TPB). However, to make the TPB model fit better to the context green hotels, the variables *perceived moral obligation* and *environmental awareness* were added. The reason for adding these variables was because they are closely entwined with each other and is argued in previous research argues they influence environmentally friendly behaviour.

Methodology: This study used an online questionnaire and a small experiment in the questionnaire. The sample consisted of students from Kristianstad University.

Conclusion: The result of this study shows that all the hypotheses were rejected and therefore the null hypotheses are retained.

Key words: The Theory of Planned Behaviour, green hotels, intention to visit, perceived moral obligation, environmental awareness

Acknowledgment

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1. Introduction

In this section an introduction to environmental issues the tourism faces and what might influence students to select a hotel that works for sustainability is given, followed by a problematization. The chapter continues with the formulation of the research question and the purpose of the thesis. Lastly, the section ends with limitations and the outline of this thesis.

1.1 Background

Tourism has a major impact on the environment. 5 % of the global carbon emissions and 14% of total greenhouse emissions are caused by tourism in the world (Juvan & Dolnicar, 2014a). As the environmental issues increases, a push for sustainability strategies within the tourism sector increases making environmental factors important for the hotel industry (Barber, 2014; Han & Yoon, 2015; Kang, Stein, Heo, & Lee, 2012; Baker, Davis, & Weaver, 2014). Leading hotels have increased their efforts to encounter environmental issues and invest more in becoming green and lowering the environmental impact (Kang *et al.,* 2012). An average hotel purchase more products in one week than a family do in one year (Chen & Tung, 2014). The harmful impact hotels have on the environment has received customers' attention and made them more aware of environmental issues (Han & Yoon, 2015; Baker, Davis, & Weaver, 2014; Gleim, Smith, Andrews, & Cronin Jr. , 2013).

There is a growing concern about environmental issues like pollution, global warming and ozone depletion (Han & Yoon, 2015; Paço, Alves, Shiel, & Filho, 2014; Norazah & Norbayah, 2015; Lee, Hsu, Han, & Kim, 2010). However, modern Western lifestyles are, characterized by overconsumption causing major pressure on natural resources and ecosystems. People's lifestyles are based upon past and current consumption patterns that are intertwined with people's everyday choices and practices. Sustainability in lifestyles is a concept that includes activities like, leisure activities as well as, material consumption. Thus, sustainable consumption is about the purchase, use and disposal of products and services. To successfully change customers' behaviour it is necessary to understand the diversity in lifestyles and provide sustainable options. Current sustainable action strategies rarely acknowledge the diverse motivations of people. Hence, understanding variables that influence peoples' behaviour in favour of sustainable patterns is important (Backhaus, Breukers, Mont, Paukovic, & Mourik, 2011).

People travel more than ever and the tourism sector is expanding rapidly. As the tourism and hotel sector prosper, the competition intensifies (Roy, 2011). However, customers' attitudes have changed and they are becoming more aware of their own environmental impact. More people are moving towards more sustainable lifestyles (Backhaus *et al.,* 2011). There is research suggesting that customers prefer to stay in hotels that actively work for sustainability (Green hotelier, 2014). This increased environmental awareness is suggested to be an emerging market (Barber, 2014) and has been argued to provide hotels, with a strong sustainability profile, a competitive advantage (Han & Yoon, 2015). Still, even though environmental awareness is increasing, the purchasing behaviour is not following this trend (Paço *et al.,* 2014; Gleim *et al.,* 2013). Therefore, it is relevant to examine further what influences customers' choice when selecting a green hotel. A green hotel is an environmental friendly lodging property that follows ecologically comprehensive practices like water and energy savings, to help protect the planet (Han, Hsu, & Sheu, 2010).

1.2 Problematization

There is a conflict of interest within the hotel business between the society at large and the customers visiting the hotels. On the one hand, we have seen an increasing demand from society for stronger actions from the hotel sector to take responsibility for their environmental impacts. Already back in the 1990's companies were strongly affected by the growing demand for responsible business and corporate responsibility (Martin, 1992). This demand from society has by no means lost momentum over the last decades, rather the opposite (Barber, 2014; Chen & Tung, 2014). On the other hand, even if customers, when at home, feel the moral responsibility for the environment this is not necessarily the case when in a hotel setting. Studies have shown that when being on vacation the societal norm, in terms of environmental friendly behaviour, is not as important (Miao & Wei, 2013; Juvan & Dolnicar, 2014b). At the hotels, customers expect to be pampered with hot water in the showers, freshly washed linen, a generous supply of towels and plenty of supplies of food and drinks (Barber, 2014).

This clash of interests creates issues for hotels, which try to accommodate both demands. How can hotels be profitably greener when customers do not show the same interest as the society? It is necessary for green hotels to understand which variables influence customers to select green hotels. Hence, customers' decision-making process and planned behaviour are of importance to be able to design and implement environmental strategies to attract customers

(Han, Hsu, & Sheu, 2010). One segment of the hotel customers can be university students; therefore, students are used in this study as representations of customers. University students are a good sample when testing situations involving environmental choices, due to their high environmental awareness. The reason for their higher environmental awareness is because they are often well informed and concerned about environmental problems (Paço *et al.,* 2014; Backhaus *et al.,* 2011).

Peoples' intention to a planned behaviour can be explained by using the Theory of Planned Behaviour (TPB) (Lu & Liao, 2012), like intentions to visit green hotels (Han, Hsu, & Sheu, 2010). The theory's assumption is that, the stronger the intention is to engage in a specific behaviour the more likely the action should be (Ajzen, 1991). The theory is developed by Ajzen (1991) and argues that attitude, subjective norm and perceived behavioural control are closely entwined with each other. These variables are good indicators to understand behaviour in specific contexts (Ajzen, 1991).

To be able to capture intention to select a green hotel, and consider the demand from society and customers, the model of TPB needs to be adjusted. This study has added the variables *perceived moral obligation* and *environmental awareness*. These variables have been tested in previous studies. Chen and Tung (2014) tested perceived moral obligation and found that if an individual has higher moral obligation the intention to visit is more likely to occur. They also stated that moral obligation needs to be considered when investigating peoples' willingness to perform certain behaviours. People might feel the moral obligation to contribute to a better environment. Therefore, moral obligation could affect the intention to select a green hotel since this choice would be better for the environment. However, pro-environmental behaviour has also been suggested not to be consistent across different settings (Miao & Wei, 2013). Since perceived moral obligation is about the willingness to perform it could complement perceived behavioural control. Perceived behavioural control only focuses on the resources and opportunities (Ajzen, 1991), while perceived moral obligation focuses on the willingness to perform (Chen & Tung, 2014). By adding this variable to the theory of planned behaviour, there can be a possibility of development of the model with an complement of the willingness to perform and not just study the resources and opportunities or the influence significant others has on the planned behaviour. Due to these reasons, adding moral obligation as a variable that can improve the prediction of intentions (Chen & Tung, 2014), thus, and making it a crucial variable to add to the TPB.

The second variable is environmental awareness, which refers to "individuals' concern/apprehension about the various facets of environmental problems and their seriousness" (Han & Yoon 2015, p. 24). Han and Yoon (2015) tested environmental awareness and the result shows no significant relation between environmental awareness and the intention to select a green hotel. However, according to Han and Yoon, 2015 environmental awareness is a vital precondition for environmentally responsible consumer behaviour. Therefore, it might be relevant to examine further if the variable has a significant impact on the intention to visit a green hotel. The assumption is that more environmental knowledge about green issues leads to more pro-environmental behaviour (Miao & Wei, 2013; Norazah & Norbayah, 2015). Therefore, it is expected that environmental awareness influence the likelihood of guests choosing a green hotel. Each of the variables in the theory is further described in the literature review and how they are expected to influence the model.

To the best of our knowledge it has not been found that the variables have been tested together with the TPB. Still, the variables together might better explain what influence customers intention to select a green hotels, since they are closely related with each other (Nihlén Fahlquist, 2009).

This study is important since there is a clash of interest between hotels, society and customers. Additionally, from a hotel perspective knowing what influences their customers' behaviour can help them design their business model to be both competitive and green. Therefore, more studies need to investigate customers' intentions when selecting green hotels. Furthermore, this knowledge is important for hotels, since green initiatives are something asked more frequently by customers (Norazah & Norbayah, 2015; Han H. , Hsu, Lee, & Sheu, 2011). Therefore, the theoretical contribution of this paper aims to investigate if the additional variables together with TPB can better explain customers' intentions to select green hotels. The added variables have already been tested (for example in: Chen & Tung, 2014; Norazah, 2013). However, they have not been tested together.

1.3 Purpose

The aim with this thesis is to examine and determine how different variables influence students' intention to select green hotels. The variables tested are *subjective norm, perceived behavioural control, perceived moral obligation* and *environmental awareness*. The main

theory is the Theory of Planned Behaviour (TPB). To make the TPB more comprehensive, two variables *perceived moral obligation* and *environmental awareness* are added.

1.4 Research question

This paper concentrates on students' intention to choose a green hotel. From the problematization the research question that is addressed in this thesis is:

What influence students' intention to select a green hotel and how?

1.5 Limitations

This study is limited in the selection of the added variables. There are more possible variables to study, for example environmental concern (Chen & Tung, 2014) and green hotel knowledge (Norazah & Norbayah, 2015). However, the chosen variable environmental awareness has been tested in previous studies, examining customers' intention towards selecting green hotels. Still, they do not seem to be extensively tested together with the TPB, and in the context of this study. To the best of our knowledge, environmental awareness has only been tested in one study. In that study, it could not be determined if the influence of environmental awareness was a coincidence or actually affected the intention to select a green hotel. Therefore, it is important to further study this variable. Perceived moral obligation has also been tested before, and is found to enhance the predictability of intentions to visit a green hotel. Since environmental awareness and perceived moral obligation are closely linked to each other, they need to be tested together to see if they can better explain students' intentions.

1.6 Outline

This thesis consists of seven sections. The first section describes the background and presents the problematization. From the problematization the research question and purpose of this thesis are developed. The first section ends with limitations and outlines. In the second section the theoretical method is described. The third section presents the literature review and ends with the theoretical model for this thesis. In the fourth section, the empirical method and operationalization are described and argues for the tests used to examine the data. In the fifth section, the empirical findings are presented. In section six, the result is discussed. Finally, in section seven the thesis ends with a summary, conclusion, ethical and societal implications, practical and theoretical contributions and suggestions for further research.

2. Theoretical Method

This section shortly explains different research approaches and describes which one that is applied to this thesis. The following section focuses on the research philosophy and approach used. The next section discusses the choice of theory and then the source criticism considered in this thesis is described.

2.1 Research philosophy

A research philosophy permits the researcher to make assumptions about how the world is seen from their perspective. The philosophy is influenced by the practical considerations, due to the fact that some of the philosophies are better suited. The three main philosophies are *interpretivism, realism* and *positivism* (Saunders, Lewis, & Thornhill, 2012). This paper has a *positivistic* position since the collected data might explain a causal link relationship that can be used to further explain the theory. In this study hypotheses are developed to investigate if there are relationships between different variables and the intention to choose a green hotel. The data collected with this position are often quantitative, which makes it possible to generalize the result to a larger population (*ibid*).

Positivism is also about collecting data of an observable reality, to search for regularities and causal relationships that could result in law-like generalizations (Saunders, Lewis, & Thornhill, 2012). This paper investigates if there are any patterns amongst students, when selecting a green hotel. A trait for positivism is also that the research is conducted in a value-free way as possible. In other words, the researcher is value neutral to the study. However, it is arguable if any research can be totally value-free (Saunders, Lewis, & Thornhill, 2012; Bryman & Bell, 2011). As far as possible, this study is conducted as objectively as possible, which is also a characteristic for a positivistic position. This study was conducted through online questionnaires and not face to face. Therefore, the interview effect (respondents answering how they think they should answer and not how they want to) might not have been that high (Bryman & Bell, 2011).

2.2 Research strategy

There are three different research approaches: *induction, deduction* and *abduction,* which can be applied to a research (Saunders, Lewis, & Thornhill, 2012). A deductive approach tests a premise by collecting appropriate data to measure the concepts or variables and then analysing the data. If the result is not consistent with the premise the theory is false, and must either be rejected or modified (*ibid*). This paper uses a deductive approach, which aims to explain a causal relationship between variables. This measure uses existing theory in a specific field of research to formulate hypotheses that can be further examined. (Bryman & Bell, 2011). A deductive approach often try to verify if a theory is applicable or not, and tries to test the theories objectively. Furthermore, a deductive approach often uses a highly structured methodology to make replications possible for other researchers. The concepts should also be operationalized and defined so that facts become measurable (Saunders, Lewis, & Thornhill, 2012). This paper uses a deductive approach since it applies the Theory of Planned Behaviour (TPB) to develop hypotheses, which might explain the intentions when selecting a green hotel. Additionally, other already established variables, in this specific context, were also added to see if they could better explain students' intentions to choose green hotels. The measurements, for each variable is directly taken or derived from previous research. This might increase the validity and possibility for other researchers to replicate this study.

2.3 Choice of theory

This paper applies the TPB, which is derived from the psychology field. The TPB uses some central concepts within the social and behaviour discipline, which permits prediction and understanding of a particular behaviour in a specific context (Ajzen, 1991). This theory provides an important theoretical basis to understand whether consumers intend to perform an environmentally friendly behaviour or not (Chen & Tung, 2014). The TPB is one of the main theories utilized in studies within the tourism field when examining customers' intentions (Han, Hsu, & Sheu, 2010; Chen & Tung, 2014; Juvan & Dolnicar, 2014b). Moreover, the TPB allows the addition of more variables depending on a specific context (Ajzen, 1991), which might make it more applicable to capture the intention to select a green hotel.

2.4 Research method

A researcher can either chose to collect quantitative or qualitative data. The distinction between the two research methods is their way of processing data. It is words and explorations (qualitative) versus numbers and explanations (quantitative). Since, the aim for this thesis is to explain what motivates customers' intention to select a green hotel, a relationship between the variables is analysed. When relationships are analysed and the study aims to explain the more appropriate method is the quantitative approach. Quantitative methods have also been suggested to be best suited for a deductive approach when testing theories (Bryman & Bell, 2011). This study uses a quantitative approach in form of questionnaires. The operationalization is further explained in the section empirical method.

2.5 Source criticism

All the articles used in this paper are peer-reviewed. Since there is a lot of information available on the Internet, this is done to ensure quality in the information used. The Webpages used in this paper are updated at least 2014 to provide current information. One has to observe that the two reports used in this paper are created by organizations, which both are well known to be supportive of environmental friendly reforms. However, additional articles have also supported the organizations information included in this paper, which adds to the credibility of the information.

3. Literature review

To be able to examine which variables influence tourists' intention to choose a green hotel, it is important to know how consumer behaviour is described and defined. This section also presents the concept of green consumerism. The main theory, Theory of Planned Behaviour, and the original variables are also further explained. This literature review also contains the definitions of the added variables, and end with a summary and the theoretical model.

3.1 Consumer behaviour

Consumer behaviour is one of the most researched fields within tourism (Cohen, Prayag, & Moital, 2014). It differs from the field of marketing since it is a research topic for social psychologist, derived in the 50's (Shaw & Jones, 2005). It is used to study the buying and consumption behaviour of customers, to be able to design the most effective marketing possible (Blackwell, Miniard, & Engel, 2001). The study of consumer behaviour originates from *why people buy* and can be defined as: "all activities directly involved in obtaining, consuming, and disposing of products and services" (Cohen, Prayag, & Moital, 2014, p. 874). Obtaining refers to the process before and during the purchase, which includes information seeking, evaluation of products/services, choices and purchases. The second activity is consuming, this is about how, when, where, and under what condition consumers use a product. The last activity is disposing which refers to how the customer recycles or throws away the used products (Blackwell, Miniard, & Engel, 2001). Consumer behaviour includes all the steps where the consumers are involved with the products/services offered (Shaw & Jones, 2005). In the early days of consumer behaviour research focus was on why people bought products, to be able to understand how specific reasons affect consumption patterns. However, the field has developed and gained a greater focus on how and why people consume the products to be able to know what they want (Blackwell, Miniard, & Engel, 2001). Consumer behaviour research also includes social science and some of the popular topics are for example: motivation, selective attention, social influence, intentions and choice (Shaw & Jones, 2005).

3.1.1 Green consumerism

During the time period 1980-1990, customers started to purchase environmentally friendly substitutes (Prothero, 1990; Schlegelmilch, Bohlen, & Diamantopoulos, 1996). This is also the time period when the concept *green consumer* started to emerge. A green consumer is defined as a "person that acts, purchases and consumes, in accordance with the need for

environmental maintenance and refuses to use products that are harmful for the environment" (Paco *et al.,* 2014, p. 57). This kind of product can be defined as a *green product,* which is a product that does not pollute the planet or only uses minimal natural resources, and can be recycled (Vazifehdoust, Taleghani, Esmaeilpour, Nazari, & Khadang, 2013). Some other examples of environmentally friendly characteristics are products and services that conserve energy and water, minimize production of waste and are made from recycled materials that can either be reused or recycled (Vazifehdoust *et al.,* 2013).

As consumers become aware of issues related to the fragile state of the environment, they place greater importance on environmentally friendly purchases (Gleim *et al.,* 2013). Thus, consumers become more and more demanding regarding environmentally friendly products from companies (Peattie & Crane, 2005). This consumer behaviour could be referred to as *green purchasing*. Green purchasing is the selection and consumption of products and services that most effectively minimize negative impacts on the environmental over the product's entire life cycle. The main goal for green products is to reduce their environmental impact (Vazifehdoust *et al.,* 2013). This kind of change in consumers and production chains has been described as the moving away from the "throwaway era", and where the trend points towards an era where less is more (Prothero, 1990).

Green tourism is a main example of green consumerism (Chen & Tung, 2014). Hence, one example of green consumerism could be when a consumer selects a green hotel. A green hotel is an environmental friendly lodging property that institutes and follows ecological practices (like water- and energy savings and reduction of solid waste) to help protect the planet (Han, Hsu, & Sheu , 2010; Chen & Tung, 2014; Han *et al.,* 2011). However, even if the hotel itself puts a lot of pressure on the environment, its environmental impact cannot solely be put on the hotels. Consumers need to take their responsibility as well. Hence, the success of green hotels needs support from both hotels and consumers (Chen & Tung, 2014). Therefore, what makes people select a green hotel seems relevant to investigate further. This can be explained by the Theory of Planned Behaviour, which is further described in the next section.

3.2 Theory of planned behaviour

Human behaviour is hard to explain. Within the psychology field, Ajzen (1991) developed the Theory of Planned Behaviour (TPB) as a way to study the planned behaviour of people in a specific context. The main basic assumption of the TPB model is that most planned behaviour

people engage in is under their own control (Chen & Tung, 2014). The TPB is an extension of the Theory of Reasoned Actions (TRA). Ajzen (1991) added the variable perceived behavioural control to the TRA, this was due to the limitations in dealing with behaviours when people lack volitional control. The new model was then called the TPB. In both of the theories, the intention is a central variable and is expected to include the motivational factors influencing behaviour. Thus, the intention variable should be an indication of how hard individuals is willing to try and how much effort they are planning to exercise to be able to perform the behaviour. Therefore, the stronger the intention is to engage, the more likely it is that the behaviour will be performed (*ibid*). The TPB has been used within the field of tourism to be able to study why tourists make their choices (Chen & Tung, 2014; Han & Kim, 2010; Norazah & Norbayah, 2015; Han, Hsu, & Sheu, 2010).

The TPB model is shown in Figure 1. The central variable is intention. Perceived behavioural control is affecting intention and can directly predict behavioural achievement. It can also be used as a substitute to measure actual control. For the other variables, Ajzen (1991, p.188) states that: "as a general rule, the more favorable the attitude and subjective norm with respect to a behavior, and the greater the perceived behavioral control, the stronger should be an individual's intention to perform the behavior under consideration".
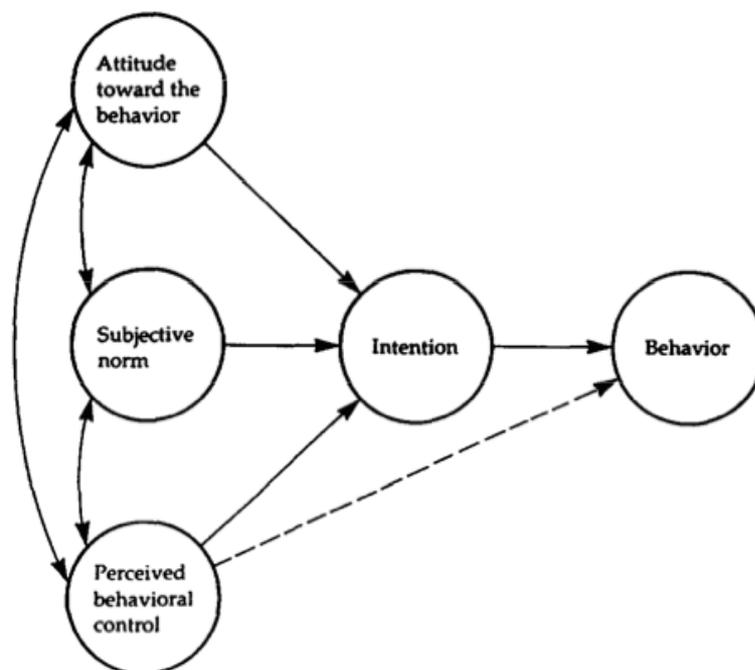

Figure 1. Theory of planned behaviour source: Ajzen 1991

The next section further explains the variables of the model in detail and presents the hypotheses.

3.2.1 Intentions

In TPB intention refers to the individuals' intention to perform a specific behaviour. Ajzen (1991 p.181) argues that, "intentions are assumed to capture the motivational factors that influence behaviour". These motivational factors can be people's willingness to try, and how much effort they are willing to exert, to be able to perform the behaviour (*ibid*). Intention also reflects the desire to perform and, has a direct effect on the behaviour (Lu & Liao, 2012). Therefore the decision factor in a person's actual behaviour is the tendency to behave, which is called behavioural intention (Chen & Tung, 2014). The general rule is: "the stronger the intention to engage in a behaviour, the more likely should be its performance" (Ajzen 1991 p.181). In this study, intention refers to a student's intention of choosing a green hotel.

However, it has been argued that intentions are hard to measure (Davis & Warshaw, 1992), which could be because individuals might need experience, to be able to decide if they should perform the behaviour or not. Previous studies have for example tested the intention on respondents from a hotel database (Han, Hsu, & Sheu, 2010), which means that their sample have hotel experiences. However, this sample consists of students and it cannot be assumed that all respondents have the experience of a hotel, and especially not a green hotel. This can be an indication of lack of experience of the respondents, and might therefore limit the possibility to measure intention. However, because attitude affects intentions more than subjective norms and perceived behavioural control (Han, Hsu, & Sheu, 2010) it might be possible to use the measurement for attitude instead of intention. Therefore, the variable attitude is not included in our model as a variable motivating students to choose a green hotel, but as a measurement to examine intention.

Attitude refers to "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen 1991, p. 188). It is based on outcome evaluations, which involves the evaluation of possible consequences of a specific behaviour (Han & Kim, 2010; Han, Hsu, & Sheu, 2010). Hence, attitude is related to an individual's like or dislike of conducting a specific behaviour (Norazah & Norbayah, 2015; Han & Kim, 2010). When individuals have a more positive attitude, his/her behavioural intention will be more positive (Chen & Tung, 2014). Thus, when determining whether or not to follow a specific behaviour, a person often assesses benefits and disadvantages resulting from that behaviour (Han, Hsu, & Sheu, 2010). When the outcome is positively evaluated a person is more likely to perform after that behaviour (Ajzen, 1991; Han, Hsu, & Sheu, 2010). Hotel

customers' environmentally friendly attitudes positively affect their intention to stay at a green hotel (Chen & Tung, 2014; Han, Hsu, & Sheu, 2010). Furthermore, results from Han, Hsu and Sheu (2010) revealed that attitude, positively affected intention to stay at a green hotel.

3.2.2 Subjective norm

The first variable in TPB that affect intentions is subjective norm (Ajzen, 1991; Chen & Tung, 2014). The variable refers to, by Ajzen (1991, p. 188) as: "the perceived social pressure to perform or not to perform the behaviour". Hence, it affects people's decision-making process and intention towards a specific behaviour (Ajzen, 1991; Chen & Tung, 2014). The social pressure comes from people close to the person, for example family members or friends (Norazah & Norbayah, 2015; Chen & Tung, 2014). The assumption is that the more positive subjective norm one has, the stronger is the intention to act (Chen & Tung, 2014). The subjective norm consists of normative beliefs and motivation to comply. Normative beliefs are the perceived behavioural expectations of one's significant others, and motivation to comply means a person's desire to accommodate the opinions of the significant other regarding a behaviour (Han & Kim, 2010). Han, Hsu and Sheu (2010) found empirical evidence that there is a relationship between subjective norm and tourists' attitudes towards a green hotel. Hence, if significant others think that staying at a green hotel is an appropriate behaviour the social pressure to visit a green hotel would increase (*ibid*). However, Norazah and Norbayah (2015) found no significant relation between subjective norm and the intention to re-visit a green hotel. The results in previous studies differ, which increases the importance of including subjective norm when testing the intention in different contexts. Therefore, subjective norm was added to the proposed model and the following hypothesis was developed:

Hypothesis$_1$: *Positive subjective norm of significant others, towards sustainability is positively related to the intention to select a green hotel.*

3.2.3 Perceived behavioural control

The second variable affecting the intention is perceived behavioural control. This variable is important to study due to resources and opportunities available when making a choice (Ajzen, 1991). Resources/opportunities can be time, money, costs and the self-confident in ability to perform the planned behaviour (Han, Hsu, & Sheu, 2010; Chen & Tung, 2014; Norazah & Norbayah, 2015). These resources/opportunities are not always under the individuals own

control, however needs to be taken into consideration if the individual intend to perform a behaviour (Ajzen, 1991; Chen & Tung, 2014). For example, an individual might not feel they have the time, money or that the costs are too high for them to travel. Ajzen's (1991, p. 122) definition was "the perceived ease of difficulty of performing the behavior". He argues that this, to some extent, must affect the likelihood of behavioural achievement (Ajzen, 1991). This variable refers to an individual's perception of the presence/absence of resources or opportunities, which is required to perform the specific behaviour, which in this case is the intention to choose a green hotel. These opportunities/resources is then analysed, with regard to importance for the individual in the case of the achievement of the behavioural outcome. This process may change due to the situation and form of action, which can affect the behaviour control positively or negatively (Han, Hsu, & Sheu, 2010). It is argued that if the individual has more control over the performance of the behaviour, due to more resources or opportunities, the intention will be higher (*ibid*). Hence, the second hypothesis is:

Hypothesis$_2$: *A higher perceived behavioural control, one feels, is positively related to the intention to select a green hotel.*

The variables above are from the original TPB model. In the next section the added variables, tested with the TPB, are discussed.

3.3 Variables added to the Theory of Planned Behaviour

In the Theory of Planned Behaviour intention is composed by attitude, subjective norm and perceived behavioural control. However, this paper adds two more variables, which are argued to influence the intention. These are environmental awareness and perceived moral obligation.

3.3.1 Perceived moral obligation

A key trend affecting travel behaviour, at least in more wealthy nations, is a rising concern over the morality of consumption (Cohen, Prayag, & Moital, 2014). Therefore, the first variable added is perceived moral obligation. Moral obligation can be defined as an individual's willingness to perform a particular behaviour based on their feelings of responsibility (Chen & Tung, 2014). Ajzen (1991) claims that researchers have to take into consideration perceived moral obligation or responsibility to perform or not perform the behaviour. Hence, a person's perceived moral obligation has a vital impact on moral intention (Chen & Tung, 2014). It has been suggested that moral obligations, parallel with attitudes,

subjective norms and perceived behavioural control, should influence intentions (Ajzen, 1991). Therefore, in addition to the original components in the TPB, an individual's perceived moral obligation should also be included into the model to add to the predictability (Ajzen, 1991; Chen & Tung, 2014). In a study conducted by Chen and Tung (2014), it was found that consumers' perceived moral obligation had a positive impact on the intention to visit a green hotel. Therefore, we also expect a relationship between perceived moral obligation and the intention to choose a green hotel. The third hypothesis is:

Hypothesis3: *A higher perceived moral obligation, one feels, is positively related to the intention to select a green hotel.*

3.3.2 Environmental awareness

Environmental knowledge refers to general knowledge about concepts, facts and relationships concerning the environment and ecosystems (Vazifehdoust *et al.,* 2013). It involves the awareness people has about the environment, for example how certain behaviour may affect the environment, greenhouse effects and which changes are necessary for a sustainable development (Norazah, 2013).

For the last few decades, the society has been recognizing the seriousness of environmental problems, causing the concerns for environment to become larger (Han & Kim, 2010). Environmental awareness refers to "individuals' concern/apprehension about the various facets of environmental problems and their seriousness" (Han & Yoon, 2015, p. 24). On one hand, despite of increased concern for the environment customers' are not purchasing green services equal to the concern (Gleim *et al.,* 2013). On the other hand, according to Han and Kim (2010) environmental concerns have led to great changes in customers' buying behaviours and attitudes toward eco-friendly business establishments. For example, as tourists becomes increasingly concerned about global warming they are more likely to make an eco-friendly decision like select a green hotel (Han *et al.,* 2011). Therefore, environmental awareness is a vital precondition for environmentally responsible consumer behaviour. Consumers that are environmentally responsible are often more aware of environmental problems. Those consumers also more often believe in the effectiveness of green behaviours, engage in environmentally friendly activities, and request products and/or services provided by environmentally responsible companies (Han & Yoon, 2015). Therefore, it is expected that higher environmental awareness will lead to more intentions to select a green hotel.

Hypothesis4: *A higher environmental awareness, one has, is positively related to the intention to select a green hotel.*

3.4 Theoretical summary, hypotheses and model

The Theory of Planned Behaviour is often used to study the planned behaviour of people in a specific context. Central to the model is the variable intention, which is expected to influence the planned behaviour. Intention is an indication of how hard individuals are willing to try to perform the behaviour, the stronger intention the more likely to perform the behaviour (Ajzen, 1991). In this study intention refers to students' intention to choose a green hotel. However, it is difficult to measure intention. Since attitude and intention are closely entwined with each other (Davis & Warshaw, 1992), there is a possibility to measure intention by using the attitude measurement. Attitude refers to an individual's like or dislike to perform a specific behaviour (Norazah & Norbayah, 2015; Han & Kim, 2010). The more positive attitude, the more positive behavioural intention will be (Chen & Tung, 2014). The variable, subjective norm is expected to influence intentions (Ajzen, 1991; Chen & Tung, 2014). The variable concerns social pressure which comes/do not come from the persons' significant others (Norazah & Norbayah, 2015; Chen & Tung, 2014). The belief is that more positive subjective norm, stronger the intention to act (Chen & Tung, 2014). The variable perceived behavioural control, is also expected to influence intentions. This variable describes the perceived ease/difficulty a person sees in performing the behaviour as resources/opportunities (Ajzen, 1991), like time, money and/or cost (Han, Hsu, & Sheu, 2010; Chen & Tung, 2014).

This thesis adds two variables to the TPB to make it fit the specific context better, intention to choose a green hotel. The first variable moral obligation is defined as an individual's willingness to perform a particular behaviour based on their feeling of responsibility (Chen & Tung, 2014). Researchers have to take this variable into consideration (Ajzen, 1991), since a person's perceived moral obligation has a vital impact on moral intention (Chen & Tung, 2014). The second variable is environmental awareness and refers to peoples' concern about the different facets of environmental problems (Han & Yoon, 2015). By adding environmental awareness it is possible to capture the eco-friendly behaviour of consumers. Environmentally aware consumers are often more aware of environmental problem, believe in effectiveness of green behaviours, and ask for products and/or services provided by environmentally responsible companies (*ibid*).

A summary of the hypotheses, which test the model, is presented in table 1.

Table 1. Summary of hypotheses

Hypothesis 1: Positive subjective norm of significant others, towards sustainability is positively related to the intention to select a green hotel.

Hypothesis 2: A higher perceived behavioural control, one feels, is positively related to the intention to select a green hotel.

Hypothesis 3: A higher perceived moral obligation, a one feels, is positively related to the intention to select a green hotel.

Hypothesis 4: A higher environmental awareness, a one has, is positively related to the intention to select a green hotel.

The model developed, for this study, is modified from Ajzen (1991) where the additional variables are taken from Chen and Tung (2014); Han and Yoon (2015). The model is presented bellow in figure 2.
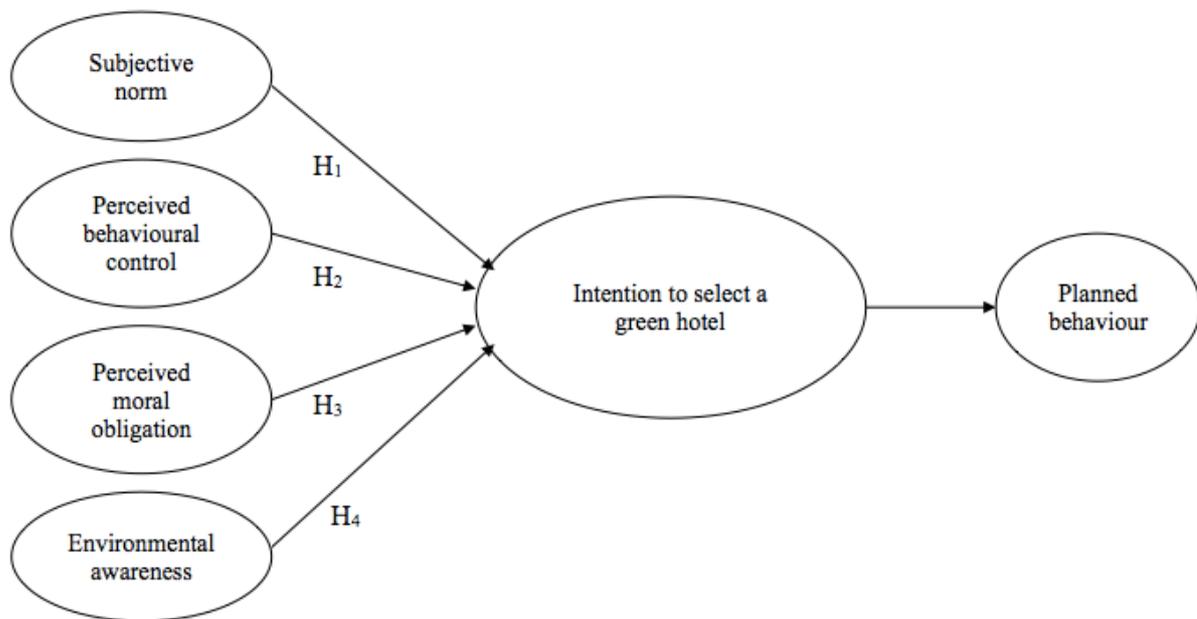
Figure 2. Model of variables influencing peoples' intention to select green hotels and is modified from source: Ajzen, 1991

In the model the main assumption is that the each variable will affect the intention to select a green hotel; the more positive each variable are the more positive the intention to a planned behaviour. It is also assumed that if intention is positive the more likely it is for the performance planned behaviour.

4. Empirical method

This section explains choice of methodology and why questionnaires are used. Afterwards, the sampling process is presented. Thereafter, an operationalization of the concepts is presented. Then factor analysis and Cronbach's alpha is described, followed by Pearson's correlation and standard multiple regression. Ethical consideration is also presented in this chapter. The chapter ends with a discussion of the concepts validity, reliability and generalization.

4.1 Survey

There are seven research strategies available when collecting data; however, the next section only describes the strategy used in this thesis, and argues why this has been selected.

A survey in form of a questionnaire was used to collect the data for this study. Surveys are often associated with a deductive approach (Saunders, Lewis, & Thornhill, 2012). Questionnaires are good choices when there is a need to collect a lot of data, and when there is lack of time (Denscombe, 2009). Surveys can either be face-to-face like structured interviews, over the telephone, online or paper based surveys. In this thesis, an online questionnaire was distributed amongst the respondents, though Survey Monkey. Data generated by surveys often allows for generalizations to be made, which can strengthen the conclusions. These benefits are of importance to test the hypotheses and research question in this dissertation, which is why a questionnaire was selected. Another advantage is convenience for respondents, as they can complete the questionnaire in their own time (Saunders, Lewis, & Thornhill, 2012).

4.1.1 Questionnaire

Questionnaires are exclusively linked to quantitative research and a deductive approach. This strategy tends to be used in exploratory research and to be able to suggest possible relationships between variables. The strategy allows for a sizeable data collection (Saunders, Lewis, & Thornhill, 2012), and generates primary data, which means that the data collected becomes specific for the research project (Bryman & Bell, 2011). The data were collected during the week 21. The questionnaire can be found in appendix 1.

The green certification used in this study is "Green Key". This is an international eco-label encouraging sustainable tourism with the aim to prevent changes in the climate. The certification is a part of the Foundation for Environmental Education (Green Key, 2015). This

is a non-government, non-profit organisation working for a sustainable development through environmental education. This certification began in 1994 and is now established in more than 40 countries. Green Key encourages the tourism industry (hotels, hostels, camp sites, conference and holiday centres) to act sustainably in different environmental aspects by awarding and advocating facilities. The different aspects covered are: water, waste, energy, involvement and awareness of guests, staff involvement, environmental management, use of chemicals, food and beverages. Green Key wants to protect the environment and make it easier for customers to be aware of green tourism (Green Key, 2015).

4.2 Experiment

An experiment is included in the questionnaire to be able to investigate if the cost to stay at a hotel, influences students' intention to choose a green hotel or not. The experiment method is a well-used method when testing people's actions and to investigate which variables are influencing something. What is of importance when using experiments is to have both an experiment group and a control group, to be able to control if the variable really influence or not (Saunders, Lewis, & Thornhill, 2012).

The questionnaire, to the experiment group, begins by showing pictures of the three hotels where it is displayed if the hotel is green or not. This is done through Green Key, which is a certification for green hotels. Hotel A and C were presented as green hotels and Hotel B as a non-green hotel. For all the pictures of the hotels, a description of the hotel's characteristics was visible. The description is used to try to create opinions toward the hotels, from the respondent. The respondents are asked to, from 1-7 scale, rank the likelihood of choosing each hotel. No information of the price is visible. In the end of the questionnaire the same pictures are shown again, however this time the cost to stay at the hotel is added. The green hotels (A and C) cost 1055 (SEK) and hotel B cost 482 (SEK). Thus, it was more expensive to stay at the green hotels. This is to see if the respondents choose the same hotel again or if this time, the costs matter in the intention to select a hotel. The reason to have a large difference in price was to create an obvious difference between the non-green and green hotels for the respondents and to force them to take clear a stand. For the control group the three pictures in the beginning are removed, and they have only the possibility to rank the same pictures that the experiment group was shown last, where the price was visible.

To test the experiment's result, MANOVA and paired sample t-test were used. MANOVA is used to test if there are any differences between groups (Pallant, 2010). Therefore, it is used to test if there were any differences between the control group and the experiment group. A paired sample t-test allows a researcher to compare a respondent's answer from a pre-and post-event, like when conducting experiments (Pallant, 2010). Thus, paired sample t-test is used to examine if there were any differences in the experiment between the first selection of the hotels and the second selection time. The result from the MANOVA and paired sample t-test is presented in part six.

4.3 Sample selection

This study is conducted in Sweden. Sweden has been ranked number nine of 178 countries in *environmental performance index* (EPI), which is an index that ranks how well a country perform on two broad environmental areas; protection of human health from environmental harm and protection of ecosystems (Yale University , 2015). This 9th place indicates that Sweden is a country where the environmental awareness is high, which makes it interesting to investigate if Swedish customers keep their environmental moral when choosing a hotel on their vacation. Still, this study would be interesting in other countries as well and is not specifically constructed for the Swedish context.

The respondents consist of university students. These have been suggested to be a good sample since young people often have more chances to travel (Chen & Tung, 2014). Additionally, students have also been suggested to play a crucial role for the environmental development in the future (Paço *et al.,* 2014). Moreover, students are often well informed and concerned about environmental issues (Paço *et al.,* 2014; Backhaus *et al.,* 2011). Therefore, this study selected students as respondents.

A request for permission to distribute the questionnaire online was sent out to the teachers. The request was sent out to 11 teachers; out of those 7 answered and gave their permission. The total number of students registered in those classes was 491. The online questionnaire was posted on their student platform, called *itslearning*, and each respondent had the opportunity to decline the questionnaire. The sample consists of students from 7 different classes, with different educational focus, on Kristianstad University. The sample consists of students from business administration, nursing and gastronomy. In each program two classes are selected, one starting autumn 2012 and one autumn 2014. The reason for this is to try and capture differences in age, since it might be assumed that in each of the classes there is a

majority of year of birth. Furthermore, the classes were selected because they are large programs and were scheduled to have classes during the time period that the data collection was conducted. The reason for wanting the classes to attending the university is because there might be a higher likelihood of them more regular visiting the student platform *itslearning*, where the questionnaire was sent out. This might enhance the likelihood of getting more respondents from those classes than students not having a reason to regularly visit the platform. One of the classes was a control group, where 30 students are registered. Hence, there are 6 experiment classes and one control class. The control class was chosen due to convenience and consists of Master students from business administration.

4.4 Operationalization

This next part describes the operationalization, from the literature review. Operationalization is defined as the steps you take to answer your research question. In other words, it is when concepts get translated into tangible indicators (Saunders, Lewis, & Thornhill, 2012); making it possible for researchers to, with items, to measure the specific concept (Bryman & Bell, 2011). Hence, these items were used in this questionnaire.

4.4.1 Dependent variable

This paper's dependent variable is *intention to visit a green hotel.* A dependent variable changes due to other variables (Saunders, Lewis, & Thornhill, 2012).

Intention to select a green hotel. There is a common measurement for intention, which is designed by Han Hsu and Sheu (2010). However, it is difficult to measure intention if the experience is lacking. This is because intention is not a belief; it is more a behavioural decision. Since, intention and attitude are highly correlated (Davis & Warshaw, 1992), there is a possibility to measure intention by using the attitude measurement. In this study, it cannot be assumed that all the respondents in the sample have experience of staying at a green hotel. However, even without experience people might create opinions about subjects, for example in our case green hotels. By provide a clear description in the beginning about what green hotels are, and then in the pictures present what each hotel include, respondents can create an opinion towards green hotels. The questionnaire used the measurement for attitude towards staying at a green hotel from the same author Han, Hsu and Sheu (2010). This questionnaire asked respondents to evaluate their attitude towards select a green hotel when traveling. This was conducted to capture the overall perceived attitude towards intentions to visit a green

hotel. By answering on a point-scale 1-7 the respondents could answer on the extremes for each attitude.

4.4.2 Independent variables

An independent variable is the variable that causes the changes in the relationship between variables (Saunders, Lewis, & Thornhill, 2012). This thesis has the following independent variables *subjective norm, perceived behaviour control, perceived moral obligation* and *environmental awareness.*

Subjective norm. The questionnaire asked respondents to evaluate the subjective norm towards select a green hotel. This independent variable was assessed to understand the social pressure respondents feel towards intentions to select a green hotel. The measure is derived from the Hsu and Sheu (2010) measurement. However, since that measurement is not directly applicable for this study modifications were made to still measure social pressure (approval /disapprovals from significant others) but to make it fit this context. The respondents answered the statements on a point-scale 1-7, 1 (strongly disagree) to 7 (strongly agree). The statements can be seen in appendix 3.

Perceived behavioural control. The questionnaire asked respondents to evaluate the perceived behavioural control towards selecting a green hotel. This independent variable was assessed to if respondents perceive that they have the means and opportunities to perform, if they feel the intention to select a green hotel. The measure is derived from the Hsu and Sheu (2010) measurement. However, since that measurement is not directly applicable for this study modification were made to still measure perceived behavioural control but to make it fit this context. The respondents answered the statements on a point-scale 1-7, 1 (strongly disagree) to 7 (strongly agree). The statements can be seen in appendix 3.

Additionally, income of the respondents was also measured as a part of perceived behavioural control, the recourses to select a green hotel. This measurement is connected to the experiment in the questionnaire. Furthermore, education level of the respondents' parents was added as a part of perceived behavioural control to see if the respondents have the opportunity to frequently travel with their parents.

Perceived moral obligation. The measure is designed by Chen and Tung (2014) and also tested by the same author and Han (2015). The items were developed to examine how respondents perceive their moral obligation, when it comes to the environment. A 1-7 point-scale was presented were respondents could answer the statements, 1 (strongly disagree) to 7 (strongly agree). The statements can be seen in appendix 3.

Environmental awareness. This measure is designed by Han and Yoon (2015) and also tested by the same author. A 1-7 point-scale was presented were respondents could answer the statements, 1 (strongly disagree) to 7 (strongly agree). The statements used, concerned general environmental awareness of the respondents and can be viewed in appendix 3.

4.4.3 Control variables

The control variables used in this paper are gender, age, field of study, frequency of staying at a hotel/year and if the respondent have been visiting a green hotel before.

Gender. This is a measure by Miao and Wei (2013) and tested by the same authors. The respondents were able to choose if they were male or female.

Age. This measure is designed by Miao and Wei (2013) and tested by the same authors. The respondents were asked to fill in if they were between the following years: 21-30, 31-40, 41-50, 51-60 or 61 or over. In this study there was no such categories but instead respondents filled out their year of birth. This was done to not already decide and affect the year category.

Field of study. Since, the questionnaire was sent out to different programs on the university this control variable is included to see if there is a difference depending on which educational focus the respondents has.

Frequency of staying at a hotel/year. This measure is designed by Miao and Wei (2013) and tested by the same authors. The respondents were asked to present how often per year they are staying at a hotel. The following answers were possible: less than once a year, 2 or 3 times, 4 or 5 times or more than 5 times. However, in this study the question was left open to not create any categories.

Previous experience from staying at a green hotel. This statement was used in this questionnaire to give an indication on the actual behaviour. Since, it might be expected that if the respondent had been on a green hotel they would have some other attitudes towards the intention to select a green hotel which might influence the result. For this question respondents choose either answer *yes*, *no* or *do not know*.

The items (statements) used in this questionnaire can be seen in appendix 3, were they are presented under each variable. The next section presents the tests used to examine the relationship between the study's items.

4.4.4 Factor analysis and Cronbach's alpha

To test if there were any relationships between the items (statements and questions) used in the questionnaire we conducted a factor analysis. Factor analysis measure if the items (statements) used can be reduced or summarized into fewer variables. To be able to use factor analysis the Kaiser-Meyer-Olkin (KMO) value should be above 0.6 to be acceptable (Pallant, 2010). However, in this study the KMO value was only 0.287, which means that it cannot be used to determine the factors. The low value might be because the factor analysis need be conducted on a sample, with at least 150 respondents or because of outliers in the dataset (*ibid*). In this study only 78 respondents were included which is half of what is needed and this might explain the low KMO-value. Additionally, the items were transformed to see if there were any outliers, which might affect the KMO-value was conducted. This was conducted through natural logarithm and square root. However, the transformation made no difference in the result, meaning that outliers might not be the reason for a low KMO score. Therefore, the Cronbach's alpha was used instead, since we still wanted to test if the items could be combined.

Cronbach's alpha is one of the most commonly used indicators of internal reliability, which refers to how well the items are measuring the same thing (Pallant, 2010). This is a way to see how well the items used in this study relate to each other and if they can be transformed into one variable. In Cronbach's alpha the researcher selects the items that are going to be tested together, while in the factor analysis the items is placed under the component SPSS calculate that they belong to (*ibid*). Pallant (2010) and Byrman and Bell (2011) state that the Cronbach's alpha value should be above 0.7 to be acceptable for research. However, according to Hair, Black, Babin and Anderson (2010) ideally the Cronbach's alpha value

should be between 0.6-0.7 to be acceptable. The result from the Cronbach's alpha is presented further in empirical findings under table 3.

4.5 Pearson's correlation and Standard multiple regression

To test this study's model Pearson's correlation was first conducted to test if the data was normally distributed. Depending on if the data is normally distributed or not will determine what kind of test we could perform. Pearson's correlation is selected since the variables were normally distributed. Correlation was done to examine if there even existed any relationship between the independent variables and dependent variable. To test the model, standard multiple regression was selected. A multiple regression test is a technique that is often used to explore the relationship between a number of independent variables and a dependent variable. In a standard multiple regression, all independent variables are tested simultaneously with the dependent variable and is the most commonly used multiple regression. Additionally, with standard multiple regression we were able to investigate what kind of relationship (positive or negative) the independent variables had on intention. Moreover, we could also capture the result on which of the independent variables explained the model the most. This suits our study's purpose and therefore, standard multiple regression was used to test our model. In this study the minimum accepted significance level above $P=0.1$ because this level was used by Norbayah and Nosbayah (2015), which has a similar study.

4.6 Ethical consideration

There are various ethical principles that a researcher needs to take under consideration when conducting business research. Firstly, the researcher should take into consideration *lack of consent*. This principle means that respondents should receive as much information as possible so that they can make a clear decision on whether or not they want to participate (Bryman & Bell, 2011). The questionnaire was sent out on the study platform for each class, which mean that the respondents were not forced to participate and had the opportunity to decline. Furthermore, it was clearly written in the questionnaire who was conducting the study and what its purpose was. This was also done to give more information to respondents and to help them decide if they wanted to participate. The questionnaire also provided a definition of green hotels. Additionally, the respondents had the possibility to mark a box *I don't know*, to not force the respondents to give an answer.

Secondly and thirdly, *invasion of privacy and data management* is also principles, which needs to be considered (Bryman & Bell, 2011). The questionnaire clearly displayed that all

the information would be processed anonymously. When the data was analysed the respondents were given an ID-number to provide additional anonymity.

Fourth, *deception* means that the researchers present the research as something else to the respondents (Bryman & Bell, 2011). However, as stated above the respondents were told the purpose of the survey and it also stated how long time the questionnaire was appreciated to take. However, the questionnaire used a small experiment to see if price had any impact on the green hotel choice. Still, the experiment was in line with which variables influences the selection of green hotels and not testing for something other than that selection.

When the questionnaire was conducted, these ethical principles were taken in to consideration for the respondents account.

4.7 Validity

There are different kinds of ways that can help a researcher to establish validity (Bryman & Bell, 2011). Validity is whether the result actually is what it appears to be, for example, if the relationship between the variables really is a casual relationship (Saunders, Lewis, & Thornhill, 2012). Furthermore, validity is about if a measurement of a concept actually measures that specific concept. In this paper, face validity and construct validity were conducted on the study.

Face validity is referred to if the measure, question or scale appears to be reasonable and fit to measure the concept. To examine if a measurement is relevant more qualified persons can help defining if the measurement is good (Bryman & Bell, 2011). Three lecturer of the business faculty at Kristianstad University evaluated this questionnaire, before it was presented to the respondents. The help from lectures was to see if the questionnaire needed some modification.

Moreover, this study used *construct validity*. Construct validity concerns whether a measure, developed from a concept, really reflects the concept that it is supposed to be expressing. The hypotheses should be developed according to theories that are relevant to the concept, for example from previous research (Bryman & Bell, 2011). This thesis has mainly used construct validity when determining which items are important. The variables have been chosen after what previous research has stated to be influential and what they used when measuring intentions to select a green hotel. The measurement used in this paper is either derived from or directly taken from previous researchers since, then the measurement has

already been tested and is therefore often more valid.

4.8 Reliability

Reliability indicates to which extent your data collection techniques or analysis will yield consistent findings (Saunders, Lewis, & Thornhill, 2012). The question with reliability is if a result is repeatable or not and is also often connected with quantitative research (Bryman & Bell, 2011). One factor to evaluate if a measure is reliable is internal reliability. Internal reliability refers to the degree the questions that the variables consist of is consistent. One method to test internal reliability is by performing Cronbach's alpha, which tests for the internally reliability (Bryman & Bell, 2011). Before analysing the collected data the factor analysis was performed on the statements and questions, to see if they were internally reliable.

One thing, which can affect reliability in a study, is *subject or participant bias*, which means that respondents answer in a way that they think they should answer and not how they really think. However, through anonymity participants might feel more at ease to answer as they really think (Saunders, Lewis, & Thornhill, 2012). Therefore, the questionnaire clearly stated that all information would be anonymous. Additionally, the questionnaire was conducted online which might provided the feeling of anonymity among the respondents and offered them a possibility to make sure, if they wanted, to be alone when answering.

4.9 Generalizability

The aim with quantitative methods is to be able to extrapolate the result to a bigger population (Bryman & Bell, 2011). However, we cannot argue that the result of this paper can be extrapolated to all the Kristianstad University students. It is only generalizable to the students that were registered in the classes that were part of the sample.

5. Empirical results

This section present the data collected from the questionnaire. The first part describes the data concerning the experiment. The second part presents the results of the data regarding the variables. Finally, the section ends with a summary of empirical results.

5.1 Descriptive of the sample

The sample consists of 78 students from Kristianstad University. Of the sample, 46 respondents were women and 19 were men, the rest (13 respondents) chose not to answer this question. The majority of the respondents were studying business administration (86 %). The other respondents were studying nursing (6.7%) and gastronomy (6.7%). In the questionnaire it was asked if the respondents had experience of a green hotel before. 5 of the respondents stated yes, 24 said no and 36 were not sure.

Table 2. Descriptive of the sample

Variables	N	Min.	Max.	Mean	Std. D
Intention	60	3	7	5.383	1.1369
Subjective norm	60	1	6	3.083	1.3147
Perceived behavioural control	62	1.2	6	4.046	1.2131
Perceived moral obligation	64	1	7	4.107	1.5291
Environmental awareness	64	1	7	5.454	1.3476
Age	65	20	36	23.923	3.684
Frequency of travel	59	1	10	2.966	1.9824
Valid N (list wise)	24				

Furthermore, the control variables were tested with either a T-test or an ANOVA- test. There is a difference between a T-test and an ANOVA-test. In a T-test only two groups can be compared while ANOVA allows more groups to be compared at the same time (Pallant, 2010). The tests were conducted to examine if there were any difference between the groups within a variable in how the visiting intentions were perceived. The first control variable tested, with T-test, was gender and the result showed that it did not affect the intention whether the respondent were a female or a male. The second variable tested, "Previous experience from staying at a green hotel", with ANOVA-test showed that there was no difference on the result if the respondents answered *yes*, *no* or *I do not know*. The third variable " field of study" was also tested, however, there was no significant difference in the

answers depending on the programme a respondent attended.

5.2 Cronbach's alpha

Cronbah's alpha was used to test if the items (statements) used had internal reliability, to see if they can be used together in one variable. Following table presents the results from the test.

Table 3. Cronbach's alpha

Variable	Cronbach's alpha	Number of statements (N)
Intention	0.898	7
Subjective norm	0.610	3
Perceived behavioural control	0.692	7
Perceived moral obligation	0.764	3
Environmental awareness	0.817	4

From the test one can see that the internal consistency between the items measuring attitude, perceived moral obligation and environmental awareness is above the accepted level 0.7 (Pallant, 2010; Bryman & Bell, 2011). The variables subjective norm and perceived behavioural control are accepted level above the 0.6 claimed by Hair *et al.,* (2010). Therefore, the items selected for each variable was summarized into one.

5.3 Experiment

5.3.1 Differences between the experiment and control group

To test if there were differences between the experiment group and control group we used MANOVA. First we used the Levene's test, which examines if the variance in scores is equal for all the groups. For there to be equal variance, the P-value should be above 0.05. However, that is not the case for hotel B (P=0.05), which means that we cannot assume equal variance. Therefore, we used a more conservative alpha value to determine the significance. In this case P should be above 0.025 (Pallant, 2010), which is above the P-value 0.05. To examine if there is a significant difference between the experiment group and control group we looked at the multivariance test and the Pillai's Trace statistics. Pillai's Trace statistics should be used if the sample is small since it provides a more robust comparison (*ibid*). Since the control group only consist of 11 respondents Pillai's statistics were used and the result showed P=0.312. Thus, when the control group and the experiment group see both price and the green key certification there is no significant differences in how they select the hotels.

5.3.2 Differences within the experiment group

The paired sample t-test was used to see how the respondents selected the hotels when they first saw them, with no price displayed and then how the respondents selected the hotels when the price was presented. The result is presented in table 4.

Table 4. Paired sample t-test

Select Hotel	Mean	N	Std. Deviation	Std. Error Mean	Sig.
Select Hotel A					
No price displayed	5.318	44	1.722	0.259	
Price displayed	4.227	44	1.696	0.256	0.000
Select Hotel B					
No price displayed	5.304	46	1.645	0.243	
Price displayed	5.935	46	1.162	0.171	0.034
Select Hotel C					
No price displayed	5.66	47	1.659	0.242	
Price displayed	4.468	47	1.626	0.237	0.000

All of the mean values, for the hotels, were significant, which indicate that we can say that it is not just coincidence in how the respondents selected the hotels. From table 4, we can see that mean value for the likelihood to select hotel A (green hotel), when respondents only knew if the hotel was green or not, was 5.3. Then when the price was added the mean value for hotel A descended to 4.2. This is a drop on 1.1 in the likelihood to select hotel A (on a scale 1-7) and showed that respondents were less keen on selecting hotel A when the price was displayed. The result was the same for hotel C, also a green hotel, which had the mean value 5.7 that then declined to 4.5 when the price was added. Like hotel A, the mean value on intention to select hotel B dropped with 1.2. Opposite to hotel A and C, hotel B was described as a non-green hotel. When first selected the mean value for hotel B was 5.3 then, with price, the mean value increased to 5.9. Even if the mean did not increase much more (0.6), it still indicates that some respondents increased their likelihood to select hotel B compared to the first selection.

5.4 Analysis of theoretical model

5.4.1 Normality

The data was first tested to assess the normality in each variable. In the test for normality the Kolmogorov-Smirnov is presented which indicate how assesses the normality of the distribution in scores. Kolmogorov-Smirnov should be above 0.05 to indicate that there exists normality in the variable (Pallant, 2010). The variables intention, subjective norm, perceived behavioural control and perceived moral obligation were all above 0.05 on Kolmogorov-Smirnov indicating normality. However, the variable environmental awareness was below 0.05 meaning that it was not normally distributed. To correct the normality a researcher can transform the data in the variable. This is done through natural logarithm or square root, depending on what kind of skewedness the variable has (*ibid*). For the variable environmental awareness's skewedness, we used square root to assess normality. After the transformation environmental awareness had a normal distribution. All the variables Kolmogorov-Smirnov values can be seen in appendix 3.

5.4.2 Correlation between variables

We began to investigate if there even was a relationship between the dependent variable and independent variables with the help of Pearson's correlations. Pearson's correlation is used since the data is normally distributed. The result of the matrix shows that subjective norm, perceived moral obligation and environmental awareness shows correlation with intention significant, p-value less than 0.01. The relationship between intention and perceived moral obligation is r=0.429. Further, the relationship between intention and environmental awareness is r=-0.406. Additionally, the relationship between intention and subjective norm is r=0.246 and has a significant p-value less than 0.10. Pallant (2010) suggests guidelines on how to interpret the strength of a relation in a correlation: r=0.10–0.29 (low), r=0.30–0.49 (moderate) and r= 0.50–1.0 (strong). This indicates a medium relation between these variables and intention. The correlation matrix can be seen below in table 5.

Table 5. Pearson's correlation matrix

Variables	Mean	St. D	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Intention	5.383	1.1369									
2. Subjective norm	3.083	1.3147	0.246 †								
3. Perceived behavioural control	4.046	1.2131	0.182	0.241†							
4. Perceived moral obligation	4.107	1.5291	0.429**	0.201	0.052						
5. Environmental awareness	1.544	0.40531	-0.406**	0.004	0.106	-0.414**					
6. Age	23.923	3.684	0.011	0.135	0.144	-0.063	-0.083				
7. Programme	1.188	0.5308	0.129	-0.06	0.147	0.197	-0.123	0.447***			
8. Gender	0.708	0.4584	0.044	-0.219 †	-0.286*	0.264*	-0.253*	-0.143	0.166		
9. Frequency of travel	2.966	1.9824	0.255†	0.043	0.232 †	0.196	-0.22 †	0.115	0.312*	0.195	
10. Stayed at a hotel before	1.97	0.5294	-0.326 †	-0.049	-0.103	-0.406*	0.364*	-0.101	-0.29	-0.166	-0.125

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; † $p < 0.10$

In the next section the standard multiple regression, conducted on the variables to investigate the hypotheses, is presented.

5.4.3 Standard multiple regression

To be able to use standard multiple regression one first has to examine if there exists any multicollinearity between the independent variables. This can be investigated through collinearity statistics, which is a part of standard multiple regression. This diagnostic can capture high correlation that might not even be possible to discover in the correlation matrix. The statistics show two values: *tolerance* and *variance inflation factor* (*VIF*). Tolerance indicates how much of the variance in the data that can be attributed to that variable. To rule out multicollinearity in the independent variables the *tolerance* value should be above 0.1 and the VIF value should be below 10 for there to not be high correlation between the independent variables (Pallant, 2010). In table 6, the collinearity statistics can be viewed.

Table 6. Collinearity statistics

Variable	Tolerance value	VIF value
Gender	0.718	1.393
Age	0.698	1.432
Programme	0.625	1.600
Frequency of travel	0.786	1.273
Stayed at a green hotel before	0.733	1.363
Subjective norm	0.817	1.224
Perceived behavioural control	0.765	1.307
Perceived moral obligation	0.645	1.551
Environmental awareness (Sqrt)	0.709	1.410

From the table it can be seen that no independent variable is below 0.1 in tolerance or have a VIF value above 10. Therefore, it is assumed that there exists no multicollinearity. Thus, all the variables are retained and standard multiple regression can be used.

In table 7, an overview of the result from the standard multiple regression can be seen.

Table 7. Standard multiple regression

Variable		Std. Beta	Sig.	Std. Error
Gender		-0.076	0.741	0.563
Age		-0.085	0.717	0.071
Programme		0.025	0.919	0.521
Frequency of travel		0.121	0.583	0.124
Stayed at a green hotel before		-0.117	0.610	0.482
Subjective norm		0.165	0.449	0.184
Perceived behavioural control		0.108	0.628	0.206
Perceived moral obligation		0.211	0.390	0.178
Environmental awareness (Sqrt)		-0.285	0.228	0.640
Constant	6.106			
F-value	1.005			
Adj. R^2	0.002		0.471	

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; † $p < 0.10$

The adjusted R square (adjusted R^2) is used for this model. Adjusted R^2 refers to how much of the variance in the dependent variable, intention, is explained by the model (Pallant, 2010). The reason for using adjusted R^2 is because the sample size in this thesis is not that large. For smaller samples the adjusted R^2 provides a better estimation (*ibid*). For this study the adjusted R^2=0.002. However, the adjusted R^2 is not significant and we cannot rule out that coincidence caused the value of adjusted R^2.

To examine our hypotheses, the standardised Beta value is used to examine how much the individual variable influences the dependent variable. Standardised Beta value is used since; these values for each of the variables have been transformed to the same scale, which allows for direct comparison (Pallant, 2010). Beta explains how much that the independent variable explains the dependent variable, when variances explained by the other independent variables are controlled for (ibid). The following sections present each hypothesis separately.

5.4.3.1 Subjective norm

The first hypothesis is as follows:

Positive subjective norm of significant others, towards sustainability is positively related to the intention to select a green hotel.

In the multiple regression subjective norm's standardised Beta value is 0.165. However, Beta value is not significant (P=0.449), therefore hypothesis one is rejected.

5.4.3.2 Perceived behavioural control

The second hypothesis is as follows:

A higher perceived behavioural control, one feels, is positively related to the intention to select a green hotel.

In the multiple regression the standardised Beta value is 0.108, However, Beta is not significant (P=0.628) and, hypothesis two is rejected.

5.4.3.3 Perceived moral obligation

The third hypothesis is as follows:

A higher perceived moral obligation, one feels, is positively related to the intention to select a green hotel.

The multiple regression shows that the standardised Beta value for perceived moral obligation is 0.221 but not significant (P=0.390). Therefore, hypothesis three is rejected.

5.4.3.4 Environmental awareness

The fourth hypothesis is as follows:

A higher environmental awareness, one has, is positively related to the intention to select a green hotel.

Environmental awareness's standardised Beta value is not significant (P=0.228) which mean that the null hypothesis is retained and hypothesis four rejected; even if the variable had the largest explanation on the dependent variable intention.

5.5 Summary of the empirical results

In table 8 a summary of the outcomes from the hypotheses is presented

Table 8. Summary of hypotheses

Hypotheses	Outcome
1	Rejected
2	Rejected
3	Rejected
4	Rejected

Note: *** $p < 0.001$; ** $p < 0.01$; * $p < 0.05$; † $p < 0.10$

All the hypotheses were rejected and therefore we keep the null hypotheses for this study. In the next section all the variables' result is further be discussed.

6. Analysis and Discussion

In this section the result from each variable, subjective norm, perceived behavioural control, perceived moral obligation and environmental awareness is further discussed and analysed.

The variables expected to influence the intention to visit green hotels are: subjective norm, perceived behavioural control, perceived moral obligation and environmental awareness. All these variables are expected to positively influence students' intention to select a green hotel.

6.1 Subjective norm

Subjective norm had no significant influence on intention to visit a green hotel (P=0.449) and therefore, hypothesis one is rejected. Thus, pressure from significant other, in this study, does not influence a student's intention to select a green hotel. This result contradicts to previous research by Ajzen (1991), which found that subjective norm had an impact on the planned behaviour of individuals. Our findings also differs from Han, Hsu and Sheu's (2010) study, they found that subjective norm influenced the intention to visit green hotels. There are different reasons to why our study might contradict to previous research. First, Han, Hsu and Sheu's (2010) sample consisted of only previous hotel customers and not just students. This might be one reason for the differences in our result. Since we cannot assume that all our respondents have experience with hotels and the topic green hotels might not be that familiar. This could mean that not all students know their significant others' opinion about green hotels or if family/friends stays at green hotels. For example, if respondents do not discuss the topic green hotels with their significant others, it might be difficult to know their opinions about green hotels. If the respondents lacked this knowledge, it could have affected the variable subjective norm and made the social pressure and expectations from significant others less important.

Second, the statements used in this questionnaire asked for the respondent's significant others' opinions. However, the term, *significant others* can be open for misinterpretation of who really is included. This could have affected the variable's result and how the respondents choose to answer. Since it might differ between the respondents who are significant to them. Additionally, the society's pressure for environmentally friendly options might not just come from significant others but also from media. Today, environmental aspects are a discussed topic, due to the high social pressure for environmental responsibility (Barber, 2014). This might result in media having a large influence on people. However, in this study we only

asked for the opinions of significant others, which could have been to narrow. This could also have affected the result for subjective norm.

Third, the respondents answered through a questionnaire, which allowed anonymity and the opportunity to answer the questionnaire when they wanted to. The questionnaires were sent out through the student platform *itslearning,* there is a chance that the respondent answered on the university. This could have affected their answers since it has been suggested that people act differently depending on the settings they are in (Miao & Wei, 2013; Juvan & Dolnicar, 2014b). Therefore, depending on if significant others were there or not when responding, the respondent might have answered in a different way. The students might have been reminded of their significant others' normative believes and/or expectations if they would have been present.

Furthermore, interviews would also make it possible to analyse who is included within *significant others* among the respondents, and how much the respondents feel that they are influenced by them. It would also be a possibility to reach an understanding where the largest influence comes from, significant others or society/media to reach deeper understanding of the variable subjective norm.

These reasons might have affected the result of subjective norm in our study.

6.2 Perceived behavioural control

The variable perceived behavioural control was non-significant (P=0.628), meaning that the result could be caused by chance. Ajzen (1991) claims that perceived behavioural control influences the planned behaviour of individuals. Since the more perceived control of resources/opportunities the higher likelihood to perform the planned behaviour. However, Ajzen (1991) also stated that perceived behavioural control can vary depending on what kind of situation the individual is in. Therefore, we compared our result to Han, Hsu and Sheu (2010), who conducted their study in the context visiting intentions towards a green hotel. They found that perceived behavioural control has a significant impact on the visiting intention to a green hotel. This is not in line with our result, which might depend on the following reasons. As mentioned before, students have higher environmental awareness than average (Paço *et al.,* 2014; Backhaus *et al.,* 2011). From this you would expect environmental awareness to have a stronger influence among a student group than in the rest of the

population. However, it is also known that students in general have tighter restrictions in terms of financial resources than the average consumer (Swedbank, 2015). If looking at environmental awareness from the perspective of pro-social behaviour (Eisenberg & Miller, 1987) then visiting a green hotel can be seen as an act of altruism (you act for the better of others than yourself, ibid). In this case it has been shown that the level of affluence indeed can affect the likeliness of performing that behaviour (Borden & Francis, 1978). Assuming that students live with restricted resources, Borden and Francis (1978) suggest that they are less likely to act pro-environmentally because their limited affluence make other issues higher priority. This could indicate that there might be a threshold level in economic affluence affecting the likeliness of sustainable behaviour. Hence, explaining the differences in results between our study and the study of Han, Hsu and Sheu (2010).

Second, our statements are more focused on how the respondents perceived their resources and opportunities. This also differs a bit from how Han, Hsu and Sheu's (2010) designed their statements. They asked for how much the respondent felt they could decide to select a green hotel or not. However, since we could not assume that our sample have had experiences with green hotels our statements tried to specifically ask about the perceived time and money resources, which is a base to peoples' own perception of their ability to perform the behaviour (Ajzen, 1991). These might be the reasons to why our result differs from Han, Hsu and Sheu (2010).

Additionally, we conducted an experiment to examine if cost influenced the respondents' intention to select a green hotel. In the experiment the students first received the information if the hotel was green or not. Finally, the respondents were presented to the pictures once again. This time they knew both if the hotel was green or not, and the cost to stay at the hotel. There was a significant difference in how the experiment group selected the hotels before and after the price was added. For hotel A and C, the mean values dropped with 1.1, in the likelihood, during the second selection opportunity. While hotel B's mean value increased with 0.6. This could indicate that one reason for the differences in mean value might be because of the cost. Since all that was added the second time was the price. However, we do not argue that there could not be other factors that we have not thought about that could have influenced how the respondents selected the hotels the second time. Still, this could indicate that price do matter for students, when they intend to select a green hotel. It could also be that some students, in general, do not want to pay 1055 (SEK) for any kind of hotel. Therefore, it

might have been good to have a price between 1055 and 482 (SEK) instead of having two high prices. However we wanted to have a large difference to try to capture any difference to investigate if there is a threshold in price for students when selecting a green hotel. To investigate how much more students are willing to spend on green hotels instead of just investigate if price matters. Between the control group and experiment group there was no significant difference in how the hotels were ranked.

6.3 Perceived moral obligation

Perceived moral obligation was not statistically significant (P= 0.390) and therefore hypothesis three is rejected. This result contradicts previous research and also the assumption made by Ajzen (1991), which stated that moral obligation should be included when examining planned behaviour since it better predicts the intention. Chen and Tung (2014) also found that moral obligation had a positive influence on the visiting intention.

Reasons to why our result might differ from previous research are the following. First, in the study made by Chen and Tung (2014) 60.1% of the sample were students; 33.3% were employees and 6.6 % were unemployed. However, our sample consisted of only students and since students have restricted resources (Swedbank, 2015) this might have affected the result. Due to constraints in resources the individuals might not be able to fulfil their moral obligation to choose green hotels when travelling. This means that even if their morality is to choose green, they might not be able to select a green hotel due to price. This difference in sample could have caused for a non-significant result in this study.

Second, the moral obligation might also affect the students to not choose a green hotel. There can be other lodging options to choose when travelling that are greater for the environment than hotels. Since individuals feel the moral obligation to contribute to a better environment (Chen & Tung, 2014) the individuals might choose other options than green hotels. This can also affect the result of this study. However, they might are not be aware of the market of green hotels. Even if they have higher environmental awareness they might lack knowledge about the existence of green options when it comes to hotels. Reasons for this can be that they are not travelling often or that the hotels are not using marketing to show that they are green. It could also be that students are not aware of the environmental impact of the hotel industry, and therefore lack the knowledge to make active green choices (Gleim *et al.,* 2013).

6.4 Environmental awareness

Lastly, the variable environmental awareness was found to have a non-significant influence on the variable intention (P=0.228). This result is in line with the findings of Han and Yoon (2015), also showing a non-significant influence of environmental awareness on visiting intention.

A possible explanation to the non-significant influence of environmental awareness on visiting intentions is the so called "attitude/knowledge-behaviour gap", as discussed by Kollmus and Agyeman (2002). According to this study there exists a gap between the behaviour of consumers and their consumer choices, hence making it very difficult to predict consumer choice based on attitude/knowledge. Further on, it has been shown that in order to measure the attitude towards certain behaviour (in our study the intention to visit a green hotel) you need to choose variables that are closely connected to that specific behaviour (ibid). For example, comparing the attitude towards driving a car and attitude to climate change often shows no correlation - even if the studied sample is highly concerned about the problems of climate change. The reason behind this is that the studied sample sees no close link between the behaviour (driving a car) and climate change (ibid). In our study this problem could explain the lack of influence between environmental awareness and visiting intention. If the studied sample does not see a close link between what type of hotel they visit and environmental degradation then their level of environmental awareness will not affect their intentions. In this study we have assumed a direct link between the level of environmental awareness and intention to select a green hotel. However, in the light of the "attitude/knowledge – behaviour gap" this might not be the case in real life. It might have been good to conduct a pre-study on students, investigating their knowledge about the environmental impact of the hotel industry. This would allow us to further examine this assumption and develop questions that show a closer link between environmental awareness and hotel visits.

According Han and Kim (2010) environmental awareness has been an important variable to improve the attitude towards green business establishment. This allows for the assumption that higher environmental awareness leads to increased visiting intentions to green hotels. However, another possible explanation for the non-significant environmental awareness influence on visiting intention could be the lack of information. Gleim *et al.,* (2013) states that

more detailed information about how a green product contributes positively to the environment leads to increased willingness to pay. In this study the certification *Green Key* was used to signal that if the hotel was green or not. Even if this is an international eco-label encouraging sustainable tourism (Green Key, 2015), there are only 21 hotels in Sweden (Håll Sverige rent, 2015) that has this certification. This could indicate that there is a lack of knowledge about the certification. This lack of knowledge could have affected this study's result, due to Gleim *et al.,* (2013) statement that people are more willing to pay for green products and business when they know the effect their green choice. This information about the certification is important since hotels might lead to hotels developing their own sustainability program instead of paying for a certification. This has been the case with hotels like Nordic Choice Hotels, which is now using their own environmental program (Nordic Choice Hotels, 2015).

6.5 Final discussion

All studied independent variables had a non-significant relationship with the dependent variable in the linear regression analysis. Thus, all our four hypotheses are rejected and the null hypotheses retained. This contradicts the majority of previous research and opens up for a discussion on what could be the underlying causes of the heterogeneity in the results.

One underlying cause could lie in the process of adapting the survey questions to our study context. The study questions used in our survey all derived from previous studies on the topic. However, in this process the questions were translated into Swedish for the convenience of the respondents. The translation process might have influenced the result of this study. For example, it has been suggested that some words and contexts are cannot be perfectly translated between languages (Harzing, Reiche, & Pudelko, 2013) and therefore, the interpretation of these variables can differ between the studies.

Further on, it should be noticed that the control sample used in this study was not randomly selected. Due to time constraint the control group was a convenience sample, which might have affected the result. The control group was the master students within the field of business administration and accounting. Due to time constraint for the respondents in the control group they might not have had enough time to answer, which would have affected the result. Additionally, the control group is made from the minority of the whole sample, which

might have influenced the result. The master students for example have a longer educational background, which might create other preferences than bachelor students. Due to these reasons, it should be noted that the control group might not be optimal and consequently have affected the result for the whole sample. Another aspect that could affect the control group is that they have been studying together for a longer time and might had previous discussions about the environment making them think more alike each other and homogenous when it comes to opinions about environmental problems and how to handle these. One idea for future research is to use a randomized selection from the whole sample, to draw every tenth respondent to be in the control group. This randomization should be conducted to create both a larger and a more diverse control group. Therefore, for future research, the control group should be both larger and randomly selected.

This could indicate that the sample and method we used were not sufficient enough and that we might need other and narrower measurement in future research. The result could also indicate that there are some changes in intentions in peoples mind today, since our study is more recently conducted.

The adjusted R^2-value is non-significant (P=0.471) and not high (0.2%). This seeming lack of influence from our variables on visiting intention could be explained by different reasons. First, behaviour in itself is very complex and influenced by numerous external cues and factors (Ajzen, 1991). According to Kollmuss and Agyeman (2002), what influences pro-environmental behaviour, such as visiting a green hotel, is too complex to be described using a single model. This could explain our low R^2-value. Therefore we suggest future researchers to investigate each variable separately at first to examine if one of the variables might influence another, which in return influences visiting intentions. For example, examine if it might be better to move environmental awareness to affect perceived moral obligation which might influence the visiting intentions; instead of directly affecting intention.

Second, visiting intention might be affected by other external variables than the ones chosen for this study. We therefore suggest other variables than the ones studied in this paper to be considered when trying to better understand intentions to select a green hotel. For example, from our own speculations there might be a consumer group that choose green alternatives for other reasons than the environment such as health reason. This thought is based on the assumption from Lu, Bock and Joseph (2013), which state that we select green options for

health reasons. This reason has not been studied in this context (to our knowledge) and might be a possible explanation. This means that for a green hotel perspective, they might need to focus on other aspect to get students to visit green hotels.

Since none of the variables showed significance a final model cannot be designed and all the null hypotheses will be kept. How to develop the model for further research on green hotels will be further described in the section of future research.

7. Conclusion

This section summarizes the thesis and presents the conclusions. It also describes the ethical and societal considerations. This is followed by the theoretical and practical contributions. Finally, the section ends with suggestions for future research.

7.1 Summary of the thesis

The impact from the tourism is major on the environment. The pressure from the society to take environmental responsibility is high. Still, customers want to be pampered during their hotel stay. Therefore, there is a conflict of interests that the hotel business needs to take into consideration. To be able to design and implement strategies that takes the society's demand into consideration and still satisfy customers there is a need to study what influences customers' intention to select a green hotel. The aim with this thesis is to examine and determine how different variables influence students' intention to select green hotels. Therefore, the research question is:

What influence students' intention to select a green hotel and how?

The Theory of Planned Behaviour (TPB) can be used to study which variables influence customers' intention to select a green hotel. The TPB is developed by Ajzen (1991) and consist of the variables attitude, subjective norm and perceived behavioural control. To make the model fit the context intention to select a green hotel the variables perceived moral obligation and environmental awareness were added. Therefore, the model, in this paper, consists of subjective norm, perceived behavioural control, perceived moral obligation and environmental awareness. Since, intention is hard to measure (Davis & Warshaw, 1992) the variable was tested with the measurement of attitude.

To test the model an online questionnaire was conducted. The questionnaire also contained a small experiment, where the respondent was asked to rank (1-7) the likelihood to select the three hotels presented in the experiment. The study's sample consisted of students from Kristianstad University. Students were selected due to their high environmental awareness (Paço *et al.,* 2014; Backhaus *et al.,* 2011) and restricted resources (Swedbank, 2015), because it might create a dilemma. The total sample consisted of 78 students from three different filed of studies.

The next section presents the conclusion and findings of this thesis.

7.1.1 Conclusion of the findings
The hypotheses to test this study's model are the following:

Hypothesis 1: Positive subjective norm of significant others, towards sustainability is positively related to the intention to select a green hotel.

Hypothesis 2: A higher perceived behavioural control, one feels, is positively related to the intention to select a green hotel.

Hypothesis 3: A higher perceived moral obligation, one feels, is positively related to the intention to select a green hotel.

Hypothesis 4: A higher environmental awareness, one has, is positively related to the intention to select a green hotel.

The result from the finding shows that all of the hypotheses were rejected. Hence, in this study all the null hypotheses are retained. This indicates that more studies needs to be conducted to examine what hotels should focus on to increase students' intention to select a green hotel. Since there still might exist a knowledge gap that needs to be addressed in order to answer our research question.

7.2 Ethical and societal considerations
Tourism has a large impact on the environment (Juvan & Dolnicar, 2014b) and the environmental awareness and concern has increased, creating a pressure for more environmentally friendly options (Barber, 2014). People put a lot of the environmental responsibility on companies (Martin, 1992). Therefore, to be environmentally friendly is something that can affect hotels. Consequently, to be able to capture the customers' intentions it is important to understand what influence their intention to select a hotel. To understand what influence customers to select a green hotel over a non-green hotel can help hotels to develop strategies so that they can meet both customers' and societies demands. If green hotels can better attract more customers, it will also affect the society since green hotels are better on caring for the environment which in large is beneficial for the society. Therefore, the kind of study is important for societies to help them contribute to a better environment.

7.3 Theoretical and practical contributions

One theoretical contribution of this thesis is that the measurement used in this study need to be more specific in order to capture if they have an influence on the dependent variable. As mentioned earlier, a measurement has to be closely linked in a respondents mind with the actual behaviour to be able to explain what influence students' intention to select a green hotel. Further, in this study none of the expected independent variables influenced visiting intentions. This result might indicate the complexity of these variables and, as mentioned by Ajzen (1991), that behaviour is very complicated to measure and is influenced by a lot of different, often intangible, variables. This opens up for more studies that need to be conducted in order to answer the research question in this paper.

The practical contribution from this study can be guidelines for hotels to better understand what is important for students' intention to select a green hotel. As discussed earlier, due to that people tend to more likely select a green choice when knowing about its sustainable effect it is important to inform more about what Green Key stands for if a hotel is going to use the certificate. Otherwise it might be more beneficial for hotels to use their own sustainability programs. Either way it seems important to inform hotel customers and make them aware of how the hotel is working toward sustainability, which might also enhance the intention to actually visit the green hotel.

7.4 Future research

None of the independent variables influenced intention to visit a green hotel. This result could be due to the broad nature of the independent variables used in this study. For future research other more accurate measurement that are closely linked to the behaviour, in the respondents mind should be developed. This development of measurements could be examined in a pre-study were more deep-interviews are made to investigate what respondents link to intention to visit green hotels. This pre-study can also investigate the accuracy of the assumptions made in this study. Since interviews allow for a deeper answer from the respondents, for example to deeply understand subjective norm, who is a significant other and their influence, interviews would be a preferable method. Perceived behavioural control also needs to be further investigated to see what really influences the intention, the resources and opportunities or the own control and self-confidence, to accomplish the behaviour.

Further, a pre-study would also allow for a large study on the actual behaviour. This could make it possible to see if the people actually followed their intention to do the planned behaviour or not. Additionally, it might also provide other variables not discussed in previous research that could enhance the understanding of the intention to select a green hotel. Additionally, the pre-study should also include a sample with other respondents, both with and without experience of green hotels and include respondents with differences in resources, (time and money) to see if this affects how individuals choose hotels. By doing this it could be studied if affluence is of importance if choosing a green hotel or not. Since in this case we only chose students, whom overall have restricted resources.

Further, in future research it might be suggested to examine each variable separately first to see if one of the variables might influence another and thus, change the positions of the variables. This might then better predict the intention to visit a green hotel. All these developments of the research could provide a different result and might make it possible to generalize the findings to a larger sample.

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Appendix 1. Questionnaire (Swedish)

Hej, vi är två ekonomstudenter på Högskolan Kristianstad och skriver just nu vår Magisteruppsats. Enkäten är till för att undersöka vad som influerar turister att välja gröna hotell när man reser. Ett grönt hotell är definierat som: ett boende som följer omfattande ekologiska praxis som vatten- och energibesparande för att hjälpa till och skydda planeten. Vi skulle vara mycket tacksamma om du tog dig tid att svara på följande frågor. Vänligen observera att all information kommer att behandlas anonymt.

Hotell A
Bekvämligheter:

Ekologisk frukostbuffé ingår
Dubbelsäng
Hotellets målsättning: Hållbarhet
0,6 km till centrum
Uthyrning av cykel
Luftkonditionering

Hur sannolikt är det att du väljer hotell A
(1=" Inte alls sannolikt", 7 = "Högst sannolikt")

1 2 3 4 5 6 7 Vet ej
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Hotell B
Bekvämligheter:

Frukostbuffé ingår
Dubbelsäng
Hotellets målsättning: Komfort
0,6 km till centrum
Uthyrning av bil
Luftkonditionering

Hur sannolikt är det att du väljer hotell B
(1=" Inte alls sannolikt", 7 = "Högst sannolikt)

1 2 3 4 5 6 7 Vet ej
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Hotell C
Bekvämligheter:

Ekologisk frukostbuffé ingår
Dubbelsäng
Hotellets målsättning: Hållbarhet
0,6 km till centrum
Uthyrning av cykel
Luftkonditionering

Hur sannolikt är det att du väljer hotell C
(1=" Inte alls sannolikt", 7 = "Högst sannolikt")

Vet ej
1 2 3 4 5 6 7 ☐

Kön: Man   Kvinna

Födelseår:_____

Vilket program går du?_____

Hur mycket inkomst har du i månaden, före skatt? (Kr)_____

Hur hög utbildning har dina föräldrar?

Mamma: Högstadiet	Gymnasiet	Påbörjad högre utbildning	Kandidat	Magister	Doktor
Pappa: Högstadiet	Gymnasiet	Påbörjad högre utbildning	Kandidat	Magister	Doktor

Ungefär hur ofta bor du på hotell per år? (Gång)_____

Hur väl instämmer du i följande påståenden:
(Vänligen ranka 1-7)

Enligt mig, bo på ett grönt hotell är:

Vet ej

4. Väldigt dåligt (1)/ Väldigt bra (7)
5. Icke önskvärt (1)/ Väldigt önskvärt (7)
6. Icke angenämt(1) / Väldigt angenämt (7)
7. Väldigt dumt(1) / Väldigt klokt (7)
8. Icke fördelaktigt(1)/ Väldigt fördelaktigt (7)
9. Väldigt otrevligt(1) / Väldigt trevligt (7)
10. Väldigt negativt(1) / Väldigt positivt (7)

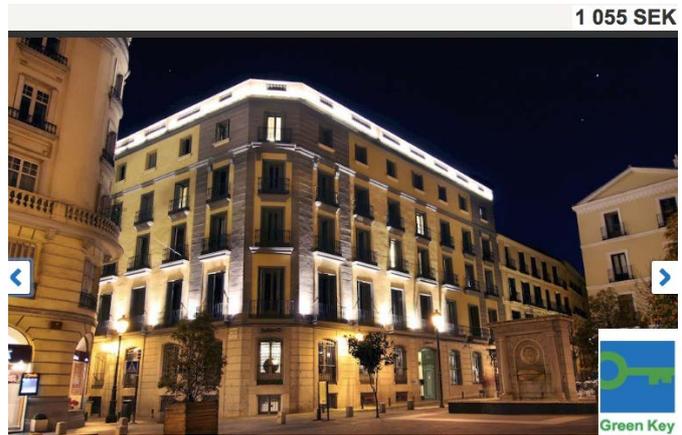Hur väl instämmer du i följande påståenden:
(1=" Instämmer inte alls", 7 = "Instämmer helt")

Vet ej

11. Jag tror att människor i min krets har en positiv inställning till gröna hotell

1 2 3 4 5 6 7 ☐

12. Jag tror att människor i min krets bor på gröna hotell

1 2 3 4 5 6 7 ☐

13. Jag tror att människor i min krets försöker påverka mitt val att bo på gröna hotell

1 2 3 4 5 6 7 ☐

14. Jag har resurserna att bo på ett grönt hotell mig

1 2 3 4 5 6 7 ☐

15. Jag har möjligheten att bo på ett grönt hotell

1 2 3 4 5 6 7 ☐

16. Min familj har resurserna att bo på ett grönt hotell när vi reser

1 2 3 4 5 6 7 ☐

17. Min familj har möjligheten att bo på ett grönt hotell när vi reser

1 2 3 4 5 6 7 ☐

18. Jag känner benägenhet att göra miljömässiga val när jag reser, exempelvis ta tåget istället för flyg

1 2 3 4 5 6 7 ☐

20. När jag väljer hotell känner jag mig moraliskt förpliktad att ta hänsyn till de miljömässiga problemen, orsakade av hotell

1 2 3 4 5 6 7 ☐

21. Eftersom miljöresurser är begränsade känner jag att alla borde värna om miljön, även när man väljer hotell

1 2 3 4 5 6 7 ☐

22. Effekterna från föroreningar är värre för folkhälsan än vad vi insett

1 2 3 4 5 6 7 ☐

23. Under de kommande decennierna kommer tusentals arter att utrotas på grund av miljöförstöring

1 2 3 4 5 6 7 ☐

24. Påståendena om att nuvarande föroreningsnivåer påverkar jordens klimat är överdrivna

1 2 3 4 5 6 7 ☐

25. Att värna om miljön kommer att skapa en bättre framtid för nästa generation

1 2 3 4 5 6 7 ☐

Hotell A
Bekvämligheter:

Ekologisk frukostbuffé ingår
Dubbelsäng
Hotellets målsättning: Hållbarhet
0,6 km till centrum
Uthyrning av cykel
Luftkonditionering

1 055 SEK
Green Key

Hur sannolikt är det att du väljer hotell A
(1=" Inte alls sannolikt", 7 = "Högst sannolikt")

1 2 3 4 5 6 7 Vet ej

Hotell B
Bekvämligheter:

Frukostbuffé ingår
Dubbelsäng
Hotellets målsättning: Komfort
0,6 km till centrum
Uthyrning av bil
Luftkonditionering

482 SEK
Bild [1/64]

Hur sannolikt är det att du väljer hotell B
(1=" Inte alls sannolikt", 7 = "Högst sannolikt)

1 2 3 4 5 6 7 Vet ej

Hotell C
Bekvämligheter:

Ekologisk frukostbuffé ingår
Dubbelsäng
Hotellets målsättning: Hållbarhet
0,6 km till centrum
Uthyrning av cykel
Luftkonditionering

1 055 SEK
Green Key

Hur sannolikt är det att du väljer hotell C
(1=" Inte alls sannolikt", 7 = "Högst sannolikt")

1 2 3 4 5 6 7 Vet ej

Tack för din medverkan!

Appendix 2. Operationalization

The survey questions and their sources

Intentions: (from Han Hsu and Sheu, 2010)

For me, staying at a green hotel when traveling is
– Extremely bad (1)/Extremely good (7)
– Extremely undesirable (1)/Extremely desirable (7)
– Extremely unpleasant (1)/Extremely pleasant (7)
– Extremely foolish (1)/Extremely wise (7)
– Extremely unfavourable (1)/Extremely favourable (7)
– Extremely unenjoyably (1)/Extremely enjoyable (7)
– Extremely negative (1)/Extremely positive (7)

Subjective norms: (derived from Han Hsu and Sheu, 2010)
– I think people in my social circle have a positive mind set towards green hotels
– I think people in my social circle stay at green hotels
– I think people in my social circle try to influence my choice to stay at green hotels

Perceived behavioural control: (from Han Hsu and Sheu, 2010)
– I have the resources to stay at a green hotel
– I have the opportunities to stay at a green hotel
– My family have the resources to stay at a green hotel when we are traveling together
– My family have the opportunities to stay at a green hotel when we are traveling together
– How much income does you have/ month before taxes? (Kr)
– What is the highest education your parents have? (Junior high, high school, initiated higher education, Graduate, Masters and PhD)

Perceived moral obligation: (from Han 2015; Chen and Tung, 2014)
– I feel personally obliged to travel in an environmentally sound way, for example by taking the train instead of taking the flight
– I feel a moral obligation to take the environmental problems caused by hotels into account when making hotel choices
– Everybody should save natural resources because they are limited

Environmental awareness: (from Han and Yoon 2015).
– The effects of pollution on public health are worse than we realize
– Over the next several decades, thousands of species will become extinct
– Claims that current levels of pollution are changing earth's climate are exaggerated
– Environmental protection will provide a better world for me and my children

Control variables (from Miao and Wei 2013).
– Gender (Male/Female)
– Age (birth year)
– Field of study
– Approximate times respondent stay at a hotel/year (times)
– Have you visited a green hotel before? (Yes, no, do not know)

Appendix 3. Normality

Assesses normality

Variable	Kolmogorov-Smirnov value
Intention	0.088
Subjective norm	0.071
Perceived behavioural control	0.200*
Perceived moral obligation	0.200*
Environmental awareness (Sqrt)	0.200*

* =P < 0.05