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What drives you sustainable?

– A quantitative study about purchasing motivations towards utilitarian and hedonic products with regards to influence of materialism

ABSTRACT. The purpose of this study is to investigate and explain the difference in motives and barriers that arise within purchasing behavior of sustainable products with utilitarian and hedonic product attributes, and whether materialism demonstrates a moderating effect towards these motives. Product attributes implies different buying motivations, nonetheless, surprisingly, this problem has not been addressed yet. The academic interest in the topic was stipulated by the existent attitude-behavior gap in sustainable consumption and inability of previous research to come to satisfying results. To address this research gap, we conducted an empirical study by surveying 171 Swedish residents on the topics of materialism level, social and ethical consumption behavior with the connection to purchasing incentives. We found that motives differ significantly; however, it is possible to distinguish factors uniform for both types of products. Moreover, materialism has no significant influence on the behavior, despite the negative correlation with environmentally friendly behavior patterns.

Keywords: ***Attitude-Behavioral Gap, Materialism, Motivation, Sustainable product, Utilitarian and Hedonic products***

Authors:
Johanna Belsing, 50219
Kseniia Shymoniuk, 40882

Tutor:
Tina Sendlhofer

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Introduction

Firstly, this section (1) will introduce the area of research that will be addressed in the thesis. This section will then proceed with a presentation of the gap in need of future research, definitions of crucial, complex terminology, the delimitations of the study and the structure of the thesis. When finished reading this section should you, as a reader, have a clear understanding of the study's main purpose, as well as how the presented research aims to contribute to the academic research at large.

1.1 Background

During the last decades, the global consumption has continued to constantly rise, leading to depletion of the Earth's resources. People are consuming out of many reasons, both personal and social, putting at risk the welfare of the global society and rising environmental concerns (Chen, Chai 2010). Realization of the environmental burden imposed has led to shifts in the consumer perception. The realized threat has been resulting in the emergence of sustainable trends, aiming at minimizing the damaging effects of the increased production. In today's world, the concept of sustainability is becoming more and more socially spread, turning into a new norm and reality. Recent global consumer study, conducted by Unilever, reveals insights regarding consumer interest in and commitment to sustainable products, as well as an over $1 trillion market opportunity for brands that can effectively and transparently market the sustainability of their goods. 33% of respondents said they would purchase a product if they believed it benefitted society and the environment. This high share of consumers, favoring sustainable products, indicate a new, significant shift in consumers' attitudes towards a sustainable world (Accenture et al. 2014).

However, even though more and more people are willing to buy sustainable products, some factors stop them from doing so. Although public interest in sustainability increases and consumer attitudes are mainly positive, behavioral patterns are not consistent with these positive attitudes (Vermeir, Verbeke 2006). Recent reports showed that 59% of the general population are not even thinking about participating in environmentally friendly activities (Gupta, Ogden 2006). This phenomenon is called the attitude-behavior gap.

1.1.1 Presentation of the Gap in Need of Further Research

The consumer purchase decision process has been subject to much research since the early 1950's (Westbrook et al. 1978). The knowledge of consumer behavior helps marketers to understand how consumers think, feel and select from alternatives (Babu et al. 2010). Since the 1990's a dramatic shift in the paradigm of consumption has occurred. People are shifting their focus towards purchase of sustainable products (Manchanda 2014). Although public interest in sustainability increases and consumer attitudes are primarily positive, the behavioral patterns have been proven to have no consistency with attitudes (Vermeir, Verbeke 2006). There has already been conducted a significant body of research rising the issue of the so-called attitude-behavior gap in environmentally friendly purchasing behavior, which mirrors the discrepancy of

actions with attitudes and intentions in sustainable consumption (Vermeir, Verbeke 2006, Kollmuss, Agyeman 2002, Kilbourne, Pickett 2008). People are consecutively tending to express their favorable attitudes towards buying sustainable products (Vermeir, Verbeke 2006, Arvola et al. 2008, Liu et al. 2012) while their behavior does not fully correspond to these attitudes and aspirations, leading to the level of actual consumption for sustainable products still being at the points of 1-3% of the overall consumption (Bray et al. 2011).

When reviewing existing literature on the attitude-behavior gap in sustainable purchase behavior (Vermeir, Verbeke 2006, Kollmuss, Agyeman 2002, Kilbourne, Pickett 2008), it becomes apparent that the incentives that motivates consumers to change behavior towards more sustainable products have not been comprehensively investigated, and previous research has not been able to present a rich substential conclusion regrading what is the main reason behind outlined inconsistency. The topic has not been researched enough, neither from the materialistic (Manchanda 2014), nor the product attributes perspective (O'Rourke, Ringer 2015). This thesis will, therefore, move the field further along by investigating the interrelationship between these two perspectives.

When reviewing the research, a grid of numerous theoretical frameworks attempting to explain the incentives gap appears, but, nonetheless, no definitive explanation has yet been presented (Kollmuss, Agyeman 2002). It is, however, a broad sophisticated field. Two important domains have been covered to the greater extent (1) environmental information's impact on consumers' decision making process and (2) sustainable consumer decision making regarding fast moving consumer goods (FMCG) growing thicker (Kollmuss, Agyeman 2002, O'Rourke, Ringer 2015, Aertsens et al. 2010, Verain et al. 2015, Young et al. 2010). Further, Verain et al. (2015), that look into product and process motives regrading sustainable food consumption in connection with different dimensions of sustainability; environmental, social and animal welfare. The research indicates, that product motives can differentiate across different product categories, but does not go further into product characteristics and ensuing factors (Verain et al. 2015). Taking into account the strong emphasis on product characteristics in sustainable consumption theory, the absence of attempts to clarify the difference in motivation and barriers across different types of products with predominantly utilitarian and hedonic attributes is surprising, but intriguing. With regards to research conducted in the intersection between sustainable purchasing behavior and materialism, the outcomes have become rather bipolar. Notably, limited research has been conducted, presenting ambiguous outcomes.
In light of the aforementioned obscurity, this study aims at covering motives and barriers moderating the attitude-incentives relationship across products with predominant utilitarian and hedonic attributes, and if these motives and barriers are inveigled by individuals' level of materialism. Expected results presumably can help marketers more effectively plan and execute their marketing efforts.

1.2 Purpose of Study

This thesis strives to answer the question of to what extend do motives and barriers for consumption of sustainable products differ between product categories with predominant utilitarian vs. hedonic attributes, and what impact do individuals' level of materialism have on these differences. Hence, the purpose of this study is to investigate the motives and barriers, which moderate consumers' purchase intentions, and moderating effect of materialism on these motives and barriers. In that strive, this thesis will investigate suitable motives and barriers towards utilitarian, as well as, hedonic products, the materialistic level of Swedish individuals, and the relationship between materialism and social consumption motivation. This with regards to previous research, and the low level of investigation regarding whether consumer motives and barriers for purchase of sustainable products differ depending on the utilitarian and hedonic product attributes.

This opens up two main research paths. Firstly (1), we have for the main objective to scrutinize if there are any general differences in regards to motives and barriers for environmentally friendly purchase decisions depending on product categories and consumer attitudes towards them. Secondly (2), if these motives differ depending on consumer level of materialism. The former area is of a more general character, while the latter is rather narrowly focused. In addition, to add more descriptive value, (3) ethically minded consumer behavior and its relationship with materialism will be examined in order to give a broader explanation of the study result.

Based on the outlined background, the presented gap and the purpose of study, the thesis research question can be formulated as following:

> Do the motives and barriers for consumption of sustainable products differ between products with predominant utilitarian vs. hedonic attributes, and are there any differences in motives and barriers for consumption of sustainable products due to individual's level of materialism?

1.2.1 The Expected Contribution to Research

Through an empirical, focused study, we expect to contribute with clarity to the ongoing theoretical discussion regarding motives for environmentally friendly behavior and consumer purchase decisions towards sustainable products, as well as materialism and its influence.

The first research path, presented above in section *1.3 Purpose of Study,* will be directed to provide a deeper understanding of which motivations and barriers are the main influencers to purchase decisions of sustainable products. This section will be designed to elaborate further on the sustainable attitude-behavioral gap by narrowing in on the specific reasons, as well as highlighting potential differences in motives and barriers between utilitarian and hedonic products. Previous research has not, as presented in section *1.2 Presentation of the Gap in Need*

of Further Research, to a large extent tried to clarify these differences. Hence, a clear purpose for this thesis is to further elaborate on this line of thinking. The second research path is expected to shed light upon the moderating role personality traits and materialism can have on motives for environmentally friendly behavior and sustainable purchasing behavior. Due to the fact that the intersection between environmentally friendly purchasing behavior and consumer personality traits has not been investigated enough, this research path aims to present a theoretical discussion as well as argue for the connection between materialism and environmentally friendly behavior. As there are currently a relatively large number of studies that in different ways deal with the connection between ethical consumer behavior and materialism, the third research path of the thesis seeks to study ethically minded consumer behavior's influence on the materialistic results. Together with the first two research paths this will give us a deeper understanding of the dynamics of motives, barriers and materialism.

Nevertheless, developing a model or scale that tries to incorporate all factors influencing environmentally friendly consumer behavior might not be feasible nor useful, we, therefore, strive with this thesi to illuminate a less researched view of such a complex multi-faceted area. This resulting in a contribution to the knowledge on the sustainable attitude-behavioral gap. Theoretical implications also gain practical relevance when these motives are used in marketer's line of work. Based on this, our forth (4) expected knowledge contribution is to build upon implications for marketers based on how these motives differ depending on product attributes and individual's level of materialism.

1.3 Delimitations

In order to investigate the purpose of this thesis, measures to delimit the scope of the study were necessary. As presented in section *1.3 Purpose of Study*, the main purpose of this study is to investigate the motives and barriers, which moderate consumers' purchase intention, and materialism's moderating effect on these motives and barriers. The study is, therefore, designed to contribute to the understanding of the sustainable attitude-behavioral gap and the incentives and hinders for environmentally friendly consumer behavior (Kollmuss, Agyeman 2002). However, to provide insight into consumers internal, as well as external, factors influencing consumers sustainable motives the study will investigate measurements of behavior and social motivations (Belk 1984, Moisander 2007).

To keep the thesis purpose and objectives manageable with an opportunity to contribute to previous research, the scope of behavior and social motivation measurements had to be limited. As the aim for this thesis is to investigate materialism's moderating effect on consumers' motives and barriers, as well as the dynamic between materialism, ethically minded behavior and social consumer motivation, we delimit the number of internal and external factors. To provide a more concrete understanding for the components investigated, three samples of measurements from existing literature, namely Richins & Dawson's updated measurement for materialism (Richins, Dawson 1992), Sundbury-Riley & Kohlbache's EMCB scale (Sudbury-Riley, Kohlbacher 2014), and Moschis SCM scale (Fitzmaurice, Comegys 2006), were selected." We have chosen not to include

the internal factor environmental knowledge due to the high frequency of previous and ongoing research in the area of attitude-behavioral gap.
Some delimitations regarding the target group of this study had to be made as well. Taking the time and resource constraints into account, the availability sampling method was found the most efficient choice. In order to limit cultural bias due to regional perspective influenced by local community mentality, the respondents in this study were limited to residents of Sweden.

1.4 Definitions

It has become clear that one of the major problems for sustainable products acceptance on the market derives from the very definition of the concept "Sustainable Products". The definition has for a long time been unclear and the literature lacks a common definition (Durif et al. 2010).
The area of sustainable products and materialism utilizes complex terminology. In order to clarify how this thesis approaches the concepts and definitions, a list of chosen definitions based on established, proven theory will be presented.

DEFINITIONS OF TERMINOLOGY	
Attitude-Behavioral Gap	The attitude-behavioral gap refers to the fact that while many consumers demonstrate a positive attitude towards purchases of sustainable products, it is only a small number of consumers that actually purchases those products. (Hughner et al. 2007, Joshi, Rahman 2015)
Consumer Behavior	Consumer behavior reflects the totality of consumer's decisions with respect to the acquisition, consumption, and disposition of goods, services, activities, experiences, people, and ideas by human decision-making units over time (Hoyer et al. 2016)
Environmental Concern	The degree to which people are aware of problems regarding the environment and support efforts to solve the problems (Xiao, Dunlap 2007)
Environmental Knowledge	Environmental Knowledge is defined as a generalized knowledge base which is based on the facts and relationship between natural environment and its major ecosystems (Fryxell, Lo 2003)
Environmentally Friendly Behavior	In this thesis, Environmentally Friendly Behavior refers to the sort of behavior that consciously seeks to minimize the negative impact of one's actions on the natural and built world (Jensen 2002)
Ethical Concern	An individual's internalized ethical rules, which reflect personal beliefs about appropriate behavior (Shaw, Shiu 2003)
Ethical Consumption	Purchase decisions made not only on the basis of personal interests but also on the basis of the interests of society and the environment (Jobber 2010)
Materialism	In popular speech materialism refers to a devotion to material needs and desires, to the neglect of spiritual matters; a way of life based entirely upon material interests (Richins, Dawson 1992). Materialism is also referred to as a consumer culture that passionately desires to consume goods for reasons that traditionally was defined as non-utilitarian, such as for status or novelty (Belk 1988)
Sustainable Product	A sustainable product is designed to minimize the environmental impact during its whole life-cycle. In particular, non-renewable resources use is minimized, toxic materials are avoided and renewable resource use takes place according to their rate of replenishment (Albino et al. 2009)

1.5 Thesis Outline

This thesis is structured in five sections. (1) The first section, *Introduction* (p.6), introduces our area of research, the main reasons for further studies and the survey's primary purpose. In this section, the research gap we have identified will be presented and the expected contributions of this study will be argued for. Furthermore, the *Introduction* presents definitions and delimitations to guide the reader through the terminology and conceptualizations presented in the second section, *Literature Review. (*2) Section two, *Literature Review*, reviews the relevant literature and theory (p.11). (3) In the third section, *Methodology,* the selected method for designing and testing of the main study is presented. The third section do also illuminate the three pre-studies guiding the design and execution of the main study (p.26). (4) Section four, *Results and Analysis,* presents and analyzes the tests of the hypothesis presented in section 2 (p.44). In section three, the reasoning regarding accepting or rejecting the hypotheses will be offered. (5) In section five, *Final Discussion,* the results are analyzed and discussed in regards to the theory presented in section 2 to get a coherent picture of our study. In this section the study's theoretical contribution, managerial implications and limitations of the study are illuminated to open up for discussion and criticism, and suggestions for future research will be presented (p.57).

Literature Review

Due to the relative unexplored area of motivations and barriers towards sustainable purchases, this section (2) aims to review selected literature on the attitude-behavioral gap, examining the motives and barriers impacting on it. This section will also introduce the two types of sustainable products investigated, in addition to materialism, social consumption motivations and ethically minded behavior as factors impacting on consumers' purchase of sustainable products. The hypotheses will be presented throughout the section.

2.1 An Exploratory View of Environmentally Friendly Behavior

Consumer behavior has always been of great interest to marketers (Babu et al. 2010). With the cultivation of the environmental trend, this behavior has changed due to new factors, inherent by a product and affecting consumption. Each purchase made has an ethical, resource and waste impact. When individuals consider an environmentally friendly lifestyle, they also engage in an increasingly complex decision-making process (Young et al. 2010). Hence, sustainable consumption can be characterized as a complex form of consumer behavior. The objectives for environmentally friendly actions are diverse and there is hardly an agreement upon an appropriate consumption strategy (Moisander 2007). Previous research has argued that environmentally friendly behavior is a behavioral pattern demonstrated in relational degrees, therefore not something consumer has or does not have (Antil, Bennett 1979).

2.1.1 Introducing the Attitude-Behavioral Gap

The traditional way of approaching the attitude-behavioral gap is to understand that attitudes alone are often a poor predictor of behavioral intentions (Ajzen 2001). This can explain a gap between favorable attitude towards environmentally friendly behavior and behavioral intention

to purchase sustainable products (Vermeir, Verbeke 2006). Behavioral factors have been studied at length in previous research in order to explain it, particularly, by exploring the role of attitude as the antecedents to purchase sustainable products and environmentally friendly behavior (Kumar et al. 2017). Numerous theoretical frameworks additionally attempted to explain the gap through possession of environmental knowledge (Kollmuss, Agyeman 2002). The classification study by Joshi, Rahman (2015) reviewed 50 studies on motivations and barriers, existent within sustainable consumption, nevertheless, they argued there is still high unclearness in understanding of consumers' decision-making towards sustainable consumption.

2.1.2 Purchasing Behavior for Sustainable Products

The earlier models of environmentally friendly behavior were based on a linear progression of environmental knowledge leading to environmental awareness and environmental attitudes, presumably causing sustainable consumer behavior (Kollmuss, Agyeman 2002). It was assumed that educating people about environmental issues would automatically result in a more sustainable behavior (Burgess et al. 1998). These models have since been proven inaccurate. Although many hundreds of studies have been conducted regarding the relationship between attitude and purchase behavior, no definite explanation has been found yet (Kollmuss, Agyeman 2002). Based on previous research, a descriptive framework of the complexity of purchasing behavior for sustainable products can be introduced:

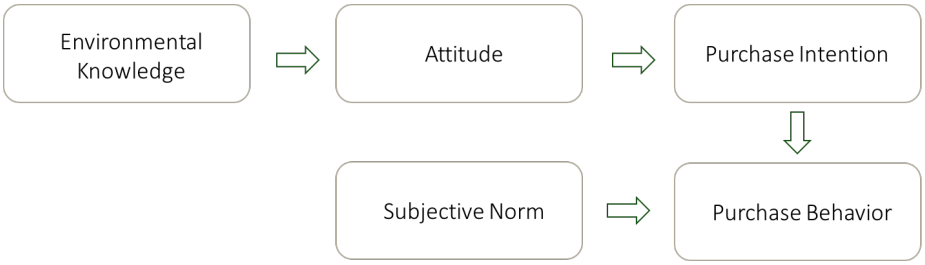


Figure 1. Framework of Purchasing Behavior for Sustainable Products Based on Previous Research

2.1.2.1 Attitude as a Mediator

Previous research has been able to establish a relationship between environmental knowledge and attitude. Vermeir, Verbeke (2006), amongst others, advocate that a favorable attitude towards a sustainable product leads to favorable purchase behavior intentions (Vermeir, Verbeke 2006). A small number of studies has, however, demonstrated an opposite view, namely a negative relationship between environmental knowledge and attitude (Kumar et al. 2017). Even though, it should be argued that environmental knowledge affects the attitude towards sustainable products, which, in turn, affects the purchase intention.

2.1.2.2 Purchase Intention and Purchase Behavior for Sustainable Products

Behavior can be determined from intentions with considerate accuracy (Ajzen 1991, Ajzen, Fishbein 1980). Historically, intention has been perceived as a strong predictor of behavior, however, in some cases, intention has been affirmed not to act in a consistent manner. This effect is known as the intention-behavior gap, described by Grunert, Juhl (1995) (Kumar et al. 2017).

Clarification should be made yet regarding the area of purchase intention being still observed to have a high, positive correlation with purchase behavior (Sheppard et al. 1988).

2.1.2.3 The Relationship Between Subjective Norm and Purchase Behavior

The subjective norm is a social pressure acting upon and guiding a particular behavior (Ajzen 1991, Ajzen, Fishbein 1977), as to say, individuals do not only perform a behavior under social pressure, the subjective norm also provides the individual with information about the appropriateness of that behavior (Jager et al. 2000). Various studies have over the years analyzed subjective norm for describing environmentally friendly behavior (Vermeir, Verbeke 2006), and a direct, positive relationship between the subjective norm and environmentally friendly behavior has been presented.

2.1.3 One of Many Explanations for the Gap

Consumer purchasing decisions incorporate a complex variety of motivations that complicates the understanding. Specific attitudes may suggest a specific behavior when taken in isolation, a behavior that might change when a broader purchase decision is considered. Additional attitudes, interfering and moderating behavior, weaken the initial attitude and result in an alternative outcome (Vermeir, Verbeke 2006). Different explanations can be suggested for the gap between the positive attitude of consumers and their actual purchase behavior. In an effort to bring some clarity, Vermeir, Verbeke (2006), with inspiration from Jager (2000), present a conceptual framework of consumer behavior towards sustainable products. It embraces three main determinants of behavioral intentions, with relevance for sustainable products, and presented as Values, Needs and Motivations. In this specific study, the values and motivations will be investigated, by finding compatibility of the model with posed objectives. Values, needs and motivation's influence on the attitude-behavioral gap are outlined in *Figure 2* below.

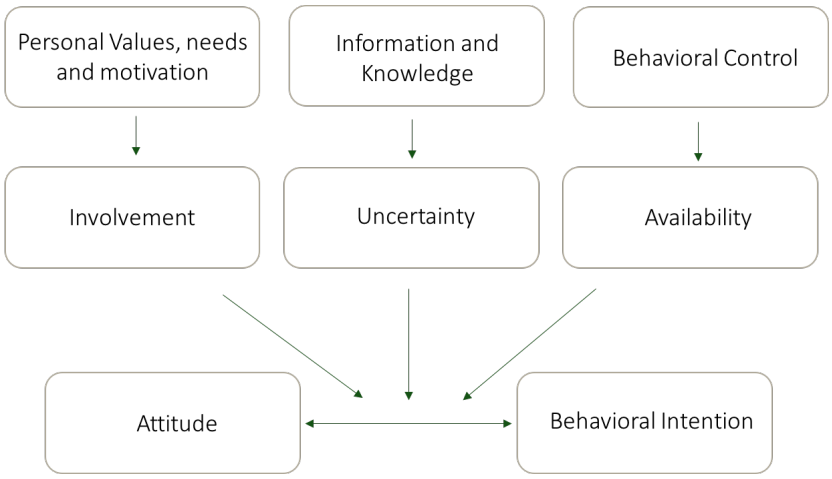


Figure 2. Values, Needs, and Motivation's Influence on the Attitude-Behavioral Gap

2.1.3.1 Values and Motivation

Values express the goals and needs that motivate people in appropriate ways to attain these goals and needs. Values play an important role in consumers' decision-making process (Burgess 1992), by giving direction and emotional intensity (Schwartz 1994). Vitell et al (2001) argues, among others, that consumers are guided by values when making ethical decisions, and a vast amount

of previous research has linked ethical and environmentally friendly behavior to personal values (Vermeir, Verbeke 2006).

Motivation is understood as a reason for behavior (Solomon 2014) and determines which of all possible behaviors will be chosen and why (Moisander 2007, Hoyer et al. 2016). Motivation has an impact on how consumers process information and make decisions. Highly-motivated consumers are therefore more likely to put effort into the decision-making process. On the other hand, consumers with low motivation devote little effort into information processing and decision-making (Hoyer et al. 2016). In addition to motivation, it has been argued that consumers' behavior is determined by the ability to execute a behavior. Consumers are not always motivated to execute a behavior due to lack of resources. Strong motivation is, however, presumed to enhance people's abilities (Pieters 1991). When faced with low motivation consumers may use decision making shortcuts, the common way consumers tend to buy utilitarian products (Hoyer et al. 2016). In *Figure 3* a simple model of Motivations impact on behavior is presented (Moisander 2007).

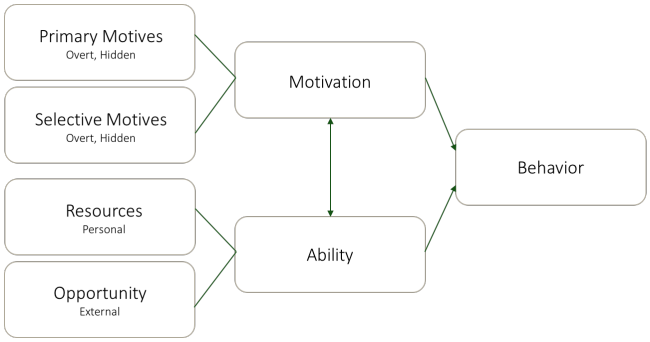


Figure 3. Simple Model of Motivation

Involvement is a specific kind of motivation, a motivation activated when an offering is perceived to meet important goals, needs and values (Jager et al. 2000). For involvement, the object is of utmost importance to the self, it addresses important values and goals in people's life (Vermeir, Verbeke 2006). Previous studies have linked ethical or sustainable behavior to personal values (Vermeir, Verbeke 2006) and it has been argued that the extent of sustainable behavior depends on the specific factors, such as habits, specific attitudes and opportunity to highly engage in sustainable consumption (Thøgersen 2001).

2.1.3.2. Availability and Behavioral Control

According to the framework by Vermeir, Verbeke (2006) presented in section *2.1.3.1* above, the third potential determinant of consumer decision-making is the availability of sustainable products. Behavioral control refers to the difficulty of obtaining a specific product (Jager et al. 2000). Although the motivation to consume sustainable products is high, it might not be possible due to limited choice or lack of availability. A problem is often due to the perceived scarcity of sustainable products (Vermeir, Verbeke 2006), sustainable products have been proven to be inadequately promoted and have bad visibility (De Pelsmacker et al. 2003). Recent research has shown that over 50% of consumers are interested in purchasing sustainable products, but were

hindered due to perceived barriers of lack of availability (Vermeir, Verbeke 2006). Other aspects related to behavioral control are the perceived consumer effectiveness, namely an individuals' belief that their personal effort can contribute to the solution of a problem (Ellen et al. 1991). Therefore, in order to motivate a behavioral change, consumers must be convinced that their behavior has an impact.

In line with this reasoning, Blake (1999) and Johnstone, Tan (2006) argue, that responsibility and practicality act as a hindering factor for environmentally friendly behavior (Blake 1999, Johnstone, Tan 2015). Essentially, one main reason used to justify a non-environmentally friendly lifestyle is the perception that it is too hard to be environmentally friendly. Being environmentally friendly are seen as both time consuming and cost a lot of money. Aspects such as high price and income constraints were cited as a serious obstacle in Johnstone, Tan's (2015) research. In other words, individuals argued that they did not act environmentally friendly due to the belief that it was beyond their control.

2.1.3.3 Information, Knowledge and Uncertainty

Access to clear and reliable information has been argued by, among others, Vermeir, Verbeke (2006) to be an important factor in the purchase decision process. Previous studies have shown that few consumers have a high comprehension or awareness of products sustainable characteristics of products. The benefits of sustainable products are often poorly communicated to consumers, enabling individuals to make informed decisions in regards to sustainable products. The less information available, the more uncertain consumers get regarding their product choice. The fact that sustainability is a so-called credence attribute, the one, that individuals cannot evaluate personally, forcing individuals to put their trust into the source. Uncertainty can lead to the use of social information, individuals referring to others in order to get indications regarding the best outcome (Vermeir, Verbeke 2006). Theory of needs suggest that individuals tend to perform behavior that is deemed desirable by loved ones or referent group (Voon et al. 2011), which corresponds with the incentives presupposed by social proof.

In addition, intentions to purchase sustainable hedonic products have been proven strongly determined by negative emotions like mistrust towards larger corporate brands (Harris et al. 2015). Findings supported by Krystallis, Chryssohoidis (2005) argue that lack of awareness of the sustainable concept and uncertainty over the truthfulness of organic food claims to hinder also a more widespread consumption.

2.1.4 Limitations in Previous Research

The conceptual framework and arguments presented by Vermeir, Verbeke (2006) (see *Figure 3,* in section *3.1.3*) are supported by some previous sociological research regarding the attitude-behavioral gap. The sociological research claims the majority of environmentally friendly behavior models presented to be limited. The limitations are argued to arise from the failure of taking into account individual, social and institutional constraints, as well as in the assumption that humans are not rational (Kollmuss, Agyeman 2002, Blake 1999). Blake (1999) identifies, in line with

Vermeir, Verbeke (2006), three barriers to environmentally friendly behavior; Individuality, Responsibility and Practicality. Blake's (1999) model is presented in *Figure 4.*

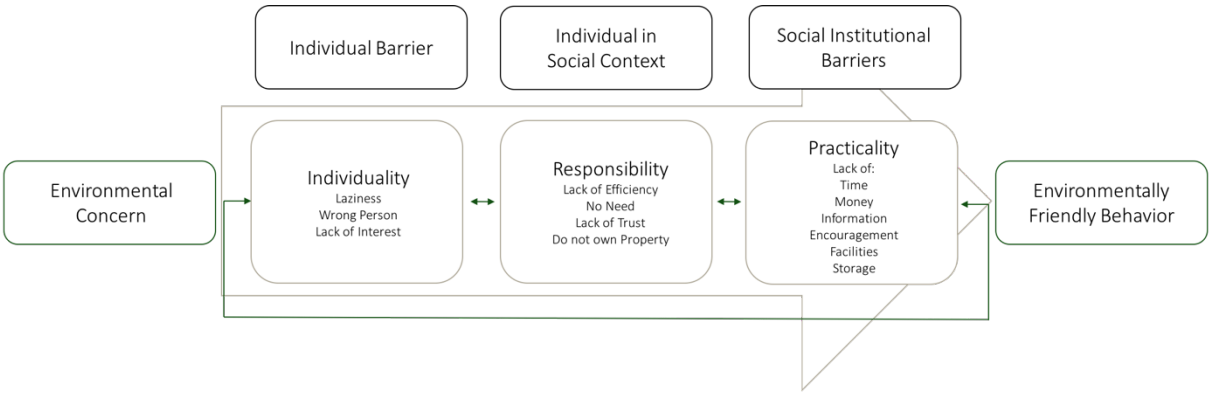


Figure 4. Barriers Between Environmental Concern and Action

The individual barrier of the model refers to individual's internal barriers, attitude and temperament (Blake 1999). In accordance with Vermeir, Verbeke (2006), Blake (1999) argues that environmental concern can be overridden by conflicting attitudes and stronger needs and desires (Kollmuss, Agyeman 2002, Blake 1999).

The responsibility barrier reflects the lack of willingness to behave environmentally friendly due to the lack of trust (Blake 1999), and argued by Ellen et al. (2001). According to Blake (1999), people who do not act environmentally friendly feel the lack of potential as to influence the situation, and, therefore, should not have to take the responsibility for it. This notion was supported by Johnstone, Tan (2015).

The Practicality barrier is defined as the social constraint that prevents people from acting environmentally friendly. This constraint prevents people, regardless of their attitudes or intentions, and often refers to a lack of time, money and information. In need of clarification, Blake's (1999) model, however, does not account for familial pressure, social and cultural factors.

2.2 Product Attributes

2.2.1 Motivations for Purchase of Sustainable Products

Consumption based studies have been so far mostly focused on organic food. Given the growing number of sustainable products and the positive change in consumers' environmental concern, a need for further examination of consumer purchasing behavior in regards to sustainable products has been evolved (Follows, Jobber 2000).

2.2.1.1 Product Motivations

Similar to consumption based studies, the array of previous research regarding the area of motivation and barriers towards purchase of sustainable products has mainly been focused on utilitarian sustainable products. Thus, the motives towards purchasing of everyday commodities were researched relatively better compare to other types. In general, sustainable products are regarded as healthier and safer, than non-sustainable products (Voon et al. 2011). In their

research, Aertsens et al. (2011) presents 7 product attributes, previously proven motives for purchase of sustainable product. In accordance with Makatouni (2002), Aertens et al. (2011) presents organic food to be better tasting, more nutritious, perceived to have lower levels of chemicals used in production (Aertsens et al. 2010, Makatouni 2002), in addition to better quality and freshness. Analyzing aforementioned motives, one can grasp the common feature of these motives as being of a high personal importance. Theory refers to them as to individualistic, opposite to altruistic ones, such as environmental and social concern. According to Joshi, Rahman 2015, array of studies find individualistic values to have a stronger influence than altruistic on purchasing green and sustainable products (Cerjak et al. 2010, Padel, Foster 2005, Kristallis, Vassalo 2008, Magnusson et al. 2003).
In support for this, researches often find health to be the most important motivator (Joshi, Rahman 2015, Aertsens et al. 2010). Hence, hypothesized that Health is the main motivation for individuals to purchase sustainable products.

2.2.1.2 Process Motivations

In line with previously presented view regarding the attitude-behavioral gap, individuals to the similar extent base their behavior on social pressure (Ajzen 1991). Purchase intentions have been proven to be strongly influenced by social motivations; Concern for the environment, Animal safety and Support for Local producers (Aertsens et al. 2010, Harris et al. 2015). In addition, Griskevicius, Tybur (2010) argue that the purchase of sustainable products can be argued altruistic, since the products in general have a higher price and of lower quality than conventional products, and sustainable products benefits the whole environment. This argument is based on the reason that altruism might function as a costly signal associated with status (Griskevicius, Tybur 2010). Griskevicius, Tybur (2010) were able to prove that status motives increased the desire for sustainable products when shopping in public, as well as, when green products cost more.

2.2.2 Barriers Hindering from Purchase of Sustainable Products

Previous research has demonstrated a scarcity of research regarding the barriers hindering purchase of sustainable products (Connell 2010). According to Aertens et al. (2011) and Joshi, Rahman (2015) the three main reasons why consumers do not purchase sustainable products are: high price, lack of availability and the difference to conventional products is insufficient. Moreover, the general public find sustainable products to be difficult to acquire (Vermeir, Verbeke 2006). Vermeir, Verbeke (2006) argue that perceived availability acts as a barrier towards sustainable consumption intentions. Consumers who believe that sustainable products are less available intend to purchase products to a lesser extent.

In addition, research has argued that the main reasons preventing individuals from buying sustainable products are lack of availability, satisfaction with conventional products, lack of trust, the limited choice and lack of perceived value (Makatouni 2002), all in line with the previously presented view of the attitude-behavioral gap (Vermeir, Verbeke 2006).

In line with Aertens et al.'s (2011) results, price has been reported in 10 studies as a main barrier that widens the attitude-behavioral gap in regards to sustainable products (Joshi, Rahman 2015). According to Connell (2010), lack of economic resources of consumers was found to magnify the price sensitivity of consumers. In addition, low price sensitivity positively correlates with sustainable purchase behavior (Aertsens et al. 2010). Thus, it is clear that high price negatively impacts sustainable purchase intentions and behavior (Joshi, Rahman 2015). Hence, hypothesized that cost is the main reason why individuals do not purchase sustainable products.

H1a: Health is the main reason why individuals purchase sustainable utilitarian products

H1b: Health is the main reason why individuals purchase sustainable hedonic products

H1c: Cost is the main reason why individuals do not purchase sustainable utilitarian products

H1d: Cost is the main reason why individuals do not purchase sustainable hedonic products

2.2.3 Utilitarian and Hedonic Product Attributes

Consumers naturally purchase both sustainable and non-sustainable products. It is, therefore, argued that behavior should be assessed for specific products and activities rather than general environmentally friendly response patterns (Follows, Jobber 2000). Product categories are often defined according to two types, utilitarian and hedonic (Dhar, Wertenbroch 2000), different according to the utilitarian and hedonic value they create (Kushwaha, Shankar 2013). Utilitarian products are seen as instrumental and functional. Alternatively, hedonic products provide pleasure, fun and excitement, as well as a more experiential consumption (Dhar, Wertenbroch 2000, Batra, Ahtola 1991). The monetary perspective of utilitarian and hedonic goods is highly interesting to business practitioners with the respect willingness to pay price premiums and value, posed to different goods. Dhar and Wertenbroch (2000) prove that subjects weigh hedonic attributes more in forfeiture decision, and that consumers are tending to infer greater value in the hedonic products they own (Dhar, Wertenbroch 2000), which leads to the assumption of higher willingness to pay for products with hedonic attributes. Experimental study by Chitturi et al. (2005) in support for this statement shows that consumers are willing to pay more for hedonically pleasing products (Chitturi et al. 2005). Therefore, it is hypothesized that individuals are willing to pay a higher price premium for hedonic than utilitarian products.

2.2.3.1 Sustainability and utilitarian and hedonic products

The topic of sustainability in attribute dimension is under-researched at the moment, but existing results provide strong incentives to dive deeper. According to Gruber, Schlegelmilch (2015), sustainability is valued differently in high and low involvement categories as well as in hedonic and utilitarian product categories, and, surprisingly, consumers value sustainability more in low than in high involvement products, but do not value sustainability differently in hedonic and utilitarian product categories (Gruber, Schlegelmilch 2015).

2.2.3.2 Price premium for sustainability

In previous research, there was an attempt to investigate whether price premium or the consumer willingness to pay price premium for sustainable products would differ based on the product's attributes (Seo 2016). However, the research mostly focuses on preferences within the categories, based on other factors of differentiations, rather than differences between utilitarian and hedonic products, and the authors look solely into the food category.

> **H2:** Individuals are willing to pay a higher price premium for hedonic products than for utilitarian products

2.3 Materialism

The consumer trait commonly known as materialism reflects the importance a consumer attaches to worldly possessions. At the highest level of materialism, possessions have a central place in a person's life. These possessions provide the greatest source of satisfaction, as well as dissatisfaction, in life, either indirectly or directly (Belk 1983). Materialism is often used as a cultural variable to comparing cultures within a culture of consumption (Inglehart 1981). Cultural differences in materialism, studied by Belk (1996) and Strizhakova, Coulter (2013) clearly shows that materialism levels can vary across countries with the connection neither to "Western" nor "Eastern" world. Sweden is one of the countries studied that has been rated low in materialism, hence hypothesized to have low levels of materialism.

> **H3:** Swedish consumers exhibits low levels of materialism

2.3.1 The Three Traits of Materialism

Richins, Dawson (1994) view materialism as a construct, composed of value dimensions, embracing success, possessiveness and happiness, and emphasize that acquisition plays bigger role than the actual use of goods for materialistic people, endowed with a system of beliefs and behavior, that distinguish them from less materialistic ones (Richins, Dawson 1992). According to Richins, Dawson (1994), materialism can be measured with three main traits, related to happiness and satisfaction in life (Belk 1984). Theses three traits are: Acquisition Centrality, Acquisition as the Pursuit of Happiness and Possession-defined Success (Richins, Dawson 1992). Materialism, as defined in this study, is presented in *Figure 5.*

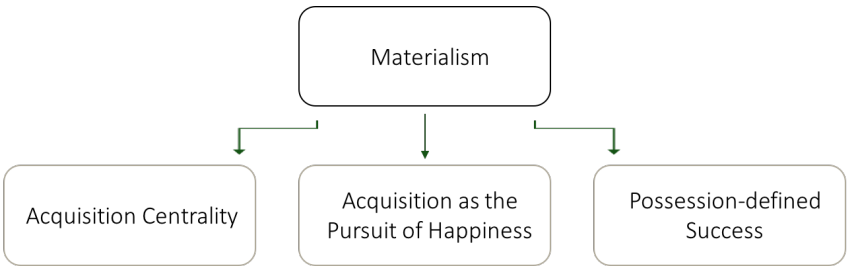


Figure 5. A Model of the Construct of Materialism

2.3.1.1 Acquisition Centrality

Materialists place possessions and their acquisition at the center of their lives. According to Bredemeier, Toby (1972), materialists worship things and their lives are structured and oriented based on the pursuit of possessions (Bredemeier, Toby 1972). The acquisition centrality, and the measurement it makes up, describes the dominance materialism can achieve in a person's life.

2.3.1.2 Acquisition as the Pursuit of Happiness

As previously presented, possessions and the acquisition of products are fundamental for materialists due to their essential connection to the satisfaction and well-being they provide (Ward, Wackman 1971). The fact that self-satisfaction is the goal of high consumption levels is frequently mentioned in previous literature (Belk 1984, Richins, Dawson 1992, Ward, Wackman 1971). What distinguishes materialists is the pursuit of happiness to the higher extent through acquisitions than other means (Richins, Dawson 1992).

2.3.1.3 Possession-defined Success

Materialists tend to judge their own, as well as others', success by the amount of products collected (Richins, Dawson 1992) and perceive material well-being as evidence of success and right-mindedness (Bois 1955). Materialists view themselves as successful to the extent that they can possess products which project desired images. However, the value of possessions stems, not only from the ability to assign status, but from the ability to project a desired self-image (Richins, Dawson 1992).

2.3.2. Factors Influencing Materialism

It has been argued by Eastmanet al. (1997), and more recently by Segal, Podoshen (2013), materialism is significantly higher across male population (Eastman et al. 1997, Segal, Podoshen 2013). However, absence of gender difference has been argued and supported by Burroughs, Rindfleisch (2002) who found that males and females displayed similar level of materialism as measured by the materialistic value scale, as well as by the originators of the scale itself, Richins and Dawson (Richins, Dawson 1992, Burroughs, Rindfleisch 2002). Materialism has also been proven to be influenced by age. According to Belk (1985), materialism starts to decrease after individuals has reached middle aged (Belk 1985).

2.3.3 The Social Meaning of Materialism

In accordance with mentioned qualities and habits, common for materialists, materialism is commonly viewed as a negative trait, which leads to overconsumption and poses environmental problems (Richins, Dawson 1992).

Eastman et al. 1999 argues, that materialists acquire things to signal their status to the society and themselves (Eastman et al. 1999). Respectively, they are often viewed as individuals, who want to have "the best", "the most expensive" and other status possessions (Richins, Dawson 1992). Hence, it can be hypothesized that cost is not the foremost hinder for highly materialistic individuals to purchase sustainable products. Thus, it can be theorized that materialistic people would choose, among different alternatives, the one that represents the trend and possession of

which is associated with a specific social group, obtaining by that a role acquisition function (Hoyer et al. 2016). The idea of social/conspicious consumption stands for the person's satisfaction with the buying decision when the surrounding others see the purchased product as a product of prestige (Kilsheimer 1993). Factors such as social proof and social consumption motivation influence purchasing decisions, and this tendency can be assumed growing, taking into account the transition of the modern society materialism into the form of a more central organizing value of consumers, rather than individual behavioral traits (Richins, Dawson 1992). Hence, highly materialistic individuals are hypothesized to purchase sustainable products due to primarily individualistic motives. Unfortunately, little research has been done on the topic of status consumption for sustainable products. It is, therefore, beneficial to investigate status consumption motivation as possible incentive for sustainable purchasing, as this factor can be practically not less important than environmental or ethical concern, whereas it still leads to the actual purchasing of goods.

H4a: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable utilitarian products

H4b: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable hedonic products

H4c: Cost is not the main reason why highly materialistic individuals do not purchase sustainable utilitarian products

H4d: Cost is not the main reason why highly materialistic individuals do not purchase sustainable hedonic products

2.3.4 Materialism and Environmentally Friendly Behavior

The volume of academic research on materialism has already looked up into range of perspectives, including relationship between materialism and environmentalism, which is of a particular interest for our study. Studies reveal negative correlation between these two aspects (Banerjee, McKeage 1994). Researchers argue materialism and environmentalism to be not compatible, where highly materialistic individuals are less preoccupied with the environmental issues. However, there are some researchers arguing for a new type of materialism, namely responsible materialism. Responsible materialism, which is distinct from the type of materialism used in this thesis, is about a positive relationship with responsible goods and sustainability. This line of thought is supported by Manchanda (2014) who proved a positive relationship between materialism and green purchase behavior, however, this study had significant limitations.

2.3.5 Materialism and Social Consumption

Highly materialistic individuals depend more on projecting the identity to others by relying on the social meaning of consumer goods (Fitzmaurice, Comegys 2006). Social or conspicuous consumption pays more attention to the external dimension, focusing on the display of products that may enhance consumers social status. Fitzmaurice, Comegys (2006) confirmed in their study a significant positive relationship between materialism and social consumption motivation. This

follows the logic of Moschis (1981), that social consumption motivation helps to explain materialist's pursuit of possessions in reflecting the ability to acquire and own possession to the social environment. Materialism can therefore be hypothesized to positively correlate with social consumption motivation. Recent research by Dermody et al. (2015) has looked into the connection of social consumption motivation, materialism and sustainable consumer behavior for two different nations. In both demographic contexts, social consumption motivation had a positive relation with sustainable purchasing behavior. Sustainable consumption behaviors might be encouraged through the social visibility of social consumption motivation, which enables the expression of pro-environmental attitude to significant others, e.g. in-groups and 'face' (Dermody 2015). For example, Vermeir, Verbeke (2008) found such a relationship for sustainable food consumption intention (Vermeir, Verbeke 2008). It is therefore hypothesized that highly materialistic individuals' main motivation for purchasing sustainable products is social motivations, rather than environmental concerns and ethical motives.
According to cross-cultural studies on social consumption, social consumption motivation is found to be higher in individualist cultures than in collectivist ones (Souiden et al. 2010). Additionally, in collectivist cultures, social status is found to play a significant role in influencing consumers self-esteem.

H5a: Materialism is positively correlated with social consumption motivation

H5b: Highly materialistic individuals are in a greater extent than less materialistic individuals motivated by social consumption motivation

2.4 Ethical Consumer Behavior

Ethical consumption was defined by Jobber (2006) as "taking of purchase decisions not only on the basis of personal interests but also on the basis of the interests of society and the environment" (p.217). The UK Annual Report from Ethical Consumer (2014) brings evidence for the increase of conscious choice made by consumers on a daily basis (Webb et al. 2014). Increase in ethically-minded sales goes in parallel with the rise of boycotting for ethical reasons. Ethical consumption is considered to be conscious and based on the ethical and social knowledge (Gulyas 2008). Researchers have suggested that consumers generally have positive attitudes toward social responsibility, but only the consumers who have strong identity as ethical consumers actually purchase socially responsible products (Connell 2011, Strong 1996).

2.4.1 The Ethical Attitude-Behavioral Gap

Previous research regarding ethical consumer behavior have focused on the relationship between attitudes and intentions. The majority of the ethical consumer behavior models are based on a cognitive progression (Carrington et al. 2010), where beliefs determine attitudes, attitudes lead to intentions and intentions inform behavior, much similar to previously discussed behavior models. In addition, social norms and behavioral control moderates both intentions and behavior (De Pelsmacker, Janssens 2007). In *Figure 6,* the standard model of ethical behavior is presented.

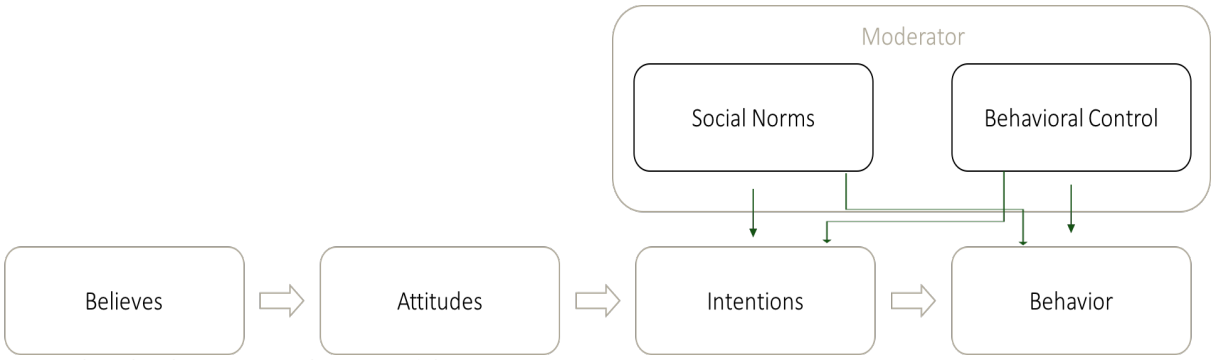


Figure 6. The Ethical Consumer Behavior Model

Despite ethical intentions, consumers do rarely purchase ethical products, and ethical concerns do not fully translate into environmentally friendly behavior (Carrington et al. 2010), and it has been found that while 30% of consumers would buy ethically, only 3% actually do (Futerra 2005), similarly to sustainable consumption processes.

The concept of environmentally friendly consumption, as presented in section *2.1 Environmentally Friendly Behavior*, is an established field of consumer behavior. However, attributes such as price, value, quality and brand are often of more importance than ethics, especially in regards to purchases where involvement is low. Still, interest in ethical consumption is highest when consumers feel that their choices can influence their lives (Uusitalo, Oksanen 2004).

2.4.2 Ethics and Its Connection to Materialism

It has been proven that the levels of ethical traits vary strongly amongst people. Hence, referring to ethical behavior as an individual trait also makes it comparable with personality traits such as materialism, due to similar evaluation methods (Uusitalo, Oksanen 2004, Carrigan, Attalla 2001). On this notion, ethical consumers can be defined as those who are concerned with a broad spectrum of issues ranging from environmental degradation to animal welfare and human rights (including labor practices) when purchasing products (Tallontire et al. 2001).

2.4.2.1 Materialism

To investigate how materialism impacts the sense of concerning society, Kolodinsky et al. (2010) examined the relationship between materialistic values of business students and their attitudes toward corporate social responsibility. The result revealed that highly materialistic individuals tend to prefer companies that pursue profit maximization above all else (Kolodinsky et al. 2010). More empirical evidence indicates that materialism is negatively correlated with people's higher ethical standards (Ferrell, Gresham 1985 , Muncy, Eastman 1988, Vitell, Muncy 1992). Materialism is therefore hypothesized to be negatively correlated with ethically minded consumption behavior.

2.4.2.2 Environmentally Friendly Consumption

Materialism as the orientation towards ideology of continuous possession increase escalates consumerism, by this undermining environmentally friendly behavior (Kilbourne, Pickett 2008). A negative correlation between materialism and ethically-minded behavior and environmental concern can therefore be argued. Bakirtaş, Buluş (2014) recent research seems to be one of the very few combining all three aspects. They found that consumer ethics influence positively both environmental concern and environmentally friendly behavior of consumers in addition to, materialism influence negatively on environmentally friendly behavior (Bakirtaş, Buluş 2014). Less materialistic individuals are therefore hypothesized to be more ethically minded than highly materialistic individuals.

H6a: Materialism is negatively correlated with ethically minded consumption behavior

H6b: Less materialistic individuals are more ethically minded than highly materialistic individuals

2.5 Summary of Hypothesis

The hypothesis presented in section *2. Literature Review* will guide the analysis and results in section 4.

Hypotheses Generated	
General Differences Between Utilitarian and Hedonic Products	**H1a:** Health is the main reason why individuals purchase sustainable utilitarian products
	H1b: Health is the main reason why individuals purchase sustainable hedonic products
	H1c: Cost is the main reason why individuals do not purchase sustainable utilitarian products
	H1d: Cost is the main reason why individuals do not purchase sustainable hedonic products
	H2: Individuals are willing to pay a higher price premium for hedonic products than for utilitarian products
Materialism & Social Consumption Motivation	**H3:** Swedish consumers exhibits low levels of materialism
	H4a: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable utilitarian products
	H4b: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable hedonic products
	H4c: Cost is not the main reason why highly materialistic individuals do not purchase sustainable utilitarian products
	H4d: Cost is not the main reason why highly materialistic individuals do not purchase sustainable hedonic products
	H5a: Materialism is positively correlated with social consumption motivation
	H5b: Highly materialistic individuals are in a greater extent than less materialistic individuals motivated by social consumption motivation
Ethically Minded Consumer Behavior	**H6a:** Materialism is negatively correlated with ethically minded consumption behavior
	H6b: Less materialistic individuals are more ethically minded than highly materialistic individuals

Methodology

This section (3) is fashioned to give the reader an understanding of the methodology applied to examine the above presented hypotheses. Firstly, the scientific approach to the research design is explained, followed by an explanation of the fundamental reasoning for the study's design. Furthermore, the elements which formed the basis of our main study, which include questionnaire design, variables, sampling method, data collection, and choice of analytical tool. Finally, the study's reliability and validity is discussed and presented.

3.1 Choice of Scientific Approach

In order to investigate and answer the research question the thesis utilizes a deductive methodology. The usage of deductive methodology stems from the hypotheses, which are generated based on existing theory (Bryman 2015). The deductive approach has previously been criticized regrading when concrete expectations is assumed, the information assets are limited. There is therefore a risk that researchers, overlook important information (Jacobsen et al. 2002). The theoretical area of sustainable products, consumer buying behavior and materialism have for a significant amount of time attracted the attention of researchers. This indicates, despite the above presented criticism, a stable and reliable output for the usage of a deductive methodology.

This study aims to investigate the moderation of materialism on consumers' motivations and barriers for purchase of sustainable products, utilitarian and hedonic, by means of a comparative study between hedonic and utilitarian products, rather than an experiment. A quantitative research method therefore is a suitable approach. The hypotheses will be tested through a quantitative study. The data was collected through a questionnaire at a single point in time, between the 5th and 24th of April 2017, and more than one case was examined. The utilization of a quantitative research design is supported by the interest in variation. The quantitative methodology was chosen in order to establish variation between cases, as well as provide us, as researches, with a systematic and standardized method for assessing variation (Bryman, Bell 2011).

First, we will empirically look at general differences in motivations and barriers for purchase of sustainable utilitarian and hedonic products. Then we will eager to establish, if individual's level of materialism has an impact on the main motives and barriers connected with the two product types. Finally, an investigation regarding materialism's relationship with ethically minded consumer behavior will be performed.

This is done by four online surveys, three pre-studies and one main study. The decision to use online questionnaires, as well as distributing the survey online through open social media networks was based on the possible breath of respondents. The defined population is broad, and a decision to use availability sampling was therefore suitable. The results are analyzed using the statistical measuring instrument SPSS.

3.2 Initial Work to Understand the Area of Investigation

In previous section, 2 *Literature Review,* the gap between consumers' attitude and behavior in regards to sustainable products were presented and discussed. As outlined, existing literature regarding the attitude-behavior gap do not comprehensively investigate what motivates and hinders consumers purchases of sustainable products.

To receive an independent assessment of the sustainability and contribution of the chosen area of research the literature review was discussed with Tina Sendlhofer PhD Student at MISUM, Mistra Centre for sustainable Markets, at Stockholm School of Economics.

3.2.1 Preparatory Investigation of Consumers relationship to Products

During the first stages of the investigation and mapping of chosen research area a pattern regarding previously investigated product categories appeared visible. As a partial basis for this study a compilation list was compiled based on articles regarding sustainable and/or materialistic research that had been reviewed until the 12th of march 2017. The majority of previous research has been focused on FMCG and electronics, see *Table 1* below.

COMPILATION LIST 12th OF MARCH 2017		
Category	*Products*	*Amount of Notions*
FMCG	Coffee, Milk, Food & Deodorant	8
Electronic Goods	TV, Stereo, DVD-player, PC & Washing Machine	7
Automobiles	Car	1
Clothes/Shoes	Clothes & Shoes	1
Books	Books, all categories	1
Furniture	Furniture, all categories	1
Travel	Travel, all categories	1
Art	Art, all categories	1

Table 1. Compilation list compiled based on articles regarding sustainable and/or materialistic research reviewed until the 12th of march 2017

In order to decide which type of utilitarian, respectively hedonic, products to investigate initial interviews were conducted with 14 consumers between 24 and 54 years of age, resident throughout Sweden. The answers were collected between the 10th and 12th of march 2017. The consumers interviewed were asked four open questions each. We asked the respondents to list; "Up to five products that you find very important to you", "Up to five products that you would like to buy", "Up to five products that you feel bad about owning" (Ger, Belk 1996) and "What type of sustainable products do you usually buy" (Young et al. 2010).

COMPILATION LIST 12th OF MARCH 2017		
Category	*Products*	*Amount of Notions*
FMCG	Coffee, Milk, Food & Deodorant	8
Electronic Goods	TV, Stereo, DVD-player, PC & Washing Machine	7
Automobiles	Car	1
Clothes/Shoes	Clothes & Shoes	1
Books	Books, all categories	1
Furniture	Furniture, all categories	1
Travel	Travel, all categories	1
Art	Art, all categories	1

Table 2. The compiled list of the total amount of notions each product category gathered

Product categories mentioned by the respondents are presented in *Appendix section 7.1 Preparatory Investigation of Consumer relationship to Products.* In *Table 2,* a compilation list presenting the combined amount of notions each product category gathered is found. The compiled list includes notions from articles reviewed until the 12th of march 2017, as well as, notions from the 14 interviews that was conducted. The most investigated and mentioned product categories, based on both previous research and the personal interviews, were Electronic goods, Clothes & Shoes and FMCG. Putting emphasis on previously researched products, above mentioned question number four ("What type of sustainable products do you usually buy"), and gender neutrality three product categories were chosen: Clothes & Shoes, FMCG and Automobiles. Subsequently, four products were chosen to be included in a pre-study: a car, a shirt, milk and laundry detergent. The products chosen were arbitrarily selected based on previous studies regarding utilitarian and hedonic sources of consumer attitudes (Batra, Ahtola 1991) with the belief that the products represented similar purchase frequency and usage for both men and women.

3.3 Design Thinking in Preparatory Work for the Main Study

The preliminary pre-studies are designed after the will to investigate appropriate utilitarian and hedonic products, investigate motivations and barriers for purchase behavior of sustainable products, and to test the usability and reliability of the measurements chosen for this study. The aim of the first pre-study was to establish two products, one that exhibits predominant utilitarian attributes and one that predominant hedonic attributes. The second pre-study aimed to select compelling motives and barriers to influence purchase behavior of sustainable products. The third, and final, pre-study served as an inspection of the materialistic and ethical measurements reliability in regards to Swedish consumers, since previous research regrading Swedish consumers are absent. For illustration of the Preparatory work for this study, see *Figure 8*.

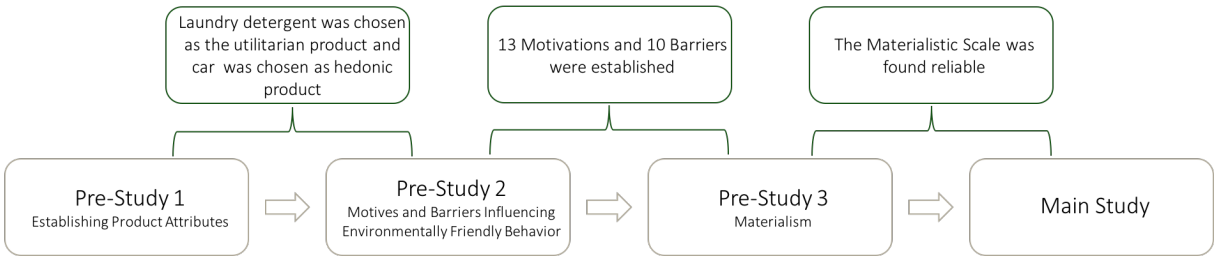


Figure 7. The Design of the Pre-Study Structure

3.3.1. Pre-Study 1: Establish Utilitarian and Hedonic Products

In order to investigate if there are any general differences in motives and barriers for purchases of sustainable products depending on the product category attributes, the decision to use one utilitarian and one hedonic product was made. The existing research regarding the area of sustainable purchase behavior and the environmentally friendly decision making process are dominated by research of FMCG products, specifically produces (Kollmuss, Agyeman 2002, O'Rourke, Ringer 2015, Aertsens et al. 2010, Verain et al. 2015, Young et al. 2010). Due to the lack of previous research regarding products with different attributes this partition was chosen to further contribute to the understanding of the attitude-behavioral gap. Based on the preparatory investigation of consumers' relationship to products, presented in section *3.2.1 Preparatory Investigation of Consumers relationship to Products*, the following products were included in pre-study 1: a car, a shirt, milk and laundry detergent. The pictures used in the pre- and main study are presented in *Appendix* 7.2.1.1. The aim for this study was to ensure that the products used in the main study exhibited predominant utilitarian and hedonic attributes according to the Swedish consumer. Therefore, we made a conscious decision not to rely on findings presented by Kushawa, Shankar (2013).

3.3.1.1 Measures

Due to the lack of previous research in the area of sustainable products using the partition presented by Kushawa, Shankar (2013), the scale for measuring the utilitarian and hedonic sources of consumer attitudes established by Batra, Athola (1991) was used. In order to measure consumer attitudes towards the products, the question "To what extent do you consider the car to be?" was asked. The respondents were asked to rate the products "Useless-Useful", "Worthless-Valuable", "Harmful-Beneficial", "Foolish-Wise", "Unpleasant-Pleasant", "Awful-Nice", "Disagreeable-Agreeable" and "Sad-Happy" (Batra, Ahtola 1991, Malhotra et al. 2000) on a bipolar 7-point Likert scale.

3.3.1.2 Distribution

The survey was designed and distributed through the survey software Qualtrics. To make the survey quick and easy to answer, a decision was made to only expose each respondent to one of the four products. Since there are four products to investigate (car, shirt, milk and laundry detergent), one survey was created with utilizing the Qualtrics' randomization option. The survey consisted of four sections, all identically designed. Each section started by presenting the respondents with an image of the product, followed by the measurement presented by Batra, Athola (1991), hence following the design advocated. The sampling method used was respondent-

driven snowballing, where a convenience sample (Bryman, Bell 2011) of 30 people were asked to answer the survey, distributed through private messages on Facebook between 24th and 30th of March 2017. Consequently, the respondents were asked to distribute the survey through their personal networks to at least 10 friends each. In order to equally randomize the four sections of the survey the, randomization option in Qualtrics was utilized, ensuring that the respondents were equally probable to receive each of the for sections.

3.3.1.3 Results

Pre-study 1 full-length survey results were received for 124 respondents, with a range from 30-34 respondents per section. In order to assure reliability of the results, Cronbach's alpha was measured through the statistical analytics program SPSS for the consumer attitude measure introduced by Batra, Athola (1991). This measurement showed high reliability with a Cronbach's alpha at 0,82. To be able to establish suitable products the utilitarian and hedonic scores were calculated (Batra, Ahtola 1991). These scores are presented in *Table 3*, below. For a more detailed presentation of the measurement scores see *Appendix 7.2.1.2*.

UTILITARIAN & HEDONIC LEVELS OF PRODUCT ATTRIBUTES								
		UTILITARIAN			HEDONIC			
Product	*N*	*Min*	*Max*	*Score*	*Min*	*Max*	*Score*	*Conclusion*
Car	30	1	7	19,84	1	7	20,1	*More Hedonic*
Shirt	34	1	7	21,11	1	7	20,52	*More Utilitarian*
Laundry Detergent	30	2	7	22,27	2	7	19,84	*More Utilitarian*
Milk	30	1	7	19,46	1	7	18,49	*More Utilitarian*

Table 3. Utilitarian and Hedonic Scores for the Four Investigated Products

3.3.1.4 Conclusion

Pre-study 1 resulted in two products chosen to be utilized in the main survey.

Due to the above presented results in *Figure 3*, laundry detergent was chosen as the utilitarian product and car was chosen as the hedonic product. Car was chosen since it was the only product proven to have a predominant hedonic score. However, as can be seen in *Figure 3*, three of the products tested had predominant score regarding utilitarian attributes. Laundry detergent was chosen since the product had the biggest difference between the two attribute scores (Batra, Ahtola 1991).

3.3.2 Pre-Study 2: Testing Motivations for Sustainable Purchases

In order to investigate if there are any general differences in regards to motives and barriers for purchases of sustainable products, these motives and barriers have to be defined. In order to contribute with a more distinct study, the amount of motives generated had to be reduced.

3.3.2.1 Measures

In order to establish which motives and barriers have the highest level of accuracy, 22 motivation statements and 18 barrier statements were included in accordance with (Aertsens et al. 2010,

Johnstone, Tan 2015, Voon et al. 2011, Harris et al. 2015, Makatouni 2002, Gielissen 2011) (*Appendix 7.4.2*). 13 of the motive statements were based on the motives presented by Aertsens et al. (2010). Some of the statements were arbitrarily modified to fit products other than produces. The nine remaining motivation statements were formulated in line with arguments presented in previous research.

MOTIVES
Motives Presented by Aertsens et al.
Without chemicals
Better for my health
Better for environment
Has better quality than non-sustainable products
Better taste
More nutritious
Higher food safety because of better control
Fresher
More durable than non-sustainable products
Safer to use due to strict production control
Better for my children/family
More animal friendly
Allows me to support local manufacturers
Convenience Perception
Buying sustainable products is highly inconvenient
Sustainable products are only available in limited stores/markets
The stores that I frequently shop do not sell a variety of sustainable products
Willingness to Pay
I am buying sustainable product even though choices are limited
I am buying sustainable product because the benefits outweigh the cost
Buying sustainable products is the right thing to do even if they cost more
Social Influence
My close friends and family consume sustainable products
My co-workers/colleagues consume sustainable products
My loved ones expect me to purchase more sustainable products

Table 4. Motives

Eight of the barrier statements were based on the barriers presented by Aertsens et al. (2010). Some of the statements were arbitrarily modified to fit products other than produces (Aertsens et al. 2010). The 10 remaining barrier statements were formulated in line with the arguments presented in previous research. The barriers investigated are presented in *Table 5*.

BARRIERS
Barriers presented by Aertsens et al.
I choose not to buy sustainable products because non-sustainable products have lower price
I choose not to buy sustainable products because non-sustainable products have better quality compare to convenient products
I choose not to buy sustainable products because non-sustainable products have better taste compare to convenient products
I choose not to buy sustainable products because non-sustainable products have better advertisement
I choose not to buy sustainable products because more information available for non-sustainable products.
I choose not to buy sustainable products because my family discourages me from buying sustainable products
I choose not to buy sustainable products because my colleagues/friends discourage me from buying sustainable products
I Choose not to buy sustainable products because the appearance/packaging of the products looks bad
Hindrance
I do not want to pay more for sustainable products than for non-sustainable products
I do not have enough budget to buy sustainable alternatives
I am willing to buy sustainable products as long as the price is not higher than that of convenient goods
I don't see why I should buy them not depending on price
The price of the product has a greater impact on my decision than the product's sustainable properties
Lack of attraction
There is none or little difference between sustainable and non-sustainable products
I do not think sustainable products are better for me
I do not trust that organic food from major food retail chains is sustainable
It is difficult for me to break my current established shopping habits
I do not buy sustainable product because there are not much variation and choice among them

Table 5. Barriers

The statements were presented on a 1-7 Likert scale (Malhotra et al. 2000) with the bipolar measure of the lowest scale point (1) "strongly disagree" to the highest "strongly agree" (Bearden

et al. 2011). As a precaution, the open statements “If you choose to buy/consume sustainable products for any reason other than those mentioned above, then fill in this field in the field below” and “If you choose not to buy/consume sustainable products for any reason other than those mentioned above, then fill in this box in the field below” was added to the respective part of the survey.

3.3.2.2 Distribution

The survey was designed and distributed through Qualtrics. In order to create coherent results and mind frames in regards to what constitutes a sustainable product the survey started with a presentation of a chosen definition of the concept sustainable products utilized. With support from Aertsens et al. (2010), the decision was made to use one survey including both motives and barriers. The sampling method used was respondent-driven snowballing where a convenience sample (Bryman, Bell 2011) of 20 people were asked to answer the survey, distributed through private messages on Facebook between 29th of March and 3rd of April 2017. Consequently, these respondents were asked to distribute the survey to at least 10 of their friends each.

3.3.2.3 Results

Pre-study 2 full-length survey results were received for 55 respondents. To compare the final results, the average mean for the motivations and barriers was calculated as argued by Aertsens et al. (2010). The results from the open statements were consistent with the motivations and barriers with the highest general mean, resulting in exclusion. In *Table 6* below**,** the average means for all of the motivation statements are presented.

MOTIVES				
Variables	*Mean*	*St.D.*	*Min*	*Max*
Motives Presented by Aertsens et al.				
Without chemicals	4,96	1,85	1	7
Better for my health	5,22	1,52	1	7
Better for environment	5,95	1,49	2	7
Has better quality than non-sustainable products	4,93	1,51	2	7
Better taste	4,64	1,65	1	7
More nutritious	4,84	1,64	1	7
Higher food safety because of better control	5,25	1,83	1	7
Fresher	4,87	1,47	2	7
More durable than non-sustainable products	4,18	1,65	1	7
Safer to use due to strict production control	5,15	1,59	1	7
Better for my children/family	5,76	1,36	2	7
More animal friendly	5,16	1,78	1	7
Allows me to support local manufacturers	4,98	1,73	2	7
Convenience Perception				
Buying sustainable products is highly inconvenient	3,80	1,51	1	7
Sustainable products are only available in limited stores/markets	4,33	1,63	1	7
The stores that I frequently shop do not sell a variety of sustainable products	4,27	1,57	1	7
Willingness to Pay				
I am buying sustainable product even though choices are limited	4,18	1,70	1	7
I am buying sustainable product because the benefits outweigh the cost	4,25	1,73	1	7
Buying sustainable products is the right thing to do even if they cost more	4,91	1,69	1	7
Social Influence				
My close friends and family consume sustainable products	3,42	1,62	1	6
My co-workers/colleagues consume sustainable products	2,91	1,69	1	6
My loved ones expect me to purchase more sustainable products	2,87	1,66	1	7

Table 6. General Means for Motives

As can be seen in *Table 6* above, there are 18 motivations that exceeded 4,0. In addition, the value 4,0 can be considered as the neutral point (Aertsens et al. 2010). As argued by Aertsens et al. (2010) the value 4 was therefore used as a breaking point for the motivation statements. Due to the results from Pre-Study 1 four of the motives related to perishables had to be excluded. The convenience perception statements presented above was introduced in the pre-study 2 questionnaire on the motivation part of the survey based on previous research regarding "attitude – behavioral intention" gap; "more sustainable food consumption can be stimulated through perceived availability" (Vermeir, Verbeke 2006). In line with Aertsens et al. (2010), a choice was made to transfer the two measures with a general mean higher than 4, and in the main survey treat them as barriers (Makatouni 2002, Krystallis et al. 2008). This decision is also supported by the Cronbach's alpha that is consistent at 0,74 for the barriers with or without the two questions, and the higher Cronbach's alpha for motives at 0,89 without the two questions, in comparison with 0,86 with the two questions. In *Table 7* below**,** the average means for all of the barriers statements are presented.

BARRIERS				
Variables	*Mean*	*St.D.*	*Min*	*Max*
Barriers presented by Aertsens et al.				
I choose not to buy sustainable products because non-sustainable products have lower price	3,55	2,08	1	7
I choose not to buy sustainable products because non-sustainable products have better quality compare to convenient products	2,69	1,46	1	6
I choose not to buy sustainable products because non-sustainable products have better taste compare to convenient products	2,64	1,64	1	6
I choose not to buy sustainable products because non-sustainable products have better advertisement	2,58	1,69	1	7
I choose not to buy sustainable products because more information available for non-sustainable products.	3,13	31,88	1	7
I choose not to buy sustainable products because my family discourages me from buying sustainable products	1,58	1,13	1	6
I choose not to buy sustainable products because my colleagues/friends discourage me from buying sustainable products	1,65	1,21	1	5
I Choose not to buy sustainable products because the appearance/packaging of the products looks bad	2,16	1,33	1	6
Hindrance				
I do not want to pay more for sustainable products than for non-sustainable products	4,27	1,79	1	7
I do not have enough budget to buy sustainable alternatives	4,13	1,75	1	7
I am willing to buy sustainable laundry detergent as long as the price is not higher than that of convenient goods	3,89	1,92	1	7
I don't see why I should buy them not depending on price	2,42	1,51	1	6
The price of the product has a greater impact on my decision than the product's sustainable properties	3,91	1,72	1	7
Lack of attraction				
There is none or little difference between sustainable and non-sustainable products	2,87	1,74	1	7
I do not think sustainable products are better for me	2,20	1,41	1	6
I do not trust that organic food from major food retail chains is sustainable	2,82	1,72	1	7
It is difficult for me to break my current established shopping habits	3,71	1,95	1	7
I do not buy sustainable product because there are not much variation and choice among them	3,53	1,83	1	7

Table 7. General Means for Barriers

In *Table 7* above, it is visual that only 2 barrier statements exceed the neutral score (4,0). The barriers can therefore be recognized as rated rather low by the overall population. In line with the methodology and discussion by Aertsens et al. (2010) the breaking point for the barriers were lowered to 3 to offer relatively reliable barriers for the main study.

3.3.2.4 Conclusion

This pre-study resulted in 12 motivations and 10 barriers to be chosen for the main survey, as they presented the highest average means (Aertsens et al. 2010). In addition, due to low general means the motivation statements regarding external social factors were not included in the 12 motivations that will be used in the main study. Based on previous research, and the aim of this thesis, the measurement of social consumption motivation, the SCM scale presented by Moschis (1981) was added to the main study (Fitzmaurice, Comegys 2006, Moschis 1981).

3.3.3 Pre-Study 3: A Final Check of the Measurements

Pre-Study 3 is performed as a final check regarding the materialistic and ethical measures chosen. Existing research have not used the chosen measurements for materialism nor ethical personality traits in any of the five Nordic countries. Hence, the materialistic scale presented and established by Richins, Dawsson (1992), as well as the EMCB scale presented and established by Sudbury-Riley, Kohlbacher (2014) was tested to secure the study's internal reliability. Since the reliability refers to the consistency of the results in research, this is an important pre-condition for the main study to produce similar, or the same results if repeated. The scales are presented in *Appendix 7.2.3.*

3.3.3.1 Measures

The scales used for measure will be the Richins, Dawson's (1992) updated measurement for materialism and Sundbury-Riley, Kohlbeche's (2014) EMCB scale (Sudbury-Riley, Kohlbacher 2014). In order to measure individuals level of materialism a measurement consisting of 18 questions, broken down into the three main traits of materialism (Richins, Dawson 1992) was used. To measure ethically minded consumer behavior a measure consisting of 10 statements was used (Sudbury-Riley, Kohlbacher 2014). For the statements, which constitute the structure of the measurements, see *Appendix 7.2.3.* The statements from both scales were all presented on a 1-7 Likert scale (Malhotra et al. 2000) with the bipolar measure of the lowest scale point (1) "strongly disagree" to the highest "strongly agree" (Bearden et al. 2011).

3.3.3.2 Distribution

The survey was designed and distributed through the survey software Qualtrics. The decision was made to put both of the measurement into the same survey in order to enable a bivariate correlation analysis to be performed. The sampling method used was respondent-driven snowballing, where a convenience sample (Bryman, Bell 2011) of 25 people were asked to answer the survey, distributed through private messages on Facebook between 29th and 31th of March 2017. Consequently, these respondents were asked to distribute the survey to at least 10 of their friends each.

3.3.3.2 Results

Pre-study 3 full-length survey results were received for 42 respondents. In order to assure reliability of the pre-study 3 results, Cronbach's alpha was measured through the statistical analytics program SPSS for the complete scale of materialism, as well as for the 3 sections making up the measurement. Cronbach's alpha was also measured for the full EMCB scale, see *Table 8.*

RELIABILITY ANALYSIS		
Measurement	*Cronbach's α*	*N*
Materialism	0,891	42
Possession-Defined Success	0,819	42
Acquisition Centrality	0,768	42
Pursuit of Happiness	0,748	42
EMCB	0,918	42

Table 8. Reliability Analysis for the Materialism and EMCB Scales

With internal consistency of 0,748, 0,768 and 0,819 for Possession-Defined Success, Acquisition Centrality, and Acquisition as the Pursuit of Happiness, the results were in line with results presented by Richins, Dawson (1992). For the total materialistic measurement, the Cronbach's alpha was 0,891, consistent with previous research (Richins, Dawson 1992). Cronbach's alpha was also measured to assure reliability of the EMCB scale. With a result at 0,918 also this measurement is in line with previous research (Sudbury-Riley, Kohlbacher 2014). With internal consistency ranging from 0,891 to 0,918 for the measurements, both measurements are reliable and was used in the main survey.

3.4 Main Study: Motives, Barriers and Materialism

This section outlines the approached sampling method, the questionnaire composition and the structure of the survey.

3.4.1 Pilot Test of Main Survey

Despite the extensive pre-studies the main survey had to be pre-tested for potential errors before distribution. The aim of the pilot-test was to detect misunderstandings, critically analyze the surveys layout, and to calculate the approximate amount of time required to complete the questionnaire.

The pilot testing was constructed so as to the respondents were asked to answer the questionnaire and provide feedback during and after the process. The pilot survey had the same structure as the main survey, hence the surveys motivation and barrier questions were randomized through the survey software Qualtrics randomization function. This function was included in order to ensure that the respondents, both in the pilot and main survey, were equally probable to get either of the two sections (motivation and barriers) first for each product. The surveys layout will be discussed further in section *3.4.4 Questionnaire*.

10 respondents were asked to give feedback during and after they completed the survey regarding the above presented objectives (Malhotra 2010), five for the Swedish version and 5 for the English version. The demographics for the participants in the pilot reflected the target group contemplated for the main study. The respondents were given the digital link to the pilot and were asked to speak their mind while undertaking the survey. A structure advocated for by Malhotra (2010) as a suitable method. As result of the pilot the respondents did not recommend any suggestions regarding further improvements and only minor spelling mistakes were corrected. The survey was found to have an approved timespan of approximately 14 minutes.

3.4.2 Approached Sampling of Respondents

As the purpose of this study is to investigate if there are any differences in motives and barriers, depending on individuals' level of materialism, for purchases of sustainable utilitarian and hedonic products this survey investigates the same motives and barriers for the two types of products. Due to the resource and time constraints of this study an availability sample of Swedish inhabitants was chosen as a suitable target group. The intended target group was chosen, with support from Wilson (2006), in order to limit cultural bias due to regional perspective influenced by local community mentality (Wilson 2006). In order to ensure that the respondents belonged to the target group, a demographic control question was added to the survey; "Are you currently living in Sweden?". Respondents currently living in Sweden were defines as the target group. In addition, it was a conscious decision to include all sexes in the intended target group, based on previous research vowing for no significant differences between gender regarding their attitude towards sustainable products (Chen, Chai 2010).

The main survey was designed and distributed through the survey software Qualtrics. The survey was distributed on the 5th of April and was kept open until the 25th of April. The survey was distributed via; electronic through social media platforms to embrace people from different backgrounds, private messages on Facebook, and through business cards with printed QR-codes in various locations in Stockholm.

The survey consists of four sections, two of them are the motivations and barriers influencing the purchase decision of a sustainable utilitarian vs. hedonic product. As presented above, motives and barriers investigated are identical for both of these sections. In an attempt to minimize attitudinal biases based on the order of the questions, the randomization option was used for the motivation and barriers section regarding both products. The randomization option ensures that anyone of the 171 respondents were equally probable to receive either the motive or the barrier statements before the other regarding both products, see *Appendix 7.4.5* for main survey.

As the survey took approximately 14 minutes to answer, the use of incentives was crucial. Hence, all respondents were, at the start of the survey, informed about the possibility to win two movie tickets to SF bio or a gift card at Sturehof if they completed the questionnaire. For full text see *Appendix 7.4.5.*

3.4.3 Quantitative Sampling of Surveys

In order to be able to generalize our findings from the sample to the population from which it was selected, the sample must be representative. The sample for the survey do also have to be random and not biased (Bryman, Bell 2011). In order to foresee and counteract attitudinal biases for the motivation and barrier part of the survey, a randomizing function was used, in line with Malhotra (2010), to ensure that external factors like gender, age, education and occupation did not impact on the results and therefore make the results biased (Malhotra 2010). In order to investigate if materialistic personality traits influence the motives and barriers of this study the sample needed to be split into three groups, in line with previous research of the materialistic scale utilized (Richins, Dawson 1992). For a solid statistically significant sample it is important to ensure that each group contains at least 30 respondents (Bryman, Bell 2011), in order to emulate a normal distributed curve (Malhotra et al. 2000). A normal distributed curve is invaluable for this survey due to the use of parametric analyses (Malhotra et al.2000). The distribution of respondents in each materialistic group is presented in *Table 10.*

LEVELS OF MATERIALISM	
LEVEL	***N***
Low-Materialistic	57
Mid-Range Materialistic	65
High-Materialistic	49
Total	**171**

Table 9. Number of Respondent Per Materialistic Level

In total, after having to exclude 21 respondents due to faulty completion, the total amount of responses collected was 171, as presented in *Table 10.* In accordance to our target group, all of the 171 respondents are currently living in Sweden. The sample have a gender distribution of 52% men and 46,8% women, the concluding 1,2% identified themselves as another gender. With an average age of 32, and ranging from 19 to 89 years of age, whereas the requirement for random selection is met (Bryman, Bell 2011). This represents the data set yielding the results in this thesis, the demographics will be presented in *Appendix 7.3.1.*

3.4.4 Questionnaire

The main study consists of a survey, with identical questions for all respondents. For this, widely used measuring scales and measurements was used. The measures and scales used will be presented in sections *3.4.4.1 to 3.4.4.4*.

To avoid the independent variables being affected by the dependent variables, the independent variables materialism and the EMCB scale were examined first. The layout gave the authors the opportunity to generate similar results in regards to materialistic and ethically personality traits in comparison with pre-study 3. The decision of initially present the independent variables before the respondents had been presented with the products utilized prevented the results from being influenced by product associations from the respondents' life experiences. It was not until after the independent variables had been collected the respondents were presented with the chosen definition of sustainable products. The definition was decided to be presented after the personality traits due to the risk of personal values and morals, as well as personal self-conception influencing the independent variables. A definition of a sustainable product was presented for the respondents in order to create coherent results and mind frames in regards to what constitutes a sustainable product, in line with previous research (Durif et al. 2010). Subsequently the SMC scale was incorporated. It was a conscious decision to place the independent variable SMC after the definition was presented, in order to influence and prime the respondents' minds in regards to sustainable products. As the last part of the first section individuals' sustainable share of wallet was examined through the question "How much of your total purchases consists of sustainable products".

Successively, the dependent variables, motives and barriers, were introduced. In line with Aertsens et al. (2010), the motives and barrier statements were presented consecutively for each product. In order to ensure that the dependent variables were not influenced by attitudinal biases a randomization option in the survey software Qualtrics was used. Due to the reason that direct experience having a stronger influence on people's behavior a decision was made to create scenarios before the motives and barriers part for each product. These scenarios asked the respondents to imagine being out shopping for the product category presented. In the scenarios, a presentation of a sustainable version of the product utilized was used to minimize the external factors influencing the results (Elkington et al. 1990). In addition, after the motivation section for each product consumers' willingness to pay was examined through the question "How much more are you willing to pay for a [product] compared to a corresponding non-sustainable

[product]?". Lastly the demographics were presented. This survey structure, with the most important questions first, is in line with Malhotra (2010).

The recommendation for a quantitative study is to mainly use structured questions, as this enables smother comparisons in analysis. All structured questions were presented to the respondents through a 1 to 7 point Likert scale, giving the respondents the possibility to be neutral. For all structured questions the value 1 was paired with the negative option and the value 7 with the positive option, allowing comparisons of results (Bryman, Bell 2011). One unstructured question was used for the demographic variable age, in line with Bryman, Bell (2011). According to previous research (Ger, Belk 1996) the main survey had one English and one Swedish version. The decision of keeping the original language was based on the reasoning that the questionnaire may be more reliable and valid because it avoids potential translation problem (Albaum, Strandskov 1989). The main survey, English and Swedish version, is presented in *Appendix 7.4.*

3.4.4.1 Dependent Variables

Motives. The variable motives consist of two sections, one is a multi-item scale of 9 statements based on Aertsens et al.'s (2010) measurement and the other is a multi-item scale of 3 statements. These scales were selected dependent on the general mean they presented in pre-study 2. The first scale, that from now on will be called the "modified Aertsens et al. scale, is presented in *Table 11*, below.

THE MODIFIED AERTSENS ET AL. SCALE
Without chemicals
Better for the environment
Has better quality than non-sustainable products
Better for my health
More durable than non-sustainable products
Safer to use due to strict production control
Better for my family/children
More animal friendly
Allows me to support local manufacturers

Table 10. The Modified Aertsens et al. Scale

The modified Aertsens et al. (2010) scale showed a Cronbach's alpha of 0,75 for laundry detergent and 0,89 for car, internal consistency was proven, indexes for the modified Aertsens et al. (2010) scale could be calculated. The second scale, that from now on will be called the "Motives scale", is presented in *Table 12*, below.

THE MOTIVES SCALE
I am buying this sustainable product even though choices are limited
I am buying this sustainable product because the benefits outweigh the cost
Buying sustainable products is the right thing to do even if they cost more

Table 11. The Motives Scale

The Motives scale showed a Cronbach's alpha of 0,83 for laundry detergent and 0,82 for a car, internal consistency was proven, indexes for the Motives scale could be calculated. The motives statements relevance will be determined by their average mean and distributed on a 7-point scale in SPSS.
In addition, combining these two scales into a multi-item scale of 12 statements, creating a scale from now on called "Total Motivation" scale, proved to be rational. With a Cronbach's alpha of 0,90 for laundry detergent and 0,90 for a car, high internal consistency was proven, indexes for the Total Motivation scale could be calculated. Due to the higher internal consistency, for further analysis it is the total motivations scale that will be utilized.

Barriers. The variable barriers consist of two sections, one is a multi-item scale of 2 statements based on Aertsens et al.'s (2010) measurement and the other is a multi-item scale of 8 statements. These scales were selected dependent on the general mean they presented in pre-study 2. The first scale, that from now on will be called the "Modified Barrier Aertsens et al. scale, is presented in *Table 13*, below.

THE MODIFIED BARRIER AERTSENS ET AL. SCALE
I do not buy the sustainable product because of the higher price
I do not buy sustainable products because of the lack of information regarding them

Table 12. The Modified Barrier Aertsens et al. Scale

The modified barrier Aertsens et al. scale showed a Cronbach's alpha of 0,49 for laundry detergent and 0,56 for car, internal consistency was not proven. The second scale, that from now on will be called the "Barrier scale", is presented in *Table 14*, below.

THE BARRIER SCALE
I do not want to pay more for sustainable products than for non-sustainable products
I do not have enough budget to buy sustainable alternatives
I am willing to buy sustainable products as long as the price is not higher than that of convenient goods
The price of the product has a greater impact on my decision than the product's sustainable properties
The store I frequently shop at does not provide a variety of sustainable products
Sustainable products are only available in a limited number of stores
It is difficult for me to break my current established shopping habits
I do not buy sustainable product because there are not much variation and choice among them

Table 13. The Barrier Scale

The Barrier scale showed a Cronbach's alpha of 0,79 for laundry detergent and 0,81 for car, internal consistency was proven, indexes for the Motives scale could be calculated. The motives statements relevance will be determined by their average mean and distributed on a 7-point scale in SPSS.

In addition, combining these two scales into a multi-item scale of 10 statements, creating a scale from now on called "Total Barriers" scale proved possible. With a Cronbach's alpha of 0,84 for laundry detergent and 0,86 for car, high internal consistency was proven, indexes for the Total Barrier scale could be calculated. Due to the lack of internal consistency in the modified barrier Aertsens et al. (2010) scale, for further analysis it is the total barriers scale that will be utilized.

3.4.4.2 Independent Variables

Materialism. Materialism is investigated through evaluating 18 statements, divided into three main sections: Possession-Defined Success (6), Acquisition Centrality (7) and Acquisition as the Pursuit of Happiness (5). The statements are presented in *Appendix 7.2.3.1*. All statements are kept in accordance with the statements developed and presented by Richins, Dawson (1992). As the three sections of the total materialistic measurement showed a Cronbach's alpha ranging 0,70 to 0,77 and a Cronbach's alpha at 0,85 for the entire measurement, showing high internal consistency, a sum in line with Richins, Dawsson (1992) and an index for materialism could be calculated.

SCM Scale. As presented in section *3.3.2,* only few of the motivation statements regarding social influence had a high enough general mean to be included in the 13 motivation statements used as a dependent variable in the main study. Based on previous research, it was decided to add a measurement of social consumption motivation, namely the SCM scale introduced by Moschis (1981) and presented by Fitzmaurice, Comegys (2006), as an independent variable. With a Cronbach's alpha at 0,83, showing high internal consistency, enabled computing an Index for the SCM Scale. The SCM scale consists of an multi item scale of four statements. The statements are presented in *Appendix 7.2.2.1.*

EMCB Scale. To be able to test the correlation of ethically minded consumer behavior and materialism the measurement developed and presented by Sundbury-Riley, Kohlbeche (2014), namely the EMCB scale, was utilized. The EMCB Scale consists of a multi item scale of 10 statements, the statements are presented in *Appendix 7.2.3.2.* With a Cronbach's alpha at 0,92, showing high internal consistency, an index for the EMCB scale could be calculated.

3.5 Analytical Tool: SPSS

By the use of the digital survey software Qualtrics for the data collection, IBM's SPSS was reasoned as a suitable analytical tool for quantitative data. Hence, SPSS version 23 was used for the performance of statistical analysis. The data analysis was performed in two stages, one preliminary analysis and one main. The preliminary analysis was performed in order to establish if the pre-study results were replicable, as well as control the utilized scales for internal consistency, and to compute appropriate variables and indexes to be analyzed.

The main analysis was performed through independent t-test, paired sample t-tests, related Wilcoxon, ANOVA, crosstabulations and bivariate correlation tests, which were conducted in order to calculate the general means, means of sum and the significance between consumer

groups. As presented in section *3.1 Choice of Scientific Approach*, this study aims to compare subgroups in order to investigate materialisms impact on motivations and barriers of sustainable product purchases.

3.5.1 Preliminary Analysis

To begin with, the preliminary analysis first step was to ensure the pre-study results were repopulated (Bryman 2015). The independent and dependent variables were checked through bivariate reliability analyses computing Cronbach's alpha. The results are presented in sections *3.4.4.2 Independent Variables* and *3.4.4.1 Dependent Variable.* The results were proved to be similar, yet demonstrating higher Cronbach's alpha for the main survey, the results of the pre-study could be confirmed. Internal consistency was accepted to be high if the Cronbach's alpha scores exceeded 0,7 (Bearden et al. 2011). All of the independent variables proved to have high internal consistency, allowing indexation, enabling analysis regarding the relationship between these independent variables. The second step was to group individual variables, in line with previous research. These groups were computed enabling a comparison between the groups in the analysis of the dependent variables (Richins, Dawson 1992, Sudbury-Riley, Kohlbacher 2014, Fitzmaurice, Comegys 2006). All of the dependent variables' multi-item scales did not prove to have a high enough internal consistency when checked for Cronbach's alpha if item deleted. By combining the two scales for each dependent variable, in line with Aertsenns et al. (2011), all the multi item questions proved to have high internal consistency. The dependent variables were checked in a descriptive test, the results of the pre-study could be confirmed.

3.5.2 Main Analysis

Hypotheses 1, H1a-d, were tested through two comparison of means, in order to review if there were any significant, general differences regarding motives and barriers for the two product types. Two paired sample t-test was performed to compare and establish the difference in means, as well as the significance. The hypotheses were only accepted if the differences were significant at a 5% significance level.

The second hypothesis, H2, was tested through a comparison between the two product types in regards to which product had the highest share of individuals willing to pay a price premium at 10% or more for the sustainable version of the product. Through a related-Wilcox test the significance of the difference between the groups were tested. The hypothesis was only accepted if the test was significant at a 5% significance level

Hypothesis 3, H3, was tested through a mean of sum. In order to establish the mean of sum for the total sample, an descriptives test was performed. The mean of sum was compared against results from previous studies proven to be reliable. The hypothesis was accepted if the mean of sum was established to fall in the lower tercile based on previous research.

The forth hypotheses, H4a-d, was tested through comparisons of means, in order to assess if the main motives and barriers for the two types of product significantly differed between the three levels of materialism. Four ANOVA tests were performed to compare the differences in means, as well as the significance. The hypotheses were accepted if the differences were significant at a 5% significance level and the Cronbach's alpha exceeded 0,7.

The fifth hypothesis, H5, was tested by comparisons of three levels of materialism in regards to which group of individuals, based on level of materialism, have the highest shares of individuals purchasing a realistic amount of sustainable products. The difference was presented through a crosstabulation and the significance was established through a Chi-Square test. The hypothesis was accepted if the difference were significant at a 5% significance level.

Hypothesis 6, H6a-b, was carried out in two steps. First, a significant correlation had to be established, follow by a comparison of means between the three levels of materialism. The correlation between the two measurements materialism and SCM was tested through a bivariate correlation analysis, while the mean differences and their significance was computed through an ANOVA test. The hypotheses were accepted if the differences were significant at a 5% significance level.

The seventh hypotheses, H7a-b, was carried out in two steps as well. Firstly, a significant correlation had to be established between, followed by a comparison of means between the three levels of materialism. The correlation between the two measurements materialism and EMCB was tested through a bivariate correlation analysis, while the mean differences and their significance was tested through an ANOVA test. The hypotheses were accepted if the differences were significant at a 5% significance level and the Cronbach's alpha exceeded 0,7.

3.6 Critical Review of Data Quality

To provide a concordant picture with reality, the study must be critically reviewed. In order to ensure this, two requirements must be met – the data and results yielded must be sound and valid, as well as credible and reliable (Jacobsen et al. 2002). Such requirements, and weather this study meets them, are presented below.

3.6.1 Validity

To check measurements and prove the results to be relevant, data collected need to be validated (Jacobsen, et al. 2002, Malhotra 2010).

The internal validity relates mainly to the issue of causality, or whether a conclusion that incorporates a causal relationship between two or more variables hold water. In this thesis, the internal validity is measured by the impact of the independent variables, materialism, SCM and EMCB have on the dependent variables motives and barriers. The study was pre-tested and designed to clearly inform the respondents what was asked of them.

With the aim to increase the internal validity of the study, a 7 point Likert scale has been utilized in order to generate greater differences between the reply options (Jacobsen et al. 2002). Furthermore, the utilization of tested multi-dimensional measurements, where formulation of previous research was used, adds to the internal validity (Jacobsen et al. 2002). The sections were presented in a controlled manner to minimize the spill-over effects between the products. The decision of utilizing two products with different product attributes opens up for generalizability of the results (Malhotra 2010).

Due to the valid choice of distribution, the authors are unable to monitor the respondents' execution. Therefore, it is not possible for the authors to ensure that the respondents were not exposed to disturbing factors in the environment, nor is the person they claim to be. High validity however, due still occur do to the voluntary participation of the respondents. In addition, the internal validity is also ensured by examining Cronbach's alpha, which in the 8 measurements used in the thesis was proven high (α>0,7) (Bryman, Bell 2011).

3.6.2 Reliability

Reliability answersr if the results of a study are repeatable. In a quantitative study, the reliability of the primary data source has been proven to be of utmost importance (Bryman, Bell 2011).

The data collected, for pre- & main study, and the measurements utilized was thoroughly tested for internal reliability over time, hence, considered to be stable. The measurements' reliability was tested by using Cronbach's alpha. In this study, as presented in section *3.6.1.1,* all measurements utilized yielded a Cronbach's alpha above 0,7, hence reliable (Bryman, Bell 2011). To ensure that the reliability was stable over time, the pre-study results were tested against the main study's results. To ensure that all multi-item scales utilized served their purpose and yielded reliable results, extensive literature research was performed, and measurements used had previously generated reliable results.

Results and Analysis

This section (4) aims to explain the result and analysis that can be drawn from this study. The primary data collected will be interpret and the results will be analyzed using the analytical tool IBM SPSS version 23. In each subsection, we will test outlined hypotheses in parallel with analysis of the results and findings of our empirical study. The results and analysis are presented in accordance with the structure of section 2 Literature Review.

4.1 General Differences in Motives and Barriers

In section 4.1, hypotheses regarding general differences in motivations and barriers between the utilitarian and hedonic products be investigated. In order to investigate if individual level of materialism impacts consumers motives and barriers for sustainable consumption a general image must be portrayed. Paired sample t-tests and related Wilcoxon tests are applied.

4.1.1 Initial Comparison of Motives Between Utilitarian and Hedonic Products

The first set of hypotheses (H1a-b) concerns general differences in motivation between the two product types. To test this, means of the all the motivations utilized have to be established and compared through paired sample t-test. Concluding, 9 out of 12 motivations showed a significant ($\rho \leq 0{,}05$) mean difference between the two product types. Utilitarian products had a significantly ($\rho \leq 0{,}05$) higher mean regarding 8 variables; Chemicals, Health, Quality, Durability, Safety, Family, Animal and Local (mean $Utilitarian_{Chemicals} = 4{,}88 > Hedonic_{Chemicals} = 3{,}66$; $Utilitarian_{Health} = 5{,}70 > Hedonic_{Health} = 4{,}98$; $Utilitarian_{Quality} = 5{,}02 > Hedonic_{Quality} = 4{,}63$; $Utilitarian_{Durability} = 4{,}75 > Hedonic_{Durability} = 4{,}44$; $Utilitarian_{Safety} = 5{,}16 > Hedonic_{Safety} = 4{,}66$; $Utilitarian_{Family} = 5{,}81 > Hedonic_{Family} = 5{,}29$; $Utilitarian_{Animal} = 5{,}12 > Hedonic_{Animal} = 4{,}46$; $Utilitarian_{Local} = 5{,}04 > Hedonic_{Local} = 3{,}81$,) (*Table 15)*. Hedonic products had a higher mean regarding 3 variables; Environment, Outweigh, and Right ($Hedonic_{Environment} = 5{,}7 > Utilitarian_{Environment} = 5{,}66$; $Hedonic_{Outweigh} = 4{,}72 > Utilitarian_{Outweigh} = 4{,}70$; $Hedonic_{Right} = 4{,}84 > Utilitarian_{Right} = 4{,}78$), these mean differences were not proven significant ($\rho \geq 0{,}05$) (*Table 15)*.

MEAN COMPARISONS											
Motivations											
	Utilitarian Product					Hedonic Product					
Variables	*N*	*Mean*	*St.D.*	*Min*	*Max*	*N*	*Mean*	*St.D.*	*Min*	*Max*	***Significance*** *(p ≤ 0,05)*
Without chemicals	171	4,88	1,92	1	7	171	3,66	2,04	1	7	**
Better for my health	171	5,70	1,39	1	7	171	4,98	1,79	1	7	**
Better for environment	171	5,66	1,59	1	7	171	5,7	1,6	1	7	-
Has better quality than non-sustainable products	171	5,02	1,61	1	7	171	4,63	1,91	1	7	**
More durable than non-sustainable products	171	4,75	1,82	1	7	171	4,44	1,91	1	7	*
Safer to use due to strict production control	171	5,16	1,73	1	7	171	4,66	1,87	1	7	**
Better for my children/family	171	5,81	1,39	1	7	171	5,29	1,70	1	7	**
More animal friendly	171	5,12	1,69	1	7	171	4,46	1,94	1	7	**
Allows me to support local manufacturers	171	5,04	1,89	1	7	171	3,81	2,04	1	7	**
I am buying sustainable product even though choices are limited	171	4,36	1,68	1	7	171	4,13	1,69	1	7	-
I am buying sustainable product because the benefits outweigh the cost	171	4,70	1,66	1	7	171	4,72	1,73	1	7	-
Buying sustainable products is the right thing to do even if they cost more	171	4,78	1,71	1	7	171	4,84	1,70	1	7	-

Table 14. Mean Comparisons Motivations

This implies that individuals are more motivated to purchase sustainable utilitarian products, than sustainable hedonic products, but only 8 of the 12 motivations with a higher mean for the utilitarian product means significantly differed between the two product types.

In addition, the four motivations that influence individuals the most when purchasing sustainable products, regardless of product type, proved to be; better for my family ($Utilitarian_{Family} = 5{,}81$; $Hedonic_{Family} = 5{,}29$), better for my health ($Utilitarian_{Health} = 5{,}7$; $Hedonic_{Health} = 4{,}98$), better for the environment ($Utilitarian_{Environment} = 5{,}66$; $Hedonic_{Environment} = 5{,}7$), and safer to use ($Utilitarian_{Safer} = 5{,}16$; $Hedonic_{Safer} = 4{,}84$). It can therefore be argued that family is the main reason why consumers purchase utilitarian products and environment for hedonic products. Hypotheses H1a & H1b waere therefore rejected.

The second set of hypotheses (H1c-d) concerns general differences in barriers. Concluding on the results of T-tesg, 5 out of the 10 barriers showed a significant ($\rho \leq 0,05$) mean difference between the product types. Utilitarian products had a significantly ($\rho \leq 0,05$) higher mean regarding 2 variables; Shopping habits and Information (mean $Utilitarian_{Shopping\ Habits}$ = 3,39, > $Hedonic_{Shoping\ Habits}$= 2,82; $Utilitarian_{Information}$ = 3,75, > $Hedonic_{Information}$= 3,20) *Table16*. Hedonic products had a significantly ($\rho \leq 0,05$) higher mean regarding 3 variables; Pay more, Budget, and Impact ($Hedonic_{Pay\ More}$ = 3,26 > $Utilitarian_{Pay\ More}$ = 2,98; $Hedonic_{Budget}$ = 4,01 > $Utilitarian_{Budget}$ = 3,22; $Hedonic_{Impact}$ = 3,99 > $Utilitarian_{Impact}$ = 3,65) *Table 16*.

MEAN COMPARISONS											
Barriers											
	Utilitarian Product					Hedonic Product					
Variables	*N*	*Mean*	*St.D.*	*Min*	*Max*	*N*	*Mean*	*St.D.*	*Min*	*Max*	***Significance*** *(p ≤ 0,05)*
I do not want to pay more for sustainable products than for non-sustainable products	171	2,98	1,84	1	7	171	3,26	1,93	1	7	*
I do not have enough budget to buy sustainable alternatives	171	3,22	1,99	1	7	171	4,01	2,0	1	7	**
I am willing to buy sustainable products as long as the price is not higher than that of convenient goods	171	3,92	1,99	1	7	171	3,87	1,88	1	7	-
The price of the product has a greater impact on my decision than the product's sustainable properties	171	3,65	1,87	1	7	171	3,99	1,79	1	7	*
The store I frequently shop at does not provide a variety of sustainable products	171	3,38	1,77	1	7	171	3,50	1,64	1	7	-
Sustainable products are only available in a limited number of stores	171	3,43	1,73	1	7	171	3,66	1,72	1	7	-
It is difficult for me to break my current established shopping habits	171	3,39	1,80	1	7	171	2,82	1,66	1	7	**
I do not buy the sustainable product because of the higher price	171	3,87	1,88	1	7	171	3,92	1,99	1	7	-
I do not buy sustainable product because there are not much variation and choice among them	171	3,26	1,67	1	7	171	3,43	1,71	1	7	-
I do not buy sustainable products because of the lack of information regarding them	171	3,75	1,72	1	7	171	3,20	1,70	1	7	**

Table 15. Mean Comparisons Barriers

This implies that individuals have relatively evenly high barriers towards purchase of utilitarian and hedonic sustainable products. Only one barrier in total for both product types had a mean higher than neutral (4,0), explicitly the variable Budget ($Hedonic_{Budget}$ = 4,01), low, but still in line with previous research. It can, therefore, be argued that the barriers presented are not considered to be strongly connected to purchase decisions regarding sustainable products. The barriers listed are subsequesntly not likely to hinder consumers from buying a sustainable product. The three barriers which hindering individuals from purchasing sustainable hedonic products the most are proven all to be different price angles ($Hedonic_{Budget}$ = 4,01; $Hedonic_{Impact}$ = 3,99; $Hedonic_{Price}$ = 3,92). In regards to barriers hindering individuals from purchasing sustainable utilitarian products, price is in ascendancy, though information is the third highest barrier ($Utilitarian_{Convenient\ Goods}$ = 3,92; $Utilitarian_{Price}$ = 3,87; $Utilitarian_{Information}$ = 3,75). Hypothesis H1c can therefore be argued to be supported, as well as H1d.

H1a: Health is the main reason why individuals purchase sustainable utilitarian products

Rejected

H1b: Health is the main reason why individuals purchase sustainable hedonic products

Rejected

H1c: Cost is the main reason why individuals do not purchase sustainable utilitarian products

Supported

H1d: Cost is the main reason why individuals do not purchase sustainable hedonic products

Supported

4.1.2 Willingness to Pay a Price Premium

Hypothesis H2 states that Individuals are willing to pay a higher premium for hedonic products in regards of percentage. Due to an ordinal variable, a related-Wilcoxon test was performed to gain knowledge of significance. The test showed that there was a small difference regarding individuals willing to pay a higher premium for sustainable products than 10% (Utilitarian = 116; Hedonic = 114). Thus, this difference was not proven significant ($\rho \geq 0{,}05$).

WILLINGNESS TO PAY						
Premium for Sustainable Products	Utilitarian Product		Hedonic Product		Related Wilcoxon	
	N	*Valid Percent*	*N*	*Valid Percent*	*Significance (p ≤ 0,05)*	*Z*
> 10 %	55	29 %	57	33 %	-	-0,28
10 % ≤	116	60 %	114	67 %		

Table 16. Willingness to Pay a Premium for Sustainable Products

This implies that consumers are not willing to pay a relatively higher price for any type of the sustainable products, thus price can be said to be central. A result is supported by tests of hypothesis H1a & H1b. As the difference between the two types of products was small, as well as not proven significant, hypothesis H2 is rejected.

H2: Individuals are willing to pay a higher price premium for hedonic products than for utilitarian products

Rejected

4.2 Materialism's Impact on Purchase Motives and Barriers

In this section, hypotheses concerning materialism and its impact on motives and barriers in the context of utilitarian and hedonic products will be presented. In the sections below, all test compare three levels of materialism. Due to constraints in space, in section 4.2.2 only the results for the lowest and highest terciles will be presented, in line with Dawson (1994).

4.2.1 The General Level of Materialism

The third hypothesis, H3, states that Swedish consumers in general are less materialistic. In difference to previous measurements, level of materialism is measured by the mean of sum. To test this, a sum had to be established the full measurement (descriptives test). Previous research by Richins, Dawson (1994) and Belk (1984), thus utilize the similar approach. In order to conduct further analysis, the sample of respondents will be divided into terciles based on percentage (0 – 33%; 34 – 66%; 67 – 100%). After division, 3 groups with a significant (>30) number of respondents ($N_{Low\text{-}Materialistic}$ =57; $N_{Mid\text{-}Range\ materialistic}$ = 65; $N_{High\text{-}Materialistic}$ = 49) were received. To get an overview of the level of materialism, descriptives were plotted below, showing a lower level of materialism than previous studies (See *Table 18*, below). With a mean of sum at 65,43 Sweden falls in the lower half of the materialistic scale (sum = 64,4-67,2) presented in previous research by Richins (1992).

LEVELS OF MATERIALISM					
LEVEL	*N*	*Mean*	*St.D.*	*Min*	*Max*
Low-Materialistic	57	48,19	8,26	26	59
Mid-Range Materialistic	65	66,00	3,58	60	71
High-Materialistic	49	84,71	11,02	72	124
Total	**171**	**65,43**	**16,39**	**26**	**124**

Table 17 Materialistic Mean of Sum for Sweden and the Sample's Terciles

As the materialistic mean sum of the sample (mean sum_{Sweden} = 65,43) falls in the lower half, and not in the lower tercile, of previous studies of proven levels of materialism (mean $sum_{Lower\ Tercile}$ 64,4-65,33), hypothesis 3 are only partially supported.

H3: Swedish consumers exhibits low levels of materialism	**Partially Supported**

4.2.2 Motives and Barriers, Differences due to Materialism

The set of hypotheses H4a-b states that individualistic motives are the main reasons why highly materialistic individuals purchase sustainable products. Through an ANOVA test, mean differences of the three levels of materialism for the utilitarian product were established. The test demonstrated that there was a significant ($\rho \leq 0,05$) mean difference for one variable, $Utilitarian_{Right}$. Descriptively the ANOVA test ascertain that the tree main motivations for less materialistic individuals to purchase a sustainable utilitarian product were; Environment, Family and Health (mean $Low_{Environment}$ = 6,02; Low_{Family} = 5,95; Low_{Health} = 5,7). As *Table 21* below establishes, all motives for utilitarian products exceeded the neutral level of 4,0 in regards to less materialistic individuals.

The three main motivations for highly materialistic individuals to purchase a sustainable utilitarian product are; Family, Health and Quality (mean $High_{Family}$ = 5,94; $High_{Health}$ = 5,76; $High_{Quality}$ = 5,35). One of the motives for the hedonic product did not exceeded the neutral level of 4,0 (mean $High_{Limited}$ = 3,92) in regards to highly materialistic individuals (*Table 21*).

MEAN COMPARISONS											
Utilitarian Product	Low Materialism					High Materialism					
Variables	*N*	*Mean*	*St.D.*	*Min*	*Max*	*N*	*Mean*	*St.D.*	*Min*	*Max*	***Significance*** *(p ≤ 0,05)*
Without chemicals	57	5,23	2,01	1	7	49	4,51	1,93	1	7	-
Better for my health	57	5,70	1,54	1	7	49	5,76	1,25	2	7	-
Better for environment	57	6,02	1,52	1	7	49	5,31	1,77	1	7	-
Has better quality than non-sustainable products	57	4,77	1,67	1	7	49	5,35	1,52	2	7	-
More durable than non-sustainable products	57	4,58	1,95	1	7	49	5,00	1,84	1	7	-
Safer to use due to strict production control	57	5,19	1,89	1	7	49	5,22	1,61	1	7	-
Better for my children/family	57	5,95	1,48	1	7	49	5,94	1,11	3	7	-
More animal friendly	57	5,14	1,85	1	7	49	4,96	1,77	1	7	-
Allows me to support local manufacturers	57	5,47	1,92	1	7	49	4,65	1,95	1	7	-
I am buying sustainable product even though choices are limited	57	4,65	1,77	1	7	49	3,92	1,69	1	7	-
I am buying sustainable product because the benefits outweigh the cost	57	4,89	1,76	1	7	49	4,35	1,69	1	7	-
Buying sustainable products is the right thing to do even if they cost more	57	5,05	1,81	1	7	49	4,08	1,73	1	7	High-low * Mid-High *

- = No significance at all
* = Significance Low-High
High-Low * = Significance between groups
All * = Significance between all groups

Table 18. Mean Comparisons of Motives Between Levels of Materialism for Utilitarian Products

This implies that even though the means of the three main motives differ between the levels of materialism, the difference is not significant ($\rho \geq 0,05$). In addition, the variables Environment, Family and Health are located in top four of the highest motivations for both levels of materialism (mean $Low_{Environment}$ = 6,02; Low_{Family} = 5,95; Low_{Health} = 5,7; Low_{Local} = 5,47; $High_{Family}$ = 5,94; $High_{Health}$ = 5,76; $High_{Quality}$ = 5,35; $High_{Environment}$= 5,31). Hypothesis H4a is rejected due to Family being the main motive for highly materialistic individuals.

Subsequently, an ANOVA test was performed to establish the mean differences for the barriers between the three levels of materialism for the hedonic product. The test demonstrated that there was no proven significance ($\rho \geq 0,05$) for mean difference between any level of materialism

for any variable. Descriptively the ANOVA test ascertains that, the tree main motivations for less materialistic individuals to purchase a sustainable hedonic product were; Environment, Family and Outweigh (mean $Low_{Environment}$ = 5,68; Low_{Family} = 5,44; $Low_{Outweigh}$ = 5,05). As *Table 22* below establishes, not all motives for the hedonic product exceeded the neutral level of 4,0 (mean $Low_{Chemicals}$ = 3,72), in regards to the less materialistic individuals.

The three main motivations for highly materialistic individuals to purchase a sustainable hedonic product are; Environment, Family and Health (mean $High_{Environment}$ = 5,63; $High_{Family}$ = 5,39; $High_{Health}$ = 5,02;). Three of the motives for the hedonic product did not exceeded the neutral level of 4,0 (mean $High_{Limited}$ = 3,88; $High_{Chemicals}$ = 3,55; $High_{Local}$ = 3,55) in regards to highly materialistic individuals (*Table 22*).

MEAN COMPARISONS											
Hedonic Product	Low Materialism					High Materialism					
Variables	*N*	*Mean*	*St.D.*	*Min*	*Max*	*N*	*Mean*	*St.D.*	*Min*	*Max*	***Significance*** *(p ≤ 0,05)*
Without chemicals	57	3,72	2,16	1	7	49	3,55	2,03	1	7	-
Better for my health	57	5,04	1,88	1	7	49	5,02	1,68	1	7	-
Better for environment	57	5,68	1,84	1	7	49	5,63	1,44	1	7	-
Has better quality than non-sustainable products	57	4,54	2,00	1	7	49	4,82	1,81	1	7	-
More durable than non-sustainable products	57	4,33	1,88	1	7	49	4,65	1,94	1	7	-
Safer to use due to strict production control	57	4,63	1,92	1	7	49	4,90	1,76	1	7	-
Better for my children/family	57	5,44	1,68	1	7	49	5,39	1,51	1	7	-
More animal friendly	57	4,26	2,03	1	7	49	4,78	1,94	1	7	-
Allows me to support local manufacturers	57	4,33	2,09	1	7	49	3,55	2,01	1	7	-
I am buying sustainable product even though choices are limited	57	4,44	1,71	1	7	49	3,88	1,68	1	7	-
I am buying sustainable product because the benefits outweigh the cost	57	5,05	1,77	1	7	49	4,41	1,90	1	7	-
Buying sustainable products is the right thing to do even if they cost more	57	4,93	1,88	1	7	49	4,55	1,80	1	7	-

- = No significance at all
* = Significance Low-High
High-Low * = Significance between groups
All * = Significance between all groups

Table 19. Mean Comparisons of Motives Between Levels of Materialism for Hedonic Products

This implies that even though the means of the three main barriers differs between the levels of materialism, the difference is not proven significant ($\rho \geq 0,05$). In addition, the variables Environment, Family and Health are located in top four of the highest motivations for both levels of materialism (mean $Low_{Environment}$ = 5,68; Low_{Family} = 5,44; $Low_{Outweigh}$ = 5,05; Low_{Health} = 5,04; $High_{Environment}$ = 5,63; $High_{Family}$ = 5,39; $High_{Health}$ = 5,02; $High_{Safe}$ = 4,9). Due to health being the main barrier for purchase of sustainable products for higly materialistic consumers, hypothesis H4b can therefore be rejected.

The set of hypotheses H4c-d states that barriers concerned with cost are not the main reasons why highly materialistic individuals do not purchase sustainable utilitarian, as well as, hedonic products. Through an ANOVA test, mean differences of the three levels of materialism for the utilitarian product was established. The ANOVA confirmed that there was a significant ($\rho \leq 0,05$) mean difference for one variable, $Utilitarian_{Shopping\ Habits}$. Descriptively the ANOVA test ascertain that, the tree main barriers for less materialistic individuals to purchase a sustainable utilitarian product are; Convenient Goods, Price and Information (mean $Low_{Convenient\ Goods}$ = 3,61; Low_{Price} =

3,6; $Low_{Information}$ = 3,53). The same three barriers prove to be the main barriers for highly materialistic individuals to purchase a sustainable utilitarian product (mean $High_{Price}$ = 4,27; $High_{Convenient\ Goods}$ = 4,02; $High_{Information}$ = 3,94. *Table 23* below illustrates that only two of the barriers for utilitarian products exceeded the neutral level of 4,0 in regards to highly materialistic individuals (mean $High_{Price}$ = 4,27; $High_{Convenient\ Goods}$ = 4,02).

MEAN COMPARISONS											
Utilitarian Product	Low Materialism					High Materialism					
Variables	*N*	*Mean*	*St.D.*	*Min*	*Max*	*N*	*Mean*	*St.D.*	*Min*	*Max*	***Significance*** *(p ≤ 0,05)*
I do not want to pay more for sustainable products than for non-sustainable products	57	2,68	1,99	1	7	49	3,49	1,80	1	7	-
I do not have enough budget to buy sustainable alternatives	57	2,89	2,08	1	7	49	3,51	1,95	1	7	-
I am willing to buy sustainable products as long as the price is not higher than that of convenient goods	57	3,61	2,08	1	7	49	4,02	1,87	1	7	-
The price of the product has a greater impact on my decision than the product's sustainable properties	57	3,42	2,03	1	7	49	3,82	1,94	1	7	-
The store I frequently shop at does not provide a variety of sustainable products	57	3,23	1,93	1	7	49	3,35	1,82	1	7	-
Sustainable products are only available in a limited number of stores	57	3,44	1,75	1	7	49	3,18	1,85	1	7	-
It is difficult for me to break my current established shopping habits	57	2,88	1,72	1	7	49	3,88	1,84	1	7	*
I do not buy the sustainable product because of the higher price	57	3,60	1,99	1	7	49	4,27	1,77	1	7	-
I do not buy sustainable product because there are not much variation and choice among them	57	2,95	1,55	1	7	49	3,35	1,75	1	7	-
I do not buy sustainable products because of the lack of information regarding them	57	3,53	1,75	1	7	49	3,94	1,64	1	7	-

- = No significance at all
* = Significance Low-High
High-Low * = Significance between groups
All * = Significance between all groups

Table 20. Mean Comparisons of Barriers Between Levels of Materialism for Utilitarian Products

This implies that even though the means of the three main barriers differs between the levels of materialism, the differences is not proven significant ($\rho \geq 0,05$). Since two barriers with the highest mean for both levels of materialistic are nuances of cost related barriers, hypothesis H4c is rejected.

Subsequently, the test performed to establish the mean differences for the barriers between the three levels of materialism for the hedonic product (ANOVA). Three significant mean differences were proven ($\rho \leq 0,05$), $Hedonic_{Pay\ More}$ and $Hedonic_{Shoping\ Habits}$, significant between low and high level of materialism, and $Hedonic_{Price,}$ significant between all levels of materialism. Descriptively the ANOVA test ascertain that, the tree main barrier for less materialistic individuals to purchase a sustainable hedonic product were: Availability, Budget and Convenient Goods (mean $High_{Availability}$ = 3,74; $High_{Budget}$ = 3,72; $High_{Convenient\ Goods}$ = 3,72). As *Table 24* below establishes, none of the barriers for the hedonic product exceeded the neutral level of 4,0 in regards to less materialistic individuals. The three main barriers for highly materialistic individuals to purchase a sustainable hedonic product are; Impact, Price and Budget (mean $High_{Impact}$ = 4,43; mean $High_{Price}$ = 4,35; mean $High_{Budget}$ = 4,22. Only three of the barriers for the hedonic product did exceeded the neutral level of 4,0 (mean $High_{Impact}$ = 4,43; mean $High_{Price}$ = 4,35; mean $High_{Budget}$ = 4,22) in regards to highly materialistic individuals (*Table 24*). For highly materialistic individuals the three main barriers are all connected to the cost of the product, therefore, Hypothesis H4d is rejected.

MEAN COMPARISONS											
Hedonic Product	Low Materialism					High Materialism					
Variables	*N*	*Mean*	*St.D.*	*Min*	*Max*	*N*	*Mean*	*St.D.*	*Min*	*Max*	***Significance*** *(p ≤ 0,05)*
I do not want to pay more for sustainable products than for non-sustainable products	57	2,82	1,97	1	7	49	3,86	1,93	1	7	*
I do not have enough budget to buy sustainable alternatives	57	3,72	2,09	1	7	49	4,22	2,04	1	7	-
I am willing to buy sustainable products as long as the price is not higher than that of convenient goods	57	3,72	1,79	1	7	49	4,0	2,04	1	7	-
The price of the product has a greater impact on my decision than the product's sustainable properties	57	3,67	1,91	1	7	49	4,43	1,73	1	7	-
The store I frequently shop at does not provide a variety of sustainable products	57	3,56	1,83	1	7	49	3,53	1,66	1	7	-
Sustainable products are only available in a limited number of stores	57	3,74	1,82	1	7	49	3,57	1,73	1	7	-
It is difficult for me to break my current established shopping habits	57	2,37	1,42	1	6	49	3,22	1,77	1	7	*
I do not buy the sustainable product because of the higher price	57	3,28	1,92	1	7	49	4,35	1,99	1	7	All *
I do not buy sustainable product because there are not much variation and choice among them	57	3,07	1,53	1	7	49	3,67	1,88	1	7	-
I do not buy sustainable products because of the lack of information regarding them	57	3,12	1,78	1	7	49	3,22	1,69	1	7	-

- = No significance at all
* = Significance Low-High
High-Low * = Significance between groups
All * = Significance between all groups

Table 21. Mean Comparisons of Barriers Between Levels of Materialism for Hedonic Products

There is a proven significant ($\rho \leq 0{,}05$) difference in means between less and high materialistic individuals regarding the variables Price, Shopping Habits, and Pay more with the mean differences of 1,07, 0,85 and 1,04 (mean $High_{Price} = 4{,}35 >$ mean $Low_{Price} = 3{,}2$; $High_{Shopping\ Habits} = 3{,}22 >$ mean $Low_{Shopping\ Habits} = 2{,}37$; $High_{Pay\ More} = 3{,}86 >$ mean $Low_{Pay\ More} = 2{,}82$). This implies that Price, Shopping Habits and Pay More are barriers with bigger influence on individuals purchase decision regarding sustainable hedonic products. It should be added that Availability was the main barrier for less materialistic individuals.

In addition, it can be argued that the barriers presented are not considered to be strongly connected to purchase decisions regarding any type of sustainable products for less materialistic consumers. Only five barriers with means exceeding 4, could be argued to likely hinder highly materialistic individuals from buying any type of sustainable product.

H4a: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable utilitarian products

Rejected

H4b: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable hedonic products

Rejected

H4c: Cost is not the main reason why highly materialistic individuals do not purchase sustainable utilitarian products

Rejected

H4d: Cost is not the main reason why highly materialistic individuals do not purchase sustainable hedonic products

Rejected

4.2.3 Materialisms Connection with Social Consumption

Hypothesis H5a-b states that materialism is positively correlated with social consumption motivation, and that highly materialistic individuals are in a greater extent motivated by social consumption when purchasing sustainable products. In order to investigate a bivariate correlation analysis, have to be performed. The test showed that social consumption has a positive correlation with materialism (ρ = 0,356). The correlation was significant on a 1% significance level (*Table 26*).

BIVARIATE CORRELATION	
MATERIALISM & SOCIAL CONSUMPTION MOTIVATION	
Correlation (ρ)	0,356**

Table 22. Bivariate Correlation Analysis of Materialism and Social Consumption Motivation

Subsequently, tests were performed to investigate if the level of social consumption motivation was higher for highly materialistic consumers. Through conducting an ANOVA test with the three levels of materialism, one significant difference ($\rho \leq 0,1$) was found. The mean difference between less materialistic individuals and the highly materialistic individuals was found significant on a 1% significance level. The test showed that the mean difference between the low and high levels of materialism was 0,85 (mean High-materialistic = 3,19 > low-materialism = 2,34). Hence, highly individualistic consumers were classified to be more motivated by social consumption (See *Table 27*, below). Hypothesis 5a could therefore be supported. As only one of the comparisons was proven significant ($\rho \leq 0,01$), hypothesis H5b could only be partially supported.

SOCIAL CONSUMPTION MOTIVATION						
LEVEL	*N*	*Mean*	*St.D.*	*Min*	*Max*	*Significance ($p \leq 0,05$)*
Low-Materialistic	57	2,34	1,13	1	6	Mid - High **
Mid-Range Materialistic	65	2,79	1,26	1	6	Low - High -
High-Materialistic	49	3,19	1,40	1	7	Low ** Mid -

Table 23. Difference in Social Consumption Motivation Depending on Level of Materialism

H5a: Materialism is positively correlated with social consumption motivation

Supported

H5b: Highly materialistic individuals are in a greater extent than less materialistic individuals motivated by social consumption motivation

Partially Supported

4.3 Ethically Minded Consumer Behavior

In this section, hypotheses concerning ethically minded consumer behavior and its connection with materialism will be presented.

4.3.1 Ethically Minded Consumer Behavior's Connection with Materialism

Hypothesis H6a-b states that materialism is negatively correlated with ethically minded consumption behavior and that highly materialistic individuals are less ethically minded then less materialistic individuals. In order to investigate if ethically minded consumer behavior have had any impact on previously presented results a correlation between materialism and ethically minded consumer behavior have to be established by a bivariate correlation test. The test presented that ethically minded consumer behavior was negatively correlated with materialism ((ρ = -0,239). The correlation was significant on a 1% significance level (*Table 28).*

BIVARIATE CORRELATION	
MATERIALISM & EMCB	
Correlation (ρ)	- 0,239**

Table 24. Bivariate Correlation Analysis of Materialism and Ethically Minded Consumer Behavior

Subsequently, a test was performed to investigate if the level of ethically minded consumer behavior was higher for less materialistic individuals. Through conducting an ANOVA test with the three levels of materialism, one significant difference ($\rho \leq 0,1$) was establish. The mean difference between less materialistic individuals and the highly materialistic individuals was found significant on a 1% significance level. The mean difference between the low and high levels of materialism was 1,05 (mean Low-materialistic = 5,0 > low-materialism = 3,95). Hence, less individualistic individuals are more ethically minded in regards to their behavior (See *Table 29*, below). Hypotheses H6a-b are therefore supported

ETHICALLY MINDED CONSUMER BEHAVIOUR						
LEVEL	*N*	*Mean*	*St.D.*	*Min*	*Max*	*Significance ($p \leq 0,05$)*
Low-Materialistic	57	5,0	1,36	1	7	Mid - High **
Mid-Range Materialistic	65	4,45	1,23	1	7	Low - High -
High-Materialistic	49	3,95	1,44	1	7	Low ** Mid -
Total	171	4,5	1,39	1	7	

Table 25. Difference in Ethically Minded Consumer Behavior Depending on Levels of Materialism

By the occurrence of a correlation between materialism and ethically minded consumer behavior, hypothesis H9a can be supported. As only one of the comparisons between the levels of materialism was proven significant ($\rho \leq 0,01$), hypothesis H9b could only be partially supported.

H6a: Materialism is negatively correlated with ethically minded consumption behavior

Supported

H6b: Less materialistic individuals are more ethically minded than highly materialistic individuals

Supported

4.4 Summary of Hypothesis

To summarize the findings in this thesis, following table gives an overview of accepted, partially accepted and rejected hypotheses based on the analysis in this chapter.

Hypotheses Generated		
General Differences Between Utilitarian and Hedonic Products	**H1a:** Health is the main reason why individuals purchase sustainable utilitarian products	**Rejected**
	H1b: Health is the main reason why individuals purchase sustainable hedonic products	**Rejected**
	H1c: Cost is the main reason why individuals do not purchase sustainable utilitarian products	**Supported**
	H1d: Cost is the main reason why individuals do not purchase sustainable hedonic products	**Supported**
	H2: Individuals are willing to pay a higher price premium for hedonic products than for utilitarian products	**Rejected**
Materialism & Social Consumption Motivation	**H3:** Swedish consumers exhibits low levels of materialism	**Partially Supported**
	H4a: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable utilitarian products	**Rejected**
	H4b: Individualistic motives are the main reason why highly materialistic Individuals purchase sustainable hedonic products	**Rejected**
	H4c: Cost is not the main reason why highly materialistic individuals do not purchase sustainable utilitarian products	**Rejected**
	H4d: Cost is not the main reason why highly materialistic individuals do not purchase sustainable hedonic products	**Rejected**
	H5a: Materialism is positively correlated with social consumption motivation	**Supported**
	H5b: Highly materialistic individuals are in a greater extent than less materialistic individuals motivated by social consumption motivation	**Partially Supported**
Ethically Minded Consumer Behavior	**H6a:** Materialism is negatively correlated with ethically minded consumption behavior	**Supported**
	H6b: Less materialistic individuals are more ethically minded than highly materialistic individuals	**Supported**

Final Discussion

This final section will start by discussing the outcome of the analysis and results presented in section 4, followed by conclusion. Potential drawbacks and implications with the thesis are discussed, managerial implications are presented, and potential areas for future research is put forward. After having read this chapter, the reader should have an understanding of the thesis contribution to research, and its implications for marketers.

5.1. Discussion of Results

In this section, we will analyze the results and findings of our empirical study in connection with the theoretical framework. We will structure the discussion into two parts, where (1) In the first part, we will explain whether and how the motives and barriers for consumption of sustainable products differ between product categories with utilitarian vs. hedonic attitudinal characteristics, and (2) to what extent do the personality trait materialism impact on these motivations. Further thoughts would be elaborated with regard to the constructs of social consumption motivation and ethically minded behavior to deeper explain consumers motivations behind sustainable consumption.

5.1.1 Factors, driving sustainable purchasing

Many studies have investigated moderating factors for sustainable purchasing, as information, knowledge, attitudes, subjective norm and various types of demographic and cultural influences, however, the analysis of the major studies combined came to the conclusion, that these motives are still unclear and sophisticated due to different products, environments and situations (Joshi, Rahman 2015). Interestingly, specific attitudes may suggest a specific behavior when taken in isolation, a behavior that might change when a broader purchase decision is considered. Naturally, consumers purchase both sustainable and non-sustainable products (Follows 2000), it is, therefore, argued that behavior should be assessed separately for specific products and activities rather than general environmentally friendly response patterns. Hence, we suggested the importance of an investigation of two different product types, perceived and addressed differently based on their attributes - utilitarian and hedonic. Utilitarian consumption motives presuppose meeting basic needs, finding better convenience and higher quality. Hedonic shopping motivations, on the other hand, are driven by the emotional needs for satisfaction and entertainment, an intriguing insight since it implies differences in consumers' motivations for purchase. In other words, since there are mean differences between 8 out of the 12 motives and 5 out of 10 barriers significant differences in form of motivational and importance, the argument made by Follows (2000) confirms to be relevant. It can, therefore, be argued that consumers motivation will differ depending on product, putting light on marketers' efficiency in addressing these motives in the communication towards consumers. Results obtained with Hypotheses 1a-d provide a slightly different perspective, worth further investigation. Even though there were significant differences in motives and barriers between the two product groups, the four motivations with the highest mean proved to be the same for both products. They are: better for my family, better for my health, better for the environment and safer to use. The motives varied

in placement between the two product types, but still promote a clearer picture of the reality. The significant differences still put emphasis on the need for marketers and brands to efficiently address the motivation with the highest impact, the results implicate that any sustainable product can still be efficiently driven in the market by fulfilling to the high extent these top-4 motivations.

Similar pattern can be seen in regards to the barriers hindering purchase of sustainable products. According to Blake (1999), the environmental concern can be overridden by conflicting attitudes and stronger needs and desires, and a feeling of lack of trust can be eminent. The attitude overriding the environmental concern, hindering consumers from purchase sustainable products and, thus, are implied to be cost adjacent. For both utilitarian and hedonic products, the two barriers with the highest resulted mean did both present financial-related angles, which goes in line with Joshi, Rahman (2015) conclusions, based on broad analysis of existing theories, as well as Aertsens et al. (2010). For hedonic products, alternatively, the price of the product has a greater impact on decision then the product's sustainable properties, rendering a result in line with Blake's (1999) reasoning. It should here be raised that very few of the barriers, presented relevant results in regards to hindering in purchase. The question could therefore be posed, whether the barriers presented are relevant for the purchase of sustainable products.

For the purpose of bringing in financial perspective, proven by previous Hypothesis H1c-d to be significant when it comes to sustainable purchasing, we compare willingness to pay price premium for sustainable products overall in comparison with convenient, and separately for products with different attitudinal characteristics. Interestingly, there is no difference in willingness to pay more for a sustainable product in regard to products utilitarian or hedonic characteristics, which counteract Hypothesis H2 and goes against previous theoretical findings by Seo 2016.
Respondents' willingness to pay more is positively correlated with the level of ethics and negatively – with the level of materialism, while gender and age have no influence. However, there are dependencies between sustainable purchases share size and willingness to pay price premium. Those, buying more sustainable products, are also inclined to pay higher extra price premium for sustainable characteristics. This finding somewhat supports argument by that WTP will increase with consumers reliance on the offered value of sustainable products, thus necessitating enhanced need for green product innovation with improved performance, quality consideration and economical pricing strategy. However, this area should be further researched, as for the group willing to pay extra 26-50% we had only 25 respondents.

5.1.2 Personality Traits Influence on Sustainable Purchsing

As it was highlighted, motives can be consequently formed by influence of personal traits. The construct of materialism is indissolubly connected with and directly influences consumption behavior, being negatively correlated with environmentally friendly and ethical behavior. Materialism as a personality trait has always been perceived as the force, destructive for the environment and sustainable processes in the society. Eastman, Goldsmith and Flynn (1999) argue, that materialists acquire things to signal their status to the society and themselves

(Eastman et al. 1999). Respectively, it is natural that they are often viewed as individuals, who want to have “the best”, “the most expensive” and other status possessions (Richins, Marsha 1992). Thus, materialistic traits of consumers have a negative impact on the purchasing habits, leading to the over-consumption or consumption of unethically and not environmentally-friendly produced goods.

Extensive body of research proves negative impact of materialism on green buying behavior, despite the fact that more and more people are switching their habits towards conscious consumption and express environmental concerns (Vermeir 2006). In support of previous studies, the negative correlation between materialism and ethical consumption behavior was proved by our findings. Thus, the Hypothesis H6a was supported, by significant correlation. Overall, our respondent sample showed relatively low level of materialism compare to other multicultural studies and the original study by Richins and Dawson (1994), which goes in support of Hypothesis H3, stating, that Swedish population exhibits low level of materialism.

As it was stated, materialism is negatively influencing ethical consumption, however, by conducting descriptive ANOVA for materialism and sustainable purchasing motivation, it has been, surprisingly, concluded, that materialism is not a moderator for the majority of sustainable purchasing motivations. This means, that other motives, inherent by materialists, rather than environmental and ethical concerns, are important for high-materialistic individuals in choosing sustainable products. Based on our theoretical framework, individualistic motives are of a high importance for materialistic personalities. By testing with ANOVA test the importance for the range of motivations, our Hypotheses H4a-b were, however, rejected. The findings have not proved studies by Krystallis, Vassallo (2008) Magnusson et al. (2003), emphasizing individualistic values such as health and safety to have a stronger influence than altruistic, in purchasing sustainable products. The test demonstrated that there was no proven significance for mean difference between any level of materialism for any of the variables. Descriptively the ANOVA test ascertain that, the three main motivations for highly materialistic individuals to purchase a sustainable hedonic product are: Environment, Family and Health (mean HighEnvironment = 5,63; HighFamily = 5,39; HighHealth = 5,02;). Three of the motives for the utilitarian product were: Family, Health and Quality (mean $High_{Family}$ = 5,94; $High_{Health}$ = 5,76; $High_{Quality}$ = 5,35). Even though health was in the top-3 for each of the products, Family and Envirenmental concerns outranged that. It worth mentioning as well, that neither but one motive for both of the products had significant mean difference across different materialistic groups: “I buy sustainable product because it is the right thing to do” (high-materialistic m=4,08, low-materialistic m=5,05), which implies that social norm is the motive immanent to the low-materialistic individuals to the higher extent than to the high-materialists.

From the very definition of materialism, derived from extensive theoretical base, it is understood, that a person would rather consume for self-satisfaction. Building on this logic, and proven by multiple research through years, materialism is negatively correlated with ethical behavior, for the main reason, that it presupposes purchase decisions not only on the basis of personal

interests but also on the basis of the interests of society and the environment. As Nordics have not been researched on this issue, we tested the correlation for the Swedish sample. Being a country with high life standards and high environmental concerns, there was some possibility to have the insignificant correlation. Nevertheless, correlation was confirmed to be significantly positive, by this supporting our Hypothesis H6a. It is essential to mention, however, that our sample showed high levels of ethics (mean m=4,488). Thus, high sustainable motivations can be additionally explained by this.

Interestingly, theory suggests environmental and personal concerns to be not the only ones when choosing a green product. The subjective norm is a social pressure acting upon and guiding a particular behavior (Ajze 1991, Ajjze 1977), providing consumers with information about the appropriateness of that behavior (Jager 2000). Various studies have analyzed subjective norm for describing environmentally friendly behavior (Vermeir 2006), and a direct, positive relationship between the subjective norm and environmentally friendly behavior have been presented. The topic of SCB is tempting as modern world implies high exposure of individuals to the societal movements, and status-related possessions are highly valued. As materialism and social consumption behavior demonstrated positive correlation, this connection was tested and repeated the existing findings, with higher-materialistic persons following to the greater extent the social consumption behavior comparing with low-materialistic. Thus, the Hypotheses H5a was supported, by showing the correlation of (ρ = 0,356), and, whereas, highly individualistic consumers were classified to be more motivated by social consumption than low-materialistic, but there was no significant correlation with middle-level group, the Hypothesis H5b was partially supported.

To sum up, we can get a feeling, that motivations behind sustainable purchasing are a complicated subject, with variety of influences and variables. Further the main conclusions, got from our results, will be outlined.

5.2 Conclusion

The above discussion allows us to draw on final conclusions, that should provide a clear answer to our research question.

5.2.1 Differences between motivations and barriers for purchasing sustainable utilitarian and hedonic products

When comparing motives for two types of products, one should realize, that they are strongly dependent on the product attitudinal characteristics, however, with some of the motives being more prevailing for both of them: concern about family, individualistic motives and environmental/ethical motives. With barriers assumed to be not significant to hinder consumers from buying sustainable products, financial factors related to price and budget are found to be equally important for both types of products.

5.2.2 Influence of materialism on the motives and barriers for purchasing sustainable utilitarian and hedonic products

Materialism, being negatively correlated with ethical consumption behavior, and positively consumption behavior, has no significant influence on level of sustainable behavior overall, and does not differ across two types of products. Still, materialistic motivations proved not to be the main reason for high-materialists buying incentives. For both utilitarian and hedonic products, level of materialism has not been moderating factor in sustainable decision-making.

5.3 Manegerial Implications

This research was conducted in a way that leads to valuable managerial implications. As purchasing motivations are relevant to B2C businesses, the most prominent ones within marketing and management were brought up with the ambition to create and maintain motivations connected to sustainability trend. This study is one of the very first that review attitude-behavior gap in context of sustainable purchasing along with various motives, mediating factors directly influencing motives and financial purchasing incentives, as well as barriers, comparing two types of products. The study identifies numerous motives and barriers affecting sustainable purchases and by this offers possible explanations for the observed inconsistency in it in order to clarify questions and highlight possible action directions for marketers.

Analysis of the most substantial predictors and barriers provided novelty insights for marketers in how to position sustainable products and tailor their offerings, in order to reach most accepting and favoring target group, as well as attracting new consumers.

Based on our results, we encourage marketers and strategists for sustainable goods to take on the approach, where they can balance in the marketing offering positioning product with process attributes, as motives proved to be diverse, but unified by the combination of functional incentives with societal. The findings imply that consumers prefer a sustainable product with favorable functional attributes, in parallel with the environmental concerns. So, a manufacturer or a marketer should not only focus on the sustainable characteristics of the product, but also keep elaborating on functional attributes. It is straightforward from our findings, that sustainability cannot sell itself being isolated from fulfilled product attributes, such as quality and price.

Managers, therefore, should offer consumers more value from sustainability, build on functional, emotional and social benefits. It is beneficial to align sustainability marketing strategy with the existing product characteristics and motives which induce consumers to buy this product. This could be achieved by lowering/excluding barriers and increasing possibility and involvement with offered motivation to build on the offered value.

5.4 Criticism of the Study

This study has been designed in an attempt to investigate the attitude-behavior for sustainable purchasing from the novel perspective of attitudinal characteristics of sustainable products. It made an exciting contribution to both academia, and the marketers over all. However, the potential criticism is in need of some discussion.

5.4.1 Sample of Respondent

Firstly, a conscious decision was made in regards to the delimitation of the target group. In order to limit cultural bias due to regional perspective influenced by local community mentality the target group for this specific study was limited to Swedish inhabitants. This limitation could therefore be argued to result in particular economic, cultural and mental environment prerequisites. A potential caution of this study's generalizability is the sample of homogenous respondents. With a significant distribution of respondents below the age of 45, it could be questioned if this group of individuals is truly representative of the Swedish population. Previous research has proven that materialism is influenced by age, and that materialism starts to decrease after individuals have reached middle aged (Belk 1985). The observed level of materialism could therefore be criticized as not reflecting the materialistic levels of the population of Sweden.

5.4.2 Survey Design

Secondly, in an attempt to take on a uniquely holistic approach towards a sophisticated issue and intricate purchasing process influenced by multiple factors, as result, the survey resulted in being relatively extensive. When collecting the results, it was discovered that 30% of the respondents had dropped out and did not proceed to the very end. It can therefore be argued that the study design might have led to a climb in the study's survey bias. Survey bias is especially prevalent in internet based studies since they are completed privately by respondents. However, the methods used for distribution have been advocated by Bryman, Bell (2011) as a scientifically valid and proven distribution method.

5.4.3 Indexing Analysis

Lastly, the structure of the indexed measures applied in this survey is a reflection of the components that construct the index. It can therefore be argued that the validity of the study has been affected. Since reliability is ensured for all measures and multi-item scales (Malhotra, 2010), the validity of the indexes can be argued for. As stated in section *3. Methodology*, the measurements and indexed constructs utilized in this study have been proven and applied in previous studies in the chosen research area (e.g. Richins, Dawson 1992), arguing for the validity of the established measurements.

5.5 Future Research

With the purpose to invetsigate the motives and barrier, which moderate consumers' purchase intention, and materialism's moderating effect on these motives and barriers this study filled a research gap. However, nuances arose during the analysis, so we can suggest further areas and issues to be investigated in the future:

The delimitations of this study imply that there are insights to investigated by future research. Firstly, future researches are suggested to keep focus on actual purchase behavior. With support from Kollmuss, Agyeman 2002, the models regarding attitude's direct effect on purchase intension has extensively been refuted. A future development of the behavioral components of sustainable purchase behavior can, supported by Kumar et al.'s (2017) newly developed model, advantageously be combined with attitudinal and knowledge factors in order to add to the growing research area of sustainable purchase behavior.

Secondly, by the use of ordinal scales in an attempt to investigate the sustainable share of individual's total amount of purchases, and the end result of this study the importance of economical measurements became apparent. Financial background is crucial in terms of understanding more about consumers purchase behavior. This view is supported by the final results of this study. The main barriers proven by this study for purchase of sustainable products were different nuances of cost. By investigating shares of individuals' wallets, one has no ability to investigate the actual amount of products purchased. By combining behavioral purchase studies with studies of actual purchases such as collection of receipts or shadowing consumers, studies, not much different from this one, would be given a new, relatively unexplored dimension.

Thirdly, one possible limitation to our study is that we researched two products belonging to considerably different price ranges. It would be relevant to compare products with different altitudinal characteristics, but being equally affordable. Another possible approach is to investigate products within the group, defined by the similar level of involvement, whereas detergent and car differs in this way as well.

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Appendix

7.1 Preparatory Investigation of Consumer relationship to Products

Notion comparison for the four open questions asked during the preparatory interviews

LIST UP TO FIVE PRODUCTS THAT YOU FIND VERY IMPORTANT TO YOU	
Category	*Amount of Notions*
Electronic Goods	28
Beauty Products	6
Automobile	4
Clothes & Shoes	4
Apartment & House	4
Transport	3
Interior Decor	3
Accessories	3
Musical Instrument	2
Eyewear	1
FMCG	1
Tools	1

LIST UP TO FIVE PRODUCTS THAT YOU WOULD LIKE TO BUY	
Category	*Amount of Notions*
Clothes & Shoes	14
Accessories	11
Electronic Goods	10
Interior Decor	9
Automobile	4
Beauty Products	3
Utensils	3
Transport	2
Apartment & House	2
Musical Instrument	2
Books	2
Tattoo & Piercing	2
Eyewear	1
Travel	1

LIST UP TO FIVE PRODUCTS THAT YOU FEEL BAD ABOUT OWNING	
Category	*Amount of Notions*
Clothes & Shoes	6
Interior Decor	3
Electronic Goods	2
Beauty Products	2
Alcohol	2
Medicine	2
Transport	1
Tools	1
Utensils	1
Sports	1

WHAT TYPE OF SUSTAINABLE PRODUCTS DO YOU USUALLY BUY	
Category	*Amount of Notions*
FMCG	17
Clothes & Shoes	4
Beauty Products	2
Interior Decor	2
Tools	1
Alcohol	1
Utensils	1

7.2 Pre-Studies

In this section tables and figures regarding the three pre-studies that has been carried out will be presented.

7.2.1 Pre-Study 1

7.2.1.1 Products Investigated in Pre-Study 1

Pictures used in pre-study 1 and the main survey

PRODUCTS INVESTIGATED IN PRE-STUDY 1			
			
MILK	Laundry Detergent	CAR	SHIRT

7.2.1.2 Utilitarian & Hedonic Levels of Product Attributes

A detailed description of the utilitarian and hedonic scores calculated in Pre-study 1

CAR					
Utilitarian	*Min*	*Max*	*Mean*	*Std. D*	*Total Score*
Useful-Useless	2	7	6	1,39	
Valuable-Worthless	1	7	5,07	1,55	
Beneficial-Harmful	1	7	4,3	1,95	
Wise-foolish	1	7	4,47	1,57	19,84
Hedonic					
Pleasant-Unpleasant	3	7	5,37	1,22	
Nice-Awful	3	7	4,87	1,25	
Agreeable-Disagreeable	3	7	4,93	1,2	
Happy-sad	1	7	4,93	1,44	20,1

SHIRT					
Utilitarian	*Min*	*Max*	*Mean*	*Std. D*	*Total Score*
Useful-Useless	2	7	6,06	1,32	
Valuable-Worthless	1	7	5,23	1,4	
Beneficial-Harmful	2	7	4,94	1,2	
Wise-foolish	1	7	4,88	1,3	21,11
Hedonic					
Pleasant-Unpleasant	2	7	5,26	1,21	
Nice-Awful	2	7	5,32	1,01	
Agreeable-Disagreeable	1	7	4,94	1,13	
Happy-sad	1	7	5	1,39	20,52

LAUNDRY DETERGENT					
Utilitarian	*Min*	*Max*	*Mean*	*Std. D*	*Total Score*
Useful-Useless	2	7	6,07	1,31	
Valuable-Worthless	2	7	5,57	1,41	
Beneficial-Harmful	2	7	5,33	1,58	
Wise-foolish	3	7	5,3	1,29	22,27
Hedonic					
Pleasant-Unpleasant	2	7	5,17	1,23	
Nice-Awful	2	7	4,87	1,33	
Agreeable-Disagreeable	2	7	5	1,26	
Happy-sad	3	7	4,8	1,19	19,84

MILK					
Utilitarian	*Min*	*Max*	*Mean*	*Std. D*	*Total Score*
Useful-Useless	1	7	5,63	1,85	
Valuable-Worthless	1	7	5	1,64	
Beneficial-Harmful	2	7	4,53	1,48	
Wise-foolish	1	7	4,3	1,56	19,46
Hedonic					
Pleasant-Unpleasant	2	7	4,83	1,26	
Nice-Awful	2	7	4,73	1,23	
Agreeable-Disagreeable	1	7	4,33	1,27	
Happy-sad	1	7	4,6	1,61	18,49

7.2.2 Pre-Study 2

In this section, the SCM scale added to the main survey will be presented

7.2.2.1 The SCM scale

SCM SCALE
Before purchasing a product, it is important to know what others think of certain brands or products
Before purchasing a product, it is important to know what kinds of people buy certain brands or products
Before purchasing a product, it is important to know what others think of people who use certain brands or products
Before purchasing a product, it is important to know what brands or products to buy to make good impressions on others

7.2.3 Pre-Study 3

7.2.3.1 The Materialistic Scale

The materialistic scale introduced and presented by Richins & Dawson (1992)

MATERIALISM ITEMS
POSSESSION-DEFINED SUCCESS
I admire people who own expensive houses, cars, and clothes
Some of the most important achievements in life include acquiring material possessions
I don't place much emphasis on the amount of material objects people own as a sign of success
The things I own say a lot about how well I'm doing in life
I like to own things that impress people
I don't pay much attention to the material objects, that other people own
ACQUISITION CENTRALITY
I usually buy only the things I need
I try to keep my life simple, as far as possessions are concerned
The things I own aren't so important to me
I enjoy spending money on things that aren't practical
Buying things gives me a lot of pleasure
I would like to have a lot of luxury in my life
I put less emphasis on material things than most people I know
ACQUISITION AS THE PURSUIT OF HAPPINESS
I have all the things I really need to enjoy life
My life would be better if I owned certain things I don't have
I wouldn't be any happier if I owned nicer things
I'd be happier if I could afford to buy more things
It sometimes bothers me quite a bit that I can't afford buying all the things I'd like

7.2.3.2 The EMCB Scale

The EMCB Scale introduced and presented by Sudbury-Riley and Kohlbacher (2014)

EMCB SCALE
When there is a choice I always choose the product that contributes to the least amount of environmental damage
I have switched products for environmental reasons
If I understand the potential damage to the environment that some products can cause, I do not purchase those products
I do not buy household products that harm the environment
Whenever possible, I buy products packaged in reusable or recyclable containers
I make every effort to buy paper products (toilet paper, tissues, etc.) made from recycled paper
I will not buy a product if I know that the company that sells it is socially irresponsible
I do not buy products from companies that I know use sweatshop labor, child labor, or other poor working conditions
I have paid more for environmentally friendly products when there is a cheaper alternative
I have paid more for socially responsible products when there is a cheaper alternative

7.3 Main Study

In this section tables and figures regarding the main study that has been carried out will be presented.

7.3.1 Demographics

In this section, the samples' demographics, based on the four external factors previously stated to influence environmentally friendly consumer behavior, will be presented.

DEMOGRAPHICS		
Gender	***N***	***Percent***
Men	89	52%
Women	80	46,8%
Other	2	1,2%
Age		
18-25	61	35,7%
26-35	68	39,8%
36-45	26	15,2%
46-55	9	5,3%
56 <	7	4,0%
Highest Education		
Primary Education	4	2,3%
Secondary Education	28	16,4%
University or College Degree	136	79,5%
Other	3	1,8%
Occupation		
Studies	65	38%
Work	98	57,3%
Parental Leave	1	0,6%
Pensioner	3	1,8%
Other	4	2,3%

7.4 Surveys

In this section, the three pre-studies and the main study will be presented

7.4.1 Pre-Study 1

Dear participant,
Thank you for taking the time and participate in our survey. The questionnaire will approximately take one minute and serves as a pre-study for our master thesis at Stockholm School of Economics. The results will be processed anonymously.

As a thank you, we will offer a gift card from Espresso House to a lucky participant. If you want to participate in the draw, fill in your e-mail at the end of the questionnaire.

Thank you for participating
Johanna and Kseniia

In the following questionnaire, we would like to ask you to evaluate products in the product category cars. Please take a closer look at the product image below.

Product Picture

Display logic: Use of randomizing function. The four versions of pre-study 1 are equally randomly presented to the respondents. Every respondents are only exposed to one of the versions.

Please rate the following statements on the basis of how they agree with your opinions and thoughts. The statements is presented on a scale from 1 to 7, where 1 = Strongly Disagree and 7 = Strongly Agree.

To what extent do you consider the car to be:

Useless	1	2	3	4	5	6	7	Useful
Worthless	1	2	3	4	5	6	7	Valuable
Harmful	1	2	3	4	5	6	7	Beneficial
Foolish	1	2	3	4	5	6	7	Wise
Unpleasant	1	2	3	4	5	6	7	Pleasant
Awful	1	2	3	4	5	6	7	Nice
Disagreeable	1	2	3	4	5	6	7	Agreeable
Sad	1	2	3	4	5	6	7	Happy

Just a few more questions

Are you currently living in Sweden?

- ❍ Yes
- ❍ No

What is your main occupation?

- ❍ Studies
- ❍ Work
- ❍ Parental leave
- ❍ Pensioner
- ❍ Other

What gender do you identify yourself with?

- ❍ Woman
- ❍ Man
- ❍ Other

How old are you? Write in digits, for example 25

Thank you very much for participating!

Have a nice day,
Best
Johanna and Kseniia

7.4.2 Pre-Study 2

Dear participant,
Thank you for taking the time and participate in our survey. The questionnaire will approximately only take a few minutes and serves as a pre-study for our master thesis at Stockholm School of Economics. The results will be processed anonymously.

As a thank you, we will offer a gift card from Espresso House to a lucky participant. If you want to participate in the draw, fill in your e-mail at the end of the questionnaire.

Thank you for participating
Johanna and Kseniia

Before proceeding, we would like you to read the description below. Also, have this description in mind during the rest of the survey.

Sustainable Products
A sustainable product is designed to minimize the environmental impact during its whole life-cycle. In particular, non-renewable resources use is minimized, toxic materials are avoided and renewable resource use takes place according to their rate of replenishment.

What part of your total purchases consists of sustainable products?

- ❍ I never buy sustainable products (0%)
- ❍ Less than a quarter (1-25%)
- ❍ About half (26-50%)
- ❍ More than half (> 50%)

When answering the following questions, we ask you to consider the sustainable product that you buy and consume to a great extent

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

When you buy sustainable products, you expect the product to be:

	Strongly Disagree						Strongly Agree
Without chemicals	1.	2.	3.	4.	5.	6.	7.
Better for my health	1.	2.	3.	4.	5.	6.	7.
Better for environment	1.	2.	3.	4.	5.	6.	7.
Has better quality than non-sustainable products	1.	2.	3.	4.	5.	6.	7.
Better taste	1.	2.	3.	4.	5.	6.	7.
More nutritious	1.	2.	3.	4.	5.	6.	7.
Higher food safety because of better control	1.	2.	3.	4.	5.	6.	7.
Fresher	1.	2.	3.	4.	5.	6.	7.
More durable than non-sustainable products	1.	2.	3.	4.	5.	6.	7.
Safer to use due to strict production control	1.	2.	3.	4.	5.	6.	1.
Better for my children/family	1.	2.	3.	4.	5.	6.	7.
More animal friendly	1.	2.	3.	4.	5.	6.	7.
Allows me to support local manufacturers	1.	2.	3.	4.	5.	6.	7.

If you choose to buy/consume sustainable products for any reason other than those mentioned above, please fill in the reason in the field below.

The following situations often arise when I buy sustainable products:

	Strongly Disagree						Strongly Agree
Buying sustainable products is highly inconvenient	1.	2.	3.	4.	5.	6.	7.
Sustainable products are only available in limited stores/markets	1.	2.	3.	4.	5.	6.	7.
The stores that I frequently shop do not sell a variety of sustainable products	1.	2.	3.	4.	5.	6.	7.

To what extent can you relate to the following reasons?

	Strongly Disagree						Strongly Agree
I am buying sustainable product even though choices are limited	1.	2.	3.	4.	5.	6.	7.
I am buying sustainable product because the benefits outweigh the cost	1.	2.	3.	4.	5.	6.	7.
Buying sustainable products is the right thing to do even if they cost more	1.	2.	3.	4.	5.	6.	7.

When I choose to buy sustainable products, I do it because:

	Strongly Disagree						Strongly Agree
My close friends and family consume sustainable products	1.	2.	3.	4.	5.	6.	7.
My co-workers/colleagues consume sustainable products	1.	2.	3.	4.	5.	6.	7.
My loved ones expect me to purchase more sustainable products	1.	2.	3.	4.	5.	6.	7.

When answering the questions below, we ask you to consider a non-sustainable product that you buy and consume to a great extent

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

What prevents you from buying sustainable products?

	Strongly Disagree						Strongly Agree
I do not want to pay more for sustainable products than for non-sustainable products	1.	2.	3.	4.	5.	6.	7.
I do not have enough budget to buy sustainable alternatives	1.	2.	3.	4.	5.	6.	7.
I am willing to buy sustainable laundry detergent as long as the price is not higher than that of convenient goods	1.	2.	3.	4.	5.	6.	7.
I don't see why I should buy them not depending on price	1.	2.	3.	4.	5.	6.	7.
The price of the product has a greater impact on my decision than the product's sustainable properties	1.	2.	3.	4.	5.	6.	7.

I choose not to buy sustainable products because non-sustainable products have:

	Strongly Disagree						Strongly Agree
Lower price	1.	2.	3.	4.	5.	6.	7.
Better quality compare to convenient products	1.	2.	3.	4.	5.	6.	7.
Better taste compare to convenient products	1.	2.	3.	4.	5.	6.	7.
Better advertisement	1.	2.	3.	4.	5.	6.	7.
More information available for non-sustainable products.	1.	2.	3.	4.	5.	6.	7.
My family discourages me from buying sustainable products	1.	2.	3.	4.	5.	6.	7.
My colleagues/friends discourage me from buying sustainable products	1.	2.	3.	4.	5.	6.	7.
The appearance/packaging of the products looks bad	1.	2.	3.	4.	5.	6.	7.

To what extent can you relate to the following reasons for not buying a sustainable detergent?

	Strongly Disagree						Strongly Agree
There is none or little difference between sustainable and non-sustainable products	1.	2.	3.	4.	5.	6.	7.
I do not think sustainable products are better for me	1.	2.	3.	4.	5.	6.	7.
I do not trust that organic food from major food retail chains is sustainable	1.	2.	3.	4.	5.	6.	7.
It is difficult for me to break my current established shopping habits	1.	2.	3.	4.	5.	6.	7.
I do not buy sustainable product because there are not much variation and choice among them	1.	2.	3.	4.	5.	6.	7.

If you choose not to buy/consume sustainable products for any reason other than those mentioned above, please fill in the reason in the field below.

Just a few more questions

Are you currently living in Sweden?

- ❍ Yes
- ❍ No

What is your main occupation?

- ❍ Studies
- ❍ Work
- ❍ Parental leave
- ❍ Pensioner
- ❍ Other

What gender do you identify yourself with?

- ❍ Woman
- ❍ Man
- ❍ Other

How old are you? Write in digits, for example 25

Thank you very much for participating!

Have a nice day,
Best
Johanna and Kseniia

7.4.3 Pre-Study 3

Dear participant,
Thank you for taking the time and participate in our survey. The questionnaire will approximately only take **a few minutes** and serves as a pre-study for our master thesis at Stockholm School of Economics. The results will be processed anonymously.

As a thank you, we will offer a gift card from Espresso House to a lucky participant. If you want to participate in the draw, fill in your e-mail at the end of the questionnaire.

Thank you for participating
Johanna and Kseniia

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
I admire people who own expensive houses, cars, and clothes	1.	2.	3.	4.	5.	6.	7.
Some of the most important achievements in life include acquiring material possessions	1.	2.	3.	4.	5.	6.	7.
I don't place much emphasis on the amount of material objects people own as a sign of success	1.	2.	3.	4.	5.	6.	7.
The things I own say a lot about how well I'm doing in life	1.	2.	3.	4.	5.	6.	7.
I like to own things that impress people	1.	2.	3.	4.	5.	6.	7.
I don't pay much attention to the material objects, that other people own	1.	2.	3.	4.	5.	6.	7.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
I usually buy only the things I need	1.	2.	3.	4.	5.	6.	7.
I try to keep my life simple, as far as possessions are concerned	1.	2.	3.	4.	5.	6.	7.
The things I own aren't so important to me	1.	2.	3.	4.	5.	6.	7.
I enjoy spending money on things that aren't practical	1.	2.	3.	4.	5.	6.	7.
Buying things gives me a lot of pleasure	1.	2.	3.	4.	5.	6.	7.
I would like to have a lot of luxury in my life	1.	2.	3.	4.	5.	6.	7.
I put less emphasis on material things than most people I know	1.	2.	3.	4.	5.	6.	7.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
I have all the things I really need to enjoy life	1.	2.	3.	4.	5.	6.	7.
My life would be better if I owned certain things I don't have	1.	2.	3.	4.	5.	6.	7.
I wouldn't be any happier if I owned nicer things	1.	2.	3.	4.	5.	6.	7.
I'd be happier if I could afford to buy more things	1.	2.	3.	4.	5.	6.	7.
It sometimes bothers me quite a bit that I can't afford buying all the things I'd like	1.	2.	3.	4.	5.	6.	7.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
When there is a choice I always choose the product that contributes to the least amount of environmental damage	1.	2.	3.	4.	5.	6.	7.
I have switched products for environmental reasons	1.	2.	3.	4.	5.	6.	7.
If I understand the potential damage to the environment that some products can cause, I do not purchase those products	1.	2.	3.	4.	5.	6.	7.
I do not buy household products that harm the environment	1.	2.	3.	4.	5.	6.	7.
Whenever possible, I buy products packaged in reusable or recyclable containers	1.	2.	3.	4.	5.	6.	7.
I make every effort to buy paper products (toilet paper, tissues, etc.) made from recycled paper	1.	2.	3.	4.	5.	6.	7.
I will not buy a product if I know that the company that sells it is socially irresponsible	1.	2.	3.	4.	5.	6.	7.
I do not buy products from companies that I know use sweatshop labor, child labor, or other poor working conditions	1.	2.	3.	4.	5.	6.	7.
I have paid more for environmentally friendly products when there is a cheaper alternative	1.	2.	3.	4.	5.	6.	7.
I have paid more for socially responsible products when there is a cheaper alternative	1.	2.	3.	4.	5.	6.	7.

Just a few more questions

Are you currently living in Sweden?

- ❍ Yes
- ❍ No

What is your main occupation?

- Studies
- Work
- Parental leave
- Pensioner
- Other

What gender do you identify yourself with?

- Woman
- Man
- Other

How old are you? Write in digits, for example 25

Thank you very much for participating!

Have a nice day,
Best
Johanna and Kseniia

7.4.4 Main Study – English Version

Dear participant,

Thank you for taking time and participating in this survey. It will take approximately 14 minutes and is the main study for our Master Thesis at the Stockholm School of Economics. The results will be processed anonymously.

As a thank you, we will offer two SF movie tickets to one lucky participant and a gift card at Sturehof to another. If you want to participate in the prize draw, please fill in your email address at the end of the questionnaire.

Kindly thank you and have a great day!
Kseniia and Johanna

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
I admire people who own expensive houses, cars, and clothes	1.	2.	3.	4.	5.	6.	7.
Some of the most important achievements in life include acquiring material possessions	1.	2.	3.	4.	5.	6.	7.
I don't place much emphasis on the amount of material objects people own as a sign of success	1.	2.	3.	4.	5.	6.	7.
The things I own say a lot about how well I'm doing in life	1.	2.	3.	4.	5.	6.	7.
I like to own things that impress people	1.	2.	3.	4.	5.	6.	7.
I don't pay much attention to the material objects, that other people own	1.	2.	3.	4.	5.	6.	7.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
I usually buy only the things I need	1.	2.	3.	4.	5.	6.	7.
I try to keep my life simple, as far as possessions are concerned	1.	2.	3.	4.	5.	6.	7.
The things I own aren't so important to me	1.	2.	3.	4.	5.	6.	7.
I enjoy spending money on things that aren't practical	1.	2.	3.	4.	5.	6.	7.
Buying things gives me a lot of pleasure	1.	2.	3.	4.	5.	6.	7.
I would like to have a lot of luxury in my life	1.	2.	3.	4.	5.	6.	7.
I put less emphasis on material things than most people I know	1.	2.	3.	4.	5.	6.	7.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
I have all the things I really need to enjoy life	1.	2.	3.	4.	5.	6.	7.
My life would be better if I owned certain things I don't have	1.	2.	3.	4.	5.	6.	7.
I wouldn't be any happier if I owned nicer things	1.	2.	3.	4.	5.	6.	7.
I'd be happier if I could afford to buy more things	1.	2.	3.	4.	5.	6.	7.
It sometimes bothers me quite a bit that I can't afford buying all the things I'd like	1.	2.	3.	4.	5.	6.	7.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
When there is a choice I always choose the product that contributes to the least amount of environmental damage	1.	2.	3.	4.	5.	6.	7.
I have switched products for environmental reasons	1.	2.	3.	4.	5.	6.	7.
If I understand the potential damage to the environment that some products can cause, I do not purchase those products	1.	2.	3.	4.	5.	6.	7.
I do not buy household products that harm the environment	1.	2.	3.	4.	5.	6.	7.
Whenever possible, I buy products packaged in reusable or recyclable containers	1.	2.	3.	4.	5.	6.	7.
I make every effort to buy paper products (toilet paper, tissues, etc.) made from recycled paper	1.	2.	3.	4.	5.	6.	7.
I will not buy a product if I know that the company that sells it is socially irresponsible	1.	2.	3.	4.	5.	6.	7.
I do not buy products from companies that I know use sweatshop labor, child labor, or other poor working conditions	1.	2.	3.	4.	5.	6.	7.
I have paid more for environmentally friendly products when there is a cheaper alternative	1.	2.	3.	4.	5.	6.	7.
I have paid more for socially responsible products when there is a cheaper alternative	1.	2.	3.	4.	5.	6.	7.

Before proceeding, we would like you to read the description below. Also, have this description in mind during the rest of the survey.

Sustainable Products

A sustainable product is designed to minimize the environmental impact during its whole life-cycle. In particular, non-renewable resources use is minimized, toxic materials are avoided and renewable resource use takes place according to their rate of replenishment.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

To what extent do you agree with the following statements?

	Strongly Disagree						Strongly Agree
Before purchasing a product, it is important to know what others think of certain brands or products	1.	2.	3.	4.	5.	6.	7.
Before purchasing a product, it is important to know what kinds of people buy certain brands or products	1.	2.	3.	4.	5.	6.	7.
Before purchasing a product, it is important to know what others think of people who use certain brands or products	1.	2.	3.	4.	5.	6.	7.
Before purchasing a product, it is important to know what brands or products to buy to make good impressions on others	1.	2.	3.	4.	5.	6.	7.

What part of your total purchases consists of sustainable products?

- ❍ I never buy sustainable products (0%)
- ❍ Less than a quarter (1-25%)
- ❍ About half (26-50%)
- ❍ More than half (> 50%)

How much more are you willing to pay for a sustainable product compared to a corresponding non-sustainable product?

- ❍ Less than 10% more
- ❍ 10-25% more
- ❍ 26-50% more
- ❍ Over 50% more

Display logic: Use of randomizing function. The motives and barriers for the utilitarian product are equally randomly presented first in order to the respondents. Every respondent is exposed to both motives and barriers, just in different orders.

Imagine, you are out shopping for household goods, and just came across the product, presented further.



The laundry detergent you can see in the picture is a sustainable product. It is easy on the environment; the sustainable formula works for all temperatures and standard machines for an effective clean. The packaging is reusable - scoop included. The detergent is made in Sweden, cruelty free. The package has a size of 0,75 kg for 14 standard loads.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

I WOULD BUY a sustainable laundry detergent because it is:

	Strongly Disagree						Strongly Agree
Without chemicals	1.	2.	3.	4.	5.	6.	7.
Better for the environment	1.	2.	3.	4.	5.	6.	7.
Has better quality than non-sustainable products	1.	2.	3.	4.	5.	6.	7.
Better for my health	1.	2.	3.	4.	5.	6.	7.
More durable than non-sustainable products	1.	2.	3.	4.	5.	6.	7.
Safer to use due to strict production control	1.	2.	3.	4.	5.	6.	7.
Better for my family/children	1.	2.	3.	4.	5.	6.	7.
More animal friendly	1.	2.	3.	4.	5.	6.	7.
Allows me to support local manufacturers	1.	2.	3.	4.	5.	6.	7.

How strongly can you relate to the following statements regarding the aforementioned product?

	Strongly Disagree						Strongly Agree
I am buying this sustainable product even though choices are limited	1.	2.	3.	4.	5.	6.	7.
I am buying this sustainable product because the benefits outweigh the cost	1.	2.	3.	4.	5.	6.	7.
Buying sustainable products is the right thing to do even if they cost more	1.	2.	3.	4.	5.	6.	7.

How much more are you willing to pay for a sustainable laundry detergent compared to a corresponding non-sustainable laundry detergent?

- ❍ Less than 10% more
- ❍ 10-25% more
- ❍ 26-50% more
- ❍ Over 50% more



The laundry detergent you can see in the picture is a sustainable product. It is easy on the environment; the sustainable formula works for all temperatures and standard machines for an effective clean. The packaging is reusable - scoop included. The detergent is made in Sweden, cruelty free. The package has a size of 0,75 kg for 14 standard loads.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

I WOULD NOT buy a sustainable laundry detergent because:

	Strongly Disagree						Strongly Agree
I do not want to pay more for sustainable laundry detergents than for non-sustainable products	1.	2.	3.	4.	5.	6.	7.
I do not have enough budget to buy sustainable alternatives	1.	2.	3.	4.	5.	6.	7.
I am willing to buy sustainable laundry detergent as long as the price is not higher than that of convenient goods	1.	2.	3.	4.	5.	6.	7.
The price of the product has a greater impact on my decision than the product's sustainable properties	1.	2.	3.	4.	5.	6.	7.
The store I frequently shop at does not provide a variety of sustainable products	1.	2.	3.	4.	5.	6.	7.
Sustainable products are only available in a limited number of stores	1.	2.	3.	4.	5.	6.	7.

To what extent can you relate to the following reasons for not buying a sustainable detergent?

	Strongly Disagree						Strongly Agree
It is difficult for me to break my current established shopping habits	1.	2.	3.	4.	5.	6.	7.
I do not buy the sustainable product because of the higher price	1.	2.	3.	4.	5.	6.	7.
I do not buy sustainable product because there are not much variation and choice among them	1.	2.	3.	4.	5.	6.	7.
I do not buy sustainable products because of the lack of information regarding them	1.	2.	3.	4.	5.	6.	7.

Display logic: Use of randomizing function. The motives and barriers for the utilitarian product are equally randomly presented first in order to the respondents. Every respondent is exposed to both motives and barriers, just in different orders.

Imagine, you are planning on buying a car, and just came across the product, presented further.



The car you can see in the picture is a sustainable product, a so-called Diesel Hybrid, classified in Sweden as a miljöbil (environmentally friendly vehicle). The car has an average consumption of 0.36 liters per 10 kilometers. The car's dioxide emission standard is Euro 6 and according to the Swedish transport agency the car is allowed to be driven in environmental zones 2 and 3, which means it is allowed to be driven in every city in Sweden. The vehicle's electric motor provides 27 horsepower which in turn gives a total power of 231 horsepower, and the car goes from 0 to 100 in 6,4 seconds.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

I WOULD BUY a sustainable car because it is:

	Strongly Disagree						Strongly Agree
Without chemicals	1.	2.	3.	4.	5.	6.	7.
Better for the environment	1.	2.	3.	4.	5.	6.	7.
Has better quality than non-sustainable products	1.	2.	3.	4.	5.	6.	7.
Better for my health	1.	2.	3.	4.	5.	6.	7.
More durable than non-sustainable products	1.	2.	3.	4.	5.	6.	7.
Safer to use due to strict production control	1.	2.	3.	4.	5.	6.	7.
Better for my family/children	1.	2.	3.	4.	5.	6.	7.
More animal friendly	1.	2.	3.	4.	5.	6.	7.
Allows me to support local manufacturers	1.	2.	3.	4.	5.	6.	7.

How strongly can you relate to the following statements regarding the aforementioned product?

	Strongly Disagree						Strongly Agree
I am buying this sustainable product even though choices are limited	1.	2.	3.	4.	5.	6.	7.
I am buying this sustainable product because the benefits outweigh the cost	1.	2.	3.	4.	5.	6.	7.
Buying sustainable products is the right thing to do even if they cost more	1.	2.	3.	4.	5.	6.	7.

How much more are you willing to pay for a sustainable car compared to a corresponding non-sustainable car?

- ❍ Less than 10% more
- ❍ 10-25% more
- ❍ 26-50% more
- ❍ Over 50% more



The car you can see in the picture is a sustainable product, a so-called Diesel Hybrid, classified in Sweden as a miljöbil (environmentally friendly vehicle). The car has an average consumption of 0.36 liters per 10 kilometers. The car's dioxide emission standard is Euro 6 and according to the Swedish transport agency the car is allowed to be driven in environmental zones 2 and 3, which means it is allowed to be driven in every city in Sweden. The vehicle's electric motor provides 27 horsepower which in turn gives a total power of 231 horsepower, and the car goes from 0 to 100 in 6,4 seconds.

Please, rate the following statements on the basis of how they relate to you. The statements can be rated on a scale from 1 to 7, where 1 = Strongly DISAGREE and 7 = Strongly AGREE.

I WOULD NOT buy a sustainable car because:

	Strongly Disagree						Strongly Agree
I do not want to pay more for a sustainable car than for a non-sustainable product	1.	2.	3.	4.	5.	6.	7.
I do not have enough budget to buy sustainable alternatives	1.	2.	3.	4.	5.	6.	7.
I am willing to buy a sustainable car as long as the price is not higher than that of convenient goods	1.	2.	3.	4.	5.	6.	7.
The price of the product has a greater impact on my decision than the product's sustainable properties	1.	2.	3.	4.	5.	6.	7.
The store I frequently shop at does not provide a variety of sustainable products	1.	2.	3.	4.	5.	6.	7.
Sustainable products are only available in a limited number of stores	1.	2.	3.	4.	5.	6.	7.

To what extent can you relate to the following reasons for not buying a sustainable detergent?

	Strongly Disagree						Strongly Agree
It is difficult for me to break my current established shopping habits	1.	2.	3.	4.	5.	6.	7.
I do not buy the sustainable product because of the higher price	1.	2.	3.	4.	5.	6.	7.
I do not buy sustainable product because there are not much variation and choice among them	1.	2.	3.	4.	5.	6.	7.
I do not buy sustainable products because of the lack of information regarding them	1.	2.	3.	4.	5.	6.	7.

Just a few more questions

Are you currently living in Sweden?

- ❍ Yes
- ❍ No

What is your highest completed education?

- ❍ Primary Education
- ❍ Secondary Education
- ❍ University of College Education
- ❍ Other

What is your main occupation?

- Studies
- Work
- Parental leave
- Pensioner
- Other

What is your household's monthly income in total? (before tax) please write in SEK, for example 20000

How many children are there in your household?

- 0
- 1
- 2
- 3
- More than 3

What gender do you identify yourself with?

- Woman
- Man
- Other

How old are you? Write in digits, for example 25

Kindly thank you for your time and participation!

Have a great day,
Johanna and Kseniia

7.4.6 Main Study – Swedish Version

Tack för att du tog dig tid att delta i denna undersökning. Frågeformulerat tar ungefär 14 minuter och är vår huvudstudie för vår masteruppsats vid Handelshögskolan i Stockholm. Alla resultat kommer att behandlas anonymt.

Som tack kommer vi även att lotta ut två SF biobiljetter till en lycklig deltagare och ett presentkort på Sturehof till en annan lycklig deltagare, om du vill vara med i denna utlottning så fyller du i din mailadress i slutet av enkäten.

Tack för din medverkan och ha en bra dag,
Med vänlig hälsning,
Johanna och Kseniia

Vänligen gradera följande påståenden utifrån hur de stämmer in med dina åsikter och tankar. Påståendena ges på en skala 1-7, där 1 = Instämmer inte alls och 7 = Instämmer helt.

I vilken utsträckning instämmer du på följande påståenden?

	Strongly Disagree						Strongly Agree
Jag beundrar människor som äger dyra bostäder, bilar och kläder	1.	2.	3.	4.	5.	6.	7.
Några av de största framgångarna i livet inkluderar inköp av materiella ägodelar	1.	2.	3.	4.	5.	6.	7.
Jag anser inte att mängden materiella objekt människor äger är ett tecken på framgång	1.	2.	3.	4.	5.	6.	7.
De saker jag äger säger mycket om hur väl jag lyckats i livet	1.	2.	3.	4.	5.	6.	7.
Jag gillar att äga produkter som imponerar på andra människor	1.	2.	3.	4.	5.	6.	7.
Jag ägnar ingen uppmärksamhet åt materiella objekt som människor äger	1.	2.	3.	4.	5.	6.	7.

I vilken utsträckning instämmer du på följande påståenden?

	Strongly Disagree						Strongly Agree
Jag brukar enbart köpa saker som jag behöver	1.	2.	3.	4.	5.	6.	7.
Jag försöker att hålla mitt liv enkelt när det gäller ägodelar	1.	2.	3.	4.	5.	6.	7.
De saker jag äger är inte särskilt viktiga för mig	1.	2.	3.	4.	5.	6.	7.
Jag gillar att spendera pengar på saker som inte är praktiska	1.	2.	3.	4.	5.	6.	7.
Att köpa saker ger mig mycket glädje	1.	2.	3.	4.	5.	6.	7.
Jag gillar att ha mycket lyx i mitt liv	1.	2.	3.	4.	5.	6.	7.
Jag lägger mindre vikt vid materiella ting än de flesta människor jag känner	1.	2.	3.	4.	5.	6.	7.

I vilken utsträckning instämmer du på följande påståenden?

	Strongly Disagree						Strongly Agree
Jag har allt jag behöver för att verkligen kunna njuta av livet	1.	2.	3.	4.	5.	6.	7.
Mitt liv skulle vara bättre om jag ägde vissa saker som jag inte har	1.	2.	3.	4.	5.	6.	7.
Jag skulle inte vara lyckligare om jag ägde finare saker	1.	2.	3.	4.	5.	6.	7.
Jag skulle vara lyckligare om jag hade råd att köpa mer saker	1.	2.	3.	4.	5.	6.	7.
Det finns tillfällen när det stör mig ganska mycket att jag inte har råd att köpa alla de saker jag vill	1.	2.	3.	4.	5.	6.	7.

Vänligen gradera följande påståenden utifrån hur de stämmer in med dina åsikter och tankar. Påståendena ges på en skala 1-7, där 1 = Instämmer inte alls och 7 = Instämmer helt.

I vilken utsträckning instämmer du på följande påståenden?

	Strongly Disagree						Strongly Agree
När det finns valmöjlighet väljer jag alltid den produkt som ger minst miljöskada	1.	2.	3.	4.	5.	6.	7.
Jag har bytt produkter av miljöskäl	1.	2.	3.	4.	5.	6.	7.
Om jag känner till den potentiella skadan vissa produkter kan orsaka på miljön väljer jag att inte köpa dessa produkter	1.	2.	3.	4.	5.	6.	7.
Jag köper inte hushållsprodukter som skadar miljön	1.	2.	3.	4.	5.	6.	7.
När möjlighet ges köper jag produkter vilka är förpackade i återvinnings och/eller återanvändbara förpackningar	1.	2.	3.	4.	5.	6.	7.
Jag gör allt jag kan för att köpa pappersprodukter tillverkade av återvunnet papper, exempelvis toalettpapper och servetter	1.	2.	3.	4.	5.	6.	7.
Om jag vet att ett företag är socialt oansvarigt köper jag inte deras produkter	1.	2.	3.	4.	5.	6.	7.
Jag köper inte produkter från företag som jag vet använder sig av svältlönearbete, barnarbete eller andra dåliga arbetsförhållanden	1.	2.	3.	4.	5.	6.	7.
Jag har betalat mer för miljövänliga produkter när det funnits ett billigare alternativ	1.	2.	3.	4.	5.	6.	7.
Jag har betalat mer för socialt ansvarsfulla produkter när det funnits ett billigare alternativ	1.	2.	3.	4.	5.	6.	7.

Innan ni fortsätter ber vi er läsa igenom nedan beskrivning. Ha även denna beskrivning i åtanke när ni sedan fortsätter med undersökningen

Hållbara Produkter

En hållbar produkt är utformad för att minimera dess miljöpåverkan under hela produktens livstid, från utvinning av råmaterial till användning/konsumtion och återvinning.

Framförallt undviks giftiga ämnen, användandet av icke-förnybara resurser minimeras och användningen av förnybara resurser är inte större än att resurserna kontinuerligt hinner fyllas på.

Vänligen gradera följande påståenden utifrån hur de stämmer in med dina åsikter och tankar. Påståendena ges på en skala 1-7, där 1 = Instämmer inte alls och 7 = Instämmer helt.

I vilken utsträckning instämmer du på följande påståenden?

	Strongly Disagree						Strongly Agree
Innan du köper en produkt, är det viktigt för dig att veta vad andra tycker om vissa varumärken eller produkter	1.	2.	3.	4.	5.	6.	7.
Innan du köper en produkt, är det viktigt för dig att veta vilka typer av människor som köper vissa varumärken eller produkter	1.	2.	3.	4.	5.	6.	7.
Innan du köper en produkt, är det viktigt för dig att veta vilka åsikter andra har gällande människor som använder vissa varumärken eller produkter	1.	2.	3.	4.	5.	6.	7.
Innan du köper en produkt, är det viktigt för dig att veta vilka varumärken eller produkter du skall köpa för att göra ett bra intryck hos andra	1.	2.	3.	4.	5.	6.	7.

Hur stor andel av dina totala inköp består av hållbara produkter?

- ❍ Jag köper aldrig hållbara några produkter (0%)
- ❍ Mindre än en fjärdedel (1-25%)
- ❍ Ungefär hälften (26-50%)
- ❍ Mer än hälften (>50%)

Hur mycket är du villig att betala extra för en hållbar produkt i jämförelse med en motsvarande icke hållbar produkt?

- ❍ Mindre än 10% mer
- ❍ 10-25% mer
- ❍ 26-50% mer
- ❍ Över 50% mer

Display logic: Use of randomizing function. The motives and barriers for the utilitarian product are equally randomly presented first in order to the respondents. Every respondent is exposed to both motives and barriers, just in different orders.

Tänk dig, du är ute och handlar för hushållsartiklar, och kom precis över produkten, presenteras vidare.



Det tvättmedel som visas på bilden ovan är en hållbar produkt. Tvättmedlet är skonsamt för miljön, det tvättar rent vid alla temperaturer och är anpassat för alla standardmaskiner. Förpackningen kan återanvändas och innehåller en anpassad skopa. Tvättmedlet är tillverkat i Sverige under förmånliga arbetsförhållanden. Paketet innehållet 0,75kg, vilket ger 14 standardtvättar.

Vänligen gradera följande påståenden utifrån hur de stämmer in med dina åsikter och tankar. Påståendena ges på en skala 1-7, där 1 = Instämmer inte alls och 7 = Instämmer helt.

Jag SKULLE KÖPA ett hållbart tvättmedel eftersom den är:

	Strongly Disagree						Strongly Agree
Utan kemikalier	1.	2.	3.	4.	5.	6.	7.
Bättre för miljön	1.	2.	3.	4.	5.	6.	7.
Ha en högre kvalitet än motsvarande icke hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Bättre för min hälsa	1.	2.	3.	4.	5.	6.	7.
Slitstarkare än motsvarande icke hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Säkrare att använda till följd av hårdare kontroller	1.	2.	3.	4.	5.	6.	7.
Bättre för dina barn/din familj	1.	2.	3.	4.	5.	6.	7.
Mer djurvänlig	1.	2.	3.	4.	5.	6.	7.
Låter mig stödja lokala tillverkare	1.	2.	3.	4.	5.	6.	7.

I vilken utsträckning instämmer du i följande påståenden rörande produkten ovan?

	Strongly Disagree						Strongly Agree
Jag köper denna hållbara produkt trots att utbudet är begränsat	1.	2.	3.	4.	5.	6.	7.
Jag köper denna hållbara produkt eftersom fördelarna överväger kostnaderna	1.	2.	3.	4.	5.	6.	7.
Jag köper denna hållbara produkt då det är det rätta att göra	1.	2.	3.	4.	5.	6.	7.

Hur mycket är du villig att betala extra för ett hållbart tvättmedel i jämförelse med en motsvarande icke hållbar produkt?

- ❍ Mindre än 10% mer
- ❍ 10-25% mer
- ❍ 26-50% mer
- ❍ Över 50% mer



Det tvättmedel som visas på bilden ovan är en hållbar produkt. Tvättmedlet är skonsamt för miljön, det tvättar rent vid alla temperaturer och är anpassat för alla standardmaskiner. Förpackningen kan återanvändas och innehåller en anpassad skopa. Tvättmedlet är tillverkat i Sverige under förmånliga arbetsförhållanden. Paketet innehållet 0,75kg, vilket ger 14 standardtvättar.

Vänligen gradera följande påståenden utifrån hur de stämmer in med dina åsikter och tankar. Påståendena ges på en skala 1-7, där 1 = Instämmer inte alls och 7 = Instämmer helt.

Jag SKULLE INTE köpa ett hållbart tvättmedel eftersom:

	Strongly Disagree						Strongly Agree
Jag vill inte betala mer för hållbara tvättmedel än för motsvarande icke hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Jag har inte en tillräckligt stor budget för att köpa hållbara alternativ	1.	2.	3.	4.	5.	6.	7.
Jag är villig att köpa hållbara tvättmedel så länge priset inte är högre än för bekvämlighetsprodukter	1.	2.	3.	4.	5.	6.	7.
Priset på produkten har större inverkan på mitt beslut än produktens hållbara egenskaper	1.	2.	3.	4.	5.	6.	7.
De butiker jag oftast handlar i har ett begränsat utbud av hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Hållbara produkter finns enbart tillgängliga i ett begränsat antal butiker	1.	2.	3.	4.	5.	6.	7.

I vilken utsträckning instämmer du i följande påståenden när du handlar hushållsprodukter?

	Strongly Disagree						Strongly Agree
Det är svårt att bryta mina nuvarande köpvanor	1.	2.	3.	4.	5.	6.	7.
Jag köper inte den hållbara produkten på grund av det höga priset	1.	2.	3.	4.	5.	6.	7.
Jag köper inte den hållbara produkten eftersom det finns mycket liten variation bland de hållbara produkterna	1.	2.	3.	4.	5.	6.	7.
Jag köper inte den hållbara produkten på grund av brist på information rörande hållbara produkter	1.	2.	3.	4.	5.	6.	7.

Display logic: Use of randomizing function. The motives and barriers for the utilitarian product are equally randomly presented first in order to the respondents. Every respondent is exposed to both motives and barriers, just in different orders.

Föreställ dig att du planerar att köpa en ny bil när du stöter på produkten som presenteras nedan



Bilen som visas på bilden ovan är en hållbar produkt, en så kallad diesel hybrid och klassas i Sverige som miljöbil med fem års skattelättnad. Bilen har en snittförbrukning på 0,36 liter per mil och har utsläppsstandarden Euro 6, och är där med tillåten att framföras inom både miljözon klass 2 och 3 enligt trafikverket. Bilens elmotor ger 27 hästkrafter vilket gör att den totala effekten uppgår till 231 hästkrafter, och bilen klarar där med 0-100 på 6,4 sekunder.

Vänligen gradera följande påståenden utifrån hur de stämmer in med dina åsikter och tankar. Påståendena ges på en skala 1-7, där 1 = Instämmer inte alls och 7 = Instämmer helt.

Jag SKULLE KÖPA en hållbar bil eftersom den är:

	Strongly Disagree						Strongly Agree
Utan kemikalier	1.	2.	3.	4.	5.	6.	7.
Bättre för miljön	1.	2.	3.	4.	5.	6.	7.
Ha en högre kvalitet än motsvarande icke hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Bättre för min hälsa	1.	2.	3.	4.	5.	6.	7.
Slitstarkare än motsvarande icke hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Säkrare att använda till följd av hårdare kontroller	1.	2.	3.	4.	5.	6.	7.
Bättre för dina barn/din familj	1.	2.	3.	4.	5.	6.	7.
Mer djurvänlig	1.	2.	3.	4.	5.	6.	7.
Låter mig stödja lokala tillverkare	1.	2.	3.	4.	5.	6.	7.

I vilken utsträckning instämmer du i följande påståenden rörande produkten ovan?

	Strongly Disagree						Strongly Agree
Jag köper denna hållbara produkt trots att utbudet är begränsat	1.	2.	3.	4.	5.	6.	7.
Jag köper denna hållbara produkt eftersom fördelarna överväger kostnaderna	1.	2.	3.	4.	5.	6.	7.
Jag köper denna hållbara produkt då det är det rätta att göra	1.	2.	3.	4.	5.	6.	7.

Hur mycket är du villig att betala extra för en hållbar bil i jämförelse med en motsvarande icke hållbar produkt?

- ❍ Mindre än 10% mer
- ❍ 10-25% mer
- ❍ 26-50% mer
- ❍ Över 50% mer



Bilen som visas på bilden ovan är en hållbar produkt, en så kallad diesel hybrid och klassas i Sverige som miljöbil med fem års skattelättnad. Bilen har en snittförbrukning på 0,36 liter per mil och har utsläppsstandarden Euro 6, och är där med tillåten att framföras inom både miljözon klass 2 och 3 enligt trafikverket. Bilens elmotor ger 27 hästkrafter vilket gör att den totala effekten uppgår till 231 hästkrafter, och bilen klarar där med 0-100 på 6,4 sekunder.

Vänligen gradera följande påståenden utifrån hur de stämmer in med dina åsikter och tankar. Påståendena ges på en skala 1-7, där 1 = Instämmer inte alls och 7 = Instämmer helt.

Jag SKULLE INTE köpa en hållbar bil eftersom:

	Strongly Disagree						Strongly Agree
Jag vill inte betala mer för en hållbar bil än för motsvarande icke hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Jag har inte en tillräckligt stor budget för att köpa hållbara alternativ	1.	2.	3.	4.	5.	6.	7.
Jag är villig att köpa en hållbar bil så länge priset inte är högre än för bekvämlighetsprodukter	1.	2.	3.	4.	5.	6.	7.
Priset på produkten har större inverkan på mitt beslut än produktens hållbara egenskaper	1.	2.	3.	4.	5.	6.	7.
De återförsäljare jag oftast handlar av har ett begränsat utbud av hållbara produkter	1.	2.	3.	4.	5.	6.	7.
Hållbara produkter finns enbart tillgängliga hos ett begränsat antal återförsäljare	1.	2.	3.	4.	5.	6.	7.

I vilken utsträckning instämmer du i följande påståenden när du handlar bil?

	Strongly Disagree						Strongly Agree
Det är svårt att bryta mina nuvarande köpvanor	1.	2.	3.	4.	5.	6.	7.
Jag köper inte den hållbara produkten på grund av det höga priset	1.	2.	3.	4.	5.	6.	7.
Jag köper inte den hållbara produkten eftersom det finns mycket liten variation bland de hållbara produkterna	1.	2.	3.	4.	5.	6.	7.
Jag köper inte den hållbara produkten på grund av brist på information rörande hållbara produkter	1.	2.	3.	4.	5.	6.	7.

Bara några frågor kvar nu

Är du för närvarande bosatt i Sverige?

- ❍ Ja
- ❍ Nej

Vilken är din högsta avslutade utbildning?

- ❍ Grundskoleutbildning
- ❍ Gymnasial utbildning
- ❍ Universitets- eller högskoleutbildning
- ❍ Annan

Vilken är din huvudsakliga sysselsättning?

- ❍ Studier
- ❍ Arbete
- ❍ Föräldraledig
- ❍ Pensionär
- ❍ Annat

Vilken är ditt hushålls totala månatliga inkomst? (innan skatt) Skriv i SEK, exempelvis 20000

Hur många barn finns det i ditt hushåll?

- ❍ 0
- ❍ 1
- ❍ 2
- ❍ 3
- ❍ Mer än 3

- ❍ Vilken kön identifierar du dig med?
- ❍ Kvinna
- ❍ Man
- ❍ Annat

Hur gammal är du? Skriv din ålder i siffror, exempelvis 20

Tack så mycket för din medverkan

Ha en fortsatt bra dag
Med vänlig hälsning
Johanna och Kseniia