Consumers' Perception of Responsible Consumption in Sweden

An empirical survey studying consumers' perception about environmentally friendly products within the retail and electricity industry in Sweden

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Abstract: This thesis empirically examines consumers' perception of environmentally friendly products in Sweden. The study is based on survey responses from private consumers from the retail industry (supermarkets) and the electricity industry (electricity companies selling to private consumers). There is an ongoing debate about whether sustainability is merely a trend and if it is worth for companies to adjust to the changes that such a movement would require. Many organizations are trying to teach consumers about sustainability as an attempt to help consumers act more responsibly. To explore this topic and the perception that consumers are carrying today, a study was performed using online surveys on a random sample of 948 respondents. Gender differences were found in the responses regarding the retail and electricity industries. There was no significant age difference. Results also show that more respondents considered the environment to be important from the electricity industry compared to the retail industry. Female respondents appear to care more about the environment. The results of the survey give insights into the way communication could be adapted for consumers. By adapting the marketing done by companies and organizations, there is a possibility to increase responsible consumption.

Key words: environmental sustainability, perception, Corporate Social Responsibility, responsible consumption

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Introduction

Background

Sustainability has become close to a moral obligation for some people. For some consumers, sustainability has grown and become an influencer that people are realizing is something that affects almost all parts of their lives. Articles about sustainability and its rapid growth can be found in many well-known newspapers. Take *The Economist* as an example. They say that "the more people who graduate from programmes where a sustainable agenda is taught, the more business will be imbued with it" and "The pool of sustainability-savvy faculty will increase" ("Business schools and sustainability: Getting there," 2017). In another article, they talk about the difficulties in "getting businesspeople to understand that sustainability is not just a cost or a constraint" ("In the thicket of it - However faddish and fuzzy, the idea of sustainability is here to stay," 2016).

This paper will look deeper into how consumers perceive sustainability in the retail and electricity industries. The reason for this is to gain a deeper understanding of whether there are differences with regards to the perceived importance between the industries and discuss potential reasons for this. This can, in turn, help industries to move their consumers in a desired direction. With a clear understanding of where the consumers' perception differ, it may become easier to increase feelings of, for example, accountability, which would make the consumers more willing to act more sustainably.

When examining consumers' perception of sustainable consumption and consumers' perception of environmental sustainability in this thesis, the consumers determine whether they find it to be more environmentally sustainable or not. Sustainability gives us a case, where the change is also positive for other stakeholders as well. Options that are more sustainable than other, should, according to the definition, lead to a more sustainable use of the earth's resources. In this thesis, products or services that have been produced with regards to the environment will be referred to as sustainable products. Such products, may not be sustainable in every way, they can, however, be considered as "more sustainable" compared to a similar good where no consideration to the environment was taken.

Sustainability within two industries

The industries chosen for this study is the retail industry (supermarkets) and the electricity industry (private sector), due to their many differences. The market that this thesis will puts its focus on is in other words, private consumers and not business to business. That part of the industry will be left out.

The industries chosen were also picked because there are sustainable options for the consumers in both industries. Both industries are progressive when considering the availability of sustainable alternatives in Sweden. According to the suppliers' webpages, both industries have actors, such as Coop, ICA, God El and Telge Energi, that have taken sustainability into consideration in their production in Sweden ("Coop - Hållbarhet," n.d., "elskling - frågor och svar," n.d., "ICA tar ansvar - Miljö," n.d.).

Potentially, this ensures sustainable alternatives to be available on the market, which enables consumers to buy brands and products that are more sustainable if they wish to. Due to this, companies and/or the industries have already framed the possibilities for the consumer to some degree. In many ways, this might affect the perceptions of the consumers drastically.

The supermarket and electricity industries in Sweden are different with regards to several points. The food industry is "characterized by (1) multiple buying goals that must be achieved through the processing of complex array of in-store stimuli such as products, brands, and point-of-purchase information, and (2) repetition at regular time intervals (e.g., once a week)" (Park, Iyer, & Smith, 1989). The electricity industry for private consumers, on the other hand, has close to the opposite characteristics; (1) Electricity includes few goals and can be achieved through online purchases or contact with a seller. Electricity companies usually direct private consumers to contact them by phone, and do not mention any address to visit ("Vattenfall - Contact us," n.d.). This indicates that most service is given via phone or online. (2) The choice of supplier is done more seldom, since the consumer usually buys all their consumption on a yearly basis. That is, the electricity used within the homes of the consumer.

A supermarket sells tangible products that offers us value that the consumers are facing in their everyday life. Consumers consider food several times a day due to our eating habits. Most people probably do some planning concerning what they should buy and what they should eat, as is therefore commonly sold directly to the end consumer. Food is usually not bought via subscription even though this is starting to enter the market. Services such as "Linas matkasse" are services that started appearing on the market around 10 years ago ("Tjänsten - Linas Matkasse," n.d.).

Electricity is rather an intangible service. Consumers use it constantly but it is not purchased as often due to the way society is built up; consumers do not make a purchase decision about electricity daily. Since the choice is done more seldom in the electricity industry for consumers, the decision is many times not done by all the end users. For example, one person decides for an entire home. The decision is often done by one person who decides for an entire building or household. In other words, electricity is usually bought in larger amounts for a longer period, usually a contract in a form of subscription. When consumers walk into a café, they will not be charged for electricity on their receipt, even if electricity is actually what they are paying for. Instead it will be included in the cookies or the coffee. This means that consumers may not be fully aware of how much their electricity actually accounts for and how much electricity they are using daily. In some cases, where accommodation is sold or if a hotel is rented out, it is possibly to pay for the electricity separately. This is, however, very unusual on the Swedish market.

These differences give us reason to believe that the perceptions for each industry might be different. With regards to this, the research purpose of this thesis is formulated below.

Purpose

The purpose of this thesis is to empirically investigate the following question "How do consumers in Sweden perceive the retail and electricity industry with regards to products that have been produced with regards to the environment?". This question has been divided into four specific questions.

- How do consumers perceive the importance of environmentally friendly products?
- How do consumers perceive their own consumption of environmentally friendly products?
- How do consumers perceive the importance of knowing whether products are environmentally friendly or not?
- How do consumers perceive their own awareness regarding their consumption of environmentally friendly products?

When investigating how consumers perceive the retail and electricity industries, the environment is a subject that will be interpreted by the consumers themselves. Depending on what the consumers consider to be included in the environmental consciousness that is mentioned, their answers will vary with regards to their interpretation. Similarly, the term "products" will be used for both services and products.

With a sample that can be considered to be representative of the population in Sweden, the findings from this data should contribute with an understanding of the way consumers perceive environmental consciousness within the retail and electricity industries as well as filling a gap in prior research. There is a lack of knowledge about how consumers' perception differs between industries when looking at consumers' perception of sustainability (whether products are produced with regards to the environment or not). This is a topic that is relevant for both academics and practitioners. With an increased understanding of the way in which consumers' perceptions within this topic might be different, the perspectives on both the perceptions and the topic of sustainability will be deepened.

Out of scope

The thesis will focus on the perceptions and opinions of the consumers. The actual behavior will not be assessed. It is merely the respondents' subjective views that is considered. This means that the products that they perceive to be environmentally friendly, might qualify as environmentally friendly according to other measures. No assessment of whether the products are sustainable or not will be made. Sustainability and environmentally friendly products are considered synonymous in this thesis. When looking at the word sustainability in other circumstances, more aspects would normally be included. For example, the social aspects of sustainability would be included when considering sustainability in the context of both organizational and societal sustainability. This thesis will, however, not look at this. This thesis solely takes environmental sustainability into consideration due to limited resources.

Theoretical framework

Introduction

Several areas of research will be reviewed. A general overview of the available research on sustainability will be given. This is interesting with regards to the fast-changing conditions consumers live in today. Sustainability is only one of many things consumers occupy their minds with today. Researchers have pointed out that there is a need for communities to adapt to the turbulence in society due to the volatility, uncertainty, complexity, and ambiguity that describes the current situation (Bennett & Lemoine, 2014). It is understandable that it is difficult for consumers to continually adjust and to make decisions that they think are the best option.

In addition to this, consumers' perceptions of sustainability and its impact on consumption within the retail and electricity industry will be reviewed. From a marketing perspective, this is important since it determines the outcome of the buying situation. Behavioral beliefs, normative beliefs, and control beliefs are presented as some of the building blocks when depicting the steps within "the reasoned action approach" (Ajzen & Fishbein, 2005). These beliefs are closely related to a person's perception, which the model also depicts. From these beliefs, Fishbein and Ajzen (2005) uses the terms attitude, perceived social norms, and perceptions of control to define what follows those building blocks. This, in turn, leads to intention and, ultimately, behavior. According to this research, a person's attitude and perception is what defines his or her intention and behavior.

Sustainability

The definition of sustainability was based the research behind "The Natural Step" (Robèrt & Broman, 2017). They concluded that in a sustainable society, nature is not systematically subject to…

1. Increasing concentrations of substances from the earth's crust
2. Increasing concentrations of subjects produced by society
3. Degradation by physical means
4. And in that society, there are no systematically hinders for peoples' health, influence, competence, impartiality, and meaning.

Many people feel a need and/or want to act in a sustainable way today (McDonagh & Prothero, 2014). Simultaneously, there are several perceived hinders, such as price and availability, causing consumers not to buy environmentally friendly products every time (Cowan & Kinley, 2014). This makes sustainability an interesting case to study. For example, research shows that people's behavior is affected by the intensity of the feeling of being accountable. As the consumers' feeling of accountability increases their willingness to buy sustainable products increases (Peloza, White, & Shang, 2013). This research was done with respect to ethical questions and the feeling of accountability was triggered by activating anticipated guilt. This was done in three different ways in

three studies. The first one involved awareness of discrepancy between actual and ought selves, the second one involved primed self-accountability and the last one simply involved the presence of others (Peloza et al., 2013).

There is a vast increase in the research done about sustainability. In the last two decades, the research done on the topic of sustainability has increased steadily. In the year of 2000, the number of academic research articles published within all disciplines was around 4,000 and sixteen year later the number has increased to over 40,000 ("Scopus," 2017).[1] The same pattern is seen when looking at the more general term "environment". In 2000, there were about 70,000 academic research articles written about the topic and in 2016, the number has increased with more than three times as many. In 2016, the same number was 235,000 academic research articles ("Scopus," 2017).[2] To some extent, this defined the focus of the society, which has an effect on the consumers' perception.

Additionally, media is publishing both findings from research and subjective ideas about global warming, sustainability and the environment (Greenpeace, 2016; National Geographic Partners, 2017; Union of Concerned Scientists, n.d.). The need for sustainability is often portrayed in a way that threatens the consumers. Compared to the research being published, this might have an even greater effect on the population and the way consumers decide to act environmentally friendly or not.

Perspectives on Corporate Social Responsibility

Today, there is also research about what is called corporate social responsibility (CSR). This can be considered as the companies' responsibility towards sustainability even if this is something that has been questioned by, for example, Milton Friedman, who received the Nobel Memorial Prize in Economic Sciences (The Nobel Foundation, n.d.). He took a critical perspective towards CSR. He does not include any corporate responsibility in the definition of a company or shareholder in his book Capitalism and Freedom and means that "There is one and only one social responsibility of business – to use its resources and engage in activities designed to increase its profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud." (Friedman & Friedman, 1962). Some people might question "the rules of the game" and if acting in an unsustainable way could be considered as deception or fraud. However, as long as this is not included in the judicial system it remains a philosophical question.

Researchers continue to explore the questions surrounding the debate about whether it is a responsibility carried by companies or not. Schwartz & Saiia (2012) talked about two sides of the

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[1] The search on Scopus was done by searching for sustainab* in Scopus, which includes all words starting with "sustainab" such as sustainability, sustainable etc.
[2] The search on Scopus was done by searching for environment* in Scopus, which includes all words starting with "environment" such as environmental, environments etc.

debate regarding CSR. The two sides include Milton Friedman's view, the "narrow view", and the "broad view" (i.e., beyond profits). In the conclusion of their case analysis of these two point of views, they suggest there should be a synthesis of the CSR approaches (M. S. Schwartz & Saiia, 2012).

Some researchers have concluded that there is an "ideal" level of CSR. Managers can determine this level via cost-benefit analysis. It has been stated that there is a neutral relationship between CSR and financial performance (McWilliams & Siegel, 2001).

A critical perspective on social responsibility is that CSR may be a trend that will fade out eventually. Trends are resource consuming. To act environmentally friendly is, for many, not seen as an alternative, due to their priority of earning short term financial profits over contributing to the vision of a sustainable society ("Härifrån till framtiden," 2010). One reason for this, may be the view of sustainability and the possibility that it is merely a trend that will pass. There is no certainty that the expectations on CSR will continue to grow and the view on CSR has been called fluid and evolving (Cone, 2013). This indicates that the market is still volatile with regards to actors' viewpoints on CSR and them might not settle in the near future. The attitudes and perceptions of consumers are, partly, dependent on such trends in the market, as this is what shapes our personal beliefs. CSR, may simply be a trend that is about to pass. This makes it up to the companies if they want to involve in sustainability questions because it is a "good thing" or simply wait for the consumers to change their focus onto something else. If consumers are not certain of whether sustainability is simply a trend or an emerging reality, the consumers are still in the phase of figuring out whether this is something they want to include in their own life or not. At the same time, this uncertainty is something that some researchers want the population to embrace. Marshall et al. (2010) argued that there is no longer a question about whether the world needs systems thinking for example. With an increased human and social capital, where scientific inquiry based on relevant problems and real phenomena is pursued, people will be able to contribute and partake in the paradigm shift of sustainability. One way of increasing human and social capital in business schools is by implementing "flexible and meaningful hiring and retention policies" and enhancing "opportunities for intellectually stimulating, interdisciplinary scholarship and teaching" (Marshall et al., 2010). They see this paradigm shift as something that "necessitates the transformation of the conduct of commercial enterprise and the content of business curricula" (Marshall et al., 2010).

Does CSR carry motivation and hygiene properties?
Research about CSR gives insights for both private consumers as well as companies. An article about the link between competitive advantage and CSR has propelled the efforts of companies even more (Porter & Kramer, 2009). The article put focus on the value of CSR, as opposed to merely seeing the altruistic reasons, which contributed with a new way of approaching CSR for both companies and consumers. It has also been shown that CSR efforts may benefit companies by motivating stronger consumer loyalty. This was done by "investigating the role of motivation and hygiene on CSR effects

regarding customer relationships and positive WOM" through a team franchise of the National Basketball Association (NBA) (Lacey, Kennett-Hensel, & Manolis, 2015).

One perspective is that the CSR-work done by businesses is part of the supply and demand. This can give some directions with regards to whether companies should put resources into finding ways to act environmentally friendly. One view is that companies need to adjust to this change to be profitable, because consumers have started demanding it. Researchers stated that "It is increasingly apparent that more consumers are beginning to view sustainable practices as a must-have rather than a nice-to-have characteristic" (DeLong & Mehalik, 2013; Hillman & Keim, 2001). When looking at the role CSR has on consumer loyalty, it has been concluded that "companies that raise consumers' perceptions of their social responsiveness will likely experience important benefits" (Lacey et al., 2015).

However, there is also empirical research that says that companies that raise consumers' perceptions of their social responsiveness will likely experience important benefits (Lacey et al., 2015). Specifically, an important condition for sustainability within companies might be a step towards a more customer-oriented organization (DeLong & Mehalik, 2013). This can be done by structuring the organization around the customers, instead of the products. It can also be done by letting the research and development unit focus more on consumer needs and values. According to the authors, this might be a significant driving force for achieving sustainability (DeLong & Mehalik, 2013). This puts requirements on companies to choose in what way they want to supply what their consumers demand and desire. The main point is that it is no longer a question about a responsibility then but rather something that is done for the company's profit.

Lacey et al. (2015) have also predicted that there may be a potential dissatisfaction among customers that will arrive when more consumers becomes conscious about CSR. With increasing demands from consumers already, there is a risk that companies that have not changed with the consumers, will lose against their competitors who choose to produce products with regards to the environment. Companies that match their CSR initiatives with their consumers' rising expectations can reduce tension and curb potential dissatisfaction. (Lacey et al., 2015)

This is also in line with the scenario where sustainability is continuously being important for consumers. If the current CSR-trend persists, researchers came to the conclusion that CSR "may eventually be viewed less as a relationship motivator and more as one necessary precondition for successful corporate marketing performance" (Lacey et al., 2015). In this case, it would be worth investing in CSR right away to stay attractive for consumers. An argument for incorporating it in the business is also the fact that CSR has already been shown to have a "strong motivating effect" on key consumer attitudes and behavior. In other words, it can create positive effects even if it "appears to possess both motivation and hygiene properties" (Lacey et al., 2015). Therefore, marketing

communications aimed at encouraging consumers to get excited about and support CSR initiatives are not only appropriate but important (Lacey et al., 2015).

How consumers perceive sustainability

Most individuals relate to climate change through personal experience, knowledge, the balance of benefits and costs, and trust in other societal actors (Lorenzoni & Pidgeon, 2006). These beliefs and attitudes will have an impact on how consumers perceive sustainability and their purchase intention when it comes to buying environmentally friendly products (Jobber, 2007).

When companies try to encourage their consumers to get excited about and support CSR initiatives, research points to the need of this communication being "fact-based and void of hyperbole to combat those skeptics who predominantly perceive CSR as a marketing tool" (Lacey et al., 2015; Vlachos, Tsamakos, Vrechopoulos, & Avramidis, 2009). They also underlines that "companies also need to follow up on what they are saying about their CSR efforts, as this will have a huge effect on the consumers' attitudes towards CSR" (Lacey et al., 2015). Consumers' perception of CSR is affected by "concerns about why the firm is engaging in such communications" (Lacey et al., 2015).

Risk perception is an important part of how consumers perceive sustainability and the importance of buying products that have been produced with regards to the environment. In general terms, "Risk taking involves the implementation of options that could lead to negative consequences" (Byrnes, Miller, & Schafer, 1999). By using this very broad definition, the amount of risk will partly be defined by subjective opinions of the subject who is making the decisions. He or she will, define themselves what is a negative consequence or not. Applying this on the topic of sustainability, the consumers will be affected by risk to different degrees when deciding if they want to act environmentally friendly or not.   This will partly depend on how much of a risk one perceives in buying, or not buying, sustainable products. One suggested reason for this is that emotions lead to an increased awareness of climate change because emotions "are important determinants in risk perception" (Roeser, 2012). "This awareness may motivate actions directed at the issue" (Roeser, 2012).

Lacey et al. (2015) concluded that "consumers demand [CSR efforts] and place relational value on it". After accounting for individual demographic characteristics, their findings show that consumers who regard CSR as a strong motivator and as a strong hygiene factor, "the impact of a company's CSR initiatives stand to strengthen their relationships with those consumers" (Lacey et al., 2015). For consumers that regard CSR as a weak motivator and as a weak hygiene factor, "the impact of a company's CSR initiatives will have much less impact on the strength of their relationships with those consumers" (Lacey et al., 2015). The value of strengthening the relationship with your customers can be large, which is why Lacey et al. continues to argue that since CSR efforts has such a strong motivating factor, it is worth trying to increase the customers' engagement regarding the topic.

Consumers' perception of products that have been produced with regards to the environment

Retail industry

Decisions and economic considerations have moved from the societal level to the individual within the supermarkets. In the situation of entering a supermarket, there are many products to choose from today. Compared to 100 years ago, "about eighty percent of the food on shelves of supermarkets today didn't exist" (McCleary, 2011). Consumers are given large amount of information about the products in a supermarket. However, "many consumers seem to give little thought to the links between their consumption behaviors and the process of food production (de Boer, Boersema, & Aiking, 2009)" (Krystallis, Grunert, Barcellos, Perrea, & Verbeke, 2012). This means that their attitudes may not be influenced by thoughts about transportation, energy use, construction and food production to a large extent. In fact, research shows that "many consumers underestimate the ecological impact of animal production" (Vanhonacker, Van Loo, Gellynck, & Verbeke, 2013). They say that "Well-known alternatives… are accepted, although willingness to pay is clearly lower than willingness to consume". In other words, the expense is one of the hinders that stops consumers from buying sustainable food. Another example of an obstacle when it comes to purchasing organic foods is consumers' perception that it is "not easily available," due to an "inconvenient location at point-of-sale," which makes it more "time consuming" (Zanoli & Naspetti, 2002).

There are many variations to take into considerations as a supermarket consumer, including things such as whether or not to buy food that is organic (such as USDA Organic), locally produced, that only has ingredients that are known for destroying natural resources such as forests, whether it has been genetically modified etc. The effects these choices have on the planet and the aim to act sustainable is not very straight forward. It is a question of whether consumers are aware of the consequences of their actions and whether they care about them. Any good produced will most likely have both positive and negative consequences. It cannot be guaranteed that locally produced food is better than food produced internationally in terms of the effect it has on the environment. Therefore, it is more about creating awareness and gaining knowledge within this field.

People's interest for cultivating their own food is continuing to grow and the number of people who are environmentally aware is continually increasing ("Härifrån till framtiden," 2010). This means that more and more people are becoming concerned about sustainability and keen on decreasing the environmental impact. Furthermore, "food supply chains are confronted with increased consumer demands on food quality and sustainability" (van der Vorst, Tromp, & van der Zee, 2009). This means that the attitudes have already adjusted to environmental issues.

Gender and sustainability

In previous research, attempts to find gender differences has been made on studies on fair trade for example. Researchers found that "women reported more favourable attitude, higher moral obligation, and stronger intentions toward buying [fair trade] products" compared to men (de Leeuw, Valois, Morin, & S.Schmidt, 2014). There are several interesting aspects about this statement. In addition to attitudes, moral obligations are applicable when looking at sustainability in general, which should, therefore, also be applicable for a wider set of products and not only fair trade.

Research has shown that women prefer a more caring morality compared to men (Stimpson, Jensen, & Neff, 1991). When it comes to the environment, the topic of sustainability is largely about caring for the environment. The reason for this is that it comes down to the felt preferences to give care and nurture. Connecting this to a study by de Leeuw et al. (2014), it is in line with their finding that women have stronger intentions towards buying fair trade products (de Leeuw et al., 2014).

Environmental sustainability can also be looked at from a risk perspective. Research has showed that females are more risk-averse than men, which means that they might look at the environmental issues as a bigger problem (Sjöberg, 2013). This might drive females to act more sustainably than men, due to a sense of urgency felt stronger by women.

Social identity theory was used to explain the phenomenon of gender differences as men and women might relate to CSR differently. Females appear to identify more strongly with social groups that value CSR higher compared to men. This seems to increase the probability of them perceiving a greater importance of taking the environment into consideration (Bartels & Hoogendam, 2011). In their study, Bartels & Hoogendam (2011) used an online panel study and found that people who are aware of their social identity concerning environmentally friendly consumer groups also seem to feel more attached to consumers who buy organic food products. Social identity has been defined as "the individual ' s knowledge that he (or she) belongs to certain groups together with some emotional and value significance to him (or her) of the group membership" (Tajfel, 1972). This is interesting since it indicates that by identifying with a social identity, the gap between a person's attitude towards sustainability and their behavior can be decreased.

Electricity industry

Much research and articles have been written about decreasing the usage of electricity, but there is not much written about other measures people can do to decrease the negative aspects of how electricity affects the planet (Grønhøj & Thøgersen, 2011). This has made sustainability narrowly defined in this industry as not much effort has been put on educating the consumer on the supply chain. For example, it is difficult to find information about how the energy stations were produced. More information can also be given with regards to how much energy different appliances need. Consumers could benefit from knowing if they are above or below the average spending of electricity in their country. Lesic (2015) also shows that there is a misconception of how much energy is used and depending on if we

communicate in terms of financial means or kWh there is a different understanding of how much energy is being used (Lesic, 2015). In other words, it is difficult for consumers to stay updated about the different effects energy production has on the planet.

Despite this, decisions and economic considerations have moved from the societal level to the individual also within the electricity industry. When looking at the electricity market, 100 years ago the choice about our electricity was made by the government and that was the only alternative to choose, unless they made their own electricity (B. Schwartz, 2009). This was most likely a contributing factor that increased the consumers' concern about electricity and has, in turn, affected their perception of the industry. In Sweden today, electricity is something that consumers are close to taking for granted. Electricity is something that consumers buy to be able to use other appliance in our houses; to heat up in our homes and the get light is not the main purpose of the electricity. That is more of an outcome that is expected within the Swedish society, which had a drastic increase in their electric consumption already in the beginning of the 1980s (The World Bank, 2017).

In Sweden, there is a website called "Elskling" which has the purpose of helping consumers compare different energy producers. This should make the decision easier for the consumer and increase the awareness about the fact that there are many renewable energy options on the Swedish market ("elskling - frågor och svar," n.d.).

Grønhøj & Thøgersen (2011) developed a technology that measured the electricity consumption within households and provided detailed feedback about the electricity consumption on a small liquid crystal display (LCD). The aim was to support sustainable living in private households. The research was carried out by studying twenty Danish households over a five months period, while giving them detailed feedback about their electricity consumption. Consumers' knowledge about their own electricity consumption resulted in an increase in energy saving of 7.3% compared to the control group. The changes happened within the same year of the intervention in Denmark (Grønhøj & Thøgersen, 2011). The consumers were able to respond quickly and could make adjustments to their choices right away. Previous to the intervention, the motivations and their attitudes regarding their motivation to save electricity were different. This indicates that there is a lack of knowledge about their own electricity usage and that an increase in knowledge influences their attitudes about their view on sustainability in the electricity market. By exposing the participants to feedback information about their own behavior, it became possible for some participants to "move from completely ignoring their electricity consumption to start paying attention" (Grønhøj & Thøgersen, 2011). This research indicates that there is no need for the consumers to act with consideration towards the environment, to begin with, which also signals that there is a low probability that they are concerned about an ecological labelling of their electricity. However, things will most likely have changed since 2011, and people might be more concerned today six years later.

According to EcoAlign, increased "levels of consumer engagement and a willingness to consider different options including premium services and pricing opportunities" within electricity is becoming apparent (EcoAlign, 2011). With a change in their mindset, it increases the probability that they will start considering where their energy is from.

The lack of knowledge regarding the electricity industry could potentially create a larger worry for consumers as they are starting to become more aware about the negative effects our modern behavior has on the environment and do not know how they act sustainably when consuming electricity. In the retail market, they might feel as if they have more control over the situation and that there are many alternatives to buy things that they believe are more sustainable than other options.

Conclusion of introduction

The purpose is to examine the following research question "How do consumers in Sweden perceive the retail and electricity industry with regards to products that have been produced with regards to the environment?". This will be done in combination of looking at four additional aspects. Each question serves to answer one part of the purpose and collectively they should give a more conclusive answer.

- How do consumers perceive the importance of environmentally friendly products?
- How do consumers perceive their own consumption of environmentally friendly products?
- How do consumers perceive the importance of knowing whether products are environmentally friendly or not?
- How do consumers perceive their own awareness regarding their consumption of environmentally friendly products?

Furthermore, the consumer will be identified through their gender and age and comparisons among the questions can be made. This makes it possible to understand if there are differences between gender and different age groups.

Method

Scientific approach

Three different research approaches could have been applied; deductive, inductive or abductive (Bryman & Bell, 2015). An inductive approach was preferred due to the explorative nature of the study. This allowed the focus to be on understanding dynamics between different people's perception of environmental communication. For this thesis, the survey was conducted for the purpose of finding patterns, which then resulted in an analysis that could be related to theory. This is explained similarly by Lodico, Spaulding & Voegtle (2010) "inductive reasoning is often referred to as a "bottom-up" approach to knowing, in which the researcher uses observations to build an abstraction or to describe a picture of the phenomenon that is being studied" (Lodico, Spaulding, & Voegtle, 2010). With large number of data points, it was also possible to analyze both individual and group attributes.

The research question for this thesis were broken down into four different aspects of perception and sustainability, they are specified in the section "Survey design". Quantitative data was used to examine four aspects with regards to how individuals perceive the importance of environmental friendliness. This was done with regards to supermarkets and electricity companies. For this, it is useful with large amounts of data to be able to draw any conclusion about potential differences in their attitudes. Likert-type scales were used to enable comparisons of large data set.

Pre-study

Before the survey was finalized and sent out, the questions for the survey were discussed and tested on consumers within the two industries picked. The people for the pre-study were gathered in a location at the Royal Institute of Technology in Stockholm. They were all female students between the ages 24 and 25. The test-respondents got the questions in a word document on a computer and could read all the questions by themselves. The reason it was done this way, was so that it would be similar to the situation a respondent would be in when they are taking the survey. By having the respondents talk about what they were thinking when looking at the questions and considering what they would answer, it gave input to how the questions could be reformulated in a clear and suitable way for the purpose of making it easy to understand and not leave much room for interpretation.

The changes after this pre-study included the removal of the word sustainability and restructuring of the questions. One finding during the pre-study was that words such as "sustainability" should not be used as it requires both knowledge and an interpretation of the word to answer it. Therefore, the word was changed to a more descriptive phrase, namely "products that have been produced with regards to the environment". The phrase "consider the following statement" was also added in order to make the sentence easier to understand for the respondents.

Survey design

The survey design was influenced by surveys that have been used to measure attitudes regarding sustainability previously (Dascher, Kang, & Hustvedt, 2014; Ng & Burke, 2010; Thomas, 2005). Four questions were asked to capture consumers' attitude towards sustainability. In addition to this several background questions were asked. For example, age, gender, county and whether they are consumers in the industry in question were asked. All the questions can be seen in the appendix. The purpose of the survey was to understand more about the respondents' perception of how they act and what they think. This should give an idea of the participants' perception of sustainability.

With the findings from the pre-study, the survey was constructed around four aspects based on the four research questions mentioned previously. These questions covered different aspects of the respondents' perception regarding environmentally friendly products and allowed for the right specificity within the questions. The questions asked in the survey are presented below. The "X" represents the terms "supermarkets" and "electricity companies" which were used for the retail industry and the electricity industry separately. In the survey, the questions were asked in Swedish and the following questions have been translated into English. In the appendix, the questions are available in Swedish.

1. Consider the following statement: "It feels important to me that what I buy from X has been produced with regards to the environment."
2. Consider the following statement: "What I buy from X has been produced with regards to the environment."
3. Consider the following statement: "It feels important for me to know if what I buy from X has been produced with regards to the environment."
4. Consider the following statement with regards to what you think about during the purchase situation: "I think about the fact that not everything I buy from X has been produced with regards to the environment"

All questions were answered with Likert-typed scales with the range 1-7. According to Bryman & Bell (2015), this is one of the most frequently encountered formats for measuring attitudes (Bryman & Bell, 2015). Words were added as indications for three of the alternatives, to give the respondents indications of what the points on the scale meant. Number 1, 4 and 7 were defined (1 = It is never correct/ I do not think about this in any purchase situation, 4 = It is correct half of the time/ I think about this during half of the purchase situations and 7 = It is always correct/ I think about this in every purchase situation). Question number 1, 2, and 3 was answered with the first alternative, whereas the second alternative was used for question number 4. The respondents created their own interpretation of what 2,3,5, and 6 means, while also getting some guidelines when interpreting the scale.

With the use of Likert scales, which are easy for respondents to read and understand, the questions should be more easily answered (Clow & James, 2014). All questions also had the alternative of "Do not know" to avoid "forcing people to express views they do not really hold" and thereby increasing validity (Bryman & Bell, 2015). The three alternatives were the same for the first three questions and adjusted for the last question when the consumer was supposed to imagine that they were in the situation. Then the alternative was formulated in a slightly different way, which is demonstrated after the slash-sign.

The description of what is being measured in each question is described in greater detail below. Their connection to consumers' perception and the importance of the environment are also discussed.

- Question 1 tested participants' perception of how often sustainability feels important in the purchase situation. This will be referred to as *"perceived importance"*. The purpose was to examine if the consumers want to buy products that are considered to be more sustainable or not. The respondents' answers gave an indication on how often it feels important for the consumers to buy products that have been produced with regards to the environment. This should give an overall idea of whether sustainability is of importance and an understanding of the frequency at which it feels important. This is interesting as it can be checked in combination with the other questions to ensure that the perception is not merely based upon one question.

- Question 2 tested the participants' perception of how often they buy sustainable products. This will be referred to as *"self-reported behavior"*. This question was asked to examine how often the consumers perceive themselves to buy products that they consider to be more sustainable or not. Considering something to be important is merely one side of the story. To follow up on what one considers to be important puts it in relation to all the other things a consumers spends his or her resources on.

- Question 3 tested the participants' perception of how often the knowledge of whether something is sustainable or not feels important in the purchase situation. This will be called *"perceived importance of knowing"*. With the question about knowledge, the goal was to evaluate if the consumers were aware of their perception of sustainability in the purchasing situation or not. This question was supposed to examine the same aspects as question 1, with some small differences. The consumer might consider it to be important but they do not think in those terms during the purchasing situation. This question puts the consumer in the context of the purchase situation. Once a consumer is in the purchasing process, it will be applied to the industry even more. This makes it interesting to see if there are differences between the industries for this question specifically.

- Question 4 was used to evaluate the self-reported awareness during the decision-making process. This required the consumer to be able to look at the situation more objectively and keeping the fact that they do not always buy sustainable products in mind. This will be called *"Self-reported awareness"*. This question examined if the consumers were aware of whether the products are produced with regards to the environment in the purchasing situation or not. The question was used to understand the consumer's awareness of environmental aspects when looking the supply of the store. The question puts the respondents in a situation where they could imagine themselves in a situation, where they are about the purchase a good for the industry in question. This question has the possibility to differentiate people from one another. The people who answer a high value for this question are most likely people who are more committed to acting sustainably and environmentally friendly than other people. The reason for this is that it requires more reflection and environmental consciousness in order to be thinking about this in the moment of a purchase.

Table 1 summarizes how each question contributes to determining the attitudes of each respondent.

Table 1: Summary of the description for each question

#	Question*	Short name of question	Description of what is being measured (in short)
1	Consider the following statement: "It feels important to me that what I buy from X has been produced with regards to the environment."	Perceived importance	Whether it feels important that products are produced in an environmentally friendly way
2	Consider the following statement: "What I buy from X has been produced with regards to the environment."	Self-reported behavior	Whether the participants think they act sustainably
3	Consider the following statement: "It feels important for me to know if what I buy from X has been produced with regards to the environment."	Perceived importance of knowing	Whether it feels important to know if the products being bought are produced in an environmentally friendly way
4	Consider the following statement with regards to what you think about during the purchase situation: "I think about the fact that not everything I buy from X has been produced with regards to the environment."	Self-reported awareness	Whether the participants are conscious of their own awareness regarding environmental sustainability

* The "X" represents the terms "supermarkets" and "electricity companies" which was used for the retail industry and the electricity industry separately.

The questions were asked with regards to specific aspects instead of a general statement about the respondents' perception. Instead of asking "how do you perceive the importance of the environment?", the aim was to get indications about how the respondents perceive more specific aspects about the importance of the environment. With more specific answers, it was possible to look at the overall picture of the consumers' perception and taking all the answers into consideration at the same time. This is similar to asking the same question in several ways, by only changing some words. The respondents' answers can be looked at as one question with greater certainty.

The questions were supposed to lead the respondent's mind to a suitable "place". For example, one of the questions was supposed to be answered with regards to what the respondent thought about when they were in the purchasing situation. This was written out clearly by stating "…during the purchase situation…". The reason for doing this, was to give the respondents a chance to put themselves in the situation of being in the store. This was also adjusted in the answer alternatives (as mentioned above).

Research Process

There were three different aspects that were considered at the start of this study, namely sustainability, marketing and decision-making. By considering all three topics and talking to people working within the field, the topic of responsible consumption was decided upon for this thesis.

With the help of the pre-study, the survey could be finalized and sent out. The collection of data was financially supported by the company SB-insight AB, a consultant company within sustainability communication and consumers' perception of sustainability branding done by companies. The data was collected between 2017-02-28 and 2017-03-16, using online surveys and a program called Nebu Dub Interviewer. The four questions were a part of a larger survey about sustainability, where all questions had a focus on sustainability.

In accordance with an inductive approach, the data from the surveys was analyzed to find patterns in an explorative manner. As a last step, the patterns were connected to theory and the results were discussed to find additional perspectives on the topic. Generally, the research approach was not structured in a way that each of these steps came after each other. The steps were often done in parallel to each other. The step of finding patterns and connecting the collected data to theory was repeated several times. In addition to this, new theories were added and some were removed.

The participants answered questions regarding their consumption of products within the retail industry (private consumers within supermarkets) and electricity industry (private consumers from electricity companies). The respondents were randomly given an industry to answer the questions for. In other words, it is not known how much they know about the industry or whether they are frequent consumers or not. Their answers give insights into their perspective as a consumer within the industry.

Respondents

With the coverage of all of Sweden, a good spread of the ages and a large number of people, the sample can be considered to be representative of the Swedish population (Gorard, 2010). Individuals from all 21 counties in Sweden answered the survey. The respondents were found by using panels for which they had been recruited via online applications. This makes it a random sample of respondents. The people who answered the survey were in the ages 16-70. There were 948 respondents who answered the survey. Out of these, 408 respondents answered questions only regarding supermarkets, and 427 people answered questions only for electricity companies. In addition to this, 113 respondents answered questions for both industries.

This gave us 521 answers regarding supermarkets and 540 answers regarding electricity companies, a total of 1061 replies.

All of the "Do not know"-answers were marked as missing values for the purpose of not shifting the mean. The number of respondents who answered "do not know" for all four questions within an industry was 34, which gives us 1027 valid sets of responses.

Table 2: Sample of respondents for each industry

		Percentages of respondents in the sample		
		Retail Industry (N=408)	Electricity Industry (N=427)	Both Industries (N=113)
Gender	Female	47.5	46.4	48.7
	Male	52.5	53.6	51.3
	16-19	4.9	4.9	3.5
	20-29	15.7	16.6	12.4
	30-39	17.6	15.5	23.9
Age	40-49	15.4	22.5	20.4
	50-59	21.3	19.4	16.8
	60-69	23.0	19.2	20.4
	70	2.0	1.9	2.7

The correlation within the response data was checked with the internal reliability test, Cronbach alpha. This was done for both the retail industry ($\alpha = 0.902$) and the electricity industry ($\alpha = 0.906$). The responses correlated strongly. The figure 0.8 is, according to Bryman and Bell, "typically employed as a rule of thumb to denote an acceptable level of internal reliability" (Bryman & Bell, 2015). Therefore, two indexes were made. The composition of these indexes was described in Table 2.

Variables for analysis

The following variables will be used for an explorative analysis.

- Industries – the retail industry and the electricity industry.
- Gender (background questions asked and answered by all of the respondents)
- Age (background questions asked and answered by all of the respondents. This variable was recoded by creating dummy variables for the following age groups: 16-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70.)

With regards to the methods used when analyzing the data the following tests and arrangements of data were used.

- Frequencies and the use of an index was created for the analysis.
- Correlation coefficient
- Cross tabulations
- Contingency coefficient and t-tests
- The use of dummy variables when the correlation coefficients did not show any significance.

Results

Frequencies

The perception of how important it is that products are produced with regards to the environment was analyzed with regards to supermarkets and electricity industry separately first. Table 3 and 4 include the respondents who answered the questions with regards to the retail industry and the electricity industry separately. Both tables include the respondents who answered the survey for one and two industries.

Table 3: Proportion of the answers for the questionnaire for the retail industry

Question	Percentage of respondents who answered the different scale alternatives (N=521)							
	1[A]	2	3	4[B]	5	6	7[C]	Do not know
1. Perceived importance	4.0	4.4	10.6	30.7	20.7	20.9	7.7	1.0
2. Self-reported behavior	3.1	4.6	13.4	38.0	20.5	13.8	4.0	2.5
3. Perceived importance of knowing	3.8	4.2	12.1	31.7	19.4	18.2	8.8	1.7
4. Self-reported awareness	6.1	7.7	16.5	31.9	16.1	14.4	4.6	2.7

[A] This is never correct/ I do not think about this in any purchase situation
[B] This is correct half of the time/ I think about this during half of the purchase situations
[C] This is always correct/ I think about this in every purchase situation

The majority of respondents answered the middle values of the scale, but the answers are slightly skewed to the right, towards the higher values of the Likert scale. The answers for the question about self-reported behavior is the least skewed, whereas the question about the consumers' perceived importance is the most skewed towards the higher values. The means are highest for perceived importance and perceived importance of acting environmentally friendly and the lowest for the respondents' self-reported awareness. The answer alternatives 4-6 has a clear majority of the responses. This is further discussed in the section called "Discussion".

The answers regarding electricity also shows that the answers are skewed more towards the higher values of the Likert scale compared to a normal distribution.

Table 4: Proportion of the answers for the questionnaire for the electricity industry

Question	Percentage of respondents who answered the different scale alternatives (N=540)							
	1[A]	2	3	4[B]	5	6	7[C]	Do not know
1. Perceived importance	5.9	3.3	7.4	23.7	19.4	18.9	12.6	8.7
2. Self-reported behavior	3.9	2.8	6.5	25.0	19.4	13.9	11.5	17.0
3. Perceived importance of knowing	6.1	3.5	8.1	20.9	19.8	20.4	12.2	8.9
4. Self-reported awareness	9.1	7.2	12.0	25.7	14.8	9.8	6.9	14.4

[A] This is never correct/ I do not think about this in any purchase situation
[B] This is correct half of the time/ I think about this during half of the purchase situations
[C] This is always correct/ I think about this in every purchase situation

The question "self-reported awareness" is the least skewed, whereas question "perceived importance" and "perceived importance of knowing" are the most skewed. The means are higher for question one, two and three and the lowest for question four. The majority of the respondents have answered 4-6 on the scale also for this industry. This makes it interesting to further explore the data where the respondents answered the more extreme values on the scale (1, 2, 6 and 7). They have been described in terms of gender and age in Table 5 and 6 below.

More extreme responses

The respondents who answered the extreme values on the scale (1, 2, 6 and 7) have been described in terms of gender and age in Table 5 (retail industry) and Table 6 (electricity industry). The percentages are affected by the fact that there are more respondents for certain age groups. This makes it difficult to draw conclusions about the differences between the age groups within the same industry. However, the difference between the average age for the extreme answers in the retail industry (age 57) differed with almost 30 years from the average age for the extreme answers in the electricity industry (age 28).

Table 5: Proportion of respondents with extreme answers within the retail industry

Scale values			Percentage of respondents who answered the different scale alternatives			
			Perceived importance (percent)	Self-reported behavior (percent)	Perceived importance of knowing (percent)	Self-reported awareness (percent)
1 & 2	Gender	Male	77	63	71	58
		Female	23	37	29	42
	Age (years)	16-19	4.5	5.0	2.4	5.6
		20-29	13.6	25.0	21.4	12.5
		30-39	6.8	7.5	7.1	18.1
		40-49	25.0	17.5	21.4	18.1
		50-59	25.0	25.0	26.2	25.0
		60-69	25.0	20.0	21.4	20.8
		70	0	0	0	0
6 & 7	Gender	Male	43	46	45	42
		Female	57	54	55	58
	Age (years)	16-19	4.7	4.3	6.4	5.1
		20-29	14.1	14.0	10.6	21.2
		30-39	20.8	15.1	19.9	17.2
		40-49	11.4	14.0	16.3	15.2
		50-59	16.8	14.0	16.3	13.1
		60-69	29.5	35.5	27.0	27.3
		70	2.7	3.2	3.5	1.0

Out of everyone who answered the scale alternatives 1 and 2 for the retail industry, male respondents made up for 58-77 percent for all the questions about the retail industry. The average age for the respondents who answered 1 and 2 is 57,13. For the answer alternatives 6 and 7, female respondents made up for 54-58 percent. The average ages for the high scale answers is 57,17.

Table 6: Proportion of respondents with extreme answers within the electricity industry

Scale values			Percentage of respondents who answered the different scale alternatives			
			Perceived importance	Self-reported behavior	Perceived importance of knowing	Self-reported awareness
1 & 2	Gender	Male	72	75	71	65
		Female	28	25	29	34
	Age (years)	16-19	2.0	2.8	1.9	1.1
		20-29	12.0	19.4	13.5	10.2
		30-39	14.0	13.9	9.6	17.0
		40-49	22.0	19.4	23.1	27.3
		50-59	36.0	25.0	30.8	26.1
		60-69	12.0	16.7	19.2	15.9
		70	0	0	0	2.3
6 & 7	Gender	Male	41	46	44	49
		Female	59	54	56	51
	Age (years)	16-19	4.7	3.6	5.7	5.6
		20-29	10.6	9.5	11.4	11.1
		30-39	19.4	21.9	19.9	18.9
		40-49	22.4	19.7	19.3	20.0
		50-59	21.2	21.9	22.2	22.2
		60-69	20.0	21.2	19.9	17.8
		70	1.8	2.2	1.7	4.4

Out of everyone who answered the scale alternatives 1 and 2 for the electricity industry, male respondents made up for 65 percent or more for all the questions about the electricity industry. The age span with the largest percentage of people who answered 1 and 2, was 40-59. For the answer alternatives 6 and 7, female respondents made up for 51-59 percent. The age group 60-69 was also included in the majority for female respondents who answered 6 and 7. The most common age span was 30-69. The average ages for the low scale answers and the high scale answers were 28,27 and 28,59 respectively.

Comparison with respect to gender
Retail industry

To be able to analyze potential gender differences, an independent t-test was performed. As is shown in Table 8, the test indicated that there was a significant difference between male and female respondents. The test has been carried out for each question specifically to find where the differences lies. Female respondents gave higher response values for all questions.

Table 7: Gender differences in retail industry

Question	Mean and Standard deviation	T-test (difference between means)
Perceived importance	$M_{male} = 4.25, SD = 1.47$ $M_{female} = 4.78, SD = 1.31$	Statistically significant $t(df = 382.52) = -3.76$ $p = 0.00$
Self-reported behavior	$M_{male} = 4.18, SD = 1.32$ $M_{female} = 4.36, SD = 1.19$	Not statistically significant $t(df = 378.94) = -1.46$ $p = 0.14$
Perceived importance of knowing	$M_{male} = 4.29, SD = 1.52$ $M_{female} = 4,67, SD = 1.32$	Statistically significant $t(df = 375.76) = -2.68$ $p = 0.01$
Self-reported awareness	$M_{male} = 3.92, SD = 1.53$ $M_{female} = 4.21, SD = 1.46$	Not statistically significant $t(df = 386.83) = -1.93$ $p = 0.06$
Index for supermarkets	$M_{male} = 4.17, SD = 1.30$ $M_{female} = 4.50, SD = 1.16$	Statistically significant $t(df = 403) = -2.76$ $p = 0.01$

Significant gender differences were found among the consumers within the retail industry (supermarkets) for the following questions: "perceived importance," "Perceived importance of knowing," and for the index. For these questions, male respondents did not find it as important as female respondents that the products are produced with regards to the environment. There were no significant gender differences between the answers concerning self-reported behavior and self-reported awareness with regards to the supermarket. Comparing the means among all questions, the means were the lowest for self-reported awareness.

Electricity industry

An independent t-test indicated that there was a significant difference between male and female respondents. This is shown in Table 9.

Table 8: Gender differences in the electricity industry

Question	Mean and Standard deviation	T-test (difference between means)
Perceived importance	$M_{male} = 4.40, SD = 1.66$ $M_{female} = 5.00, SD = 1.42$	Statistically significant $t(df = 367.35) = -3.82$ $p = 0.00$
Self-reported behavior	$M_{male} = 4.46, SD = 1.59$ $M_{female} = 4.94, SD = 1.34$	Statistically significant $t(df = 346.99) = -3.03$ $p = 0.00$
Perceived importance of knowing	$M_{male} = 4.44, SD = 1.71$ $M_{female} = 4,99, SD = 1.45$	Statistically significant $t(df = 368.85) = -3.35$ $p = 0.00$
Self-reported awareness	$M_{male} = 3.83, SD = 1.75$ $M_{female} = 4.23, SD = 1.57$	Statistically significant $t(df = 361) = -2.31$ $p = 0.02$
Index for electricity companies	$M_{male} = 4.28, SD = 1.54$ $M_{female} = 4.80, SD = 1.24$	Statistically significant $t(df = 369.22) = -3.72$ $p = 0.00$

Significant differences between gender were found in the responses for all the questions. Even if the responses were close to the middle, the result showed that female respondents, compared to men, did not only think more about what they want with regards to sustainability regarding supermarkets. They also perceive themselves as buying more sustainable products and keeping the purchase behavior in mind during the decision-making situation more than men.

Results from testing the index for significant differences between gender showed that male respondents do not find it as important that the good are produced with regards to the environment as female respondents do with regards to electricity.

Gender differences between respondents from the different industries

When looking at the gender differences between the responses for each industry, the first t-test was done on all the male and female respondents who took part of the survey. In other words, the industry or whether they answered the survey for one or two industries did not affect the result. When comparing all male and female respondents, the difference was significant.

Males and females within each industry were tested. All respondent of the specific gender who answered the survey for supermarkets and electricity companies respectively were used.

Table 9: Gender differences between the industries

Question	Mean and Standard deviation	T-test (difference between means)
Males	$M_{supermarkets} = 4.165, SD = 1.296$ $M_{electricity} = 4.275, SD = 1.538$	Not statistically significant $t(df = 372.950) = -0.757$ $p = 0.450$
Females	$M_{supermarkets} = 4.502, SD = 1.159$ $M_{electricity} = 4.795, SD = 1.242$	Statistically significant $t(df = 422) = -2.513$ $p = 0.012$

When taking both industries into consideration, it can be seen that female respondents answer with higher scores compared to male respondents.

When testing if there was a difference between female respondents in the two different industries, a significant difference was found. When looking at the overall index, female respondents care more about the importance of sustainability within the electricity industry than in a supermarket. There was no significant difference between males within the supermarket and males within the electricity industry did not differ significantly.

Comparison with respect to age within the retail and electricity industries

The survey was compared with regards to the respondents' age. This is interesting as it gave insights into how the generational differences affected the answers or not. Two ANOVAs and a post hoc test was carried out for the variable: age groups (16-19, 20-29, 30-39, 40-49, 50-59, 60-69, 70) for the respondents within the retail and electricity industries.

Table 7 shows that there were a few number of people in the age categories, 16-19 and 70 for both industries. For the retail industry, the mean seems to be the lowest for ages 40-59 and 70 and the highest for ages 60-69 and 70. For the electricity industry, the mean was the lowest for ages 40-59 and the highest for 16-19 and 30-39. The standard deviation was the lowest for ages 30-39 and 70 within the retail industry, whereas the standard deviation was the highest for ages 16-19 and 60-69. Within the electricity industry, the standard deviation was the lowest for ages 20-39, whereas the standard deviation was the highest for ages 50-59 and 70.

Table 10: Mean and Std. Deviation for retail and electricity industry

	N retail	N electricity	Mean retail	Mean electricity	Std. Deviation retail	Std. Deviation electricity
16 - 19 year	24	23	4.47	4.97	1.35	1.46
20 - 29 year	76	76	4.36	4.53	1.30	1.36
30 - 39 year	99	88	4.51	4.80	1.09	1.38
40 - 49 year	86	114	4.15	4.42	1.30	1.44
50 - 59 year	106	99	4.03	4.37	1.27	1.58
60 - 69 year	116	99	4.58	4.47	1.34	1.44
70 year	10	11	5.13	4.59	.64	1.58
Total	517	510	4.36	4.53	1.28	1.45

The ANOVA for the retail industry indicated that there would be a significant difference between some of the age groups with regards to their answers [$F(6, 510) = 3.03$, $p = 0.006$]. However, using the post hoc test for different group sizes, Scheffe, there is no significant difference between any groups.

The ANOVA for the electricity industry did not show a significant difference between the age groups [$F(6, 503) = 1.23$, $p = 0.291$].

The differences were also not significant when the smaller groups (age 16-19 and 70) were removed.

There was no significant difference between the age groups.

Comparison between the survey responses concerning both industries

The difference between the percentage of the people who answered 1 or 7 was greater for the respondents of the electricity market, which can be seen when comparing Table 4 and 5. The respondents appear to be more on the extremes instead of in the middle. It is specifically the percentage for the values 3 and 4 that appeared to be lower for the electricity market when comparing it to the supermarkets, which can also be seen when comparing Table 4 and 5.

Table 11 shows all the respondents who answered the questions for one or both industries. In the index column, it is possible to see the percentage of individuals who answered "do not know" for all four questions.

Table 11: Respondents who answered "do not know"

Number of respondents who answered "do not know"
(percentage per number of responses)

	Perceived importance	Self-reported behavior	Perceived importance of knowing	Self-reported awareness	Total[A]	Index[B]
Retail industry [C]	5 (1%)	13 (2%)	9 (2%)	14 (3%)	41 (2%)	4 (1%)
Electricity industry [D]	47 (9%)	92 (17%)	48 (9%)	78 (14%)	265 (12%)	30 (6%)
Total	52 (5%)	105 (10%)	57 (5%)	92 (9%)	306 (7%)	34 (6%)

[A] The percentage for the column called "Total" was calculated by taking the number of respondents who answered "do not know" and dividing it by the number of total responses for each industry (4*521 = 2084 and 4*540 = 2160)

[B] Respondents who answered "do not know" on all four questions

[C] The number of responses for all questions in the retail industry was 521

[D] The number of responses for all questions in the retail industry was 540

When looking at the number of "do not know" answers, the percentage is significantly larger for the electricity industry. The higher percentages of the electricity industry, compared to the retail industry, appeared as if less consumers are aware of the topic sustainability with regards to consumer electricity. Another reason for why respondents answered "do not know" could be that they find it difficult to make up their mind when answering the survey. This will be discussed further in the section called "Discussion".

Table 12 shows the percentages of people who answered five or above on the answer scale. Everyone who answered four or less and the ones who answered "Do not know" were removed. The table shows that the respondents appeared to find products that have been produced with regards to the environment within the electricity industry to be more important. The potential reasons for this is discussed in the section called "Discussion" below. This takes all the respondents into consideration, both people who answered the questions for one and two industries. The percentage is calculated out of the total number of respondents who answered for each industry. There were 521 and 540 responses for the supermarkets and electricity companies respectively.

Table 12: Frequencies of the answers higher up on the scale in different industries

Question	Supermarket Percentage (#) of respondents who answered 5 or above	Electricity company Percentage (#) of respondents who answered 5 or above
Perceived importance	49 % (257)	51 % (275)
Self-reported behavior	38 % (200)	45 % (242)
Perceived importance of knowing	46 % (242)	52 % (283)
Self-reported awareness	35 % (183)	32 % (170)

Table 12 shows that up to every second respondent answered five or above on all the questions. The two industries look similar with regards to the differences in number of respondents who answered five or above for each question. Question 1 and question 3 had the largest percentage of respondents who answered 5 or above. Both of those questions are about how important consumers believe it is that products are produced with regards to the environment. The question about self-reported awareness, question 4, got the lowest percentage of respondents answer 5 or above.

When testing if there was a difference between the survey responses in the two different industries, all the answers were used. Both the ones who answered for one industry and the ones who answered the questions for both industries.

Table 13: Differences between the industries regarding the different questions

Question	Mean and Standard deviation	T-test (difference between means)
Perceived importance	$M_{supermarkets} = 4.55, SD = 1.45$ $M_{electricity} = 4.69, SD = 1.62$	Not statistically significant $t(df = 983.80) = -1.50$ $p = 0.14$
Self-reported behavior	$M_{supermarkets} = 4.29, SD = 1.30$ $M_{electricity} = 4.70, SD = 1.52$	Statistically significant $t(df = 884.43) = -4.43$ $p = 0.00$
Perceived importance of knowing	$M_{supermarkets} = 4.51, SD = 1.46$ $M_{electricity} = 4.70, SD = 1.64$	Not statistically significant $t(df = 979.09) = -1.91$ $p = 0.06$
Self-reported awareness	$M_{supermarkets} = 4.09, SD = 1.50$ $M_{electricity} = 4.02, SD = 1.67$	Not statistically significant $t(df = 928.57) = -0.70$ $p = 0.48$

The questions "Perceived importance," "Perceived importance of knowing," and "Self-reported awareness" were not significantly different. The reasons for this will be discussed in the discussion section. Similarly, the respondents cared equally much about whether they perceived themselves as knowing whether the products have been produced with regards to the environment. Finally, the respondents think equally much about their previous sustainability purchasing behavior when they are in the decision-making situation.

Comparing the answers of respondents who answered survey for both industries

There were 113 respondents who answered the survey for both industries. The respondents who answered "Do not know" were not included in the "Cross Tabulation" tables; see appendix.

The contingency coefficient evaluates how strong a relationship between two variables is and gives a value between 0 and 1, where 1 is a very strong relation and 0 is no relation. When comparing the responses for the retail and electricity industry, the contingency coefficient was within the span 0.73 - 0.77 for all questions, as shown in Table 14. Thus, there was a relatively strong relationship between the respondents' answers for the two industries. This means that the respondents answered consistently.

The reason for the relationship not being very strong indicates that the industries are different when it comes to the consumers' perception of environmental communication within the industries.

Table 14: Contingency Coefficients for Cross Tabulations

Question	Contingency Coefficient (CC)
Perceived importance	0.73
Self-reported behavior	0.76
Perceived importance of knowing	0.77
Self-reported awareness	0.73

Those people who gave the same answers for both industries, are on the diagonal. Those who are above answer a higher value on the scale for the electricity industry, whereas people below the diagonal answered a higher value for the supermarkets.

For the first question, Table 15, there were 24 respondents who answered higher values for the electricity industry compared to the retail industry. Equally many answered higher values for the retail industry compared to their response to the electricity industry. There were 39 respondents who gave the same answer for the retail industry and the electricity industry.

Table 15: Cross Tabulation for Question 1: Perceived importance

		Electricity companies							
		1	2	3	4	5	6	7	Total
	1	4	0	0	2	0	0	0	6
	2	0	1	2	0	0	0	0	3
	3	1	1	3	3	0	1	1	10
Supermarkets	4	1	0	2	10	1	2	2	18
	5	1	1	0	7	6	3	2	20
	6	0	1	2	1	4	10	5	23
	7	0	0	0	0	1	1	5	7
Total		7	4	9	23	12	17	15	87

The crosstab with the greatest difference between the answers outside of the diagonal was the answers for the self-reported behavior, see Table 17. For this question, there were 28 respondents above the diagonal (electricity), whereas there were only 18 respondents below the diagonal (supermarkets). This means that there was a higher number of respondents who answered higher values for the electricity companies compared to the supermarket. In addition to this, there were 41 respondents who gave the same answer for the retail industry and the electricity industry.

Table 16: Cross Tabulation for Question 2: Self-reported behavior

		Electricity companies							
		1	2	3	4	5	6	7	Total
	1	4	0	0	0	0	0	2	6
	2	0	1	1	1	0	0	0	3
	3	0	1	4	1	1	0	1	8
Supermarkets	4	1	2	4	14	3	7	0	31
	5	0	0	0	3	8	4	3	18
	6	0	1	0	3	3	7	4	18
	7	0	0	0	0	0	0	3	3
Total		5	5	9	22	15	18	13	87

For the third question, Table 18, there were 23 respondents both above and 20 respondents below the diagonal. There were 44 respondents on the diagonal. This was the question with the highest contingency coefficient (CC = 0.77) and the highest number of people who gave the same answer for the retail industry and the electricity industry.

Table 17: Cross Tabulation for Question 3: Perceived importance of knowing

		Electricity companies							
		1	2	3	4	5	6	7	Total
	1	4	0	0	0	0	2	0	6
	2	0	1	0	0	0	0	0	1
	3	1	1	4	2	0	0	1	9
Supermarkets	4	1	1	4	15	4	5	1	31
	5	0	0	0	3	8	1	2	14
	6	1	1	0	1	3	5	5	16
	7	0	0	0	0	1	2	7	10
Total		7	4	8	21	16	15	16	87

For question 4, table 18, there were 19 respondents who responded with higher values for the electricity industry compared to the retail industry. There were 26 respondents who responded with higher values for the supermarkets compared to the electricity companies. The fact that a larger part of the respondents gave higher answers for the supermarket differs from all the other questions where the number of respondents were the same or higher for the electricity industry. In addition to this, there were 43 respondents who gave the same answer for the retail industry and the electricity industry. Even if the number of respondents on the diagonal was the second highest for this question, it was one of the questions with the smallest contingency coefficient.

Table 18: Cross Tabulation for Question 4: Self-reported awareness

| | | Electricity companies | | | | | | | |
		1	2	3	4	5	6	7	Total
	1	3	2	0	0	0	0	0	5
	2	1	1	0	1	1	0	1	5
	3	1	2	9	2	3	0	0	17
Supermarkets	4	2	4	3	13	3	2	0	27
	5	0	1	2	2	8	2	0	15
	6	0	1	0	3	2	5	2	13
	7	0	0	0	1	0	1	2	4
Total		7	11	14	22	17	10	5	86

Discussion

The discussion starts by summarizing the results and visiting the four specific questions that have been explored in this thesis, namely "perceived importance," "self-reported behavior," "importance of knowing" and "self-reported awareness". Gender differences and some perspectives on risk are then discussed, followed by comments about CSR-aspects from both consumers' and marketers' perspectives. Finally, future research, limitations and implications for practitioners are covered.

The thesis has addressed the following explorative questions:

How do consumers in Sweden perceive the retail and electricity industry with regards to products that have been produced with regards to the environment?

- How do consumers perceive the importance of environmentally friendly products?
- How do consumers perceive their own consumption of environmentally friendly products?
- How do consumers perceive the importance of knowing whether products are environmentally friendly or not?
- How do consumers perceive their own awareness regarding their consumption of environmentally friendly products?

Summary of results
- A clear majority of answers in the middle of the answer scale (4-6). The respondents may be somewhat indifferent with regards to the subject. Potentially, this indicates that the respondents are vague with respect to the topic or do not have a clear opinion about the subject.
- Within the electricity industry, there were significant differences between the responses for all questions with regards to gender.
- In the retail industry, there were no significant differences between the answers when comparing the respondents with regards to gender for the questions "Self-reported behavior" and "Self-reported awareness".
- While female respondents had higher mean response for the electricity industry (above 4.5) compared to retail industry (below 4.3), there was no difference between male responses within the industries.
- No age differences were found between the responses.

Perceived importance
With the results of the data from the following question "How do consumers perceive the importance of environmentally friendly products?", it can be concluded that some consumers care more than others about whether products have been produced with regards to the environment or not. Compared to men, females appear to be more considerate of the environment.

Recall the first topic mentioned in the theoretical framework, which was CSR, a distinction was made between the "narrow view" and "the broad view" (M. S. Schwartz & Saiia, 2012). The standpoint a person takes is of course something that affects the consumers' perception of what is important and not. As mentioned previously, Ajzen & Fishbein (2005) the perception is somewhat a bridge between beliefs and a consumers' intention and behavior (Ajzen & Fishbein, 2005). The model does not show how the behavior of a person, in turn, affects the beliefs. It can, however, be argues that a person's behavior will eventually affect the beliefs as well. It does not only go one way, since the beliefs are based on background factors that are not static. This will cause, the perception, the intention and the behavior the strengthen the belief systems even more.

An example that makes this applicable in the case of sustainability, is whether CSR is merely a trend. The consumer's personal belief about this will have an effect on his or her purchase intention.

Self-reported behavior

The answers to the question "How do consumers perceive their own consumption of environmentally friendly products?" showed a significant difference between the two industries. This is interesting as much research has been done on the gap between behavior and intention. The discussion about self-reported behavior is deepened with the perspective of social identity theory further down, in the section named "Consumers who identify with groups who puts high value on sustainability".

Importance of knowing

Insights with regards to how marketers can communicate with consumers were gained from the responses to the question "How do consumers perceive the importance of knowing whether products are environmentally friendly or not?". A larger percentage of respondents said that they "find it important to know if the good they buy have been produced with regards to the environment" compared to the percentage of respondents who said they "find it important that the good they buy are produced with regards to the environment". This points towards a gap between intention and behavior. If consumers find something to be important but do not find it equally important to ensure they are able to act in line with it, there is a difficulty in facilitating the decision-making and their ability to act responsibly. This can be used when designing the communication towards those consumers. In order to decrease this gap, there is a need for individuals to become increasingly aware of this gap (Peloza et al., 2013). When the awareness is heightened, the consumers' accountability can increase. This has a direct effect on their behavior and can facilitate the process of consuming responsibly.

Self-reported awareness

The mean of the responses to "How do consumers perceive their own awareness regarding their consumption of environmentally friendly products?" were lower, compared to the other questions when looking at all the replies. This may be due to the fact that it is a relatively specific question and it requires a large amount of reflection from the consumer. Therefore, the probability of them thinking in

terms of this is relatively small. People who indicate that this is true in their lives are most likely keeping sustainability in mind during more times of the day and not only during the purchasing situation. These are, most likely, people who tend to buy environmentally friendly products. The people keeping this in mind are people who want to actively take responsibility for buying more sustainable products and this is either an unconscious or conscious attempt to do so. They might actively tell themselves to think about this, and they might consider it an opportunity to contribute to society and the world.

It was interesting to note that females and males gave the same responses with regards to this question. This indicates that they have come equally far with regards to this. There are most likely many factors contributing to this, and one factor is probably the level of equality in Sweden. With the same education and a relatively similar upbringing at home, there is no reason for gender to be a determining factor when it comes to how much an individual is able to reflect and take responsibility for their own actions.

Gender differences

Continuing with the differences between gender, some aspects of this was mentioned in the theoretical framework. For example, researchers found that compared to men, "women reported more favourable attitude, higher moral obligation, and stronger intentions toward buying [fair trade] products" (de Leeuw et al., 2014). This thesis has come to similar conclusions. In all cases, the female respondents have answered with higher scale values compared to the male respondents.

With regards to gender, the responses concerning the retail industry had significant difference for two questions, namely "perceived importance" and "Perceived importance of knowing". When it comes to "self-reported behavior" and "self-reported awareness" there was no significant difference. In other words, there was not as large of a difference between gender there. It is possible that the people who care about sustainability, do not feel as strongly that changes must be made within this industry. One reason for this might be that the people within the industry have already made an impression that they have already taken some measures to change the situation.

In the responses with regards to the electricity industry, there were significant differences between gender. This indicates that female respondents may have different views on sustainability compared to male respondents. The reasons for this may include historical aspects of the industry. For example, if it has been male dominated previously, the same view of the industry might still be present today. This will affect the behavior and the perception that consumes have towards the industry.

One reason for the fact that female respondents scored higher than male respondents for all questions in the electricity industry, might be the fact that females have an increased preference for a caring morality and that they might be able to more strongly identify with what sustainability within the

electricity industry means (Stimpson et al., 1991). A caring morality can be considered to be synonymous with acting in a more environmentally friendly way.

Risk

As mentioned in the theoretical framework, research has shown that females are more risk-averse than men (Sjöberg, 2013). It is possible to draw parallels to caring about the environment, as the environmental aspects is portrayed as a threat in today's media by both organizations and scientists (Greenpeace, 2016; National Geographic Partners, 2017; Union of Concerned Scientists, n.d.). This might be one reason why female respondents, who tend to be more risk-averse, might choose to buy environmentally friendly products. For them, the motivating factor might be to solve the problem, for the purpose of trying to decrease the risk. As mentioned earlier, females might perceive a greater sense of urgency, which makes them act upon it and keep it more on top of mind. However, since the answers are close to the middle of the scale, this argument might not be completely relevant.

The significant difference in responses between females regarding the supermarkets and electricity companies, may indicate that they look at the industries differently when it comes to buying environmentally friendly products. Reasons for this might include that the industries are possibly dominated by a certain gender or that there may be differences in how much knowledge female versus male respondents have about each industry. The aspect that makes it different is something that affects females more than males. From the research presented above, there is the concept of females preferring a caring morality as an example.

Female consumers appear to have a slightly stronger opinion regarding the electricity industry compared to the supermarket industry, even if there are not any large differences. As there is not a difference between the responses concerning the industries from a societal perspective, which was shown when comparing all the answers for the different industries, there should be a difference in the view females, specifically, have towards the different industries. This might be dependent on the extent to which females are involved within the different industries, the amount of knowledge they have about sustainability within each industry, how much knowledge the people working within the industry has about female customers etc.

Relational value placed on CSR efforts

Recall that Lacey et al. (2015) concluded that "consumers demand [CSR efforts] and place relational value on it". This is interesting to look at from an age perspective. As different generations have faced different amount of marketing about sustainability, it is surprising that there were no significant differences between the age groups. In the literature review, several researchers mentioned that the expectations are most likely to increase and have already done so. There are several driving forces that indicates that consumers' expectations on suppliers with regards to sustainability will continue to increase. For example, there are schools which are allowing for interventions at an early age, and more

schools are talking about sustainability in the classroom ("Hållbar utveckling," n.d.). This should have an impact on consumers' perception of how important sustainability is.

It is possible to integrate these issues from an early age, which should make it possible to improve both environmental and social sustainability, as the people would relate to the topic on a more personal level. This should, in turn, increase the relational value that is put on the topic of CSR and sustainability.

Environmental issues have been on the agenda for many years but it has been difficult to find agreements that are signed by countries from all over the world ("Härifrån till framtiden," 2010). These negotiations on a societal and global level have had its path parallel to that private consumers have heard about these issues more and more. Movies and documentaries have been made, people with larger impact has made their opinions heard, and research has had its say. This should indicate a shift in the attitudes between people in different ages. The different generations may enter the market with new expectations and attitudes about the way in which CSR should be included in a business or not.

Furthermore, when the older generation grew up, they were used to playing outside about twice as much and their care for the environment is probably more integrated in their attitudes, which the study done by Via shows, where 44% of the parents they asked wished for their kids to be outside more often ("Roliga och enkla utomhuslekar för hela familjen," n.d.). This has given the older generation another way of relating to nature, and they might have a more personal and/or emotional connection.

Groups that put high value on sustainability

There were no significant differences between the responses with regards to the retail and electricity industries when looking at perceived importance, perceived importance of knowing, and self-reported awareness. One might speculate that the reason for this is that when it comes to perceiving the importance of the environment, it is not industry dependent. Instead, it might rather be a personal view that is almost equally applicable. In other words, consumers who do not identify with the importance of sustainability and the industry, will not tend to care more about sustainability within one of the industries (Bartels & Hoogendam, 2011). This is in line with the social identity theory as mentioned previously in the theoretical framework.

As the answers to the question about "self-reported behavior" is different between the industries, it may be due to differences between the purchasing processes within the industries. If one of the processes makes it easier for the consumers to perceived themselves to buy more sustainable, this should also have an effect on the self-reported behavior.

Respondents from both the retail and electricity industries are similarly distributed when it comes to how important it feels that what they buy has been produced with regards to the environment. The means are close to the middle of the answer scale for both industries. This indicates that the participants may not be environmentally conscious. The reason for this is most likely that the concept of being environmentally friendly is relatively new. As shown in the literature review, the research available has been on a steady increase in the last decade, and the knowledge available today is exponentially larger than what was available a decade ago ("Scopus," 2017). Still, more knowledge is needed for consumers to feel confident about consuming more responsibly. This is apparent as there is a gap between intention and behavior.

Table 12 showed that up to 52 percent of the respondent answered five or above on all the questions. The respondents appeared to find sustainability within the electricity industry to be more important. The reason could be due to the disasters that has happened within the industry. Even if there are scandals in the retail industry as well, the aftermath of the large consequences on nature, may contribute to impressions that stay for a longer time and has a larger effect on the way consumers perceive the industry. It could also be the reason that electricity is used to a large extent, and has almost always been part of the production of any good that is bought. This should possibly be taken into consideration when communicating with consumers. The media and marketing received by males versus females and among different age groups might differ drastically. This is, however, not the only aspect influencing our perception, but for the electricity industry this might be more important than for other industries.

When looking at the number of "do not know" answers, the percentage was significantly larger for the electricity industry. One reason for this could be if people are not used to making decisions about electricity equally often as they do within the retail industry. It is understandable if people who live close to power plants can relate to the topic of electricity more than a person who simply relates to electricity through their own use of it. A person who lives close to a power plant can see its effect on nature and might make a stronger connection to sustainability because of it. There are, most likely, more people who can relate to food and supermarkets, due to the fact that the entire population is faced with decisions about food on a daily basis. Knowledge about the connection between food and the environment may be more apparent to people, if this is something they learn from an early age.

Communication done by the industries about CSR and sustainability

Industries have come differently far with regards to their sustainability communication towards their consumers. For example, there are differences between how much the industries communicate with the consumer about the investment that has been done within sustainability. The communication has a variety in how detailed the communication is and part of this is due to how far the industry has come with regards to sustainability. If a company has not done anything with regards to sustainability, it is

more difficult to start talking about the problem, as they might have to face critique for not having done anything about it. Once the problem has been addressed in some way, it opens up for the possibility to start communicating about it. By considering the electricity industry, it becomes clear that it is possible for an actor to communicate about sustainability even if they are also doing things which are not sustainable. The production of electricity leads to even larger sustainability problems, such as global warming, but companies within the industry are still able to communicate about different ways of producing energy that decreases the negative effects.

Today, more information about sustainability and specific products is available. This puts the consumer in a position where they can reflect upon this before choosing what to buy. However, the availability of the information does not ensure that people read about it. To change the perception, further actions might have to be taken.

Future research

Research within more industries, both more and less progressive industries, could be looked at to see how the perception of consumers differ. This could give insights with regards to how much the communication of the company affects the consumer.

Another aspect that would be interesting to continue looking at is if the opinions start to change as the knowledge about sustainability increases. With knowledge, a person will most likely move more towards one of the extremes sides of the scale. Another perspective on this is the fact that companies have possibly already come far enough with their sustainability efforts, and it removes some of the pressure from the consumer. This would mean that the consumer does not need to care as much if they can trust that the companies are acting environmentally friendly. This would be interesting to compare the situation to what it used to look like a number of years ago, before sustainability had become such as trendy. Another alternative is to compare these results with other cultures and/or countries which have not come as far as Sweden with regards to the supply of environmentally friendly products.

Limitations

Bryman & Bell (2015) writes about the issue of measurement validity. This has to do with "whether or not a measure of a concept really measures that concept" (Bryman & Bell, 2015). As these questions have not been taken from other researchers, it is important to at least establish face validity. This was partly done in the pre-study. As the answers given by the respondents were talked about out loud, it was possible to understand more about their reasoning behind their answer. As the questions were not formulated in a way that asked about the consumers' perception directly, the assumption that the four questions explain a persons' perception about the importance of sustainability might be considered as faulty. The four different questions should give different facets of a similar subject.

People might want to look better than they are, within fields that they care about. The respondents have also not been able to ask questions about how to interpret the questions. No further explanation was given. In addition to this, what each step on the Likert-typed scale means to an individual may vary. Therefore, there was no guarantee that they were able or willing to answer objectively. Even when there are definitions for three out of seven points of the scale, the way people interpret those numbers and the words used to describe them, it is up to each person to determine what it means to them. Additionally, the answers might be biased and not represent the objective view of where on the scale they are located.

Since the pre-study only was done on female students between the ages 24 and 25. This might have given indications about how to ask the questions that are not applicable for the entire population. This might, in other words, have led to misunderstanding for the other respondents in the actual survey.

Since the survey was done online, it may not have given a better understanding for why they answered the way they did. The understanding for the results would have improved if qualitative interview were done parallel to this study to complement the results from the quantitative collection.

As a company collected the data, there was little insights into how the process was done. The panel used for the gathering of respondents might have had a negative effect on the result and this could have been minimized by mixing the samples with respondents from other panels as well. This was not done. Even if the questions were written independently from all the other questions that were asked in the survey, the answers might have been affected by the fact that the respondents also answered other questions about sustainability in the same survey.

With regards to the age groups, there might be scenarios where the differences do not show up due to the groups being too small. This possibly makes those conclusions less valid and a greater number of respondents could have been used when separating the people into different age categories. With too few respondents, it is not suitable to draw conclusions and generalize the outcome, as the probability that they are applicable on other situations is lower compared to if the set was larger.

Saying that something feels important is subjective. It can only give a hint about the respondents' perception. The respondent might care about the fact that the good has been produced with regards to the environment but possibly they do not care enough to act in line with it. Some respondents may have the intention of buying sustainable products and that is the reason why they say it is important. It could also feel important without having any urge to look it up, spend more money on the products that are and prioritizing to buy sustainable products might be something different. It is most likely the reason as to why the respondents finds sustainability to be of importance, rather than how important they find it, that will have a large effect on their decisions. Therefore, it is difficult to draw any conclusions from the respondents' perceived importance alone.

Since it would not be know what "important" means to the individual, the question was not asked in a way that would make the respondents grade how important it is for them. Instead, the answer was given in terms of how often it is important for them. This may indicate how often the respondents think about whether the products they buy is produced with regards to the environment or not.

With a quantitative study, the respondents are given a set of idea that they must adjust to. This might leave out important aspects that they could bring if the method was more flexible and allowed for open-ended questions. Instead of using quantitative surveys, an open-ended survey or interviews could have been used. This could have been useful to identify what concepts of sustainability exists in the consumer's mind (McNeill & Moore, 2015). This was not done as the focus was on collecting a more substantial number of responses.

Implications for practitioners

Perceptions about sustainability is interesting from the perspective of understanding more about how companies can develop their sustainability communication. These findings have given more insights about whether consumers are more concerned about the environment within the retail industry or the electricity industry. With those insights, marketers within those industries can use them when developing communication addressed to consumers. For example, when it is known that there is a difference between how much consumers care about sustainability within different industries, each industry knows if they need to work on the encouragement to start caring or giving more information to consumers who already care. These two perspectives require different marketing concepts to be relevant for the consumer. "The perception of sustainability" would be used as a segmentation variable. By communicating differently to consumers who considers the environment every time they are in purchase situation, compared to consumers who do not think about what consequences their behavior has on the environment, one can more easily guide the consumer in a desired direction.

Another aspect that is equally important is the sustainability offers. With insights about how important sustainability is within an industry, the products and services regarding sustainability can be adapted to suit the wants and the needs of the customer.

It is useful to map out what consumers' perceptions are with regards to environmental sustainability and how they differ between individuals. Knowing this can enable practitioners to facilitate the decision-making for the consumers. Having knowledge about the perceptions of the consumers is a first step in the process of knowing how to communicate with the consumers. By knowing more about their perception, the communication can be adapted in a suitable way.

Actions might be taken with regards to this data. For example, several questions could be used as a segmentation variable to adapt the communication done towards the consumers. Examples of segmentations variables include: perceived importance, self-reported behavior, self-reported awareness, and perceived importance of knowing in combination with the type of industry etc. This could lead to more constructive marketing that can improve the decision-making process significantly.

The influence of our norms and the affect it has on the roles consumers may take on with regards to the gender with which they define themselves, is an interesting aspect to look into more deeply. An interesting topic for further research is how much the norms around us influence our decisions when it comes to sustainability.

Concluding remarks

The purpose of this thesis was to investigate how consumers in Sweden perceive the retail and electricity industry with regards to environmentally friendly products. Both differences and similarities were found in survey responses. The results indicate that there is room for improvement with respect to responsible consumption.

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Appendix

Composition of sample

All respondents (N=1061)		Percentage of sample
Gender	Female	47.3
	Male	52.7
Age	16-19	4.6
	20-29	15.4
	30-39	18.1
	40-49	19.3
	50-59	19.6
	60-69	20.9
	70	2.1
State	Blekinge län	2.0
	Dalarnas län	2.3
	Gotlands län	0.4
	Gävleborgs län	3.1
	Hallands län	4.3
	Jämtlands län	1.1
	Jönköpings län	3.3
	Kalmar län	3.5
	Kronobergs län	1.4
	Norrbottens län	2.5
	Skåne län	11.5
	Stockholms län	20.3
	Södermanlands län	2.8
	Uppsala län	3.8
	Värmlands län	2.8
	Västerbottens län	2.4
	Västernorrlands län	1.9
	Västmanlands län	2.5
	Västra Götalands län	20.0
	Örebro län	3.3
	Östergötlands län	5.0

The distribution between different states in Sweden among respondents in each industry

Retail Industry (N=408)	Percentage of sample	Electricity Industry (N=427)	Percentage of sample
State		State	
Blekinge län	1.5	Blekinge län	1.6
Dalarnas län	2.5	Dalarnas län	1.4
Gotlands län	0.7	Gotlands län	0.2
Gävleborgs län	3.2	Gävleborgs län	4.2
Hallands län	4.4	Hallands län	2.3
Jämtlands län	1.2	Jämtlands län	0.7
Jönköpings län	3.7	Jönköpings län	3.7
Kalmar län	3.7	Kalmar län	2.8
Kronobergs län	2.0	Kronobergs län	0.7
Norrbottens län	1.7	Norrbottens län	2.6
Skåne län	12.3	Skåne län	12.2
Stockholms län	21.6	Stockholms län	21.3
Södermanlands län	3.7	Södermanlands län	2.1
Uppsala län	4.4	Uppsala län	3.7
Värmlands län	2.2	Värmlands län	3.5
Västerbottens län	2.7	Västerbottens län	1.9
Västernorrlands län	1.5	Västernorrlands län	2.3
Västmanlands län	2.0	Västmanlands län	2.8
Västra Götalands län	17.6	Västra Götalands län	20.6
Örebro län	2.9	Örebro län	3.5
Östergötlands län	4.7	Östergötlands län	5.6

The survey

Är du ...

○ Man

○ Kvinna

Nästa

Hur gammal är du?

[____] år

Nästa

I vilket län bor du?

○ Blekinge län   ○ Dalarnas län
○ Gotlands län   ○ Gävleborgs län
○ Hallands län   ○ Jämtlands län
○ Jönköpings län   ○ Kalmar län
○ Kronobergs län   ○ Norrbottens län
○ Skåne län   ○ Stockholms län
○ Södermanlands län   ○ Uppsala län
○ Värmlands län   ○ Västerbottens län
○ Västernorrlands län   ○ Västmanlands län
○ Västra Götalands län   ○ Örebro län
○ Östergötlands län

Nästa

Ta ställning till följande påstående:

"Det känns viktigt för mig att det jag köper från dagligvarubutiker är producerat med hänsyn till miljön."

- ○ 1 = Det stämmer aldrig
- ○ 2
- ○ 3
- ○ 4 = Det stämmer hälften av tiden
- ○ 5
- ○ 6
- ○ 7 = Det stämmer alltid
- ○ Vet ej

Nästa

Ta ställning till följande påstående:

"Det jag köper från dagligvarubutiker är producerat med hänsyn till miljön."

- ○ 1 = Det stämmer aldrig
- ○ 2
- ○ 3
- ○ 4 = Det stämmer hälften av tiden
- ○ 5
- ○ 6
- ○ 7 = Det stämmer alltid
- ○ Vet ej

Nästa

Ta ställning till följande påstående:

"Det känns viktigt för mig att veta om det jag köper från dagligvarubutiker är producerat med hänsyn till miljön."

- ○ 1 = Det stämmer aldrig
- ○ 2
- ○ 3
- ○ 4 = Det stämmer hälften av tiden
- ○ 5
- ○ 6
- ○ 7 = Det stämmer alltid
- ○ Vet ej

Nästa

Ta ställning till följande påstående med hänsyn till vad du tänker på under köptillfället:

"Jag tänker på att det jag köper från dagligvarubutiker inte alltid är producerat med hänsyn till miljön"

- ○ 1 = Jag tänker inte på detta vid något köptillfälle
- ○ 2
- ○ 3
- ○ 4 = Jag tänker på detta vid hälften av köptillfällena
- ○ 5
- ○ 6
- ○ 7 = Jag tänker på detta vid varje köptillfälle
- ○ Vet ej

Nästa