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# What Goes Around Comes Around

A Quantitative Study of Swedish Consumers' Attitudes Towards  
Sustainable Consumption Models

by

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# Abstract

**Title:** What Goes Around Comes Around - A Quantitative Study of Swedish Consumers' Attitudes Towards Sustainable Consumption Models

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**Key Words:** Sustainable Consumption, Circular Economy, Shared Economy, Product-Service Systems, Environmental Concern

**Aim and Purpose:** The aim with this thesis was to provide answers to the two research questions: *“Which of the four consumption models (“Circular economy”, “Shared economy”, “Environmentally friendly”, and “Conventional”) do Swedish consumers prefer, in relation to different product markets and product categories?”* and *“Are there any distinctive demographic segments among consumers preferring a specific consumption model? In that case, which ones?”*. The purpose of this thesis was to facilitate easier ways for consumers and practitioners to act more sustainably in the marketplace. The results of our study can guide practitioners in making decisions of which sustainable consumption model to practice for a specific product market and category, and which consumers to target. By this, practitioners can offer sustainable consumption models that align with consumers' desired ways of consuming various products.

**Methodology and Empirical Evidence:** Based on previous research about attitudes towards sustainable consumption models, perceptions on choice of preferred consumption model were collected from a total of 504 Swedish respondents through a Web survey. The data was analysed through cross-tabulations to examine which consumption model is most preferred by consumers for a specific product market.

**Findings:** The results of this thesis indicate that the individual consumer does not consistently prefer to consume according to one sustainable consumption model, but shift preference in consumption model for different product markets and categories. Moreover, the choice of preferred consumption model differs significantly, based on both product category and the respondents' demographic characteristics.

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# Introduction

The ecological footprint has increased dramatically since the 1970's, and society is now demanding more of the planet in terms of resources than it can sustainably offer, which has an impact on human as well as natural systems (WWF, 2016). This has been brought to light by, among others, the Danish business entrepreneur Vigga Svensson. In a presentation on TEDx Talks in 2015 (TEDx Talks, 2018) she states that:

*“...in UK, women wear their clothes seven times before it ends up in the attic or in the garbage bin. In the States, 30% of the clothes never left the closet last year. And in Denmark - and this is my favourite fact - young people tend to buy new clothes instead of washing their dirty ones.”*

Svensson further argues that people's approach to consumption has come to a point where both consumers and companies have no choice but to change their behaviour in order to save the planet, or at least to try keeping it alive (TEDx Talks, 2018). The demand for new products, the level of consumption and its impact on the environment has recently increased the awareness and engagement in sustainable consumption among consumers (Peattie, 2010; Porter & Kramer, 2006, 2011). Due to consumers' increased influence in the marketplace, they possess a great power in determining who stays an active and relevant business player (Roper & Fill, 2012). Companies are trying to comply to the new consumer demands by implementing different levels of sustainable initiatives (Mont, 2002; Tukker, 2004; Kotler, 2011), where the implementation of Corporate Social Responsibility (CSR) in one's business is one way of doing so (Kotler, 2011). In this thesis, we will refer to CSR using the definition from the United Nations Industrial Development Organization (UNIDO): “Corporate Social Responsibility is a management concept whereby companies integrate social and environmental concerns in their business operations and interactions with their stakeholders” (UNIDO, 2018).

As CSR has an increased importance in today's business landscape, companies have tried to improve their environmental and sustainable initiatives, and the field of sustainable practices of consumption is explored (Mont, 2002; Tukker, 2004). According to Svensson (TEDx Talks, 2018), sustainable consumption is no longer about only consuming organic and

sustainable products, but to actually consume less. This motivated her to come up with a new business idea, by which she hoped to help consumers change their consumption behaviour into a more sustainable behaviour than present today (TEDx Talks, 2018). With her company VIGGA, she demonstrates one of the sustainable socio-economic consumption models (henceforth referred to as consumption models) that has started to pop-up worldwide. The company VIGGA offers a unique subscription service where consumers subscribe to maternity and baby clothes and then send them back as they are outgrown (Vigga, 2018). This consumption model is based upon the idea that people should share products instead of buying new ones (Corvellec & Stål, 2017; Vigga, 2018), which could potentially save a lot of resources. Mont (2002) and Tukker (2004) present other consumption models that, in various ways, offer consumers sustainable practices of consumption. Moreover, as seen in recent research, consumers' attitudes towards these sustainable consumption models has been an area of interest (Baumeister, 2014; Edbring, Lehner & Mont, 2016). We believe that this field of research is particularly interesting, and urge a great importance, as one of the 17 Sustainable Development Goals (SDG's) created by the United Nations (UN) aims to accomplish sustainable consumption by the year 2030 (United Nations, 2018). SDG number 12 aims to "Ensure sustainable consumption and production patterns" (United Nations, 2018). Hence, research regarding sustainable consumption models is highly relevant, as it can potentially help fulfilling this goal. Although scholars have been trying to map out consumers' attitudes towards sustainable consumption, as well as their actual sustainable consumption behaviour, it has been proven to be difficult as it involves more complexities than meets the eye. As sustainable approaches have become more common for both consumers and companies to engage in, there is a need for marketers and companies to understand consumers' attitudes towards these sustainable consumption models. By understanding how these consumption models would be accepted by consumers, a more sustainable way of consuming could be realised than what is present to date. This could have positive impacts on humans as well as nature, and would therefore be a possible path to pursue to keep the planet alive. However, more research in the area is needed to understand if and how consumers would consume by these different consumption models. To add on to previous research in this field, we will in this thesis examine which consumption models Swedish consumers prefer the most for specific product markets and different product categories. Our study will therefore expand what previous researchers have found, by using their attitudinal findings for sustainable consumption models among consumers and examine how the Swedish consumers show preferability for one consumption model over another, in



specific product markets, when put against each other. In this thesis, when referring to product markets, we mean the general product markets (e.g. clothes, tools, furniture and transportation), where there is an exchange of some sort between consumers and companies. When we refer to product categories, we mean the product categories within such product markets. The consumption models that will be discussed in this thesis will be done so from a business-to-consumer (B2C) perspective.

The following chapters will investigate this area of research further. Chapter 1 - Background and Literature will focus on previous research in the area of sustainability within companies, sustainable consumption models and consumers' (sustainable) behaviour. This is followed by a presentation of the aim and purpose of this thesis, as well as the research questions. The second chapter, Chapter 2 - Methodology, will describe the methodology and method used for this thesis and its study. Chapter 3 - Empirical Results and Analysis will present and analyse the results of the study from a micro perspective. Chapter 4 - Discussion sums up and analyses the thesis and its study from a macro perspective, and Chapter 5 – Conclusions and Implications provides the reader with the conclusions from this thesis, as well as its managerial and theoretical implications. This last chapter will also include the limitations of our study and proposed future research.

# 1. Background and Literature

*Within this chapter, we will present and discuss previous studies regarding the research area of sustainable consumption as a base for our study. First, we will present the rise of a more sustainable approach among companies and consumers, to provide an overview of the subject at hand. Second, we will explore growing sustainable consumption models, as a consequence of society's increased sustainable approach. This will illustrate how these consumption models are implemented and practised in the marketplace today. In order to foresee the potential of these sustainable consumption models, we seek to understand consumers' general and sustainable consumption behaviour. Lastly, we will present the complexities of these areas, which lead us to the purpose and aim of this thesis, as well as two research questions we seek to answer.*

## 1.1 A More Sustainable Approach

A holistic approach towards ethical standards as well as national and international values and norms has been a topic of discussion for the past decades (Rasche, Morsing & Moon, 2017). The subject has been discussed and implemented in many different ways by academics, companies and individuals. In this thesis, we will use the terms sustainable approach and environmental approach interchangeably, as we consider them both to encourage an increase in environmentally conscious decisions and responsibilities. One of the commonly known ways of incorporating a sustainable approach among companies is by Corporate Social Responsibility (CSR) (Kotler & Lee, 2008; Rasche, Morsing & Moon, 2017). CSR has become an important strategic tool for companies in order to meet consumers' recently increased sustainable demands (Kotler, 2011). Peattie (2010) and Kotler (2011) argue that, as a result of consumers' increased interest in environmental and sustainable efforts (Krause, 1993), companies need to consider this as an additional aspect to their businesses, beyond just the functional and emotional aspects. The increased awareness of, and interest in, environmental and sustainable approaches has led to a shift in the way consumers choose to consume. There are various definitions of sustainable consumption, whereas we, in this thesis, will use the United Nations Development Goal's definition (United Nations, 2018). In this definition, sustainable consumption refers to a product's full lifecycle - from production to consumption - with the aim of "doing more and better with less" by reducing the levels of pollution and the use of resources (United Nations, 2018).

Some consumers are trying to take on a more sustainable consumption approach by letting their lives being less characterised by materialism, and by favouring companies and products with sustainable approaches (Kotler, 2011). These consumers can, according to Kotler (2011), be referred to as the LOHAS (Lifestyles of Health and Sustainability). The increased demand for sustainable products and business approaches in turn motivates the importance for companies to engage in, and market their, CSR activities (Kotler, 2011). Not only is a sustainable business approach motivated by consumers' demand, it is also motivated by consumers' positive attributions and attitudes towards CSR engaged companies (Bhattacharya & Sen, 2004; Kotler & Lee, 2005; Roper & Fill, 2012). Bhattacharya and Sen (2004), as well as Roper and Fill (2012), discuss how a company's CSR activities can influence a consumer's internal behaviour (awareness and attitude). They explain that this consequently can lead to greater financial success by influencing consumers' external behaviour (e.g. purchasing behaviour, loyalty, word of mouth and resilience). An environmentally sustainable business approach could differentiate a company from its competitors, affect its positioning as well as improve brand image and reputation (Bhattacharya & Sen, 2004; Porter & Kramer, 2006; Kotler & Lee, 2005; Kotler, 2011; Roper & Fill, 2012). Based on these financial benefits and the pressure from external stakeholders (Delmas & Burbano, 2011; Porter & Kramer, 2011), it is argued by Kotler and Lee (2005) as well as Kotler (2011) that the implementation of CSR initiatives is crucial for companies to gain success in today's competitive business landscape. They state that a business without any CSR engagement at all is not an option anymore.

Although Porter and Kramer (2006) recognise the need for sustainable approaches, they state that the CSR activities most companies are conducting are not as productive as they could be. According to the authors, society has put much pressure on businesses, making them responsible for issues that previously were not considered their responsibilities (Porter & Kramer, 2006; Delmas & Burbano, 2011). Porter and Kramer (2006) argue that CSR activities are often measured in dollars spent or in hours put into a project, but seldom in the actual impact it has on the environment. Vallaster, Lindgreen and Maon (2012) highlight the complexity for companies to create value for the brand as well as for the society. Additionally, Porter and Kramer (2006) as well as Roper and Fill (2012), claim that one must see the interdependency between companies and society. They also argue that companies could create societal value but at the same time create economic value for themselves. They argue that if a company would engage in CSR related activities, these activities can, and should, create value for the society as well as for the company. For instance, reducing the

amount of plastic packaging for products can save monetary resources for the company as well as natural resources (beneficial for the environment). This idea was further developed by Porter and Kramer (2011) when they introduced the concept of Creating Shared Value (CSV) in an article published in Harvard Business Review in 2011. The concept and meaning of CSV is to reinvent capitalism, and to create economic value that also creates value for the society (Porter & Kramer, 2011). In practice, the opportunity to create shared value for a business will be most visible when it is linked to its particular area of business. Porter and Kramer's article (2011) about CSV has been heavily cited and is popular among practitioners and academics, something that also has been mentioned as a strength of the article and the concept itself (Crane, Palazzo, Spence & Matten, 2014).

Crane et al. (2014) are some of the commenters that have scrutinised the concept of CSV. They argue that the strengths of Porter and Kramer's article (2011) is that it, besides its popularity, also links strategy with social goals, and that it connects previously weak research and practice areas with each other (Crane et al. 2014). What is more interesting is that Crane et al. (2014) also criticise the concept of CSV by pointing out four main flaws. These are 1) its unoriginality, 2) its way of overlooking the tensions connected to responsible business behaviour, 3) its questionable way of assuming company compliance and 4) that it is founded upon an insufficient understanding of companies' societal role (Crane et al. 2014). We would further like to extend their criticism towards company compliance. In addition to Crane et al.'s critique (2014), we would argue that company compliance in regards to creating value for both the company itself and the society should not be assumed. We assume that a company's survival and success always will be its first priority, and we see a win-win situation as a rather unlikely outcome. We would therefore also like to highlight that there are companies who do not want to compromise company value and risk financial gain by practising CSR- or CSV related actions. Even so, these companies cannot deny the multiple advantages, nor pressure from external forces (Delmas & Burbano, 2011). The same companies are instead trying to convey a false idea of them performing well environmentally, so-called greenwashing (Delmas & Burbano, 2011). Companies that are greenwashing are misleading their consumers, which in turn decreases companies' overall credibility (Delmas & Burbano, 2011). Furthermore, it is suggested that the mere fact that greenwashing firms exist leads to consumers questioning the authenticity of sustainable products and companies (Delmas & Burbano, 2011; Vallaster, Lindgreen & Maon, 2012; Rettie, Burchell & Barnham, 2014), also known as "greenophobia" (Grant, 2007).

When going through the literature, it is clear that consumers now demand a sustainable approach by companies (Kotler, 2011; Bhattacharya & Sen, 2004; Porter and & Kramer, 2006; 2011). As discussed, most companies comply to this demand, however the problem is the rise of “greenophobia” (Grant, 2007). A response to the increasing interest in sustainable consumption and the negative consequences of greenwashing (Delmas & Burbano, 2011), is the development of sustainable consumption business models (Mont, 2002; Tukker, 2004).

## 1.2 Sustainable Consumption Models

Sustainable consumption business models are assumed to be more sustainable than the traditional ways of consuming. Stål and Jansson (2017) argue that sustainable consumption has for a long time mainly focused on the development of sustainable products and consumers’ consumption behaviour. Little research and limited modifications have been done to the consumption processes’ actual usage and disposal of the products (Mont, 2002; Stål & Jansson, 2017). Mont (2002) and Tukker (2004) comment on product-service systems (PSSs), which are business models that focus on the service aspect (i.e. including usage and disposal) rather than the product. Tukker (2004) highlights three main categories of PSS business models: product-oriented, use-oriented and result-oriented. The first two represent the majority of practised PSS business models today, as found in studies conducted by Stål and Jansson (2017) and Corvellec and Stål (2017), why these two will be emphasised in this thesis. Product-oriented PSS refers to when a product’s ownership is transferred during its lifecycle and extra services are added to prolong its lifetime (Tukker, 2004). In the study by Stål and Jansson (2017), product-oriented PSS is exemplified as when fashion companies have take-back of their clothes; to either repair them (added service), donate them to charity or buy/sell second-hand (transfer ownership). The second PSS that is most common today is use-oriented PSS, in which ownership is never transferred when using the product (the ownership remains with the provider), and the product is in various forms shared by many consumers (Tukker, 2004). This PSS is in Stål and Jansson’s study (2017) described as leasing or renting products instead of buying them. The main difference between these two PSSs is therefore the ownership aspect. Ownership was previously considered one of the most important aspects for consumers, although this is now shifting towards not playing such a big part of their needs anymore (Baumeister, 2014). We believe that these two PSSs sounds more familiar when used by the terms circular economy (product-oriented PSS) and shared

economy (use-oriented PSS), as they share characteristics in terms of ownership status and extension of product life (Gregson, Crang, Fuller & Holmes, 2015; Piscicelli, Cooper & Fisher, 2015; Corvellec & Stål, 2017). In this thesis, we will therefore refer to the concepts of shared economy and circular economy when addressing use-oriented PSS respectively product-oriented PSS. Moreover, the concept of PSS business models will be referred to as consumption models, and the different ways of practising these consumption models (i.e. second-hand or renting) will be referred to as consumption sub-models. Previous research that have touched upon these two consumption models will be presented further down in Chapter 1.2.1 - Shared Economy and Chapter 1.2.2 - Circular Economy.

These sustainable consumption models could possibly generate advantages for companies, consumers and the environment, as well as help dematerialising society (Mont, 2002; Tukker, 2004; Corvellec & Stål, 2017). However, Mont (2002) has identified three main aspects that the success of these consumption models depends on. First, it depends on companies' willingness and possibility to adopt such business models (also questioned by Crane et al. 2014). Second, it depends on the consumers, i.e. how they will interpret these consumption models and their willingness to use them. Mont (2002) claims, just as Jackson (2005), that a reduced consumption is hard to achieve without a large societal effort. Third, it depends on the environmental impact it has (Mont, 2002). Moreover, one should keep in mind that the implementation of such consumption models may not always lead to a positive environmental impact, as discussed by e.g. Corvellec and Stål (2017) and Tukker (2004). In fact, there is a chance of a so-called rebound effect (Herring & Roy, 2007), which means that people might consume less responsible than before. An explanation to this could be that consumers might be under the impression that these consumption models as services have no negative impact on the environment and are cheaper than when buying a new product. With these two possible impressions, consumers could potentially consume even more than they are used to (Tukker, 2004; Herring & Roy, 2007).

Despite the uncertainties mentioned by Mont (2002), we believe that the implementation of consumption models with sustainability in mind could remove the distrust among consumers constructed by greenwashing. We believe this could be related to that, in these consumption models, consumers themselves are witnessing and actively taking part of the sustainable action, i.e. buying second-hand or renting a product instead of buying a new sustainably questionable product. Although we believe that these consumption models might

be a way to regain consumers' trust, it is difficult to know if, and how, this would impact their consumption behaviour. We therefore find it crucial to explore consumers' attitudes towards these sustainable consumption models.

### 1.2.1 Shared Economy

Shared economy is the concept of which Mont (2002) and Tukker (2004) refer to as the use-oriented PSS, where ownership is not transferred between the users but stays with the provider. As mentioned, Stål and Jansson (2017) exemplify this consumption model as when leasing or renting products instead of buying them, which has become popular consumption sub-models for product markets such as accommodation, clothes, tools, and transportation (Baumeister, 2014; Matzler, Veider & Kathan, 2015; Corvellec & Stål, 2017; Stål & Jansson, 2017). Shared economy can also decrease the amount of newly bought products by sharing the products together with friends or neighbours (SOU 2017:26). Well-known empirical findings of companies practising shared economy are Uber, AirBnb (SOU 2017:26) and VIGGA (Vigga, 2018). As mentioned, the ownership aspect has played a crucial role to consumers, but is now in for a change (Baumeister, 2014). Within the market for sharing products, the so-called transumers is a new consumer group visible today. The transumers are characterised by being driven by experience rather than ownership, i.e. putting more emphasis on discovering and freeing themselves from permanent ownership (Lawson, 2011).

As identified by academics (Baumeister, 2014; Edbring, Lehner & Mont, 2016), the attitude towards shared economy as a consumption model vary greatly depending on product market and product categories within that market. For example, consumers have generally been positive to sharing specific product categories of furniture (such as tables and chairs), but have been more negative towards textile related furnishing products (Edbring, Lehner & Mont, 2016). Moreover, consumers have seen shared economy as a suitable choice of consumption for products that are seldom and/or temporarily used and are more expensive (Edbring, Lehner & Mont, 2016). The motivators for using shared economy as a consumption model are, just as consumers' attitudes, widely depending on the product in question (Edbring, Lehner & Mont, 2016). Research has found that people who are positive towards shared economy, generally are motivated by risk-reducing factors as well as factors relating to either economy, societal aspects (status seeking), environmental aspects, or convenience (Lawson, 2011; Zvolska, 2015; Edbring, Lehner & Mont, 2016). Furthermore, the relationship between the business and the consumer, as well as accessibility and flexibility,

are proven to be important variables that affect consumers' attitudes towards shared economy (Edbring, Lehner & Mont, 2016). Moreover, what is a frequently appearing concern and obstacle for sharing economy is the aspect of questionable hygiene of the product (Edbring, Lehner & Mont, 2016).

Little academia can be found of recent research in regards to if demographic factors can characterise consumers who participate in sustainable consumption models. Lawson (2011) did an analysis of consumers' attitudes towards renting products, in relation to their demographic characteristics (e.g. gender, age, marital status and educational degree). However, she states that there is a need for further studies examining the relationship between environmental attitude and preference for shared economy as a consumption model (Lawson, 2011). Even so, in Edbring, Lehner and Mont's recent study (2016) of young Swedish IKEA consumers and their attitudes towards home furnishing products and different consumption models, they found two significant correlations between their sample's demographic characteristics and its attitudes towards shared economy. One finding is that the younger consumers of their sample (between 20-24 years old) are more interested in renting complete home furnishing sets temporarily than the older consumers (30-35) are (Edbring, Lehner and Mont, 2016). The suspected reason for this, according to Edbring, Lehner and Mont (2016), is that the younger consumers are still students and do not want to take root. The second finding relating to demographics that the authors found, was that there is a negative correlation between preference for shared economy and age, i.e. the older the consumers get, the more negative they become towards sharing products (Edbring, Lehner and Mont, 2016).

### 1.2.2 Circular Economy

As mentioned above, circular economy is the consumption model of which Mont (2002) and Tukker (2004) refer to as product-oriented PSS. Examples of consumption sub-models for circular economy is shopping second-hand and repairing products, and by that prolonging the lifespan of the products (Stål & Jansson, 2017). For this consumption model, in contrast to shared economy, the ownership is transferred during the product's lifecycle when purchased, i.e. single-handed ownership (Tukker, 2004). Research in the area of circular economy has focused on product markets such as clothing and transportation (Stål & Jansson, 2017). Well-known empirical findings of companies practising circular economy by different consumption sub-models are H&M's (by their Close the Loop approach (H&M Group, 2017; Ellen MacArthur Foundation, 2017)) and second-hand stores in general.



Baumeister (2014) found that consumers have a more positive attitude towards consumption models implying single-handed ownership than towards consumption models with shared ownership for products such as cars, bikes, and handbags. He also found that, regarding books, people are neutral in whether they preferred single-handed ownership or shared ownership (Baumeister, 2014). Edbring, Lehner and Mont (2016) examined consumer attitudes for home furnishing towards, among other consumption models, circular economy. They found that consumers have an overall positive attitude for buying furniture via second-hand. However, as mentioned before by Baumeister (2014), in addition to Edbring, Lehner and Mont (2016), the attitudes for consumption model vary deeply depending on product category. An explanation for this, as argued by Edbring, Lehner and Mont (2016), is the documented relationship of a positive attitude towards circular consumption for products of hard material (such as wood or metal) and a negative attitude towards circular economy for products of soft materials (e.g. textiles and mattresses), as questionable hygiene might be an obstacle for this consumption model.

One of the most frequently mentioned motivators found in previous research, for using circular economy, seems to be economical reasons (Clausen, Blättel-Mink, Erdmann & Henseling, 2010; Joung & Park-Poaps, 2013; Edbring, Lehner & Mont, 2016). Two additional motivators for circular economy as a consumption model are consumers' desire to buy products of high quality (even though previously used) over buying new products of lower quality, and their desire to own unique products (e.g. that cannot be found in stores any longer) (Clausen et al. 2010; Guiot & Roux, 2010; Edbring, Lehner & Mont, 2016). This is specifically in regards to the consumption sub-model second-hand and in relation to the product markets furniture and clothing (Clausen et al. 2010; Guiot & Roux, 2010; Edbring, Lehner & Mont, 2016).

There is a disagreement among researchers whether environmental reasons is to be considered a motivator for consuming products through circular economy. Some argue, and have found, that environmental concern is a great denominator motivating consumption (Cheng-Jui & Shuo-Chang, 2011; Edbring, Lehner & Mont, 2016), although only motivating a small amount of consumers (Clausen et al. 2010). Furthermore, it is shown in Edbring, Lehner and Mont's study (2016) that people who are very environmentally concerned do shop more by second-hand. Contradictory to Cheng-Jui and Shuo-Chang's (2011) and Edbring, Lehner and

Mont's claim (2016) of environmental concern as an acknowledged motivator for circular economy consumption, there are some researchers who insist that environmental related factors merely spark additional consumer value, specifically for the product market clothing (Niinimäki, 2010). Niinimäki (2010) means that environmental factors should not be considered a significantly decisive variable that motivates consumption through second-hand, as other variables seem to have a greater influence (such as style, fit and price) (also found by Butler and Francis (1997)).

To investigate how these sustainable consumption models (shared and circular economy) could possibly be accepted by consumers, and the potential these consumption models have in the marketplace, the next section will discuss previous research about consumers' behaviour and what drives consumption today.

### 1.3 Consumer Behaviour

According to Jackson (2005), a first step in understanding consumers' sustainable consumption behaviour is to understand their general consumption behaviour, i.e. not necessarily consumption of sustainable products. We find it interesting to explore how consumers' values drive their purchase behaviours for products that are not necessarily sustainable (what we in this thesis will refer to as conventional/traditional products). Various studies have been conducted in this field, which has resulted in different frameworks of consumers' perceived value (Sánchez-Fernández & Iniesta-Bonillo, 2007; Boksberger & Melsen, 2011). Sánchez-Fernández and Iniesta-Bonillo (2007) as well as Boksberger and Melsen (2011) made an attempt at systemising previous research in this field. They found that the concept is complex, why it is difficult to come up with one simple framework, and that there is no general conceptualisation of perceived value. One frequently cited study of perceived value in the retail sector is conducted by Sweeney and Soutar (2001), presenting 19-items of measure that are of relevance. From this 19-item scale they found four clear dimensions that can measure consumers' value: emotional, quality/performance, social, and price/value-for-money (Sweeney & Soutar, 2001). Additionally, other studies have aimed at identifying the value drivers in the service sector. Petrick (2002) identified a 25-item measure, which resulted in five clear dimensions for services; quality, emotional response, monetary price, behavioural price (non-monetary obtaining costs, e.g. time and effort), and reputation. Baumeister (2014) examined consumers' attitudes towards shared economy as a consumption

model, in regards to different product categories. His research presented an 18-item measure scale of perceived value. It consists of four main dimensions: monetary perceptions, functional perceptions, experiential perceptions, and symbolic perceptions (Baumeister, 2014). We find that, even though there are different frameworks for perceived value and that it is a complex field of research (Sánchez-Fernández & Iniesta-Bonillo, 2007; Boksberger & Melsen, 2011), the found dimensions have common denominators and are, according to us, relatively similar to each other. By this, we mean that many of the motivators collected in Edbring, Lehner and Mont's study (2016) mentioned above, have common denominators with the various frameworks of perceived value (Sweeney & Soutar, 2001; Petrick, 2002; Baumeister, 2014). We believe that the motivators found by Edbring, Lehner and Mont (2016) could refer to either a main dimension of perceived value or as an item within such a dimension (Sweeney & Soutar, 2001; Petrick, 2002; Baumeister, 2014). For example, Edbring, Lehner and Mont's (2016) motivator environmental friendliness can be found in Baumeister's (2014) dimension experiential perceptions, whereas their economical reason as motivators or obstacles can be linked to price/value-for-money (Sweeney & Soutar, 2001), monetary price (Petrick, 2002), and monetary perception (Baumeister, 2014). From this, we learn that the perceived value of purchasing conventional/traditional products have similar characteristics as the motivators for engaging in the more sustainable consumption models (as seen in Chapter 1.2 - Sustainable Consumption Models). This provides us with a good understanding of what drives consumption, both for conventional/traditional purchases and also for more environmentally friendly consumption models.

To go even deeper into the area of consumption, we would like to highlight what Jackson (2005) acknowledges as a fundamental disagreement visible among researchers over the years regarding whether increased consumption makes people happier or not. Jackson (2005) argues that one could see this debate from two sides, where one side believes that high consumption is equal to increased well-being. This can be supplemented with what was previously mentioned as an old way of marketing thinking and with the assumption that resources are infinite, as presented by Kotler (2001). This pro-consumption side of the debate believes that consumption is a tool used to create identity, and that most consumption is symbolic rather than functional (Jackson, 2005). If comparing this to the well-known theory Hierarchy of Needs, introduced by Maslow (1943), we would argue that this side of the debate describes consumption as an actualisation need, and not as a basic need. This means that we consume products that we do not always need for functional reasons, but also for hedonic reasons.

The other side of Jackson's discussion (2005) argues that consumption damages both the environment and people's psychological health, which is linked to the LOHAS (Lifestyles of Health and Sustainability) (Kotler, 2011), and the transumers (Lawson, 2011). This side of the debate (against consumption) is in accordance with the growing interest in sustainable consumption, why we find it crucial to specifically explore consumers' sustainable behaviour.

## 1.4 Consumers' Sustainable Behaviour

Apart from the debate of consumption as either good or bad, Jackson (2005) presents another on going debate among academics in the sustainability- and consumption field. In this debate, researchers discuss if improved technology could be the solution to the environmental problems (e.g. start-stop cars where the engine turn off itself when standing still), or if the desire for new technology is what damages the environment the most (Chertow, 2000; Mont, 2002; Jackson, 2005). According to Jackson (2005), improved technology, i.e. production of sustainable products, is not enough to influence consumers' behaviour. This is also discussed in an article by Chertow (2000), where she presents that some believe that the environmental impact will not decrease solely based on new technology, but will need consumers to change their behaviour accordingly. Previous researchers show that changing people's consumption behaviour into sustainable, is not an easy task (Jackson, 2005; Rettie, Burchell & Barnham, 2014). An example of this could be the attempt to make people turn off their cars when they are not actively driving, to prevent idling. It has been proven difficult to change people's behaviour into doing so, why technology can help by creating a new function that automatically turns off the car when still. We imagine that the implementation of sustainable consumption models, such as circular and shared economy, is a form of improved technology. Shared economy, for example, is often practised through web platforms and mobile applications, which facilitates the consumers to rent or share products (SOU 2017:26). We draw the conclusion that changing people's consumption behaviour into sustainable behaviour is a great challenge because of the existing "greenophobia" (Grant, 2007). As Jackson (2005) and Chertow (2000) argue, improved technology might not be the entire solution in changing people's consumption behaviour, why we therefore see it as central to also understand the consumers and their sustainable behaviour, to further urge a sustainable consumption.

Going back to what we mentioned earlier, Jackson (2005) presents two contradicting sides of how we could perceive consumption. In his conclusion, agreeing with the pro-consumption

side of the debate, he points out the crucial aspects of symbolic consumption, meaning that consumption is so much more to us today than just the functional aspect of it. By this, he means that it would be hard to change the society into stop consuming, since consumption is of great significance in how we live our lives today. However, he concludes that consuming less, related to the side that is against consumption, could result in a win-win solution as it would benefit consumers' well-being and at the same time decrease the negative impacts on the environment. He argues that this practice of consumption, to consume considerably less, could possibly be implemented in society, but that it would take a large societal effort to actualise it (Jackson, 2005). As discussed before, we do not agree with the assumption of a win-win situation. Particularly in business, there will always be winners and losers. For example, if we would stop consuming, or consume less, it would indeed have positive impacts on the environment, and maybe, as some argue, a result in better well-being for the consumers. In this scenario however, the losers would be the companies - if people consume less, they buy less and companies make less money. If seen through a utilitarian perspective (the greatest amount of happiness for the greatest amount of people (Crane & Matten, 2016)), the potential loss companies would face, due to decreased profitability, might be worth the positive environmental impacts on society as a whole.

For many years, researchers have tried to understand what drives consumers' sustainable behaviour, and what is seen as obstacles for such behaviour. Laroche, Bergeron and Barbaro-Forleo (2001) found that consumers who have the perception of environmental behaviour as inconvenient, do not want to pay extra for environmentally friendly products, whereas the ones thinking environmental friendliness is convenient are willing to pay a higher price for such products. Moreover, consumers' perceived importance of environmentally friendly behaviour also plays a crucial role to if consumers would pay extra for an environmentally friendly product or not (Laroche, Bergeron & Barbaro-Forleo, 2001). Adding to this, other academics have examined the correlation between demographics, environmental consciousness, and behaviour (Diamantopoulos, Schlegelmilch, Sinkovics & Bohlen, 2003; Franzen & Vogl, 2013). Diamantopoulos et al. (2003) argue that this is an area of complexity, but that demographic characteristics have shown to be significantly correlated with environmental consciousness. Worldwide and longitudinal research states that environmental concern correlates with age, educational degree, gender, and income (Franzen & Vogl, 2013). It is proven that women are more environmentally concerned than men (Franzen & Vogl, 2013), as well as share stronger attitudes towards the environment and tend to have greener

shopping habits (Diamantopoulos et al. 2003). Previous research also states that younger individuals, those with higher educational degree, and those with higher income show a greater environmental concern than those with other demographic characteristics (Diamantopoulos et al. 2003; Franzen & Vogl, 2013). Franzen and Vogl (2013) also state that wealthy countries have a higher concern for the environment than poor countries. Additionally, these demographic characteristics that affect environmental consciousness differ from various countries, and changes over time (Diamantopoulos et al. 2003). Since these demographic characteristics have been proven to have significance for environmental attitude and behaviour, we find this a particularly interesting and important area of research when investigating consumers' sustainable behaviour.

A part from the demographic characteristics, research also states that consumers' sustainable consumption is affected by surrounding values and norms (Jansson, Nordlund & Westin, 2017). This is further strengthened by the process of social normalisation as presented by Rettie, Burchell and Barnham (2014). They suggest that consumers are hesitant to try new products or actions if these are not considered to be normal in the society. Further, the authors mean that consumers' sustainable behaviour is coloured by their moral consciousness. In Rettie, Burchell and Barnham's study's (2014), their interviewees' reasoning behind their sustainable actions were motivated by not wanting to be considered "the bad guy" for not acting sustainably. What also was found in said research was that what is viewed as abnormal today will possibly be seen as normal in the future, i.e. normality is not stable. Hence, consumers can, and probably will, change their sustainable behaviour in accordance with what is considered normal in the society (Rettie, Burchell & Barnham, 2014). This is in line with Jackson (2005) who came to the same conclusions, meaning that to stop consuming would be hard for us since it is a part of our everyday life (i.e. seen as normal), even though we might succumb to that it would be good for the environment.

Adding to Jackson's thoughts (2005) about consumption, consumer culture theorist Douglas Holt has an interesting view on why consumers choose to consume in a sustainable manner. In his article "Constructing Sustainable Consumption: From Ethical Values to the Cultural Transformation of Sustainable Markets", published in 2012, he brings attention to flaws of the previously preliminary way of understanding consumers' unsustainable and sustainable consumption patterns, what he calls the ethical value paradigm. This paradigm has viewed consumption as a result of consumers' independent ethical values. Holt (2012) refers to this as

consumerism, which is driven by materialism, possessive individualism and even at times narcissism. This is connected with Jackson's highlighted arguments (2005) that people use consumption as symbols to create one's identity. Holt (2012) describes the ethical value paradigm to be about influencing consumers' ethical values to change their consumption pattern into sustainable. He criticises this paradigm for not being able to provide sufficient evidence for that consumers' behaviours are in accordance with their values, most known as a type of value-attitude-behaviour model. This is further strengthened by Rettie, Burchell and Barnham (2014), Jansson, Nordlund and Westin (2017), and Stål and Jansson (2017), who argue that consumers' sustainable values are not always in line with their behaviour, the so-called attitude-behaviour gap. In this thesis, we refer to this attitude-behaviour gap when implying that consumers do not always act in accordance with their attitude, i.e. consumers' attitude towards sustainable behaviour might not mirror their actual behaviour. Moreover, Holt (2012) points out this shortage of the ethical value paradigm by claiming that if consumption would be shaped by values alone, consumers' purchases would be more consistent. In contrast to this assumption, Holt (2012) suggests that consumers consume differently depending on product market, which implies that they do not always consume consistently in accordance with their sustainable values. Holt (2012) exemplifies this by saying that some people might drive a Prius (well-known for its low environmental impact) but at the same time take long-distance flights all over the world. He suggests that what he terms as the marketing construction paradigm is an additional paradigm for understanding why consumers consume unsustainable respectively sustainable the way they do. Holt's marketing construction paradigm (2012) move away from consumers previously assumed materialistic consumption drivers. Holt (2012) argues that consumers' consumption behaviour is further constructed by the market and its ideologies. We assume that this is a step towards the social normalisation process as presented by Rettie, Burchell and Barnham (2014). Holt (2012) does not fully disregard the ethical value paradigm, he merely expresses that this paradigm cannot explain all sustainable consumption choices and reasoning's behind them, but needs to be supplemented with the market construction paradigm.

This section (Chapter 1.4 – Consumers' Sustainable Behaviour) has shown that consumers' sustainable behaviour is influenced by social normalisation (Rettie, Burchell & Barnham, 2014), demographic characteristics (Diamantopoulos et al. 2003; Franzen & Vogl, 2013), and the market itself (Holt, 2012). What we interpret this previous research as, is that all these influencing factors make the area of consumers' sustainable behaviour complex. As they all

can be argued to affect sustainable consumption it one or two ways, for better or for worse, it becomes difficult to assess whether or not a greater implementation of the sustainable consumption models will be appreciated and beneficial or not, both for consumers to use and for businesses to practise.

## 1.5 The Complexity

Based on the literature we have reviewed, we have found three (main) possible consumption models that can guide consumers towards an increased sustainable consumption. First, as found by Mont (2002) and Tukker (2004), there are new consumption models arising that focus on either prolonging the lifetime of a product or decreasing the amount of bought products. This is done by, for example, offering consumption sub-models such as second-hand or renting, via circular and shared economy. Second, as discussed by Jackson (2005) and Holt (2012), there is an increased demand for sustainable products (e.g. organic, ecological and recyclable), which we interpret as the development of an environmentally friendly consumption model. In addition to these three sustainable consumption models, we also find it crucial to acknowledge the traditional way of consuming products, i.e. without any specific environmental considerations taken. We believe it is important to take on a critical perspective and be aware of that, despite the increasing sustainable approach among consumers, the conventional/traditional way of consuming is still the most common way to consume by (McKinsey & Company, 2016), why it needs to be included when discussing consumption.

This leads us to the interest of further examining these specific consumption models:

1. Circular economy (e.g. buy second-hand)
2. Shared economy (e.g. rent or lease products instead of buying)
3. Environmentally friendly (e.g. buy new but organic, ecological, low energy products)
4. Conventional (e.g. buy new products without any specific environmental considerations)

Within the area of sustainable approaches for businesses, and in the area of consumer behaviour research, there are multiple aspects that comprise complexity. Chapter 1 - Background and Literature has touched upon the complexity of: CSR (CSV, greenwashing and “greenophobia”), the approach to consumption in general (perceived value and pro-/against consumption discussion) and what influences consumers’ sustainable consumption



(technology, social normalisation, ethical values/market construction paradigm, and demographic characteristics). These complexities can be considered possible obstacles for consumers' sustainable consumption, in addition to what has already been mentioned by Mont (2002) as an uncertainty for adopting these consumption models: consumers' acceptability. Moreover, Tukker (2015) also explains that the reason why these consumption models have not been fully implemented yet is because of their disadvantages to consumers, e.g. the reduction of ownership and tangible values. Holt (2012) further suggests that the reason why some markets are not consumed in a sustainable manner is due to the markets' ideology with normalisation of the conventional consumption practise. As mentioned, Baumeister (2014) points at a decreased importance of ownership among consumers, Lawson (2011) mentions the transumers as an increasing group of consumers, and Kotler (2011) talks about the LOHAS, why we believe that consumers' acceptability of these sustainable consumption models might have changed over the years. These complexities and the change in consumer mind-set regarding sustainable consumption, leads us to the conclusion that there is an importance in understanding consumers' attitudes towards the mentioned consumption models. This is of relevance in order for businesses and society to implement such sustainable consumption models and urge a sustainable way of consuming, as aspired by one of the 17 SDG goals (United Nations, 2018). We consider our research, and all other research in the area of sustainable consumption, of utmost importance at this time, to fulfil the 12th SDG by 2030 (United Nations, 2018).

As stated, previous research has mainly examined consumers' attitudes towards various consumption models and different product markets or categories separately (Clausen et al. 2010; Guiot & Roux, 2010; Gwozdz, Netter, Bjartmarz & Reisch, 2013; Edbring, Lehner & Mont, 2016). Yet, little research has been conducted on consumers' attitudes in relation to both multiple consumption models and different product categories in different product markets. Baumeister (2014) highlights the importance of examining attitudes towards different product markets in these consumption models, since there is a high variation between both product markets and product categories, as further indicated by Holt (2012) and Edbring, Lehner and Mont (2016). However, we believe that previous studies have, to a large extent, ignored the inclusion of multiple product categories from a product market (Baumeister, 2014) and the inclusion of multiple product markets (Edbring, Lehner & Mont, 2016) in their studies. This in turn questions whether their conclusions of that the attitudes towards different consumption models differ between product markets and product categories

are reliable or not. As these studies have not examined multiple product categories within several product markets, their results cannot conclusively be generalised, i.e. state that this differentiation in attitudes apply for all product categories within all product markets. Therefore, we find this particular approach interesting to examine and take into account, as we believe that different product categories within the same product market could have different implications on consumers' choice of consumption model. Baumeister (2014) as well as other scholars such as Edbring, Lehner and Mont (2016) have examined consumers' attitudes for certain product markets and categories in regards to several consumption sub-models individually. What scholars further not have included, as far as we know, is having the consumers choose between which of the different consumption models they prefer the most for specific product markets and product categories, which points at an importance of further research in this area. Furthermore, not much research have been conducted to explore if consumers' demographic characteristics has an impact on their preferences of using a specific consumption model, even though these have shown to play a crucial role for sustainable behaviour, as stated by Laroche, Bergeron and Barbaro-Forleo (2001), Diamantopoulos et al. (2003) and Franzen and Vogl (2013). The demographic characteristics are therefore of high relevance to take into consideration when examining consumers' sustainable consumption behaviour and their acceptability of sustainable consumption models, as also encouraged by Lawson (2011). Diamantopoulos et al. (2003) further argue that the demographic characteristics that influence environmental consciousness alter from various countries and changes over time, why we found an interest in mapping the Swedish consumers' preferability for different sustainable consumption (and these sustainable consumption models specifically) of today.

The reasons why we found Swedish consumers interesting to examine is twofold. First, it is due to the possible expansion and implementation of both shared and circular economy consumption models on the Swedish market (Bademo, 2017; McCormick, 2018). Second, Sweden, internationally speaking, performs high on rankings for environmental policy, and is considered a predecessor in regards to environmental and social sustainability (Söderholm, 2013). This becomes interesting as it might affect the Swedish consumers' preferability for said consumption models. It could possibly imply a more positive attitude than other less environmentally and socially sustainable countries, which could make Sweden a suitable and profitable market for a greater implementation of these sustainable consumption models.

The aim of this thesis is to contribute to research in the field of sustainable consumption. We would like to gain insight into Swedish consumers' acceptability of, and motivators for, practising sustainable consumption models. We will do so by examining which consumption model they prefer for a specific product market and product category. By examining this question, we will also find if the Swedish consumers are consistent in their choice of preferred consumption model across product markets or categories, or if it differs. Furthermore, we will explore if there are any demographic characteristics that may impact choice of consumption model. The purpose of this thesis is to facilitate easier ways for consumers and practitioners to act more sustainably in the marketplace. The results of our study will guide practitioners in making decisions of which consumption model to practise for a specific product market and category, which consumers to target and to know what to emphasise when marketing these consumption models. By this, practitioners can offer consumption models that align with consumers' desired ways of consuming various products.

Consequently, this thesis will provide answers to the following research questions:

- *Which of the four consumption models (“Circular economy”, “Shared economy”, “Environmentally friendly”, and “Conventional”) do Swedish consumers prefer, in relation to different product markets and product categories?*
- *Are there any distinctive demographic segments among consumers preferring a specific consumption model? In that case, which ones?*

## 2. Methodology

*In this chapter, we will focus on the methodology used to conduct this study. We will here present the research approach and strategy, the research design and the content and structure of the study. We will also discuss the sampling method and the methods used for analysing and processing the data. Lastly, we will discuss the validity and reliability of the study, as well as the ethical considerations taken.*

### 2.1 Research Approach and Strategy

Our aim of this thesis was to get insight into how Swedish consumers show preferability for a consumption model over another in specific product markets and product categories, and whether or not specific demographic characteristics have an impact on their choice. Research-wise, our point of departure was of a positivist philosophy, which enabled an objective measuring of our study (Easterby-Smith, Thorpe & Jackson, 2015). Moreover, this philosophical stance had further implications for our choice of research design and method (Easterby-Smith, Thorpe & Jackson, 2015). Because of what we wanted to examine, in line with our aim and research questions, a correlating relationship was a sought-after outcome of the study (Easterby-Smith, Thorpe & Jackson, 2015).

In multiple previous studies, where the aim was to map out large population's attitudes towards consumption behaviour, researchers have used a quantitative research strategy (Gwozdz et al. 2013; Baumeister, 2014; Edbring, Lehner & Mont, 2016). These researchers have studied consumers' attitudes towards sustainability (Gwozdz et al. 2013) and towards different consumption models (Baumeister, 2014; Edbring, Lehner & Mont, 2016). In general, quantitative strategies have been frequently used when examining consumers' attitudes and behaviour (Burns & Burns, 2008). As our thesis aimed at exploring which consumption models Swedish consumers prefer for different product markets and product categories, we believe that this choice is highly connected to their attitudes for the various consumption models. Hence, we were inspired to follow in the footsteps of these academics and their previous studies in regards to research strategy, in hopes to further add to their research fields (as encouraged by Easterby-Smith, Thorpe and Jackson, 2015). Moreover, this research strategy is complemented by our thesis's deductive approach, as it seeks to examine the relationship between previous research and empirical findings of preferability of consumption models on product markets (Bryman & Bell, 2013). An advantage of using a quantitative

research strategy is that its answers provide a more representative overview of the population (Bryman & Bell, 2013), which further motivated us to take on such a research strategy. Other advantages using a quantitative research strategy and a positivistic stance are the potential replicability, and low impact of subjective interpretations (Bryman & Bell, 2013; Easterby-Smith, Thorpe & Jackson, 2015).

As mentioned in Chapter 1.4 - Consumers' Sustainable Behaviour, a well-known problem in predicting consumers' behaviour is their attitude-behaviour gap (Stål & Jansson, 2017). Even so, a common way of examining consumers' potential behaviour is by examining how they would possibly choose in certain scenarios (Fazio, 1986). To answer our research questions, we decided to conduct a survey based on perception data. We do not aspire to measure the sample's preferability in terms of positive or negative attitudes in relation to the different consumption models, but rather examine their preferability for different consumption models. Although perception data research questions are generally researched by a qualitative strategy (Burns & Burns, 2008), we saw a quantitative strategy fit as we wanted to examine a large population and obtain an overview of many related areas (such as demographic characteristics and motivators). Previous research has shown that measuring attitudes can provide indicators of actual behaviour (Fazio, 1986), as there is a strong correlation between the two. This means that when we refer to the Swedish consumers' preferability of the consumption models, it is an indication of how they could possibly consume in an actual consumption situation (Fazio, 1986). There is a risk that respondents of a study formed this way, could state an attitude or the choice of preferred consumption model that is not in accordance with their actual behaviour (Burns & Burns, 2008), i.e. showing an attitude-behaviour gap (Fazio, 1986; Stål & Jansson, 2017). Even so, we still believed that by examining Swedish consumers' preferability between the different consumption models could provide an indication of how they would actually consume, and we therefore found it a suitable research strategy in order to answer our research question.

## 2.2 Research Design

Chapter 1 - Background and Literature was constructed by secondary data, such as textbooks and articles from acknowledged journals. This chapter laid the ground for the primary data, i.e. our study.

Burns and Burns (2008) mention that consumers' attitudes are crucial for how they behave in the marketplace, which further motivates the importance of our research. A cross-sectional designed study was justified as we wanted to examine the Swedish consumers' preferability for more than one product market and product category, towards different consumption models, and as we were only examining these research questions once (Burns & Burns, 2008; Bryman & Bell, 2013). Surveys and descriptive research are commonly performed when using a cross-sectional design (Burns & Burns, 2008; Bryman & Bell, 2013), which suited our contemplated data collection method as well as our foreseen way of answering our exploratory research questions. A survey, as part of our cross-sectional design, was chosen in accordance with our philosophical assumptions and chosen research strategy. We further suspected that the use of a survey would enable us to gather a large amount of data (Burns & Burns, 2008), suitable for our population of Swedish consumers. In addition to these reasons, Easterby-Smith, Thorpe and Jackson (2015) support the usage of likewise research design from similar studies when wishing to contribute to already existing research fields. Therefore, we allowed previous studies related to ours (Gwozdz et al. 2013; Baumeister, 2014; Edbring, Lehner & Mont, 2016) to inspire and guide our research design and survey construction.

There are various ways of collecting data using a survey (Burns & Burns, 2008), however we chose to use a Web survey created via Google Forms. The choice of Google Forms as our survey tool is further discussed in Chapter 2.3 - Questionnaire Content and Structure. The three main advantages of using a Web survey (henceforth referred to as survey) is that it can reach many respondents, is cost- and time efficient (Burns & Burns, 2008), and is, in contrast to an email survey, superior when exploring a large user group online (Bryman & Bell, 2013). The cost- and time constraint also motivated a cross-sectional research design over a longitudinal design, which otherwise is an acknowledged research design for exploring correlating or cause-and-effect relationships (Burns & Burns, 2008). Also, we expected a survey to ensure a quick and easy way for respondents to participate, as its participation would not require being at a specific place at a specific time, i.e. could be done at home at any time. Burns and Burns (2008) mention that a limitation of using this survey form as a research method is that there is a chance of technical issues. This is an example of what can create frustration among the respondents that could lead to potential dropouts and missing values. In our study, there was only one respondent, to our knowledge, who had technical issues with the survey, why we do not consider this a major problem. Another disadvantage is that the sample would be limited to the people that have access to the Web (Bryman & Bell, 2013).

However, we did not consider this an issue for our study and chosen population, as the majority of the Swedish population (95,0%) has access to the Web (Internetstiftelsen i Sverige, 2017).

## 2.3 Questionnaire Content and Structure

### 2.3.1 General Questionnaire Format

Our survey was, as stated above, conducted using the tool Google Forms. The decision to use this specific tool to create the questionnaire for our study was made because of the platform's simple format, both for us as creators, and for the respondents to fill in. Also, Google Forms was chosen as we found it well compatible with the statistical computer software SPSS that we used for the data analysis. As the study aimed at examining Swedish consumers, we decided to construct the questionnaire in Swedish (see Appendix A). This was highly motivated as it would be more convenient to fill in the questionnaire in Swedish than in English, as well as more easily understood, i.e. avoiding language barriers. After the data of the questionnaire was collected, the questionnaire and the results were translated into English in order to be incorporated into this thesis (see Appendix B and Appendix C).

When conducting the questionnaire, we placed great emphasis on formulating the questions and response alternatives to avoid miscommunication. This caution was taken as we, because of our research design, had no chance of further explaining the content of the questionnaire to the respondents (Burns & Burns, 2008). To further prevent miscommunication in the final questionnaire, we conducted two separate pilot tests on five people before releasing the final questionnaire. These pilot tests were performed to test the wording and formulation of the questionnaire content, as well as if the levels of measurement were considered suitable for our study (Burns & Burns, 2008). The first pilot test revealed flaws with the questionnaire content, why the questions and the response alternatives had to be reformulated. After reformulating these, a second pilot test was conducted in order to assure that the reformulations improved the understanding of the questionnaire, which they did. By conducting these pilot tests, we also received an estimation of the average response time, which was approximately six minutes. We considered this to be a relatively good time frame for completing a questionnaire, and that the time frame would not be considered a crucial obstacle for possible respondents. The time frame was mentioned in the introduction of the

questionnaire, which also is recommended by Burns and Burns (2008). The formation of the questionnaire, both in regards to language and response time, was greatly emphasised in order to motivate participation and to receive as reliable answers as possible. The reliability of the study is discussed further down in Chapter 2.6 - Validity and Reliability.

Our final questionnaire began with an introduction, where we introduced ourselves and a selected part of the aim of the study. We also stated the number of questions and the estimated time it would take to answer them. This was followed by information about the ethical considerations relevant for the respondents' participation in the study, which is further discussed in Chapter 2.7 - Ethical Considerations. The last thing mentioned in the introduction of the questionnaire was an encouragement to the participants to read the instructions carefully and thoroughly in order to be able to respond as accurately to the questions as possible. After the introduction followed the first section of our twofold questionnaire. This first section included five so-called demographic questions (Burns & Burns, 2008). The second section of the questionnaire was related to the consumers' attitudes towards which consumption models they preferred for given product markets and categories. This section consisted of, in total, sixteen questions; eight main questions regarding which consumption sub-model the respondents would prefer for a given product category, and eight follow-up questions regarding motivators for these choices. The two different sections of the questionnaire will be explained more in depth further down. For a full view of the Swedish and English version of the questionnaire, please see Appendix A and Appendix B.

### 2.3.2 Questionnaire Section One: Demographics

In the first section of the questionnaire, the respondents were asked to answer five demographic questions regarding their gender, age, educational degree, personal monthly income and environmental concern. These questions were mainly asked to answer our second research question: *“Are there any distinctive demographic segments among consumers preferring a specific consumption model? In that case, which ones?”*, i.e. if there is a correlation between these two. If correlations between demographic characteristics and the choice of preferred consumption model would be found, we would further be able to provide indications to companies of who their target group should consist of, depending on consumption model. The first four questions of demographic characteristics were also asked to confirm previous research of the correlation between them and environmental concern (our fifth demographic question), as found by Diamantopoulos et al. (2003) and Franzen and Vogl



(2013). The reason for this was to see if our sample of Swedish potential consumers show similar results (as found by previous research (Laroche, Bergeron & Barbaro-Forleo, 2001; Diamantopoulos et al. 2003; Franzen & Vogl, 2013)) regarding demographic characteristics for a high level of environmental concern. If this would be the case, the results from our study could further add indicational patterns to already existing research, as it would build on the same basis. If the sample did not correspond with previous research statements, it would beg the question if Swedish consumers should be re-examined and in more depth in relation to environmental concern, as existing research might be too old and inaccurate. These demographic questions were all analysed as descriptive statistics.

The first two questions (gender and age) were also asked to reveal the distribution of the respondents (Burns & Burns, 2008). This data was later compared with the total Swedish population to see if our sample could be considered representative. The first question regarded the respondents' gender, and was asked as follows "To which gender do you identify with the most?". The response alternatives to this question were "Male", "Female", and "Other". The last option, "Other", was included as some individuals identify themselves as non-binary, why this option is suggested to be included in surveys (SOU 2017:92). The second question in the demographic section was regarding the respondents' age. Although age is a ratio variable, we chose to treat it as an ordinal variable to make it easier to analyse, which is supported by Burns and Burns (2008). The ordinal scale resulted in the following age categories: "0-17", "18-34", "35-49", "50-64", "65-79", and "80+". Although we wanted to exclude respondents under the age of 18, we still chose to include an age box as "0-17". If a respondent did check the "0-17" box, they were automatically transferred to the final page of the survey, where we thanked them for their participation. The choice of age exclusion is further motivated in Chapter 2.4 - Sampling and Data Collection. Even though the instruction of the survey stated that one had to be 18 years or older to participate, we still included this age box to prevent underage participation in case some participants did not read the instructions. The five age groups (when excluding "0-17") were set to enable a broad distribution, but were thought to be adjusted if we would not receive enough respondents. This is further discussed in Chapter 2.5 - Data Processing and Analysis.

Question number three was regarding the respondents' education, and framed as: "Highest completed level of education" (henceforth in this thesis referred to as educational degree). To this question, the respondents could choose from three different response alternatives from an

ordinal scale (Burns & Burns, 2008): “Elementary School”, “High School” and “University”. The format of the question and the response alternatives were chosen by recommendations of Statistics Sweden (Statistiska centralbyrån, 2004). The fourth question was regarding the respondents’ personal monthly income. As described above, we wanted to explore the relationship between demographic characteristics and environmental concern, as well as the choice of consumption model. As we considered personal monthly income a variable of which such a relationship could be found, we considered it an important question to our research, and chose to include it even if it could be considered a sensitive question for the participants to answer (Burns & Burns, 2008). Even though personal monthly income is, just as age, a ratio variable, we chose to treat it as an ordinal variable by ordering the variables into different categories (Burns & Burns, 2008). We believe that this might have reduced the inconvenience of answering a relatively sensitive question as personal monthly income like this, since no exact answer had to be provided. The way the categories of personal monthly income were divided was inspired by Statistics Sweden’s suggestions on how to frame similar questions (Statistiska centralbyrån, 2004). The different income groups for this question can be found in Appendix B.

The fifth and last question in the demographic section was framed as: “How concerned are you about today's environmental and climate impact?”, which from here on will be referred to as environmental concern. As mentioned above, this question was mainly asked to see if there was a correlation between environmental concern and the demographic characteristics asked in the four questions above. It was also asked with the purpose to find out if the respondents’ environmental concern had an impact on their choice of consumption sub-models. This question was chosen and framed as an ordinal scale, based on Tantawi, O’Shaughnessy, Gad and Ragheb’s study (2009).

### 2.3.3 Questionnaire Section Two: Consumption Models

The aim of our thesis was to examine which consumption model Swedish consumers prefer for specific product markets and categories, if demographic characteristics have an impact, and if the choice is consistent across product markets and product categories. Therefore, the main part of the questionnaire was related to this topic, to answer our first research question (“Which of the four consumption models (“Circular economy”, “Shared economy”, “Environmentally friendly”, and “Conventional”) do Swedish consumers prefer, in relation to different product markets and product categories?”). The second section began with an

introduction of specific conditions and assumptions for the main-and follow-up questions. These conditions and assumptions will be presented further down. For a complete overview of the questionnaire, please see Appendix B.

The product markets we chose to examine were “Clothing”, “Tools”, “Furniture” and “Transportation”, as shown in the table below (Table 2.1 - Product Markets and Categories). These product markets were chosen based on environmental impact and their familiarity with shared and circular consumption practices, as presented in Chapter 1.2 - Sustainable Consumption Models. They were also chosen as we wanted to further add on to previous research about these product markets and their relationship with consumption models. As previous research (Edbring, Lehner & Mont, 2016) has stated that the choice of consumption model differs not only between product markets but also between product categories, we decided to conduct this study based on product categories and not on product markets. By this, the plan was to gather results from the product categories separately, and then merge the product categories within same product market together to receive average results for the product market (see Chapter 3.2.1 - General Findings). Within each product market, two separate product categories were thoroughly chosen. The two product categories from each market were selected as we believe they had similar hygiene level. This was, to us, an important factor to consider, as hygiene has been found to be an obstacle in some product markets and for some product categories for both shared and circular economy (Edbring, Lehner & Mont, 2016). By choosing product categories with similar hygiene level, we believe that the respondents could base their choice on other factors than hygiene level, and that we by that would receive more accurate responses for our first research question. In total, these product markets and categories resulted in eight main questions with eight follow-up questions. In the main questions, we included an approximate price for the conventional product, as well as the frequency of usage. The reason for including these variables are explained further down in this section.

<b>Product Market</b>	<b>Product Category</b>	<b>Price for “Conventional”</b>	<b>Frequency of Usage</b>
Clothing	Prom dress/tuxedo	3 000-4 000 SEK	Once a year
	Blazer	500-1 000 SEK	Once every other week
Tools	Screwdriver	1 000-2 000 SEK	Once every six months
	Lawn mower	4 000-5 000 SEK	Once a week
Furniture	Dining set	6 000 SEK	Every day
	Patio furniture	500-1 000 SEK	During summer time
Transportation	Car	250 000 SEK	Five times a month
	Bike	7 000 SEK	Once a week

*Table 2.1 - Product Markets and Categories*

The product market “Clothing” was chosen as it is already existing in all of our mentioned consumption models (Stål & Jansson, 2017; McCormick, 2018), and we found it interesting to examine which of the consumption models Swedish consumers prefer. The categories chosen for this product market was “Prom dress/tuxedo” and “Blazer”. The product market “Tools” (with product categories “Screwdriver” and “Lawn mower”) was chosen as this product market is growing within the shared and circular economy consumption models (McCormick, 2018), as demonstrated by the companies Hilti and zilko.com (Baumeister, 2014; Matzler, Veider & Kathan, 2015). We therefore found it interesting to examine Swedish consumers’ preferability of consumption models in relation to the product market “Tools”, to see if the sustainable consumption models are of interest to consumers in this market. The third product market we found interesting to examine, and which we included in the questionnaire, was “Furniture”. It is a growing market for these sustainable consumption models through business-to-consumer (B2C) businesses, as Swedish furniture giant IKEA recently announced that they will implement it as part of their new business model, more easily recyclable and repairable furniture (Veckans Affärer, 2018). For this product market, we chose the product categories “Dining set” and “Patio furniture”, as they both are of hard material. The reason for this is because previous research (Edbring, Lehner & Mont, 2016) shows that consumers are more prone to use the said consumption models for hard material than for soft material. By

choosing products with hard material, we believe it would be easier to compare the two product categories. Lastly, the product market “Transportation” was chosen as it has proven to be a successful market for all four of our given consumption models (e.g. renting and leasing for shared economy, second-hand as circular economy, hybrid and electric cars as environmentally friendly consumption models, as well as the conventional petrol cars) (McCormick, 2018). It was also chosen as it is the market with a large proportion of urban air pollution (World Health Organization, 2018), why we believe that it is a market of potential in further implementing sustainable consumption models, as people want to decrease this environmental impact. Within this product market, we chose to examine “Car” and “Bike”, as was also done by Baumeister (2014) in regards to shared economy. By this, we hoped to further provide to his research about these product categories.

The main questions were framed as statements, with questions specifically asked in relation to those statements. The statements provided the respondents with a scenario where they were looking to gain access to a given product, as well as provided with the product’s price and its frequency of usage. The question following the statement, asked the respondents to choose their preferred consumption sub-model to gain this access. For this section of the questionnaire, we did consider using Likert scale to measure the respondents’ preferability of the different consumption models. However, as we wanted to have them choose which of the consumption models they preferred the most for a product category, this level of measurement was not compatible. Hence, we decided to use the consumption sub-models as a nominal level of measurement (as proved suitable from our pilot tests).

To gain information about the respondents’ preferability towards consumption models, they had six consumption sub-models to choose from (see Table 2.2 - Consumption Models and Consumption Sub-models). As seen in the table below (Table 2.2), each of the four consumption models mentioned in Chapter 1.5 - The Complexity were translated into consumption sub-models. Each consumption sub-model referred to an acknowledged consumption practice within each consumption model, which we presented in Chapter 1.2.1 - Shared Economy and Chapter 1.2.2 - Circular Economy (Stål & Jansson, 2017; SOU 2017:26). We thereby assure that, even though we asked questions regarding consumption sub-models (and not consumption models), we could merge these groups together to receive average results of the preferability of the consumption models. In total, the respondents had six different consumption sub-models to choose from: two of them representing “Shared

economy”, two representing “Circular economy”, and one each for “Environmentally friendly” and “Conventional”. This was done to not confuse the respondents with academically theoretical and (to them) unknown concepts or concepts of which they had no or preconceived notions of (further discussed in Chapter 2.6 - Validity and Reliability). As mentioned, one of the main differences between “Circular economy” and “Shared economy” as consumption models is the status of ownership (Mont 2002; Tukker, 2004), and was therefore included in the response alternatives. We saw this as necessary to describe as we wanted the respondents to have somewhat similar understandings and preconceptions of the alternatives, both as us and amongst each other. The consumption models and their respective consumption sub-models are presented in the table below.

<b>Consumption Model</b>	<b>Consumption Sub-model</b>
Circular economy	Buy second-hand (single owner)
	Restyle and repair (single owner)
Shared economy	Buy together with friends/neighbours and share usage/ownership
	Rent (temporary single owner)
Environmentally friendly	Buy new, environmentally friendly (single owner)
Conventional	Buy new, conventional (single owner)

*Table 2.2 - Consumption Models and Consumption Sub-models*

As we wanted to examine the preferability for consumption models of specific product markets and categories, we wanted the product and its attributes to be the centre of the question. Therefore, we decided to exclude product brands and specific information about the product that could potentially influence the respondents’ choice of preferred consumption model. By doing this, we isolated the question to focus on the preferred consumption model for the “general/non-specific” product (category) (Bryman & Bell, 2013). There were, however, other variables that we wanted to include in the questionnaire. As economic reasons have previously shown to be a main motivator for using different sustainable consumption models (Edbring, Lehner & Mont, 2016), we chose to include price as a variable in the main

questions. In addition to this, we also chose to include how frequently the product would be used, as we believed this could have an impact on the choice of preferred consumption model. Hence, in all main questions, the price for a conventional product and frequency of usage were included, to provide the respondents the same conditions and information about the products to base their decisions on. The said price was chosen on an estimated Swedish market price, with the help of the website Prisjakt (Prisjakt, 2018). In the introduction to the second part of the questionnaire, and at the top of each question, we included our definition of the word “conventional” (“products produced without extra consideration taken for possible environmental impact”) as well as what the price for each method of consuming said product would roughly be or be in relation to. We considered it important to include this above all questions to remind the respondents, in order to receive as accurate responses as possible, as asking the respondents to remember a lot of specific assumptions and conditions could be risky. All set prices and stated frequency of usage can be found in Table 2.1 - Product Markets and Categories above (p.36). The price for the alternative “Buy new, environmentally friendly (single owner)” was stated to be 20,0% more expensive than the alternative “Buy new, conventional (single owner)”. This price difference was an estimated price based on empirical findings (Göteborgsposten, 2017; Ekoweb, 2018; Zalando, 2018). We further stated that the price for the options “Rent (temporary single owner)” and “Buy second-hand (single owner)” would be “reasonable” in comparison to each products conventional purchase price.

Moreover, all main questions regarding which consumption sub-model the respondents would prefer for a specific product category had follow-up questions. In these follow-up questions, the respondents were asked why they chose that consumption sub-model, and were asked to select or name the foremost reason. By this question, we hoped to get an insight into what motivates the potential consumers to consume via each consumption sub-model. We believed this insight, in turn, would help companies know what to emphasise in terms of marketing one’s business. These follow-up questions provided the respondents with eight standardised reasons (henceforth referred to as motivators) along with the possibility to type in for an open-ended response alternative (Burns & Burns, 2008). As mentioned before, the respondents were asked to only choose their foremost motivator, i.e. only one alternative could be chosen. The eight standardised motivators were theoretically grounded in findings from previous research (Laroche, Bergeron & Barbaro-Forleo, 2001; Sweeney & Soutar, 2001; Petrick, 2002; Rettie, Burchell & Barnham, 2014; Baumeister, 2014; Edbring, Lehner,

& Mont, 2016). As mentioned in Chapter 1.3 - Consumer Behaviour, the area of perceived value is complex, and there is no general conceptualisation of the concept (Sánchez-Fernández & Iniesta-Bonillo, 2007; Boksberger & Melsen, 2011). To construct our questionnaire to be as simple as possible, we decided to compress perceived values and motivators found in previous research, to a few motivators that we found most suitable for our study (with names that we chose to re-frame). This resulted in eight motivators, which are, together with their theoretical background, presented in the table below (Table 2.3 - Motivators).

<b>Motivator</b>	<b>Theoretical Background</b>
Desire to own	Baumeister (2014); Edbring, Lehner, and Mont (2016)
Social normalisation	Sweeney and Soutar (2001); Rettie, Burchell and Barnham (2014); Baumeister (2014)
Flexibility	Edbring, Lehner, and Mont (2016)
Economic reasons	Sweeney and Soutar (2001); Petrick (2002); Baumeister (2014); Edbring, Lehner, and Mont (2016)
Environmental reasons	Laroche, Bergeron and Barbaro-Forleo (2001); Petrick (2002); Baumeister (2014); Edbring, Lehner, and Mont (2016)
Frequency of usage	Edbring, Lehner, and Mont (2016)
Opportunity to test	Edbring, Lehner, and Mont (2016)
Unique	Edbring, Lehner, and Mont (2016)
Other	-

*Table 2.3 - Motivators*

As seen in Appendix B, the main questions and the follow-up questions in the questionnaire were framed in a way that allowed for the same response alternatives for each of the two. We therefore find it relevant to acknowledge that there was a risk that the respondents would answer the questions systematically by the same response alternatives. This could have been



avoided by randomising the questions, which we chose not to do because of the low number of questions in the questionnaire. Also, we believe that our results (as discussed in Chapter 3 - Empirical Results and Analysis) points to that the respondents have answered differently on all questions, and no systematic patterns are visible. Hence, we believe that this is not a problem in our study, yet it is important to acknowledge the possibility of such problem.

## 2.4 Sampling and Data Collection

The data was collected through a non-probability sample method, which has advantages as it can provide good estimations and is a relatively fast and low-cost method for gathering data (Burns & Burns, 2008). A non-probability sampling method is a common method among researchers to use when there are time and expense limits to a project (Burns & Burns, 2008), which was the case for this study. The data was collected through the social media platform Facebook, through a so-called convenience sample (Burns & Burns, 2008). The advantages of using a convenience sample method are its quick and simple way of collecting many responses, whereas the limitation of it is that the results cannot be fully generalisable over the population (Burns & Burns, 2008). As this is considered a limitation of our study, it is further discussed in Chapter 2.6 - Validity and Reliability. Despite the disadvantages of a convenience sample, it is a common method to use for collecting data within the field of business research (Bryman & Bell, 2013), and as it suited our research design, we found it to be a good sampling method.

With our thesis's aim in mind, our population for the survey was Swedish consumers. Although this population is large, why we suspected that we would not be able to collect and receive a representative sample, we wanted to examine this population as we found it interesting (as motivated in Chapter 1.5 - The Complexity). Because of the size of the population, and the choice of a non-probability method, some of the individuals in this population had no chance at being asked to participate in our survey (Burns & Burns, 2008). Our sample, which consisted of 504 respondents, can therefore not represent the population fully, but can provide good estimations of possible consumption choices (Burns & Burns, 2008). The sample of this population was Swedish potential consumers, i.e. Swedish people that could potentially be consumers of the said products categories and consumption models. The reasoning behind examining consumers in Sweden specifically can be found in Chapter 1.5 - The Complexity. As mentioned in Chapter 2.3.2 - Questionnaire Section One:

Demographics, the minimum age limit to participate in the questionnaire was set at 18 years old. The exclusion of people younger than 18 (the legal age in Sweden) facilitated for us to collect data, as we did not have to request guardians' permissions for underage participation. We chose not to set an upper age limit, as potential consumers are of all ages.

As we were only interested in basic demographic characteristics of Swedish consumers, and wanted to examine possible correlations between a choice of preferred consumption model and product market in relation to these demographic characteristics, we did not find the distribution of the Swedish respondents' geographical whereabouts important, why Facebook was a suitable platform for collecting our data. Moreover, Facebook is to date the largest social media platform in Sweden (Internetstiftelsen i Sverige, 2017). It is a fast and effective way of reaching out to people (Denscombe, 2014), which strengthened our choice of using it to reach out with our survey to collect as many responses as possible. As 74,0% of the Swedish Web users, with an equally distributed age span across all ages, use Facebook from time to time (Internetstiftelsen i Sverige, 2017), we found it suitable to reach out to our sample of Swedish potential consumers by this platform. As much as 53,0% of these users use Facebook every day (Internetstiftelsen i Sverige, 2017). Moreover, the simplicity of sharing Facebook posts with others also makes Facebook an easy way of reaching out to many people. Research states that six out of ten people in the ages 56-75 share each other's Facebook posts (Internetstiftelsen i Sverige, 2017), which turned out to be partly true for our Facebook posts with the questionnaire as well. The Facebook posts promoting the participation of the questionnaire was shared in total 32 times by 20 different people (excluding our own four Facebook posts). The majority of the people that shared the questionnaire on Facebook were people older than us (older than 25 years old), which helped us reach a broader demographic group than if we had only reached our own Facebook friends (mainly female university students of the ages 18-34 with a relatively low income).

The survey had a duration of eight days, between the 22nd and the 29th of April 2018. Since participation was voluntary, we can assume that the people who responded the questionnaire were highly motivated to answer the questions (Burns & Burns, 2008). As mentioned, our final sample consisted of 504 respondents. To encourage a high response rate, it is suggested to offer the respondents some kind of reward (Burns & Burns, 2008; Bryman & Bell, 2013). However, because of lack of resources for this study we were not able to offer such rewards. If we had done so, it might have generated a higher response rate than was collected. What we

instead did was to remind our Facebook friends several times to fill in the survey, which is suggested by Burns and Burns (2008) to be a good way to get more responses.

## 2.5 Data Processing and Analysis

### 2.5.1 Adjustments

When closing the questionnaire, it had been answered by 515 respondents. However, eleven of these were under 18 years old, why their answers were excluded from the results (as mentioned in Chapter 2.3 - Questionnaire Content and Structure). Consequently, the final and adjusted sample consisted of 504 respondents.

To be able to analyse the results, we decided to make adjustments for two of the demographic questions: age and personal monthly income. The three higher age groups (“50-64”, “65-79” and “80+”) were merged together, due to low numbers of respondents in these age groups. This means that after adjusting this, the three remaining age groups were as follow: “18-34”, “35-49” and “50+”. The same adjustments were done in regards to personal monthly income. In the questionnaire, the respondents could choose from six different income groups (see Appendix B). However, the final results failed to provide us with enough respondents in the two higher income groups, why they were merged with the third highest. This adjusted material led us to four final income groups: “0-14 999”, “15 000-29 999”, “30 000-44 999” and “45 000+”.

The open-ended response alternatives for the motivators were also adjusted. The ones that were obviously belonging to the standardised alternatives we had already mentioned, were coded into those alternatives instead, in accordance with Burns and Burns (2008). This was done to decrease the amount of open-ended responses to assure a better foundation for our statistical analysis, as well as make it easier when analysing the results. At first, the results for motivators consisted of 83 open-ended response alternatives (belonging to all eight follow-up questions). After coding and adjusting, the final results consisted of 79 open-ended motivators.

### 2.5.2. Coding

When exporting the responses by our respondents from Google Forms into an Excel file, the answers each respondent had provided us with was in text, in form of the different response

alternatives (see Appendix B). We chose to code and decode the various response alternatives into numerical variables (1-9) in order to perform the different descriptive statistics later on. To exemplify this, after coding, “Male” = 1, “Female” = 2, “Other” = 3. All coding can be found in Appendix D.

### 2.5.3 Method of Analysis

All results were analysed through the statistical computer software SPSS. Due to our interest in examining preference of consumption models (and consumption sub-models) for both product markets and product categories, we used four different SPSS files, all coded differently (see Appendix D). Our first SPSS file examined the frequency of the demographic variables, why we chose to use a SPSS file with 504 rows, each row consisting of all answers of one respondent. The three other SPSS files were analysed using a stacking method of the results, sorted by product categories. The first of these files analysed the correlation between consumption models and product markets. The second and third file analysed the correlations between consumption models and product categories respectively consumption sub-models and product categories. We further analysed what motivated the respondents to prefer their chosen consumption model. All analyses were conducted using descriptive statistics through cross-tabulation. We believe that a regression analysis would have been an interesting method of analysis to use for our research questions, however due to the structure of our questionnaire, and the levels of measurement used, this was not a suitable method for us. Hence, we chose cross-tabulation as method of analysis as we found it appropriate for answering our research questions, and as this study has an explorative approach. In this section, we will describe how we processed and analysed the data more in detail.

#### *Section One: Demographics*

To map and analyse the demographic information of our respondents, we chose to do so by descriptive statistic analysis. We exported the Excel file we received from Google Forms into an SPSS file. This provided us with a Data View of 504 rows, each row representing all given answers by one of the 504 valid respondents. We then chose to calculate all demographic characteristics individually by frequency, percentage, valid percentage, and cumulative percentage. We further used cross-tabulation in SPSS Custom Tables as the method of analysis, to explore possible correlations between environmental concern and all other demographic characteristics, and sorted these by column percentage. The reason behind choosing cross-tabulation as analysis method is because it removes the confusion when

analysing raw data, and that it drives insights of the question in mind and the sample (Burns & Burns, 2008; Bryman & Bell, 2013). The cross-tabulation test statistics was set to compare column proportions, as well as adjust p-values for multiple comparisons by Bonferroni. For the cross-tabulation of the first section of the questionnaire, we also chose to include the count of the crossed variables, as the distribution of our sample was slightly inaccurate when compared to the Swedish population. Moreover, when the cross-tabulation was conducted we also included a Chi-Square test (confidence interval set at 95,0%) to see if the correlation between the variables was significant or not. For the Chi-Square test, we decided on  $p < 0,05$  (the level of significance).

### *Section Two: Consumption Models*

For the second section of the questionnaire, we chose to stack all results after different variables, depending on what correlation we wanted to examine. Stacking is another way of measuring means, and we chose it as we found it easier to aggregate. By stacking our results after product categories, our Data View on SPSS consisted of 4032 rows instead of 504 (504 respondents multiplied by eight product categories). Hence, the individual rows consisted of each respondents' demographic responses as well as their responses to a specific product category (both preferred consumption model and motivator). As mentioned above in Chapter 2.5.3 - Method of Analysis, we examined five different correlations, which were all based on the stacking method. This, however, did contribute to that the significance of the correlation between some of our variables could not be confirmed, as the data could be interpreted as if the respondent had answered one question, and impacted the potential correlation, multiple times (depending on the question and correlation we were looking for). However, for this section of the questionnaire, all tests were conducted using cross-tabulation via Custom Tables (descriptive statistics) with a corresponding Chi-Square test (confidence interval at 95,0%) with  $p < 0,05$ . Furthermore, the test statistics were, for all different analytical tests, set to compare column proportions, sort by column percentage and adjusted p-values for multiple comparisons by Bonferroni. For all these cross-tabulations, the test statistics in the software program were set to include multiple response variables in the test, which made stacking a possible method as the analysis was based on modified statistics that took a multiple response structure into consideration (SPSS, 2008). In the cross-tabulations, each of the columns was assigned a letter (A, B, C and D, for example of this, see Appendix C: Table 3.14 – Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models). Whenever

the mean responses for one column were significantly higher than for others, this column was highlighted with the letter of the column with the significantly lower mean.

The first correlation we wanted to examine was between the choices of preferred consumption models for the different product markets. To examine this correlation, the consumption sub-models belonging to a consumption model, and the product categories belonging to a product market (as shown in Table 2.1 and Table 2.2 in Chapter 2.3.3 - Questionnaire Section Two: Consumption Models) were respectively merged by decoding, and formed the different consumption models and product markets. We then cross-tabulated the variables and analysed them in a table by column percentage. This is one of the tests where we could not say that one correlation was significantly greater or weaker than another, as the analysis was based on a stacking method and were merged together.

The second type of correlation we were looking for was between consumption model and product categories, why we only decoded the consumption sub-models to consumption models, however left the coding of the product categories as they were. For the cross-tabulation, we looked at the product categories within each product market. For the third type of correlation, we could leave the coding in their original form, i.e. not decode any variable to be part of a bigger concept. Then, just as with the aforementioned correlations, cross-tabulation was used in combination with a Chi-Square test on the same basis as the previous ones.

Likewise, as for the previously mentioned correlations, we wanted to explore the Swedish consumers' motivators for choosing a specific consumption model, and did so by cross-tabulation in combination with a Chi-Square test. We saw this as an additional edition to our thesis, as it is relating to our main research questions, why we only chose to explore the motivators for the consumption models (and not consumption sub-models). As it is only briefly explored in our study, we encourage more research of this sort, which is also discussed in Chapter 5.4 - Limitations and Future Research.

## 2.6 Validity and Reliability

The validity and reliability of a study are of high importance (Burns & Burns, 2008; Bryman & Bell, 2013). In this section, we will base our discussion of validity and reliability on Bryman and Bell's definitions and guidelines (2013).

In order to draw inferences from our findings, validity was of great significance. Bryman and Bell (2013) refer to both internal and external validity, and how there needs to be a balance between these two in order to receive the best possible outcome of the study. The internal validity refers to found causalities between variables, and whether these relationships are plausible or not (Bryman & Bell, 2013). Even though a cross-sectional research design can hint if there is a relationship between variables, it cannot determine if the relationship is causal, nor in which direction it might be causal, which affects the internal validity of our study (Bryman & Bell, 2013). External validity becomes relevant when determining one's sample. It questions if the findings of the study can be generalised beyond the context of its specific research purpose, why it is important for quantitative researchers to choose a sample that is representative (Bryman & Bell, 2013). In trying to reach the most amount and widest range of people for our sample as possible, we chose non-probability and convenience sampling method through a Web survey via Facebook as data collection method. Although Bryman and Bell (2013) argue that a non-probability sample negatively affects the external validity of a study and that a convenience sample cannot be fully generalisable, we considered these the most effective methods to answer our research questions at this point in time. We hoped that we would, by all our methodological decisions, reach a large enough sample to provide estimations that would answer for our purpose and research questions. As our sample only represented a very small part of the population, we cannot claim that our findings are conclusive for the population, however it might indicate a guideline.

Other important areas that had to be considered during this quantitative study were the ecological validity and the measurement validity (Bryman & Bell, 2013). The ecological validity refers to if the method of choice in examining our research questions actually mirrors how our chosen sample would perceive, feel and act in regards to these in their natural and real environments and scenarios (Bryman & Bell, 2013). In our study, it could be argued that the respondents' answers cannot be a hundred per cent reflective of how they would actually behave in the marketplace, i.e. attitude-behaviour gap. However, as argued by Fazio (1986) it can still provide indications of actual behaviour, why we considered perception data a valid method to answer our research questions. To further strengthen our validity and reliability, we decided to pose the questionnaire questions as statements, and as if the respondents all needed said product. By this, we believed it would more accurately mirror the respondents' true choice of preferred consumption model. Measurement validity becomes relevant for

quantitative research methods as it questions whether the questions asked during the study reflect what it actually aims to measure and examine (Bryman & Bell, 2013). Bryman and Bell (2013) shed light on the difficulty in drawing inferences if the study has not included all variables that influence the relationship between the study's dependent and independent variables. We took this into consideration as we included the five variables that we thought might be of importance for our study: specified the specific product, its price and frequency of usage, chose equally hygienic products to increase comparability and avoid already recognised obstacles for consuming via given consumption models, and included environmental concern as part of the demographic characteristics. To further ensure measurement validity, we conducted the questionnaire in Swedish and performed pilot tests before posting the final questionnaire online. From the pilot tests, we decided to change a few of the names of our chosen consumption models into names of acknowledged consumption sub-models (as described in Chapter 2.3.3 - Questionnaire Section Two: Consumption Models). We saw that these would help the respondents to easier picture the corresponding consumption model in a realistic manner, decrease uncertainty and instability among the respondents to what each of these terms means and includes, and provide us with an outcome that accurately answered our research questions. An example of this was our change in name for the consumption sub-model "Buy new, sustainably produced (single owner)", which we changed to "Buy new, environmentally friendly (single owner)". The former name suggestion was interpreted by some participants from our pilot study as being more durable, as the word "sustainable" in Swedish has a double meaning, why it was changed to "Buy new, environmentally friendly (single owner)".

The reliability of a study usually concerns three aspects: stability, inter-observer consistency and internal reliability (Bryman & Bell, 2013). The stability of a study tests whether or not the study would display the same results if it was conducted at another time, i.e. if the results of the study are stable and consistent among the population, or if the results depend on random or circumstantial instances (Bryman & Bell, 2013). According to Bryman and Bell (2013), most studies based on a cross-sectional design have stability if the method is described in detail and therefore can be conducted in the same exact way at another time. However, as the study examines preferability for sustainable consumption models, a growing area of interest, we suspect that the results we received in our study would not be the same if the study was re-conducted in a few years from now. We believe that there are plenty of unstable aspects that affect the choice of preferred consumption model (e.g. social normalisation as presented by



Rettie, Burchell and Barnham (2014)), why we can assume that the preferability of such consumption models will change over time.

The second aspect of reliability is inter-observer consistency (Bryman & Bell, 2013). The inter-observer consistency means that the results of the study should not depend on who conducted the study. In our case, we tried to achieve this, to our best ability, by conducting a Web survey, i.e. “faceless” study (Burns & Burns, 2008). An advantage of such study is that the respondents’ answers are not affected by the interviewers (as can be in a face-to-face study) (Burns & Burns, 2008). The disadvantage, however, is that we do not know for certain who participated in the study, e.g. we cannot be certain that no one under 18 years old participated, even if that was the age limit (Burns & Burns, 2008). Moreover, to assure inter-observer consistency in our study, and that the subjective translation of the data was consistent, only one of us two coded and decoded the responses when analysing the results. Consequently, differences in interpretation and coding the open-ended responses of motivators were avoided (Bryman & Bell, 2013). This was however not considered a major problem in our study, as all main questions consisted of closed questions. The open-ended responses for the follow-up questions were the only ones that could possibly be interpreted subjectively, and these were not of central relevance in our study.

We could not perform Cronbach’s alpha to measure our internal reliability due to the structure of the questionnaire, which is considered a limitation of the results of our study. This measuring test of multiple-indicators would have shown if the respondents’ answers along the questionnaire were aggregated or not, i.e. shown if the cumulative item might indicate something else than what was intended (Bryman & Bell, 2013). As this cannot be performed, we cannot definitively prove that our chosen variables have affected the results consistently.

## 2.7 Ethical Considerations

When conducting a survey, it is crucial to consider the respondents’ ethical rights, the so-called participants’ rights (Burns & Burns, 2008). The right of voluntary participation was automatically considered due to the design of the research. We did not have any power of, or insight into, who participated in our study and who did not, which means that everyone who participated did so voluntarily (Burns & Burns, 2008). Further, to follow the concept of informed consent, we informed the respondents that they could end their participation at any time they liked (Burns & Burns, 2008). Moreover, we assured them that sensitive data, such

as the question about personal monthly income, would be treated completely anonymous and confidentially, just as all other questions. This was stated in the introduction text of the first section of the questionnaire. What also was stated in the introduction was a very simple version of the intended aim of the thesis, explaining that we were interested in knowing the respondents' preferences for consumption models. However, what we chose to exclude was that we wanted to know if the result would differ between different product markets, categories and the products price levels and whether or not their demographic characteristics impacted their choice of preferred consumption model. This deception was another issue that had to be considered (Burns & Burns, 2008). At the end of the questionnaire, we once again explained the purpose of our study - that we wanted to examine if there is a difference between preferred consumption model towards different product markets, categories and price level - which also motivated the question about personal monthly income. At this point, we informed the respondents that if they wanted to take part of the final thesis, they could receive an email, so-called debriefing (Burns & Burns, 2008). In total, 97 participants (19,2%) left their email address in order to get the final thesis.

## 3. Empirical Results and Analysis

*In this chapter, we will present all results of the survey. First, the results of the five demographic questions will be presented. The respondents' demographic characteristics will also be analysed in relation to their environmental concern. Second, the results from the eight main questions regarding preferred consumption model, along with their follow-up question, will be presented and analysed. These results will first be presented by general findings, followed by the specific findings from each product market. Within each section for the product markets, the results of the segmentation for that product market will be presented. We will finish this chapter with a summary of all major findings. For a full version of the questionnaire and the results, please see Appendix B and Appendix C.*

### 3.1 Results and Analysis of Questionnaire Section One

When adjusting the sample as described in Chapter 2.5 - Data Processing and Analysis, the final sample consisted of 504 Swedish potential consumers (n=504). The five demographic questions in the first section helped us get an idea of the sample's demographic profile, even though the respondents submitted their answers anonymously. Below follows results and analyses of the five demographic questions. All tables regarding the demographic questions can be found in Appendix C.

#### 3.1.1 Demographics

Our sample's gender distribution deviates from the gender distribution of the Swedish population. In Sweden in 2017, the distribution between male and female (in total) was 49,8% female and 50,2% male (Statistiska centralbyrån, 2018). Our sample consists of 65,5% "Female", 35,3% "Male" and one respondent (0,2%) identifying as "Other". There is no official data of "Other" to the Swedish population, why we cannot compare its representation. As mentioned in Chapter 2.5 - Data Processing and Analysis, the age groups were adjusted. The most present age group in our survey is the age group "18-34" (63,3%), followed by "50+" (22,6%), and the least represented age group is "35-49" (14,1%). Comparing this to the Swedish population, in 2017, where the age group "18-34" represented 22,0% of the Swedish population, age group "35-49" represented 19,0% and age group "50+" represented 38,0% (Statistiska centralbyrån, 2018), we see that the age groups in our sample are not representative of the Swedish population. However, as the population we wanted to examine

was Swedish consumers, we believe that our sample can, to a certain degree, be representative for this population as all respondents can be seen as Swedish potential consumers. Moreover, in our sample, 3,2% had an “Elementary school” degree, the ones with a “High school” degree stood for 30,2% and 66,7% of the respondents had a “University” degree. The most represented income group was “0-14 999”, and consisted of 33,7% of the respondents. The following income groups were represented as follows: 26,4% for “15 000-29 999”, 23,8% for “30 000-44 999”, and 16,1% for “45 000+”. Our results furthermore show that our sample has a generally high concern for the environment. The possible response alternatives for this question was “Little/no concern”, “Neutral”, and “Very concerned”. The majority of our respondents (62,9%) state that they are “Very concerned” about the environment. The ones stating that they are “Neutral” in this question was represented by 28,2%, and only 8,9% state that they have “Little/no concern” for environmental issues.

As seen by these results, there is some disparity in the group sizes. This means that the true variation might not have been captured for all demographic groups, which might affect the test results (Burns & Burns, 2008). For the groups that are underrepresented, the risk for sampling errors is greater. Furthermore, as the gender “Other” is only represented by one respondent (representing 0,2% of the sample), we cannot statistically say anything about this group. This being said, we will, for the rest of the study and thesis, not put any emphasis on this gender category as no statistical, reliable or valid conclusions can be drawn. As discussed in Chapter 2.4 - Sampling and Data Collection, one explanation for these disparities could be that the majority of our Facebook networks are in the overrepresented demographic groups (“Female”, “18-34”, “University” degree, and “0-14 999”), even though we tried to counteract this by having network friends of other demographic groups sharing our questionnaire with their networks.

### 3.1.2 Demographics and Environmental Concern

As mentioned in Chapter 2.3.2 - Questionnaire Section One: Demographics, a question regarding the respondents’ environmental concern was included in the questionnaire, to see if our sample demonstrates similar results of demographic characteristics for a high level of environmental concern, as found by previous research (Diamantopoulos et al. 2003; Franzen & Vogl, 2013). It was also included to see if environmental concern had an impact on the choice of preferred consumption model. As mentioned in Chapter 1.4 - Consumers’ Sustainable Behaviour, previous research have shown that the ones being the most

environmentally conscious are female, younger individuals with a higher education and a high income (Diamantopoulos et al. 2003; Franzen & Vogl, 2013). What can be seen from our results is that the demographic groups that stand out in choosing “Very concerned” about the environment are “Female” (71,8%) and “University” degree (67,9%), i.e. the same as previous research, who also stated this (Diamantopoulos et al. 2003; Franzen & Vogl, 2013).

However, what differs between our results and previous research is that our sample does not have a clear distinction regarding environmental concern between the lowest and highest income groups, nor between the youngest and the oldest age groups. Of the ones being “Very concerned”, 68,8% had an income of “0-14 999”, and 69,1% an income of “45 000+”. The youngest age group (“18-34”) had a percentage of 62,1% for “Very concerned”, whereas the oldest age group (“50+”) had a percentage of 70,2%. As there are no clear distinctions between these groups for these two demographic characteristics, our sample would indicate that it does not share the same environmental concern as previous research has stated, although not proven entirely contradictory (Diamantopoulos et al. 2003; Franzen & Vogl, 2013). We believe that the reason why there is no clear distinction between some of the groups within these variables, or where the results slightly differ from Diamantopoulos et al.’s (2003) and Franzen and Vogl’s results (2013), can be because of our sample size (n=504) and the disparity among the groups, which affects the test results. Moreover, Sweden as a country has generally a high environmental policy (Söderholm, 2013), and countries with higher welfare tend to be more environmentally concerned (Franzen & Vogl, 2013), which can explain why there is not a big difference between either age or income level groups in our sample. In sum, based on our sample, the ones being most environmentally concerned are “Female” with a “University” degree. Other than that, we cannot definitively determine any clear distinctions between the other demographic variables. However, we believe that our results do not differ considerably from previous research, as our sample indicate similar traits and results (Diamantopoulos et al. 2003; Franzen & Vogl, 2013). We thereby find it motivated to use the results from our sample to further add indicational patterns to previous research in the area of sustainable consumption, as they build on a similar base (as discussed in Chapter 2.3.2 - Questionnaire Section One: Demographics). Below follow the results from section two of the questionnaire, which helped to answer our first research question as well as laid ground for the second research question.

## 3.2 Results and Analysis of Questionnaire Section Two

The second section of the questionnaire aimed at examining our first research question: *“Which of the four consumption models (“Circular economy”, “Shared economy”, “Environmentally friendly”, and “Conventional”) do Swedish consumers prefer, in relation to different product markets and product categories?”*. This section was responded by all 504 respondents, which means that all respondents who participated in the first section also finished all questions in section two. As discussed in Chapter 2.6 - Validity and Reliability, we believe that these results can provide a guideline for how Swedish potential consumers might think, even though the results cannot be generalisable over the Swedish population.

As explained in Chapter 2.3.3 - Questionnaire Section Two: Consumption Models, the respondents answered one question for each of the eight product categories, choosing which consumption sub-model they would preferably use to gain access to that specific product category. For these questions, the respondents could choose from six different consumption sub-models. The respondents also answered a follow-up question for each of the eight questions, answering why they chose that specific consumption sub-model (presented as the motivators for the choice).

In this section, we will first present the general findings of our study, regarding the choice of preferred consumption model based on product market and environmental concern, and the motivators for these choices. In the sections following the general findings, we will present the highlighted findings from each specific product market. Within the sections for each product market, the results of preferred consumption models and consumption sub-models for each product market and categories will be presented and analysed. This section will also present the findings of how our five demographic questions might have an impact on the chosen consumption models, for each product category. The demographic segmentation analysis is conducted based on consumption models and not consumption sub-models, as the initial aim with this study was to investigate the choice of the four consumption models, and the consumption sub-models were merely a way to translate these consumption models to the respondents. The last section of this chapter will provide a summary of the results.

### 3.2.1 General Findings

#### *Consumption Models and Product Markets*

Appendix C: Table 3.10 - Chi-Square Test: Consumption Models and Product Markets display a strong correlation between chosen consumption model and product market. Table 3.1 - Consumption Models and Product Markets below shows a descriptive presentation of the choice of preferred consumption models in relation to the product markets. As the respondents chose from product categories and not product markets, and consumption sub-model and not consumption models, these results are based on the six sub-models merged into four consumption models, and the eight product categories merged into four product markets. Moreover, as these results are based on a non-probability sample as well as analysed and gained through stacking method (as mentioned in Chapter 2.5.3 - Method of Analysis), these results should be considered approximate.

		P Product Market			
		1 Clothing Column N %	2 Tools Column N %	3 Furniture Column N %	4 Transportation Column N %
CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	17,2%	37,0%	0,3%	23,1%
	2 Circular economy	26,3%	24,9%	55,5%	58,5%
	3 Environmentally friendly	20,7%	21,3%	17,4%	9,9%
	4 Conventional	35,8%	16,8%	26,9%	8,4%

*Table 3.1 - Consumption Models and Product Markets*

The table above shows that for the product market “Clothing”, the most preferred consumption model (based on percentages) is “Conventional” (as 35,8% of the respondents chose this consumption model for this product market). The most preferred consumption model for “Tools” is “Shared economy” (37,0%). For both “Furniture” and “Transportation”, the most preferred consumption model is “Circular economy” (with 55,5% respectively 58,5%). In general, what can be found in these results, is that “Tools” is the only product market where “Shared economy” is more preferred than the consumption models including single-handed ownership. What also is noteworthy is that there is a notably low preference for “Shared economy” within the product market “Furniture” (0,3%). Table 3.1 above also demonstrates that the consumption model “Circular economy” is, based on the descriptive percentages, higher preferred for product markets “Furniture” and “Transportation” than for the other two product markets. This could be explained by that both product markets include

product categories that are more expensive than others, which would further support the economic motivator for using “Circular economy” found in previous research (Clausen et al. 2010; Joung & Park-Poaps, 2013; Edbring, Lehner & Mont, 2016).

Even though we chose to include two types of furniture of hard material (“Dining set” and “Patio furniture”), as a way to counteract the potential negative attitudes towards sharing softer materialised products (Edbring, Lehner & Mont, 2016), our sample has a low preference for sharing “Furniture”. This low preference would imply that Swedish potential consumers prefer single-handed ownership for this product market. Therefore “Furniture” could be considered an additional product market to the list of products Baumeister (2014) found where single-handed ownership is preferred (car, bike, and handbag). The “Conventional” consumption model in our study is chosen to the highest percentage for “Clothing”, which is the only product market that consists of products with soft materials. This implies that for such product market, our sample of Swedish potential consumers is to a higher degree than for other product markets, prone to buy a new product. We suspect that this is connected to the hygiene obstacle mentioned by Edbring, Lehner and Mont (2016).

*Consumption Models and Environmental Concern*

Regarding the level of environmental concern, Appendix C: Table 3.11 - Chi-Square Test: Consumption Models and Environmental Concern illustrates that the choice of preferred consumption model has a significant correlation with level of environmental concern.

		CM Which of these consumption models would you prefer to gain access to this product?			
		1 Shared economy Column N %	2 Circular economy Column N %	3 Environmentally friendly Column N %	4 Conventional Column N %
EC How environmentally concerned are you?	1 Little/no concern	6,6%	7,1%	5,0%	17,5%
	2 Neutral	24,2%	25,1%	22,6%	41,9%
	3 Very concerned	69,2%	67,8%	72,4%	40,6%

*Table 3.2 - Consumption Models and Environmental Concern*

The highlighted findings from Table 3.2 - Consumption Models and Environmental Concern above are that the respondents who are “Very concerned” about the environment to a higher degree choose either “Shared economy”, “Circular economy” or “Environmentally friendly” as preferred consumption models overall, more so than for the “Conventional” consumption model, which indicates that they chose consumption sub-models that have some inclination of



environmental aspect. Moreover, Table 3.2 above shows that for those with “Little/no concern” about the environment, the consumption model “Conventional” is more preferred than the other consumption models.

*Consumption Models and Motivators*

As mentioned in Chapter 2.3.3 - Questionnaire Section Two: Consumption Models, we included a follow-up question to explore the respondents’ motivation for choosing a specific consumption sub-model (later decoded to consumption model as explained in Chapter 2.5 - Data Processing and Analysis). This was included as we wanted to see if there were clear leading motivators, which then would help companies to know what to emphasise in terms of marketing these consumption models. Appendix C: Table 3.12 - Chi-Square Test: Consumption Models and Motivators displays that there is a strong correlation between the choice of preferred consumption model and their motivators.

		CM Which of these consumption models would you prefer to gain access to this product?			
		1 Shared economy Column N %	2 Circular economy Column N %	3 Environmentally friendly Column N %	4 Conventional Column N %
R Why did you chose this consumption model? Name the main reason.	1 Desire to own	0,5%	13,9%	26,2%	45,9%
	2 Social normalisation	1,4%	1,0%	0,9%	2,0%
	3 Flexibility	10,6%	12,1%	20,6%	14,4%
	4 Economic reasons	32,7%	43,0%	2,7%	6,8%
	5 Frequency of usage	40,5%	11,7%	29,6%	22,1%
	6 Environmental reasons	11,0%	12,5%	15,3%	0,3%
	7 Opportunity to test	0,5%	0,5%	0,1%	0,6%
	8 Unique	0,1%	4,0%	2,3%	5,3%
	9 Other	2,6%	1,3%	2,3%	2,5%

*Table 3.3 - Consumption Models and Motivators*

As seen in Table 3.3 above, the choice of the four different consumption models is motivated differently. The highest motivator for choosing “Shared economy” is “Frequency of usage” with 40,5%, followed by “Economic reasons” with 32,7%. For “Circular economy”, there is one major motivator: “Economic reasons” with 43,0%. For the consumption model “Environmentally friendly”, there are three protruding motivators: “Frequency of usage” (29,6%), “Desire to own” (26,2%) and “Flexibility” (20,6%). The last consumption model, “Conventional” is mostly motivated by “Desire to own” (45,9%) and “Frequency of usage” (22,1%). Moreover, what is seen in the table above is that the motivator “Opportunity to test” has been chosen as a motivator for only 0,1-0,6% of all consumption models. Another motivator with low percentage across all four consumption models is “Social normalisation”,

representing between 0,9-2,0% on each consumption model. Also noted, is that “Environmental reasons” has a surprisingly low motivational percentage, varying between 0,3-15,3%. These findings will be further discussed in Chapter 4.1 - Discussion.

As mentioned in Chapter 2.3.3 - Questionnaire Section Two: Consumption Models, the respondents had the opportunity to type in their own motivator for why they chose a specific consumption sub-model. This means that some of the answers to these questions were answered through the open-ended alternative. As mentioned in Chapter 2.5 - Data Processing and Analysis, we coded four of the open-ended answers to be sorted into our already standardised motivators. Table 3.3 - Consumption Models and Motivators above presents the adjusted results, where “Other” is representative for all open-ended responses. After adjusting the results, these eight follow-up questions had 79 answers that were responded through the open-ended response alternative. Table 3.3 (row nine “Other”) above shows that these 79 responses are rather equally distributed over the four consumption models (as also seen in Appendix E). This tells us that our standardised alternatives for motivators seem to have been suitable for motivating the choice of preferred consumption sub-model, as most of the respondents chose one of these already set motivators. When analysing these open-ended responses, we found that they included both other motivators (as was the purpose of it), but some respondents had also typed in completely new consumption sub-models instead of other motivators. There were also respondents who claimed that they had no use for such product as an open-ended response (i.e. had misread the instructions of the questionnaire and instead provided us with missing values for the follow-up questions). These responses can therefore not be considered motivators for the already set consumption models. However, we consider the low number of respondents who provided us with irrelevant answers to this question, to not have a great impact on the results in general. For a list of all 79 open-ended responses (in Swedish), please see Appendix E.

As the motivators are not of greater relevance for answering our research questions, no further emphasis will be put into these. The motivators will further be analysed in regards to the other highlighted results, presented further down.

### 3.2.2 Findings of Preferred Consumption Model for Each Product Market

Appendix C: Table 3.13 - Chi-Square Test: Consumption Sub-models for “Prom dress/tuxedo” and “Blazer” tells us that there are significant correlations between the choice

of preferred consumption sub-model and product category (not only to product market, which was proved in Appendix C: Table 3.10 - Chi-Square Test: Consumption Models and Product Markets). Hence, we find it interesting to investigate these relationships to see how the choice of preferred consumption model differs from the different product categories within each product market. These results will be presented in the sections below, sorted after each product market.

### Product Market Clothing

#### Results and Analysis of Preferred Consumption Models

CM Which of these consumption models would you prefer to gain access to this product?	P Product Category	
	1 Prom dress/tuxedo (A)	2 Blazer (B)
	Column N %	Column N %
1 Restyle and repair (single owner)	10,5%B	2,6%
2 Rent (temporary single owner)	31,3%B	1,4%
3 Buy second-hand (single owner)	25,0%B	14,5%
4 Buy together with friends/neighbours and share usage/ownership	1,4%B	0,2%
5 Buy new, environmentally friendly (single owner)	9,3%	32,1%A
6 Buy new, conventional (single owner)	22,4%	49,2%A

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05<sup>1</sup>

1. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.4 - Consumption Sub-models for “Prom dress/tuxedo” and “Blazer”

The product market “Clothing” consists of the product categories “Prom dress/tuxedo” and “Blazer”. In our questionnaire, the “Prom dress/tuxedo” was framed as being used once a year and having a conventional purchase price of 3 000-4 000 SEK, whereas “Blazer” was framed as being used once every other week, and have a conventional purchase price of 500-1 000 SEK. Table 3.1 - Consumption Models and Product Markets above (p.55) displays that, for the product market “Clothing”, “Conventional” is the most preferred consumption model, with 35,8%. However, when looking at the two separate product categories within this product market (see Table 3.4 above), we see that this is only found in our study for “Blazer” (with 49,2% for the consumption sub-model “Buy new, conventional (single owner)). For

“Prom dress/tuxedo”, the preferred consumption sub-model is “Rent (temporary single owner)” (31,3%). Consequently, our sample prefers to gain access to “Prom dress/tuxedo” and “Blazer” by two different consumption sub-models, belonging to two different consumption models (“Shared economy” respectively “Conventional”). As mentioned in Chapter 1.2.1 - Shared Economy, previous research states that consumers tend to be more positive towards sharing products that are used more temporary (Edbring, Lehner & Mont, 2016). Hence, a possible explanation for this might be that “Prom dress/tuxedo”, in our questionnaire, was framed as being used less frequently than “Blazer”, why the respondents are more positive towards sharing this item. To further strengthen this, “Prom dress/tuxedo” has a higher potential user frequency for both consumption sub-models within the consumption model “Shared economy” than “Blazer” has. This means that “Shared economy” is more preferred for “Prom dress/tuxedo” than for “Blazer”, i.e. more preferred for product categories which are more expensive and used less frequently.

Furthermore, the second most preferred consumption sub-model for “Prom dress/tuxedo” is “Buy second-hand (single owner)” (also shown in Table 3.4 above), belonging to the consumption model “Circular economy”. The second most preferred consumption sub-model for “Blazer” is to “Buy new, environmentally friendly (single owner)”, which is equal to the consumption model “Environmentally friendly”. Hence, we cannot say that there is one specific preferred consumption model for the product market “Clothing”, as the general findings suggest, but that it differs from product categories. For “Prom dress/tuxedo”, they respondents would choose a consumption sub-model that means wearing pre-owned or pre-used items, whereas for “Blazer” they would choose a consumption model that implies buying a completely new. This means that our study further supports Holt’s (2012), Baumeister’s (2014) and Edbring, Lehner and Mont’s research (2016), stating that the attitude towards a consumption model depends on the product category.

Environmental reasons is, according to previous research, a significant motivator for sustainable consumption models (Lawson, 2011; Edbring, Lehner & Mont, 2016). Interestingly, in our study and in regards to the product market “Clothing”, “Environmental reasons” is seldom chosen as main motivator for any of the consumption models (see Table 3.3 - Consumption Models and Motivators on p. 57). This correlates with what Clausen et al. (2010) said about environmental reasons as a main motivator for second-hand purchasing - that only a small number of consumers are actually driven by this motivator. Our results could

also mirror Niinimäki’s argument (2010), that environmental factors, specifically for clothing, only contribute with additional value for the consumer, and is therefore not a significant motivator.

### Results and Analysis of Segmentation

In this section, we will present the results of preferred consumption models, based on segmentation through the demographic variables that show significant correlations. The results will be presented by the product categories “Prom dress/tuxedo” and “Blazer”. Table 3.5 - Chi-Square Test: Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models below shows that there are significant correlations for three of the five demographic variables in regards to chosen consumption model for the product category “Prom dress/tuxedo”. The two variables with a higher associated probability than 0,05, showing no significant correlation, are educational degree and personal monthly income. Regarding “Blazer”, there is no significant correlation for the choice of preferred consumption model and educational degree, whereas there are significant correlations for all other demographic variables. All percentages mentioned in this section can be found in Appendix C: Table 3.14 - Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models, if not else is stated.

**Pearson Chi-Square Tests**

P Product Category		CM Which of these consumption models would you prefer to gain access to this product?	G To which gender do you identify with the most?		A Age		ED Highest completed level of education		MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).		EC How environmentally concerned are you?	
			Chi-square	Sig.	Chi-square	Sig.	Chi-square	Sig.	Chi-square	Sig.	Chi-square	Sig.
1 Prom dress/tuxedo			34,310		12,835		3,578		11,734		38,378	
			df	6	6	6	6	6	9	6	6	6
			Sig.	,000 <sup>a,b,c</sup>	,046 <sup>a</sup>	,734	,229	,000 <sup>a</sup>				
2 Blazer			34,073		13,371		9,419		20,200		74,827	
			df	6	6	6	6	9	6	6	6	6
			Sig.	,000 <sup>a,b,c</sup>	,038 <sup>a</sup>	,151 <sup>b,c</sup>	,017 <sup>b</sup>	,000 <sup>a,c</sup>				

Results are based on nonempty rows and columns in each innermost subtable.

a. The Chi-square statistic is significant at the ,05 level.

b. More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

c. The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

*Table 3.5 - Chi-Square Test: Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models*

### Gender

The results from the cross-tabulation show that “Female” prefer “Circular economy” significantly more than “Male” respondents do, for both “Prom dress/tuxedo” and “Blazer”, as demonstrated by product category “Prom dress/tuxedo”, where 44,2% of the “Female” chose “Circular economy”, and only 19,1% of the “Male” did so. The “Male”

respondents did however prefer the “Conventional” consumption model significantly more than the “Female” ones, for both product categories in this product market. This is exemplified by the product category “Blazer”, where “Male” chose the consumption model “Conventional” with 64,7% and “Female” with 40,9%. This could be connected to that women have proven, in previous research, as well as in our study (Chapter 3.1.2 - Demographics and Environmental Concern), to be the gender that is most environmentally concerned and act accordingly (Diamantopoulos et al. 2003; Franzen & Vogl, 2013). Although, what needs to be considered is that the most preferred consumption model for “Blazer” for “Female” was also “Conventional”, even if they chose it to a significantly lower percentage than “Male”. This means that “Conventional” is the highest preferred consumption model for “Blazer” for both genders, indicating that this would be the most suitable consumption model for this product category. Moreover, “Shared economy” for “Blazer” is shown a very low preference for, by both genders (1,7% “Male” and 1,5% “Female”). This is interesting since “Shared economy” was the highest preferred consumption model for “Prom dress/tuxedo” for “Male” with 38,7%, which makes it even more visible that the choice of preferred consumption model differs across product categories.

## **Age**

The results show that there is no specific pattern for the variable age, even though there are several significant correlations between the age groups and their choice of preferred consumption model. This might be explained partly by that the product category “Prom dress/tuxedo” in relation to the demographic variable age has the associated probability of 0,46 (see Table 3.5 - Chi-Square Test: Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models above, p.61). As this correlation is proven weak in our study (based on our sample), the results might not provide or represent fully accurate conclusions. Even though there are no obvious patterns, we can draw a broad conclusion of that older people are positive towards “Shared economy” (as seen for “Prom dress/tuxedo” with 43,9%), and younger people are positive towards buying “Conventional” as seen for “Blazer” with 50,8%). The first of these two results contradicts Edbring, Lehner and Mont’s study (2016) stating that the older the consumer, the preference for “Shared economy” decreases. The latter result is interesting as the majority of the youngest age group (“18-34”) defines themselves as having a “Very concerned” attitude towards the environment (as seen in Appendix C: Table 3.7 - Age and environmental concern), but indicate that they would choose the least environmentally profitable consumption model for “Blazer”. This could imply that there could be a possible

attitude-behaviour gap for this age group within product market “Clothing”, if the respondent were to behave according to their stated choices.

### **Personal Monthly Income**

As mentioned before, no significant correlations between “Prom dress/tuxedo” could be found for personal monthly income and the choice of preferred consumption model. This correlation was however found significant for “Blazer”. The highest income group (“45 000+”) seem to choose “Environmentally friendly” more than the other income groups do. This is exemplified by “Blazer”, where 48,1% chose “Environmentally friendly” as a consumption model, which is higher compared to the other income groups. A reason for that the ones with the highest income choose “Environmentally friendly” as a consumption model could be because they proved environmental concern in our study, also strengthened by previous research (Franzen & Vogl, 2013). Moreover, “Environmentally friendly” as a consumption model was in our questionnaire framed as being 20,0% more expensive than the “Conventional” option, why we believe that people earning more money put less emphasis on the more expensive price tag and instead focus on the environmental benefits. Moreover, as Laroche, Bergeron and Barbaro-Forleo (2001) state, the ones thinking that buying environmentally friendly products (i.e. consumption model “Environmentally friendly”) is convenient, are willing to pay extra for such products. Based on the results of our study, this would imply that the respondents with higher income (“45 000+”) do not consider purchasing environmentally beneficial products as inconvenient. Moreover, regarding “Blazer”, the lower income groups show a significantly greater preference for “Circular economy” (exemplified by “0-14 999” with 21,2%) than the ones earning “45 000+” (4,9%). This would imply that these income groups to a higher degree find “Environmentally friendly” as inconvenient (Laroche, Bergeron & Barbaro-Forleo, 2001), possibly because of the higher price tag. As found in our study and stated in Chapter 3.2.2 Findings of Preferred Consumption Model for Each Product Market, the highest motivator for choosing “Circular economy” in this product market was “Economic reasons”.

### **Environmental Concern**

As already mentioned, respondents’ environmental concern is significantly correlated with the choice of preferred consumption model for these product categories. The results tell us that the ones with high environmental concern prefer consumption models with a focus on the environment (“Circular economy” and “Environmentally friendly”), and the ones not being

concerned about the environment show a significantly higher preference for the consumption model “Conventional”. This can be exemplified with percentages for “Prom dress/tuxedo”, where 42,0% of the ones being “Very concerned” chose “Circular economy”, in comparison to the ones with “Little/no concern”, where only 11,1% chose this consumption model. This finds further support from previous research (Edbring, Lehner & Mont, 2016), stating that people who are very concerned tend to shop through circular economy (specifically second-hand). In contrast, the ones having “Little/no concern” chose “Conventional” for “Prom dress/tuxedo” with 48,9%, whereas only 15,5% of the ones being “Very concerned” chose this consumption model. This implies that our sample, to a certain degree, is consistent with their attitude and possible behaviour, i.e. the attitude-behaviour gap is not visible in this product market.

**Product Market Tools**

*Results and Analysis of Preferred Consumption Models*

		P Product Category	
		3 Screwdriver (A)	4 Lawn mower (B)
		Column N %	Column N %
CM Which of these consumption models would you prefer to gain access to this product?	1 Restyle and repair (single owner)	5,4%	11,7%A
	2 Rent (temporary single owner)	26,0%B	1,0%
	3 Buy second-hand (single owner)	12,9%	19,8%A
	4 Buy together with friends/neighbours and share usage/ownership	27,2%B	19,8%
	5 Buy new, environmentally friendly (single owner)	10,5%	32,1%A
	6 Buy new, conventional (single owner)	18,1%	15,5%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion.  
Significance level for upper case letters (A, B, C): .05<sup>1</sup>

1. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

*Table 3.6 - Consumption Sub-models for “Screwdriver” and “Lawn mower”*

Appendix C: Table 3.15 - Chi-Square Test: Consumption Sub-models for “Screwdriver” and “Lawn mower” tells us that there are significant correlations between the choice of preferred consumption sub-model and product category. In our study, the product market “Tools”, is represented by “Screwdriver” and “Lawn mower”. In the questionnaire, “Screwdriver” was



framed as being used once every six months, and have a conventional purchase price of 1 000-2 000 SEK, whereas “Lawn mower” was framed as being used once a week, and having a conventional purchase price at 4 000-5 000 SEK. For “Tools”, the most preferred consumption model is “Shared economy” with 37,0% (as seen in Table 3.1 - Consumption Models and Product Markets, p.55). If examining the two product categories separately, the preferred consumption sub-models differ, where for “Screwdriver” it is “Buy together with friends/neighbours and share usage/ownership” (27,2%) and for “Lawn mower” it is “Buy new, environmentally friendly (single owner)” (32,1%). Since these two consumption sub-models represent different consumption models (“Shared economy” respectively “Environmentally friendly”), we cannot say that the product market “Tools” is preferred by one specific consumption model, but that it differs within the product market. This is in accordance with Holt’s (2012), Baumeister’s (2014) Edbring, Lehner and Mont’s (2016) research stating that choice of consumption model differs within product markets.

The second most preferred consumption sub-model for “Screwdriver” is “Rent (temporary single owner)” (26,0%), which means that the two highest preferred consumption sub-models for “Screwdriver” both belong to “Shared economy”. Again, this supports previous research of that such consumption model suits products not frequently used (Edbring, Lehner & Mont, 2016), as the “Screwdriver” in this study was framed being used less frequently than the “Lawn mower”. The second most preferred consumption sub-models for the more frequently used “Lawn mower”, on the other hand, was to “Buy second-hand (single owner)” and “Buy together with friends/neighbours and share usage/ownership” (with 19,8% respectively). In contrast to “Screwdriver”, the attitudes towards preferred consumption sub-models for “Lawn mower” are proven more scattered. As the sample prefer three different consumption models (attracting almost a fifth of the consumers, at least) for the product category “Lawn mower”, we cannot say that there is one preferred consumption sub-model for this entire product category.

### *Results and Analysis of Segmentation*

In this section, we will present the results of preferred consumption models, based on segmentation through the demographic variables that show a significant correlation. The results will be presented by the product categories “Screwdriver” and “Lawn mower”. Table 3.7 - Chi-Square Test: Segmentation for “Screwdriver” and “Lawn mower” and Consumption Models below shows that there are significant differences for all demographic variables,

except for educational degree, for both product categories. All percentages mentioned in this section can be found in Appendix C: Table 3.16 - Segmentation for “Screwdriver” and “Lawn mower” and Consumption Models, if not else is stated.

**Pearson Chi-Square Tests**

P Product Category		CM Which of these consumption models would you prefer to gain access to this product?		G To which gender do you identify with the most?	A Age	ED Highest completed level of education	MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).	EC How environmentally concerned are you?									
				Chi-square	df	Sig.	Chi-square	df	Sig.	Chi-square	df	Sig.					
3 Screwdriver			42,365	6	,000 <sup>a,b,c</sup>	35,458	6	,000 <sup>a</sup>	11,425	6	,076 <sup>b</sup>	24,206	9	,004 <sup>a</sup>	44,415	6	,000 <sup>a</sup>
4 Lawn mower			20,502	6	,002 <sup>a,b,c</sup>	24,965	6	,000 <sup>a</sup>	11,465	6	,075	22,905	9	,006 <sup>a</sup>	66,206	6	,000 <sup>a</sup>

Results are based on nonempty rows and columns in each innermost subtable.  
<sup>a</sup>. The Chi-square statistic is significant at the ,05 level.  
<sup>b</sup>. More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.  
<sup>c</sup>. The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

*Table 3.7 - Chi-Square Test: Segmentation for “Screwdriver” and “Lawn mower” and Consumption Models*

**Gender**

For both product categories within product market “Tools”, “Female” show a significantly greater preference for “Shared economy” than “Male” do. This is found in the example for “Screwdriver”, where 61,2% of “Female” prefer “Shared economy” compared to 38,2% of the “Male” respondents. “Male”, on the other hand, illustrate significantly greater preference for “Conventional” than the “Female” do, which can be exemplified for “Screwdriver”, where 31,2% of the “Male” respondents prefer “Conventional”, in contrast to 10,9% of the “Female” respondents. This is consistent with previous research stating that women are generally more environmentally concerned (Franzen & Vogl, 2013) and have a more environmentally friendly shopping behaviour (Diamantopoulos et al. 2003), as “Shared economy” is a more environmentally friendly consumption model than “Conventional”. It is also consistent with our own results found for product market “Clothing”.

**Age**

In general, “Shared economy” is most preferred by all age groups for “Screwdriver”, although significantly more preferred by the youngest age group, “18-34”, with 59,9%. This is consistent with Edbring, Lehner and Mont’s findings (2016), stating that younger consumers are more interested in sharing products than older consumers. Our result is further supported by Edbring, Lehner and Mont (2016), as the interest for “Shared economy” decreases the

older the consumers are. Additionally to this, the older age groups seem to prefer the “Environmentally friendly” consumption model for both product categories, more so than the youngest age group. This can be exemplified by the results for “Screwdriver”, where both “35-49” (14,1%) and “50+” (21,9%) show a significantly higher preference for “Environmentally friendly” than the age group “18-34” (with 5,6%).

### **Personal Monthly Income**

For product category “Screwdriver”, the most preferred consumption model for all income groups is “Shared economy”. For “Lawn mower”, the ones with highest income display significantly more preference for “Environmentally friendly” (with 51,9%) than the ones in the other income groups (with percentages varying from 27,1%-29,3%). This is similar results as seen in the product category “Blazer”. As mentioned before, we believe that a reason for this is that they are less concerned about the higher price for such products (as they have a higher income). Also, as stated in Chapter 1.4 - Consumers’ Sustainable Behaviour, Laroche, Bergeron and Barbaro-Forleo (2001) argue that the ones buying “Environmentally friendly” products do not see it as inconvenient. This could be motivated by that the ones in the highest income group do not see the higher price as inconvenient (as “Environmentally friendly” is framed as being 20,0% more expensive than the “Conventional” option in the questionnaire).

### **Environmental Concern**

Generally speaking for “Tools”, our results tell us that the respondents who are “Very concerned” about the environment seem to have a preference for the sustainable consumption model options (“Shared economy”, “Circular economy” and “Environmentally friendly”), whereas the ones having “Little/no concern” and “Neutral” concern prefer the “Conventional” consumption model. This is displayed by the product category “Lawn mower”, where “Very concerned” respondents preferred a “Shared economy” consumption model with 24,0%, compared to respondents with “Little/no concern” with 11,1%. This result is similar as found by Edbring, Lehner and Mont (2016), that sharing products is preferred by very environmentally concerned individuals. For the same product category, the ones claiming to have “Little/no concern” chose “Conventional” with 42,2% compared to “Very concerned” where only 6,3% preferred the same consumption model. These results show that there is no clear attitude-behaviour gap for this product market and its various categories, as the respondents seem to prefer consumption models which are in line with their indicated environmental concern.

# Product Market Furniture

## Results and Analysis of Preferred Consumption Models

CM Which of these consumption models would you prefer to gain access to this product?		P Product Category	
		5 Dining set (A)	6 Patio furniture (B)
		Column N %	Column N %
1 Restyle and repair (single owner)		7,7%	9,9%
2 Rent (temporary single owner)		0,0% <sup>1</sup>	0,0% <sup>1</sup>
3 Buy second-hand (single owner)		50,2%B	43,1%
4 Buy together with friends/neighbours and share usage/ownership		0,0% <sup>1</sup>	0,6%
5 Buy new, environmentally friendly (single owner)		15,5%	19,2%
6 Buy new, conventional (single owner)		26,6%	27,2%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion.

Significance level for upper case letters (A, B, C): .05<sup>2</sup>

1. This category is not used in comparisons because its column proportion is equal to zero or one.
2. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.8 - Consumption Sub-models for “Dining set” and “Patio furniture”

As seen in Appendix C: Table 3.17 - Chi-Square Test: Consumption Sub-models for “Dining set” and “Patio furniture”, there are significant correlations between the choice of preferred consumption sub-model and product categories. For the product market “Furniture” in the questionnaire, we framed “Dining set” as being used every day, and having a conventional purchase price of 6 000 SEK. The “Patio furniture” was framed as being used during summertime, with a conventional purchase price of 500-1 000 SEK. The obscure frequency of usage defined for the latter product category makes it difficult for us to draw conclusions regarding whether this impacts the choice of preferred consumption model or not, and if it does - to what extent. For “Furniture”, the most preferred consumption model is “Circular economy” with 55,5% (seen in Table 3.1 - Consumption Models and Product Markets, p.55). What also can be said is that, as seen in the table above (Table 3.8 - Consumption Sub-models for “Dining set” and “Patio furniture”), “Shared economy” is not a popular consumption model for this product market, with only 0,3% preferring this consumption model. The two consumption sub-models belonging to “Shared economy” (“Rent (temporary single owner)” and “Buy together with friends/neighbours and share usage/ownership”) are clearly not popular choices for either “Dining set” or “Patio furniture”. Even if Edbring, Lehner and

Mont (2016) state that people are in general positive towards sharing furniture of similar characteristics as “Dining set” and “Patio furniture” (of hard material), we believe that the framing of our question had an impact on the respondents’ choice. We believe that both product categories can be interpreted as being frequently used, why sharing and moving around such large products is not very practical.

The most preferred consumption sub-model for both “Dining set” and “Patio furniture” was “Buy second-hand (single owner)”, with percentages of 50,2% respectively 43,1%. Coinciding with the research from Edbring, Lehner and Mont (2016), consumers have a positive attitude for “Circular economy” regarding furniture, specifically for the consumption sub-model “Buy second-hand (single owner)”, as they illustrate a high preference for this.

*Results and Analysis of Segmentation*

In this section, we will present the results of preferred consumption models, based on segmentation through the demographic variables that show significant correlation. The results will be presented by the product categories “Dining set” and “Patio furniture”.

**Pearson Chi-Square Tests**

P Product Category	5 Dining set	CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	G To which gender do you identify with the most?	A Age	ED Highest completed level of education	MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).	EC How environmentally concerned are you?
				17,594	14,621	2,484	13,609	44,165
			df	4	4	4	6	4
			Sig.	,001 <sup>a,b,c</sup>	,006 <sup>a,b</sup>	,647 <sup>b</sup>	,034 <sup>a,b</sup>	,000 <sup>a,b</sup>
	6 Patio furniture	CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	18,330	36,643	12,008	22,874	29,608
			df	6	6	6	9	6
			Sig.	,005 <sup>a,b,c</sup>	,000 <sup>a,b,c</sup>	,062 <sup>b,c</sup>	,006 <sup>a,b,c</sup>	,000 <sup>a,b,c</sup>

Results are based on nonempty rows and columns in each innermost subtable.  
 \*. The Chi-square statistic is significant at the ,05 level.  
 b. More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.  
 c. The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

*Table 3.9 - Chi-Square Test: Segmentation for “Dining set” and “Patio furniture” and Consumption Models*

Table 3.9 above shows that there are significant differences for all demographic variables, except for educational degree, for both product categories. Noteworthy is that for “Patio furniture”, educational degree has an associated probability of 0,062, which is not much greater than the significance level of 0,05. In this analysis we will not go deeper into this as it is non-significant for our sample, although it could be of interest to further investigate why there is a big difference in associated probability for “Patio furniture” and “Dining set”. All

percentages mentioned in this section can be found in Appendix C: Table 3.18 - Segmentation for “Dining set” and “Patio Furniture” and Consumption Models, if not else is stated.

## **Gender**

As seen in the previously mentioned product markets, “Female” show a greater preference for “Circular economy” and “Male” show a greater preference for “Conventional” consumption model. This is the case even in this product market, demonstrated by “Dining set”, where 63,3% of the “Female” chose consumption sub-models within “Circular economy”, whereas the percentages for “Male” is 47,4%. Also, “Male” respondents show a significantly higher preference for the consumption model “Conventional” than “Female” do (illustrated with 37,6% for “Male” and 20,9% for “Female” for product category “Dining set”). This is in accordance with “Female” being more environmentally concerned, as proved in our research (Chapter 3.1.2 - Demographics and Environmental Concern) as well as with previous research (Franzen & Vogl, 2013) stating that they act according to more environmentally beneficial behaviour (Diamantopoulos et al. 2003).

## **Age**

The results from the demographic variable age tell us that there is a difference between the age groups and their choice of preferred consumption model. All age groups show preference for consumption models with single-handed ownership, but the difference is that the older age group, “50+”, shows significantly higher preference for consumption model “Environmentally friendly” than the youngest age group does. This is illustrated by “Patio furniture”, where the oldest age group prefers this consumption model by 37,7%, and the youngest by only 12,5%. On the other hand, the youngest age group, “18-34”, shows significantly higher preference for “Circular economy” than the older age group does, as exemplified with “Patio furniture” where the percentages are 58,9% for the youngest and 38,6% for the oldest. The notable difference is that the older age group wants to buy completely new furniture, whereas the younger age groups are more prone to buy second-hand (“Circular economy”). As seen in Table 3.3 - Consumption Models and Motivators on p.57, the two main motivators for choosing “Environmentally friendly” are “Desire to own” (32,0%) and “Frequency of usage” (32,0%). This implies that the older age group (“50+”) lays more emphasis on owning their furniture, but do not care about the economic aspect. The highest motivator for “Circular economy” for “Furniture” is “Economic reasons” (49,0%),

which implies that the ones choosing this consumption model (mostly “18-34”), put more emphasis on the price tag.

### **Personal Monthly Income**

The results in Appendix C: Table 3.18 - Segmentation for “Dining set” and “Patio Furniture” and Consumption Models demonstrate that for product category “Patio furniture”, the respondents in the lowest income group (“0-14 999”) shows a significantly higher preference for “Circular economy” than the ones in the highest income group (“45 000+”), with 59,4% respectively 38,3%. Moreover, the ones in the highest income group shows a significantly higher preference for “Environmentally friendly” than all other income groups do (with 35,8%). Just as for the other product markets, these results imply that the ones in the lower income groups are more prone to use “Circular economy”, whereas the ones with higher income prefer “Environmentally friendly” as a consumption model. As discussed before, the “Environmentally friendly” consumption model was framed in the questionnaire as being 20,0% more expensive than the “Conventional” option, why we assume that price is a main determining factor for these choices. Moreover, the ones being willing to pay the additional 20,0% for “Environmentally friendly” products are the ones thinking that acting environmentally friendly is convenient, as mentioned by (Laroche, Bergeron & Barbaro-Forleo, 2001). The results tell us that all income groups prefer single-handed ownership for “Furniture”, however, the ones with higher income want to buy a completely new product, whereas the ones with lower income want to buy second-hand (by “Circular economy”).

### **Environmental Concern**

Consistent with the previous product markets in our study, the respondents to our questionnaire seem to choose consumption model accordingly with their stated environmental concern, i.e. there is no clear indication of an attitude-behaviour gap. This is mirrored in these results, where the ones having “Little/no concern” and the ones being “Neutral” show a significantly higher preference for “Conventional” (the least environmentally friendly consumption model) than the ones being “Very concerned” do. This is demonstrated by, for example, the choice of preferred consumption model for “Dining set”, where 53,3% of the ones with “Little/no concern” and 39,4% of the ones being “Neutral” have a preference for “Conventional”, while only 17,0% of the ones being “Very concerned” state so. Additionally, the ones being “Very concerned” shows a significantly greater preference for “Circular economy” than the ones having less environmental concern, as demonstrated for “Dining set”,

where 66,6% of the ones being “Very concerned” chose “Circular economy”, comparing to the other two groups of 35,6% (“Little/no concern”) and 45,8% (“Neutral”).

### Product Market Transportation

#### Results and Analysis of Preferred Consumption Models

		P Product Category	
		7 Car (A)	8 Bike (B)
		Column N %	Column N %
CM Which of these consumption models would you prefer to gain access to this product?	1 Restyle and repair (single owner)	10,9%	17,5%A
	2 Rent (temporary single owner)	26,4%B	3,6%
	3 Buy second-hand (single owner)	35,9%	52,8%A
	4 Buy together with friends/neighbours and share usage/ownership	14,9%B	1,4%
	5 Buy new, environmentally friendly (single owner)	8,5%	11,3%
	6 Buy new, conventional (single owner)	3,4%	13,5%A

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion.

Significance level for upper case letters (A, B, C): ,05<sup>1</sup>

1. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.10 - Consumption Sub-models for “Car” and “Bike”

As seen in Appendix C: Table 3.19 - Chi-Square Test: Consumption Sub-models for “Car” and “Bike” tells us that there are significant correlations between the choice of preferred consumption sub-model and product category. For the product market “Transportation” in the questionnaire, we framed “Car” as being used five times a month, and having a conventional purchase price of 250 000 SEK. The “Bike” was framed as being used once a week, with a conventional purchase price of 7 000 SEK. These two product categories are the two ones in our study that differ remarkably from each other in regards to price. Interestingly enough, despite the price difference, our study shows that “Buy second-hand (single owner)” is the most preferred consumption sub-model for both “Car” and “Bike” (35,9% respectively 52,8%). These results prove similar to Baumeister’s study (2014) which suggests that consumers are more positive towards single-handed ownership for these specific product



categories. All percentages mentioned in this section can be found in Appendix C: Table 3.20 - Segmentation for “Car” and “Bike” and Consumption Models, if not else is stated.

*Results and Analysis of Segmentation*

In this section, we will present the results of preferred consumption models, based on segmentation through the demographic variables that show a significant correlation. The results will be presented by the product categories “Car” and “Bike”. As seen in the Table 3.11 below, the demographic variables shown significantly correlated with the choice of consumption model for “Transportation” (i.e. with an associated probability lower than the significance level  $p < 0,05$ ) differ from each product category. For “Car”, the significant demographic variables are gender, age, educational degree and environmental concern. For “Bike”, the significant demographic variables are gender, age, personal monthly income and environmental concern.

**Pearson Chi-Square Tests**

P Product Category	7 Car	CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	G To which gender do you identify with the most?	A Age	ED Highest completed level of education	MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).	EC How environmentally concerned are you?
				7,839	14,922	20,226	15,320	67,937
			df	6	6	6	9	6
			Sig.	,250 <sup>a,b</sup>	,021 <sup>*</sup>	,003 <sup>b,*</sup>	,083	,000 <sup>a,*</sup>
	8 Bike	CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	13,024	14,980	5,035	29,633	15,037
			df	6	6	6	9	6
			Sig.	,043 <sup>a,b,*</sup>	,020 <sup>*</sup>	,539 <sup>a,b</sup>	,001 <sup>*</sup>	,020 <sup>*</sup>

Results are based on nonempty rows and columns in each innermost subtable.  
 \*. The Chi-square statistic is significant at the ,05 level.  
 a. More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.  
 b. The minimum expected cell count in this subtable is less than one. Chi-square results may be invalid.

*Table 3.11 - Chi-Square Test: Segmentation for “Car” and “Bike” and Consumption Model*

**Gender**

As seen in Table 3.11 above, gender is one of the two variables shown significantly correlated to the choice of preferred consumption model for both product categories. As seen in Appendix C: Table 3.20 - Segmentation for “Car” and “Bike” and Consumption Models, our results indicate that the most popular consumption model for both genders and both product categories is “Circular economy”. What is noteworthy is that the second highest preferred consumption model (for both genders) for “Car” is “Shared economy”, whereas this consumption model is the least preferred for both genders for product category “Bike”. Consequently, no clear patterns can be found between preferability for a consumption model

and the demographic variable gender (even though there are some significant differences according to the Chi-Square test). What can be found however is that the preferability differs a lot depending on product category. The one conclusion we can draw from these results is that “Male” to a higher degree (not always significantly higher), prefer the consumption model “Conventional” than the “Female” gender do, which is consistent with previous research stating that men are less environmentally conscious and acting thereafter, in comparison to women (Diamantopoulos et al. 2003; Franzen & Vogl, 2013), and also consistent with our results for previous mentioned product markets.

### **Age**

What can be said based on these results, is that within the product category “Car”, the youngest age group (“18-34”) shows a significantly higher preference for “Shared economy” than the oldest age group does (with 44,8% respectively 30,7%). As previous product markets has shown in this study, this points at more positive attitude towards, and greater preferability for, sharing products among young consumers than among older, as also stated by Edbring, Lehner and Mont (2016). However, overall, the results of the choice of preferred consumption model seem to not differ that much based on age. The different age groups have similar percentages for all consumption models, and the most preferred consumption model for all age groups for “Bike” is “Circular economy”. For “Car”, the percentages are rather equal for all age groups for both “Shared economy” and “Circular economy”.

### **Educational Degree**

As seen in Table 3.11 - Chi-Square Test: Segmentation for “Car” and “Bike” and Consumption Model above, there are only significant correlations between educational degree and the choice of preferred consumption model for the product category “Car”. Respondents from our sample with a “University” degree significantly higher prefer “Shared economy” for product category “Car”. This is found where 46,7% of the “University” degree respondents chose “Shared economy”, compared to the ones with a “High school” degree (having 31,6% preferring “Shared economy”).

### **Personal Monthly Income**

Within product category “Car”, there are no significant correlations with the choice of preferred consumption model and personal monthly income. We find this interesting since this variable has shown significant for all other product categories (except “Prom

dress/tuxedo”), and, as “Car” is the most expensive product category in our study, we would have guessed that personal monthly income would have an impact on the choice of preferred consumption model.

Significant correlations were shown for “Bike”, where the three lowest income groups display a significantly higher preference for “Circular economy”, where the lower income groups show preferential attitudes with 74,7%, 76,7%, and 71,7% compared to the highest income group (“45 000+” with 48,1%). Also, the highest income group shows a significantly higher preference for “Environmentally friendly” as a consumption model than two of the lower income groups (with 23,5% compared to 6,0% and 8,3%). These results imply, just as for other product markets, that the ones with lower income prefer “Circular economy” whereas the ones with higher income prefer “Environmentally friendly”. We therefore have suspicions that the choice of preferred consumption model can depend on a product’s price, and whether or not the consumer is positive towards paying more for a brand new although environmentally friendly product, as also discussed by Laroche, Bergeron and Barbaro-Forleo (2001).

### **Environmental Concern**

For product category “Car”, the respondents that are “Very concerned” about the environment show a significantly higher preference for “Shared economy” (49,5%) than the ones with “Little/no concern” (24,4%) and the ones being “Neutral” (28,2%). Moreover, the ones having “Little/no concern” and “Neutral” concern for the environment for product category “Car” show higher preference for “Conventional” than the ones being “Very concerned” (with 20,0% and 4,2% against 0,6%). Similar results can be found for product category “Bike”. Consistent with previous product markets in our study, our sample seems to act in accordance with stated environmental concern, i.e. there is no clear indication of an attitude-behaviour gap for their environmental attitude and the preferred consumption model.

## **3.3 Summary of Results**

### **3.3.1 Results of Preferred Consumption Models**

As seen in the results above, there are indications of that some consumption models are more suitable for some product markets than others. Despite that there were differences between the product categories within the product markets, an indication of preferred consumption model

for each product market is provided. As seen for “Clothing” and “Tools”, the distribution of preferred consumption models is more equal, compared to the distribution for preferred consumption models for “Furniture” and “Transportation”. For “Clothing” and “Tools”, we consider all four consumption models to have a place in respective product market. The preferability for each consumption model, for both these markets, all vary roughly between a fourth and a fifth by the Swedish potential consumers (our sample). However, we can see that there is one consumption model for each market that stands out. The most preferred consumption model for “Clothing” is “Conventional”, and the most preferred for “Tools” is “Shared economy”.

Regarding “Furniture” and “Transportation”, our results indicate that there is not an equal distribution of preferability between all four consumption models. For both these product markets, we can see that there is one consumption model that really stands out, being more than half of the consumers’ most preferred choice. This consumption model is “Circular economy”, for both product markets. The other consumption models should be able to, or may, find a place for both product markets, due to their slightly lower level of preference. Additionally, what is clear from our results is that for “Furniture” specifically, “Shared economy” is not a preferred consumption model among our sample of Swedish potential consumers.

We cannot control for the variables price and frequency of usage as they were included in the questions. However, the results still indicate that for product categories framed as being frequently used and the more expensive products (see Table 2.1 - Product Markets and Categories on p.36), “Circular economy” was the most preferred consumption model among our sample. All results indicate that our sample of Swedish potential consumers do not always choose to consume by the same consumption model for all product markets, nor do they consume by the same consumption model across product markets, but that their preference differs depending on product category.

As for what should be emphasised by companies marketing-wise for each consumption model, we found protruding motivators for each consumption model. For “Shared economy”, “Frequency of usage” and “Economic reasons” are the most frequently mentioned motivators. For “Circular economy”, “Economic reasons” is the strongest motivator. For the “Environmentally friendly” consumption model, “Frequency of usage”, “Desire to own”, and

“Flexibility” are the motivators with the highest percentage. Lastly, for “Conventional”, the protruding motivators are “Desire to own” and “Frequency of usage”. Moreover, “Opportunity to test”, “Social normalisation” and “Environmental reasons” do not indicate strong motivators for any of the consumption models.

### 3.3.2 Results of Segmentation

The results from the segmentation indicate that the choice of preferred consumption model does not solely depend on product market, but also on demographic variables such as gender, age, personal monthly income and environmental concern. The variable educational degree has illustrated to have the least significance (little to no impact) regarding the choice of preferred consumption model for all product categories.

Moreover, our results indicate that “Male” prefer the consumption model “Conventional” significantly more than “Female” do, which was shown for almost all product categories. We can also see that “Female” prefer the sustainable consumption models (“Shared economy” and “Circular economy”) more than “Male” do. Regarding the demographic variable age, our results suggest that for most of the product categories, young people prefer “Shared economy” significantly more than the older age groups do. The ones preferring the consumption model “Environmentally friendly” seem to be in the oldest age segment and the ones with higher personal monthly income. Also, related to personal monthly income, our results tell us that individuals from the lower income groups have a higher preference for either “Shared economy” or “Circular economy”. Lastly, the ones having “Little/no concern” about the environment are shown to choose “Conventional” as a consumption model significantly more often than the ones being “Very concerned”.

## 4. Discussion

*In this chapter, we will highlight and analyse the main findings of the results presented in the previous chapter, and put them in a bigger context in relation to previous studies.*

### 4.1 Discussion

As stated in Chapter 1.5 - The Complexity, we found that previous researchers in the area of sustainable consumption have not had the consumers choosing one consumption model over others, nor have they explored potential demographic segments of these consumers. This motivated us to do such research: to find approximate results of which consumption model is most preferred for what product market and category, if consumers choose to consume according to one specific consumption model across product markets and categories, and if there is a trace of common denominators in demographic characteristics for these consumers. To be able to build on previous studies, we examined our samples demographic characteristics in relation to their environmental concern to see if it was in line with previous research (Diamantopoulos et al. 2003; Franzen & Vogl, 2013). As our sample indicated similarities with previous studies, we found it acceptable to use their results as a base for our own study and new findings.

As mentioned in Chapter 1.2 - Sustainable Consumption Models, Mont (2002) acknowledges consumers' acceptability of these sustainable consumption models as an uncertainty for implementing them. The results from our survey indicate that our sample is, for most product markets, positive towards the sustainable consumption models, in accordance with that people are more interested in sustainable consumption (Peattie, 2010; Porter & Kramer, 2006, 2011). Even though our sample illustrates preference for the sustainable consumption models in several cases, previous research argue that it is difficult to change consumers' behaviour into more sustainable (Jackson, 2005; Rettie, Burchell & Barnham, 2014). Consequently, the mere fact that our sample is positive towards these consumption models does not mean that they would act accordingly in a real scenario, however could provide indications of actual behaviour, as argued by Fazio (1986).

Moreover, what can be seen throughout our results is that the preferability towards a certain consumption model differs widely depending on product market. It is also proven that the preference for a consumption model differs for the product categories within one product

market, which is argued by Holt (2012), Baumeister (2014) and Edbring, Lehner and Mont (2016). Consequently, based on our study, we cannot say that a product market in general can be assigned one consumption model, but that further considerations for each product category needs to be taken. Moreover, our sample indicate that consumers do not prefer using one and the same consumption model consistently across all product markets and categories.

Interesting to see is that many of the respondents prefer “Shared economy”, even though previous research have stated that people are, for some product categories, more positive towards a single-handed ownership (Baumeister, 2014). However, the preferability for “Shared economy” in our study do support the fact that people would like to consume less, i.e. dematerialising (Mont, 2002; Corvellec & Stål, 2017). In our study, the correlation between young consumers and “Shared economy” implies that these young consumers share characteristics with the so-called transumers, i.e. being more driven and interested in the experience of a product, instead of owning it (Lawson, 2011). As mentioned, previous research has demonstrated that the attitude towards “Shared economy” is generally more positive (to a certain degree) among young consumers than among older consumers (Edbring, Lehner & Mont, 2016). As our study is of a cross-section design, it is difficult to say something certain about ages (in comparison to longitudinal design, which conducts a study over time (Burns & Burns, 2008)). When interpreting these age groups’ preferences, we suspect that there can be two possible reasons for their decisions. Either, our results point to a greater preference for “Shared economy” among young respondents and not for old consumers, i.e. as one grow older, the preference for the consumption model changes (as argued by Edbring, Lehner and Mont (2016)). Or, it is because of so-called cohorts, i.e. that the young respondents are in a cohort that prefer “Shared economy”. This would then imply that when the younger consumers grow old, the ones preferring “Shared economy” will then be represented by the old age groups. Noteworthy is that, in our research, we find that the preference for “Shared economy” is relatively high even for the older consumers (our two older age groups). As Rettie, Burchell and Barnham (2014) argue, normalisation is not stable. Can we then assume that “Shared economy” is starting to become socially normalised among all age spans, and that the so-called transumers will increase in number?

Another interesting finding in the results of our study is that the motivator “Environmental reasons” does not account for being a strong main motivator for driving consumption of the sustainable consumption models. As the respondents could only choose their foremost

motivator, the results give us a good indicator of which motivators can be seen as the main ones. Based on the assumption that businesses are increasing adoption of sustainable consumption models to comply the consumers' demands for environmentally friendliness (Mont, 2002; Tukker, 2004; Kotler, 2011), we find it noteworthy that consumers in turn do not consider "Environmental reasons" as their main motivator for engaging in such consumption models. This may imply that the environmental aspects are mostly seen as additional value for the consumers, as suggested by Niinimäki (2010). However, if a company would like to emphasise the environmental benefits of a consumption model, despite not being a strong motivator for our sample, the company should do this carefully with "greenophobia" in mind, as it might affect the company's environmental credibility (Grant, 2007).

Two of the top motivators throughout the study are "Economic reasons" and "Frequency of usage". The former one was, to us, quite expected, as this motivator was previously found to have great significance among many researchers (Sweeney & Soutar, 2001; Petrick, 2002; Baumeister, 2014; Edbring, Lehner, & Mont, 2016). Contrastingly, "Frequency of usage" is not mentioned or suggest by many other researchers than Edbring, Lehner and Mont (2016), and yet we still find it to be one of our study's most frequently appearing motivators. We believe that the main reason for this might be that we framed the questions including both price and frequency of usage, why it might have affected the respondents' choice of motivator as they already had those aspects in mind. Worth mentioning is also that Edbring, Lehner and Mont (2016) framed this motivator as only relating to how seldom the product was used. We believe that our way of framing it could be seen from both sides, i.e. either that the product is seldom used or frequently used. This might be one explanation of why this motivator is so visible in our study.

Additionally, as the majority of our sample (62,9%) state that they are "Very concerned" about the environment, it correlates with previous research stating that consumers today are generally conscious and engaged in the environmental issues (Peattie, 2010; Porter & Kramer, 2006, 2011). Moreover from the results, we can tell that the ones being "Very concerned" generally are preferring to consume by one of the sustainable consumption models ("Shared economy", "Circular economy" or "Environmentally friendly"), whereas the ones stating that they have "Little/no concern" and "Neutral" environmental concern to a higher degree prefer the consumption model "Conventional", which we do not consider an environmentally



beneficial consumption model. This implies that the respondents' environmental concern mirrors their preferability of intended consumption behaviour, which is what is stated by Diamantopoulos et al. (2003), and Franzen and Vogl (2013). Noteworthy is that our high percentage of "Very concerned" respondents among our sample may have had an impact on the sample's generally high preferability of sustainable consumption models over the "Conventional" consumption model.

## 5. Conclusions and Implications

*In this chapter, we will present the conclusions of our study. We will present how well our aim of this thesis is fulfilled, as well as present the answers to our research questions. Moreover, we will provide the reader with theoretical and managerial implications as a consequence of our study. Lastly, we will present the limitations of our study and suggest further research in the area of sustainable consumption.*

### 5.1 Conclusions

What we can conclude from our study is that Swedish potential consumers indicate a positive attitude towards these sustainable consumption models. Moreover, we found that the preference for sustainable consumption models differs across product markets and product categories. Referring back to our first research question (*“Which of the four consumption models (“Circular economy”, “Shared economy”, “Environmentally friendly”, and “Conventional”) do Swedish consumers prefer, in relation to different product markets and product categories?”*), we would like to state, based on our study, that for both product markets “Clothing” and “Tools”, all four consumption models have the potential to succeed in the marketplace. However, if only choosing one consumption model for “Clothing”, “Conventional” is the most preferred. For “Tools”, the most preferred consumption model is “Shared economy”. Regarding the product markets “Furniture” and “Transportation”, “Circular economy” is the most preferred consumption model. However, for “Furniture” our results indicate that “Shared economy” is not considered a suitable consumption model. Moreover, if marketing these consumption models, our study indicates that one should generally emphasise aspects relating to “Economic reasons” and “Frequency of usage”.

Referring back to our second research question (*“Are there any distinctive demographic segments among consumers preferring a specific consumption model? In that case, which ones?”*), we found that the choice of preferred consumption model also differs between consumers with various demographic characteristics. To only highlight a few of the found target groups, the results of our sample indicate that “Male” are more prone to prefer the “Conventional” consumption model than “Female”, high income takers and older people are protruding groups for the “Environmentally friendly” consumption model, and young people is a promising group for “Shared economy”. Furthermore, educational degree indicates to have no correlation with the choice of preferred consumption model.

## 5.2 Theoretical Implications

As the aim of this thesis was to contribute to research in the field of sustainable consumption, by gaining insight into Swedish consumers' acceptability of, and motivators for, practising sustainable consumption models, we strongly believe that these findings have managed to do so. Moreover, this thesis contribute with an overview of the Swedish population alone, and their attitudes towards sustainable behaviour. Noteworthy is that what we have contributed with in terms of new theory, cannot be considered to be generalisable for anything more than our sample. However, what it can do is provide indications and estimations. Our findings contribute to the marketing discipline as it is the first study of its kind, examining Swedish potential consumers' preferability of different consumption models at the same time, and having them choose their most preferred one for specific product categories. These results contribute with new theory regarding consumers' choice of preferred consumption model. Unlike previous research, our study shows that the choice of preferred consumption model is more complex than that consumers choose to consume according to one single consumption model throughout all their consumption possibilities. We can further add on to previous research, and to a greater extent, based on our study and approximate results, argue that the preferability towards consumption models differs across multiple product markets and multiple product categories within markets. Based on this finding, we can conclude that the individual consumer does not consistently prefer to consume according to one sustainable consumption model, but shift preference in consumption model for different product markets and categories.

We further contribute with insights into demographic characteristics of Swedish consumers that affect their choice of preferred consumption model. By our study, it is indicated that Swedish potential consumers reason similarly as what has been found by previous research from worldwide studies in regards to environmental concern, based on their demographic characteristics. We have also contributed to theory in how demographic characteristics are correlating with the choice of preferred consumption model.

## 5.3 Managerial Implication

This study fulfils this thesis's purpose of facilitating easier ways for consumers and practitioners to act more sustainably in the marketplace. This is done by providing several managerial implications. First, this study illustrate that Swedish potential consumers are

generally interested in consuming according to these sustainable consumption models, i.e. that there is a market for such consumption models in various product markets. Second, the study contributes with empirically grounded information regarding which of these four consumption models is most preferred by Swedish potential consumers, for the four given product markets and their product categories. This knowledge will guide companies to make the choice of whether to emphasise their current consumption models, or encourage a change to a more suitable option. Third, our study helps practitioners target the right consumers for their consumption model, based on their demographic characteristics. Fourth and last, the main motivators found for each consumption model for the different product markets should act as focal points when marketing said consumption model.

## 5.4 Limitations and Future Research

This study is the first study conducted in Sweden regarding consumers' preference for consumption models in different product markets, and possible influences to this preferred choice (demographic characteristics and motivators). The limitations of this study allow for further research in this area.

A limitation of our study is its cross-sectional design, from which we cannot chart changes (Burns & Burns, 2008). We suspect that, as previous research points at an increased interest in sustainability (Peattie, 2010; Porter & Kramer, 2006, 2011), and our study shows that the sample in general often prefer sustainable consumption models over "Conventional", that this pattern can change over time as these consumption models get more socially normalised. As for future research, we therefore suggest that this type of study should be conducted over time (further suggested by Diamantopoulos et al. 2003), i.e. a longitudinal study, to track progress or change in consumers' attitudes towards sustainable consumption (Burns & Burns, 2008). Another limitation with this research is its sample method: non-probability sample through a convenience sample method. We can because of the sample method not fully generalise our findings, especially so since it is based on perceptual data, and due to our limited sample size (n=504). Consequently, this encourages future research with greater resources (time and money) to examine the same research questions more in depth. This could either be done by a larger, better distributed, sample with probability sample method, or by a qualitative study.

Moreover, we would like to see more product markets and product categories within, examined in relation to consumers' preference, as we have found varying results for each

product market and product category. As our study has indicated that the choice of preferred consumption model depends on product category, we highly suspect that if one were to examine even more product markets and product categories, one would collect an even better insight into how the preferred choice of consumption model correlate with product categories. Moreover, as stated, our study cannot with certainty say which variable that affects the choice of preferred consumption model the most. We would therefore further welcome research that controls for different variables to see which of the variables is the most influential one. Future research could for example control for product price and frequency of usage. As these variables were included in our questions in or questionnaire, we cannot control for them but only provide approximate indications of these variables' impact on the choice of preferred consumption model.

In this study, we have found that our sample of Swedish potential consumers are generally positive towards these sustainable consumption models, which has previously been seen as an uncertainty for the success of these consumption models (Mont, 2002). However, Mont (2002) and Crane et al. (2014) mention company compliance and environmental improvement as two other uncertainties for such consumption models. We agreed on the critique regarding company compliance, meaning that more research about consumers' attitudes towards these consumption models were needed in order for companies to be interested in adapting them. Now that we have indications of that the Swedish consumers are positive towards these consumption models, and which models they prefer - the questions remain of how well Swedish companies will comply to this, and how much more environmentally friendly these consumption models really are. Furthermore, what would a greater implementation of these sustainable consumption models mean for consumers' sustainable consumption behaviour? Could it be that sustainable consumption behaviour has predominantly so far depended on consumers' strong independent sustainable values (what Holt (2012) refers to as the ethical value paradigm)? And if so, would a great implementation of these more sustainable consumption models have an impact on consumers' sustainable consumption behaviour? Could the implementation affect the way in which consumers act sustainably in the marketplace - meaning that companies spark the sustainable behaviour, instead of it being the individual consumers and their individual values that drives such consumption?

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# Appendix A

## The Questionnaire (Swedish)

Avsnitt 1 av 12

### Undersökning om mer hållbar konsumtion

Hej!

Vi heter Lina Öberg och Michelle Bergsell och läser en magisterutbildning inom marknadsföring vid Lunds universitet. Vad snällt att Du vill medverka i vår undersökning, det uppskattar vi verkligen! Vi vill med hjälp av Dina svar undersöka på vilket sätt svenska konsumenter föredrar att införskaffa produkter. Detta hjälper oss i vår magisteruppsats som handlar om mer hållbara/miljövänliga konsumtionsätt.

Lite kort information innan undersökningen börjar:

Enkäten består av 21 frågor och tar ca 6 minuter att slutföra. Den är helt frivillig. Du kan när som helst avsluta Din medverkan, men vi uppskattar självklart om Du tar Dig tid att svara på hela enkäten så vi kan använda oss av Dina svar.

Alla svar hanteras helt anonymt och konfidentiellt.

Var vänlig och läs instruktionerna noggrant så att Du lättare kan svara på våra frågor.

Tack på förhand!

Lina och Michelle

Avsnitt 2 av 12

### Demografi

Vilket kön identifierar Du Dig mest med?

- Man
- Kvinna
- Annat

Ålder

Du måste vara 18 år eller äldre för att delta i undersökningen.

- 0-17
- 18-34
- 35-49
- 50-64
- 65-79
- 80 +

Högsta avslutade utbildning

- Grundskola, folkskola, realskola eller liknande
- Gymnasieutbildning
- Universitets- eller högskoleutbildning

Personlig månadsinkomst (bidrag och lön). Alternativ anges i svenska kronor (SEK).

- 0 – 14 999
- 15 000 – 29 999
- 30 000 – 44 999
- 45 000 – 59 999
- 60 000 – 79 999
- 80 000 +

Hur bekymrad är Du över dagens miljö- och klimatpåverkan?

- Lite/inte alls bekymrad
- Neutral
- Mycket bekymrad

Avsnitt 3 av 12

### **Hållbar konsumtion**

I den här delen vill vi få reda på vilket sätt Du föredrar att införskaffa de nämnda produkterna. I alla frågor vill vi att Du ska anta att Du inte redan äger produkten. Du ska alltså införskaffa denna produkt och välja vilket sätt Du helst skulle göra detta på, utifrån de angivna alternativen.

Alla priser som nämns i frågorna som “nypris” är uppskattade utifrån ungefärligt svenskt marknadspris för konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan). Utöver det ber vi Dig anta att de givna konsumtionsalternativen sker till ett rimligt pris i förhållande till produktens givna nypris. Anta att de produkter som är producerade med extra hänsyn till miljöpåverkan ("miljövänliga produkter") har ett pris som är 20% högre än de som anses vara konventionella.

Avsnitt 4 av 12

### **Fråga 1/8**

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 1. Anta att Du har användning för en balklänning/smoking (nypris ca 3000-4000 SEK) en gång om året. Vilket av dessa alternativ skulle du föredra för att få tillgång till detta plagg?

- Styla om/laga ett plagg som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).
- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnad (vara ensam ägare).
- Köpa ny tillsammans med vänner och dela på användandet/ägandet.
- Köpa ny, miljövänlig (vara ensam ägare).
- Köpa ny, konventionell (vara ensam ägare).

Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till min balklänning/smoking.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av plagget.

- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda balklänningen/smokingen.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika plagg.
- Jag vill ha en balklänning/smoking som inte alla andra har/vara unik.
- Annat...

Avsnitt 5 av 12

### Fråga 2/8

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 2. Anta att Du har användning för en kavaj (nypris ca. 500-1000 SEK) vid ett speciellt tillfälle en gång varannan vecka. Vilket av dessa alternativ skulle du föredra för att få tillgång till detta plagg?

- Styla om/laga ett plagg som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).
- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnad (vara ensam ägare).
- Köpa ny tillsammans med vänner och dela på användandet/ägandet.
- Köpa ny, miljövänlig (vara ensam ägare).
- Köpa ny, konventionell (vara ensam ägare).

Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till min kavaj.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av plagget.
- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda kavajen.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika plagg.
- Jag vill ha en kavaj som inte alla andra har/vara unik.
- Annat...

Avsnitt 6 av 12

### Fråga 3/8

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 3. Anta att Du har användning för en skruvdragare (nypris ca 1000-2000 SEK) en gång i halvåret. Vilket av dessa alternativ skulle Du föredra för att få tillgång till skruvdragare?

- Laga en skruvdragare som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).

- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnad (vara ensam ägare).
- Köpa ny tillsammans med grannar/vänner och dela på användandet/ägandet.
- Köpa ny, miljövänlig (vara ensam ägare).
- Köpa ny, konventionell (vara ensam ägare).

Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till min skruvdragare.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av verktyget.
- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda skruvdragaren.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika modeller av skruvdragare.
- Jag vill ha en skruvdragare som inte alla andra har/vara unik.
- Annat...

Avsnitt 7 av 12

#### Fråga 4/8

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 4. Anta att Du har en trädgård med gräsmatta som behöver klippas en gång i veckan. Till detta behöver Du en gräsklippare (nypris ca 4000-5000 SEK). Vilket av dessa alternativ skulle Du föredra för att få tillgång till gräsklipparen?

- Laga en gräsklippare som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).
- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnad (vara ensam ägare).
- Köpa ny tillsammans med grannar/vänner och dela på användandet/ägandet.
- Köpa ny, miljövänlig (vara ensam ägare).
- Köpa ny, konventionell (vara ensam ägare).

Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till min gräsklippare.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av gräsklipparen.
- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda gräsklipparen.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika modeller av gräsklippare.
- Jag vill ha en gräsklippare som inte alla andra har/vara unik.
- Annat...

Avsnitt 8 av 12

### Fråga 5/8

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 5. Anta att Du är nyinflyttad och behöver ett nytt matsalsmöblemang (bord + stolar) (nypris ca 6000 SEK) som ska användas dagligen. Vilket av dessa alternativ skulle Du föredra för att få tillgång till matsalsmöblemanget?

- Styla om/laga matsalsmöblemang som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).
- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnat (vara ensam ägare).
- Köpa nytt tillsammans med grannar/vänner och dela på användandet/ägandet.
- Köpa nytt, miljövänligt (vara ensam ägare).
- Köpa nytt, konventionellt (vara ensam ägare).

Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till mitt matsalsmöblemang.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av matsalsmöblemanget.
- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda matsalsmöblemanget.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika matsalsmöblemang.
- Jag vill ha ett matsalsmöblemang som inte alla andra har/vara unik.
- Annat...

Avsnitt 9 av 12

### Fråga 6/8

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 6. Anta att Du bor i en lägenhet med balkong och behöver utemöbler (nypris ca 500-1000 SEK) under sommarhalvåret. Vilket av dessa alternativ skulle Du föredra för att få tillgång till utemöblerna?

- Styla om/laga utemöbler som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).
- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnat (vara ensam ägare).
- Köpa nya tillsammans med grannar/vänner och dela på användandet/ägandet.
- Köpa nya, miljövänliga (vara ensam ägare).
- Köpa nya, konventionella (vara ensam ägare).



Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till mina utemöbler.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av utemöblerna.
- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda utemöblerna.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika modeller av utemöbler.
- Jag vill ha utemöbler som inte alla andra har/vara unik.
- Annat...

Avsnitt 10 av 12

### Fråga 7/8

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 7. Anta att Du har användning för bil (nypris ca 250 000 SEK) max fem gånger i månaden när Du handla mat lokalt. Vilket av dessa alternativ skulle Du föredra för att få tillgång till bilen?

- Laga en bil som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).
- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnad (vara ensam ägare).
- Köpa ny tillsammans med grannar/vänner och dela på användandet/ägandet.
- Köpa ny, miljövänlig (vara ensam ägare).
- Köpa ny, konventionell (vara ensam ägare).

Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till min bil.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av bilen.
- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda bilen.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika bilar.
- Jag vill ha en bil som inte alla andra har/vara unik.
- Annat...

Avsnitt 11 av 12

### Fråga 8/8

Nypriset som anges i frågan avser konventionella/traditionella produkter (produkter som är producerade utan extra hänsyn till eventuell miljöpåverkan).

Anta att alternativet "Köpa ny, miljövänlig (vara ensam ägare)" är 20% dyrare än nypriset för de konventionella produkterna.

Anta att alternativen "Hyra" och "Köpa begagnad" sker till ett rimligt pris i förhållande till de konventionella produkternas nypris.

Fråga 8. Anta att Du har användning för cykel (nypris ca 7000 SEK) en gång i veckan. Vilket av dessa alternativ skulle Du föredra för att införskaffa cykeln?

- Styla om/laga en cykel som Du redan äger, vilket tar tid och kostar pengar (vara ensam ägare).
- Hyra (tillfälligt vara ensam ägare).
- Köpa begagnad (vara ensam ägare).
- Köpa ny tillsammans med grannar/vänner och dela på användandet/ägandet.
- Köpa ny, miljövänlig (vara ensam ägare).
- Köpa ny, konventionell (vara ensam ägare).

Varför valde Du detta alternativ? Nämn den främsta anledningen.

- Jag vill vara ensam ägare till min cykel.
- Många i min omgivning konsumerar på detta vis.
- Det gör att jag kan vara flexibel i mitt användande av cykeln.
- Jag anser att detta alternativ är mer ekonomiskt än de andra.
- På grund av hur ofta jag kommer använda cykeln.
- Jag vill hjälpa till att skydda miljön/inte bidra till miljöförstöring.
- Jag vill ha möjlighet att testa olika cyklar.
- Jag vill ha en cykel som inte alla andra har/vara unik.
- Annat...

Avsnitt 12 av 12

### **Tack!**

Syftet med denna studie är att undersöka om pris och produktkategori har en avgörande roll för hur konsumenter kan tänka sig att införskaffa produkter.

Här ger vi Dig möjligheten att skriva i Din e-postadress om Du vill ta del av vår slutgiltiga uppsats. Om Du inte vill det kan Du bara klicka på "Skicka".

Tack för Din medverkan!

Lina Öberg och Michelle Bergsell

E-mailadress

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# Appendix B

## The Questionnaire (English)

Section 1 of 12

### **Research about more sustainable consumption**

Hi!

We are Lina Öberg and Michelle Bergsell and we are studying a Master's degree in Marketing at Lund University. We really appreciate that you want to participate in our survey! We want to, with the help of your responses, investigate how Swedish consumers prefer to procure products. This helps us in our master's thesis which is about sustainable/environmentally friendly ways of consuming.

Some short information before the research begins:

The questionnaire consists of 21 questions and takes about 6 minutes to complete. It is completely voluntary. You can terminate your participation at any time, but we appreciate if you take the time to respond to the entire questionnaire so that we can use your answers.

All responses are completely anonymous and confidential.

Please read the instructions carefully so that you can easily answer our questions.

Thank you in advance!

Lina and Michelle

Section 2 of 12

### **Demography**

To which gender do you identify with the most?

- Male
- Female
- Other

Age

You have to be 18 years old or older to participate in the research.

- 0-17
- 18-34
- 35-49
- 50-64
- 65-79
- 80+

Highest completed level of education

- Elementary School
- High School

- University

Personal monthly income (financial support and salary). Response alternatives are given in Swedish crowns (kr).

- 0 – 14 999
- 15 000 – 29 999
- 30 000 – 44 999
- 45 000 – 59 999
- 60 000 – 79 999
- 80 000 +

How concerned are you about today's environmental and climate impact?

- Little/no concern
- Neutral
- Very concerned

Section 3 of 12

### **Sustainable Consumption**

In this section, we want to find out how you would prefer to gain access to the mentioned products. In all questions, we would like you to assume that you do not already own the product. Accordingly: you should assume that you want to gain access to the said product, and state in which of the ways you would prefer to do so, based on the listed options.

All prices that are mentioned in the questions as “New Price” are estimated based on an average Swedish market price for conventional/traditional products (products that are produced without extra considerations taken for possible environmental impacts). In addition, we ask you to assume that the given consumption options are practiced at a reasonable price in relation to the product’s given new price. Assume that the products produced with extra considerations taken for environmental impact (“environmentally friendly products”) are 20% more expensive than those considered to be conventional products.

Section 4 of 12

### **Question 1/8**

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner)” and “Buy second-hand (single owner)” are practiced at a reasonable price in relation to the new price of the conventional products.

Question 1. Assume that you would use a prom dress/tuxedo (new price approximately 3 000-4 000 SEK) once a year. Which of these options would you prefer to gain access to this clothing item?

- Restyle and repair a piece of clothing that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)

- Buy together with friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my prom dress/tuxedo.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the garment.
- I think this option is more economical than the other.
- Because of how often I will use the dressing / tuxedo.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different items.
- I would like a prom dress / tuxedo that not everyone else has / be unique.
- Other ...

Section 5 of 12

### Question 2/8

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner)” and “Buy second-hand (single owner)” are practiced at a reasonable price in relation to the new price of the conventional products.

Question 2. Assume that you use a blazer (new price approximately 500-1 000 SEK) at a special occasion once every other week. Which of these options would you prefer to gain access to this clothing item?

- Restyle and repair a piece of clothing that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)
- Buy together with friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my blazer.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the garment.
- I think this option is more economical than the other.
- Because of how often I will use the blazer.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different items.
- I would like a blazer that not everyone else has / be unique.
- Other ...

Section 6 of 12

**Question 3/8**

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner)” and “Buy second-hand (single owner)” are practiced at a reasonable price in relation to the new price of the conventional products.

Question 3. Assume that you use a screwdriver (new price approximately 1 000-2 000 SEK) once every six months. Which of these options would you prefer to gain access to a screwdriver?

- Restyle and repair a screwdriver that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)
- Buy together with neighbours/friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my screwdriver.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the tool.
- I think this option is more economical than the other.
- Because of how often I will use the screwdriver.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different screwdrivers.
- I would like a screwdriver that not everyone else has / be unique.
- Other ...

Section 7 of 12

**Question 4/8**

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner)” and “Buy second-hand (single owner)” are practiced at a reasonable price in relation to the new price of the conventional products.

Question 4. Assume that you own a garden which grass needs cutting once each week. For this you need a lawn mower (new price approximately 4 000-5 000 SEK). Which of these options would you prefer to gain access to a lawn mower?

- Restyle and repair a lawn mower that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)

- Buy together with neighbours/friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my lawn mower.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the tool.
- I think this option is more economical than the other.
- Because of how often I will use the lawn mower.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different lawn mowers.
- I would like a lawn mower that not everyone else has / be unique.
- Other ...

Section 8 of 12

### Question 5/8

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner” and “Buy second-hand (single owner”) are practiced at a reasonable price in relation to the new price of the conventional products.

Question 5. Assume that you have just moved to a new place and are in need of a new dining set (table and chairs) (new price approximately 6 000 SEK) that is intended to be used daily. Which of these options would you prefer to gain access to a dining set?

- Restyle and repair a dining set that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)
- Buy together with neighbours/friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my dining set.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the furniture.
- I think this option is more economical than the other.
- Because of how often I will use the dining set.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different dining sets.
- I would like a dining set that not everyone else has / be unique.
- Other ...

Section 9 of 12

**Question 6/8**

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner)” and “Buy second-hand (single owner)” are practiced at a reasonable price in relation to the new price of the conventional products.

Question 6. Assume that you live a flat with a patio and are in need of patio furniture (new price approximately 500-1 000 SEK) during the summertime. Which of these options would you prefer to gain access to patio furniture?

- Restyle and repair patio furniture that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)
- Buy together with neighbours/friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my patio furniture.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the furniture.
- I think this option is more economical than the other.
- Because of how often I will use the patio furniture.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different patio furniture.
- I would like patio furniture that not everyone else has / be unique.
- Other ...

Section 10 of 12

**Question 7/8**

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner)” and “Buy second-hand (single owner)” are practiced at a reasonable price in relation to the new price of the conventional products.

Question 7. Assume that you have use for a car (new price approximately 250 000 SEK) at the most five times a month for when you are buying groceries locally. Which of these options would you prefer to gain access to a car?

- Restyle and repair a car that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)



- Buy together with neighbours/friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my car.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the vehicle.
- I think this option is more economical than the other.
- Because of how often I will use the car.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different cars.
- I would like a car that not everyone else has / be unique.
- Other ...

Section 11 of 12

### Question 8/8

The new price mentioned in the question refers to conventional/traditional products (products produced without extra consideration taken for possible environmental impact). Assume that the option “Buy new, environmentally friendly (single owner)” is 20% more expensive than the new price for the conventional products.

Assume that the options “Rent (temporary single owner” and “Buy second-hand (single owner”) are practiced at a reasonable price in relation to the new price of the conventional products.

Question 8. Assume that you use a bike (new price approximately 7 000 SEK) once a week. Which of these options would you prefer to gain access to a car?

- Restyle and repair a bike that you already own, which takes time and costs money (single owner)
- Rent (temporary single owner)
- Buy second-hand (single owner)
- Buy together with neighbours/friends and share usage/ownership
- Buy new, environmentally friendly (single owner)
- Buy new, conventional (single owner)

Why did you choose this option? Name the foremost reason.

- I would like to be the only owner of my bike.
- Many people in my environment consume this way.
- It allows me to be flexible in my use of the vehicle.
- I think this option is more economical than the other.
- Because of how often I will use the bike.
- I would like to help protect the environment / not contribute to environmental pollution.
- I would like to be able to test different bikes.
- I would like a bike that not everyone else has / be unique.
- Other ...

Section 12 of 12

**Thank you!**

The purpose of this study is to examine of price and product category plays a determining role in how consumers would consider gaining access to products.

Here we provide you with the opportunity to to fill in your email address if you would like to take part of our final thesis. If you do not want that you can just press “Send”.

Thank you for your participation!  
Lina Öberg and Michelle Bergsell

E-mail address

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# Appendix C

## Survey Results

**Q1 To which gender do you identify with the most?**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Male	173	34,3	34,3	34,3
	2 Female	330	65,5	65,5	99,8
	3 Other	1	,2	,2	100,0
	Total	504	100,0	100,0	

Table 3.1 – Gender

**Q2 Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 18-34	319	63,3	63,3	63,3
	2 35-49	71	14,1	14,1	77,4
	3 50+	114	22,6	22,6	100,0
	Total	504	100,0	100,0	

Table 3.2 - Age

**Q3 Highest completed level of education**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Elementary School	16	3,2	3,2	3,2
	2 High School	152	30,2	30,2	33,3
	3 University	336	66,7	66,7	100,0
	Total	504	100,0	100,0	

Table 3.3 - Educational Degree

**Q4 Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 0-14 999	170	33,7	33,7	33,7
	2 15 000-29 999	133	26,4	26,4	60,1
	3 30 000-44 999	120	23,8	23,8	83,9
	4 45 000+	81	16,1	16,1	100,0
	Total	504	100,0	100,0	

Table 3.4 - Personal Monthly Income

### Q5 How environmentally concerned are you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1 Little/no concern	45	8,9	8,9	8,9
	2 Neutral	142	28,2	28,2	37,1
	3 Very concerned	317	62,9	62,9	100,0
	Total	504	100,0	100,0	

Table 3.5 - Environmental Concern

Q1 To which gender do you identify with the most?

Q5 How environmentally concerned are you?		1 Male		2 Female		3 Other	
		Count	Column N %	Count	Column N %	Count	Column N %
		1 Little/no concern	26	15,0%	19	5,8%	0
	2 Neutral	67	38,7%	74	22,4%	1	100,0%
	3 Very concerned	80	46,2%	237	71,8%	0	0,0%

Table 3.6 - Gender and Environmental Concern

Q2 Age

Q5 How environmentally concerned are you?		1 18-34		2 35-49		3 50+	
		Count	Column N %	Count	Column N %	Count	Column N %
		1 Little/no concern	27	8,5%	11	15,5%	7
	2 Neutral	94	29,5%	21	29,6%	27	23,7%
	3 Very concerned	198	62,1%	39	54,9%	80	70,2%

Table 3.7 - Age and Environmental Concern

Q3 Highest completed level of education

Q5 How environmentally concerned are you?		1 Elementary School		2 High School		3 University	
		Count	Column N %	Count	Column N %	Count	Column N %
		1 Little/no concern	1	6,3%	16	10,5%	28
	2 Neutral	10	62,5%	52	34,2%	80	23,8%
	3 Very concerned	5	31,3%	84	55,3%	228	67,9%

Table 3.8 - Educational Degree and Environmental Concern

Q4 Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).

Q5 How environmentally concerned are you?		1 0-14 999		2 15 000-29 999		3 30 000-44 999		4 45 000+	
		Count	Column N %	Count	Column N %	Count	Column N %	Count	Column N %
		1 Little/no concern	12	7,1%	14	10,5%	15	12,5%	4
	2 Neutral	41	24,1%	43	32,3%	37	30,8%	21	25,9%
	3 Very concerned	117	68,8%	76	57,1%	68	56,7%	56	69,1%

Table 3.9 - Personal Monthly Income and Environmental Concern

**Pearson Chi-Square Tests**

P Product Market

CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	845,969
	df	9
	Sig.	,000*

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the ,05 level.

Table 3.10 - Chi-Square Test: Consumption Models and Product Markets

**Pearson Chi-Square Tests**

CM Which of these consumption models would you prefer to gain access to this product?

EC How environmentally concerned are you?	Chi-square	263,594
	df	6
	Sig.	,000*

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the ,05 level.

Table 3.11 - Chi-Square Test: Consumption Models and Environmental Concern

**Pearson Chi-Square Tests**

CM Which of these consumption models would you prefer to gain access to this product?

R Why did you chose this consumption model? Name the main reason.	Chi-square	1363,604
	df	24
	Sig.	,000*

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the ,05 level.

Table 3.12 - Chi-Square Test: Consumption Models and Motivators

## Pearson Chi-Square Tests

		P Product Category	
CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	294,808	
	df	5	
	Sig.	,000*	

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the ,05 level.

Table 3.13 - Chi-Square Test: Consumption Sub-models for “Prom dress/tuxedo” and “Blazer”

				G To which gender do you identify with the most?			A Age		
				1 Male	2 Female	3 Other	1 18-34	2 35-49	3 50+
				(A)	(B)	(C)	(A)	(B)	(C)
				Column N %	Column N %	Column N %	Column N %	Column N %	Column N %
P Product Category	1 Prom dress/tuxedo	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	38,7% B	29,4%	100,0% <sup>1,2</sup>	28,5%	33,8%	43,9% A
			2 Circular economy	19,1%	44,2% A	0,0% <sup>1,2</sup>	37,3%	32,4%	32,5%
			3 Environmentally friendly	12,1%	7,9%	0,0% <sup>1,2</sup>	8,8%	9,9%	10,5%
			4 Conventional	30,1% B	18,5%	0,0% <sup>1,2</sup>	25,4% C	23,9%	13,2%
	2 Blazer	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	1,7%	1,5%	0,0% <sup>1,2</sup>	0,9%	1,4%	3,5%
			2 Circular economy	6,4%	22,7% A	0,0% <sup>1,2</sup>	18,2%	14,1%	15,8%
			3 Environmentally friendly	27,2%	34,8%	0,0% <sup>1,2</sup>	30,1%	25,4%	42,1%
			4 Conventional	64,7% B	40,9%	100,0% <sup>1,2</sup>	50,8%	59,2% C	38,6%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): ,05<sup>2</sup>

1. This category is not used in comparisons because the sum of case weights is less than two.
2. This category is not used in comparisons because its column proportion is equal to zero or one.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.14 – Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models (1 of 3)

				ED Highest completed level of education			MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).			
				1 Elementary School	2 High School	3 University	1 0-14 999	2 15 000-29 999	3 30 000-44 999	4 45 000+
				(A)	(B)	(C)	(A)	(B)	(C)	(D)
				Column N %	Column N %	Column N %	Column N %	Column N %	Column N %	Column N %
P Product Category	1 Prom dress/tuxedo	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	43,8%	32,2%	32,4%	30,6%	30,1%	36,7%	35,8%
			2 Circular economy	37,5%	31,6%	37,2%	35,9%	36,8%	36,7%	30,9%
			3 Environmentally friendly	6,3%	10,5%	8,9%	10,0%	9,8%	3,3%	16,0% C
			4 Conventional	12,5%	25,7%	21,4%	23,5%	23,3%	23,3%	17,3%
	2 Blazer	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	6,3%	0,0% <sup>2</sup>	2,1%	1,2%	0,8%	3,3%	1,2%
			2 Circular economy	12,5%	14,5%	18,5%	21,2% D	18,8% D	17,5% D	4,9%
			3 Environmentally friendly	25,0%	29,6%	33,6%	29,4%	28,6%	29,2%	48,1% A B C
			4 Conventional	56,3%	55,9%	45,8%	48,2%	51,9%	50,0%	45,7%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller Significance level for upper case letters (A, B, C): ,05<sup>2</sup>

1. This category is not used in comparisons because the sum of case weights is less than two.
2. This category is not used in comparisons because its column proportion is equal to zero or one.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using t

Table 3.14 – Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models (2 of 3)

				EC How environmentally concerned are you?		
				1 Little/no concern (A) Column N %	2 Neutral (B) Column N %	3 Very concerned (C) Column N %
P Product Category	1 Prom dress/tuxedo	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	33,3%	33,8%	32,2%
			2 Circular economy	11,1%	28,9% A	42,0% A B
			3 Environmentally friendly	6,7%	7,7%	10,4%
			4 Conventional	48,9% C	29,6% C	15,5%
	2 Blazer	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	2,2%	2,1%	1,3%
			2 Circular economy	13,3%	9,9%	20,8% B
			3 Environmentally friendly	6,7%	16,2%	42,9% A B
			4 Conventional	77,8% C	71,8% C	35,0%

Results are based on two-sided tests. For each significant pair, the key of the category with the sma Significance level for upper case letters (A, B, C): ,05<sup>3</sup>

1. This category is not used in comparisons because the sum of case weights is less than two.
2. This category is not used in comparisons because its column proportion is equal to zero or on
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using

Table 3.14 – Segmentation for “Prom dress/tuxedo” and “Blazer” and Consumption Models (3 of 3)

### Pearson Chi-Square Tests

		P Product Category	
CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	198,103	
	df	5	
	Sig.	,000*	

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the ,05 level.

Table 3.15 - Chi-Square Test: Consumption Sub-models for “Screwdriver” and “Lawn mower”

				G To which gender do you identify with the most?			A Age		
				1 Male (A) Column N %	2 Female (B) Column N %	3 Other (C) Column N %	1 18–34 (A) Column N %	2 35–49 (B) Column N %	3 50+ (C) Column N %
P Product Category	3 Screwdriver	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	38,2%	61,2% A	0,0% <sup>1,2</sup>	59,9% B C	43,7%	40,4%
			2 Circular economy	20,2%	17,3%	0,0% <sup>1,2</sup>	19,4%	15,5%	16,7%
			3 Environmentally friendly	10,4%	10,6%	0,0% <sup>1,2</sup>	5,6%	14,1% A	21,9% A
			4 Conventional	31,2% B	10,9%	100,0% <sup>1,2</sup>	15,0%	26,8%	21,1%
	4 Lawn mower	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	15,6%	23,6% A	0,0% <sup>1,2</sup>	23,2% B	8,5%	21,9%
			2 Circular economy	32,4%	30,9%	100,0% <sup>1,2</sup>	32,6%	40,8% C	22,8%
			3 Environmentally friendly	27,7%	34,5%	0,0% <sup>1,2</sup>	26,3%	36,6%	45,6% A
			4 Conventional	24,3% B	10,9%	0,0% <sup>1,2</sup>	17,9%	14,1%	9,6%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): ,05<sup>3</sup>

1. This category is not used in comparisons because the sum of case weights is less than two.
2. This category is not used in comparisons because its column proportion is equal to zero or one.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.16 – Segmentation for “Screwdriver” and “Lawn mower” and Consumption Models (1 of 3)

P Product Category	3 Screwdriver	CM Which of these consumption models would you prefer to gain access to this product?		ED Highest completed level of education			MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).			
				1 Elementary School	2 High School	3 University	1 0-14 999	2 15 000-29 999	3 30 000-44 999	4 45 000+
				(A) Column N %	(B) Column N %	(C) Column N %	(A) Column N %	(B) Column N %	(C) Column N %	(D) Column N %
			1 Shared economy	37,5%	46,1%	57,1%	57,6%	54,9%	48,3%	48,1%
			2 Circular economy	18,8%	25,7% C	14,9%	21,2%	22,6%	11,7%	14,8%
			3 Environmentally friendly	18,8%	9,9%	10,4%	7,6%	8,3%	11,7%	18,5%
			4 Conventional	25,0%	18,4%	17,6%	13,5%	14,3%	28,3% A B	18,5%
	4 Lawn mower	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	25,0%	22,4%	19,9%	27,1%	18,8%	18,3%	14,8%
			2 Circular economy	43,8%	37,5%	28,3%	31,2%	36,1%	32,5%	23,5%
			3 Environmentally friendly	25,0%	23,0%	36,6% B	27,1%	29,3%	29,2%	51,9% A B C
			4 Conventional	6,3%	17,1%	15,2%	14,7%	15,8%	20,0%	9,9%

Results are based on two-sided tests. For each significant pair, the key of the category with the Significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because the sum of case weights is less than two
2. This category is not used in comparisons because its column proportion is equal to zero
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable

Table 3.16 – Segmentation for “Screwdriver” and “Lawn mower” and Consumption Models (2 of 3)

P Product Category	3 Screwdriver	CM Which of these consumption models would you prefer to gain access to this product?		EC How environmentally concerned are you?		
				1 Little/no concern	2 Neutral	3 Very concerned
				(A) Column N %	(B) Column N %	(C) Column N %
			1 Shared economy	42,2%	44,4%	58,7% B
			2 Circular economy	13,3%	12,0%	21,8% B
			3 Environmentally friendly	8,9%	12,7%	9,8%
			4 Conventional	35,6% C	31,0% C	9,8%
	4 Lawn mower	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	11,1%	16,9%	24,0%
			2 Circular economy	31,1%	31,7%	31,5%
			3 Environmentally friendly	15,6%	23,9%	38,2% A B
			4 Conventional	42,2% C	27,5% C	6,3%

Results are based on two-sided tests. For each significant pair, the key of the category with the Significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because the sum of case weights is less than two
2. This category is not used in comparisons because its column proportion is equal to zero
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable

Table 3.16 – Segmentation for ”Screwdriver” and ”Lawn mower” and Consumption Models (3 of 3)

### Pearson Chi-Square Tests

CM Which of these consumption models would you prefer to gain access to this product?	P Product Category	
	Chi-square	9,213
df	4	
Sig.	,056 <sup>a</sup>	

Results are based on nonempty rows and columns in each innermost subtable.

- More than 20% of cells in this subtable have expected cell counts less than 5. Chi-square results may be invalid.

Table 3.17 – Chi-Square Test: Consumption Sub-models for “Dining set” and “Patio furniture”



				G To which gender do you identify with the most?			A Age		
				1 Male	2 Female	3 Other	1 18-34	2 35-49	3 50+
				(A) Column N %	(B) Column N %	(C) Column N %	(A) Column N %	(B) Column N %	(C) Column N %
P Product Category	5 Dining set	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1,2</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>
			2 Circular economy	47,4%	63,3% A	100,0% <sup>1,2</sup>	58,6%	64,8%	51,8%
			3 Environmentally friendly	15,0%	15,8%	0,0% <sup>1,2</sup>	13,2%	8,5%	26,3% A B
			4 Conventional	37,6% B	20,9%	0,0% <sup>1,2</sup>	28,2%	26,8%	21,9%
	6 Patio furniture	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	1,2%	0,3%	0,0% <sup>1,2</sup>	0,6%	1,4%	0,0% <sup>1</sup>
			2 Circular economy	42,2%	58,5% A	100,0% <sup>1,2</sup>	58,9% C	49,3%	38,6%
			3 Environmentally friendly	19,1%	19,4%	0,0% <sup>1,2</sup>	12,5%	19,7%	37,7% A B
			4 Conventional	37,6% B	21,8%	0,0% <sup>1,2</sup>	27,9%	29,6%	23,7%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because its column proportion is equal to zero or one.
2. This category is not used in comparisons because the sum of case weights is less than two.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.18 – Segmentation for “Dining set” and “Patio furniture” and Consumption Models (1 of 3)

				ED Highest completed level of education			MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).			
				1 Elementary School	2 High School	3 University	1 0-14 999	2 15 000-29 999	3 30 000-44 999	4 45 000+
				(A) Column N %	(B) Column N %	(C) Column N %	(A) Column N %	(B) Column N %	(C) Column N %	(D) Column N %
P Product Category	5 Dining set	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>
			2 Circular economy	56,3%	54,6%	59,5%	61,2%	56,4%	60,0%	50,6%
			3 Environmentally friendly	25,0%	15,8%	14,9%	13,5%	13,5%	11,7%	28,4% A B C
			4 Conventional	18,8%	29,6%	25,6%	25,3%	30,1%	28,3%	21,0%
	6 Patio furniture	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	0,0% <sup>1</sup>	2,0%	0,0% <sup>1</sup>	1,2%	0,8%	0,0% <sup>1</sup>	0,0% <sup>1</sup>
			2 Circular economy	37,5%	53,3%	53,6%	59,4% D	52,6%	54,2%	38,3%
			3 Environmentally friendly	12,5%	17,1%	20,5%	12,4%	18,0%	19,2%	35,8% A B C
			4 Conventional	50,0%	27,6%	25,9%	27,1%	28,6%	26,7%	25,9%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because its column proportion is equal to zero or one.
2. This category is not used in comparisons because the sum of case weights is less than two.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.18 – Segmentation for “Dining set” and “Patio furniture” and Consumption Models (2 of 3)

				EC How environmentally concerned are you?		
				1 Little/no concern (A) Column N %	2 Neutral (B) Column N %	3 Very concerned (C) Column N %
P Product Category	5 Dining set	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	0,0% <sup>1</sup>	0,0% <sup>1</sup>	0,0% <sup>1</sup>
			2 Circular economy	35,6%	45,8%	66,6% A B
			3 Environmentally friendly	11,1%	14,8%	16,4%
			4 Conventional	53,3% C	39,4% C	17,0%
	6 Patio furniture	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	2,2%	0,7%	0,3%
			2 Circular economy	42,2%	40,8%	59,9% B
			3 Environmentally friendly	13,3%	19,0%	20,2%
			4 Conventional	42,2% C	39,4% C	19,6%

Results are based on two-sided tests. For each significant pair, the key of the category with the significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because its column proportion is equal to zero
2. This category is not used in comparisons because the sum of case weights is less than 1
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable

Table 3.18 – Segmentation for “Dining set” and “Patio furniture” and Consumption Models (3 of 3)

### Pearson Chi-Square Tests

		P Product Category	
CM Which of these consumption models would you prefer to gain access to this product?	Chi-square	200,312	
	df	5	
	Sig.	,000 <sup>*</sup>	

Results are based on nonempty rows and columns in each innermost subtable.

\*. The Chi-square statistic is significant at the ,05 level.

Table 3.19 - Chi-Square Test: Consumption Sub-models for “Car” and “Bike”

				G To which gender do you identify with the most?			A Age		
				1 Male (A) Column N %	2 Female (B) Column N %	3 Other (C) Column N %	1 18-34 (A) Column N %	2 35-49 (B) Column N %	3 50+ (C) Column N %
P Product Category	7 Car	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	34,7%	44,8% A	0,0% <sup>1,2</sup>	44,8% C	42,3%	30,7%
			2 Circular economy	51,4%	44,2%	100,0% <sup>1,2</sup>	46,1%	38,0%	54,4%
			3 Environmentally friendly	8,7%	8,5%	0,0% <sup>1,2</sup>	6,0%	14,1%	12,3%
			4 Conventional	5,2%	2,4%	0,0% <sup>1,2</sup>	3,1%	5,6%	2,6%
	8 Bike	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	5,2%	4,8%	0,0% <sup>1,2</sup>	5,6%	4,2%	3,5%
			2 Circular economy	67,1%	71,8%	100,0% <sup>1,2</sup>	73,4%	62,0%	66,7%
			3 Environmentally friendly	7,5%	13,3%	0,0% <sup>1,2</sup>	10,0%	8,5%	16,7%
			4 Conventional	20,2% B	10,0%	0,0% <sup>1,2</sup>	11,0%	25,4% A	13,2%

Results are based on two-sided tests. For each significant pair, the key of the category with the smaller column proportion appears in the category with the larger column proportion. Significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because the sum of case weights is less than two.
2. This category is not used in comparisons because its column proportion is equal to zero or one.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Table 3.20 – Segmentation for “Car” and “Bike” and Consumption Models (1 of 3)

				ED Highest completed level of education			MI Personal monthly income (financial support and salary). Options are given in Swedish crowns (kr).			
				1 Elementary School	2 High School	3 University	1 0–14 999	2 15 000–29 999	3 30 000–44 999	4 45 000+
				(A) Column N %	(B) Column N %	(C) Column N %	(A) Column N %	(B) Column N %	(C) Column N %	(D) Column N %
P Product Category	7 Car	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	18,8%	31,6%	46,7% B	44,1%	36,8%	40,0%	44,4%
			2 Circular economy	68,8%	55,9% C	41,7%	47,6%	51,9%	44,2%	40,7%
			3 Environmentally friendly	6,3%	6,6%	9,5%	5,9%	7,5%	9,2%	14,8%
			4 Conventional	6,3%	5,9%	2,1%	2,4%	3,8%	6,7%	0,0% <sup>2</sup>
	8 Bike	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	12,5%	4,6%	4,8%	4,7%	4,5%	4,2%	7,4%
			2 Circular economy	50,0%	73,7%	69,6%	74,7% D	76,7% D	71,7% D	48,1%
			3 Environmentally friendly	18,8%	9,2%	11,9%	11,8%	6,0%	8,3%	23,5% B C
			4 Conventional	18,8%	12,5%	13,7%	8,8%	12,8%	15,8%	21,0% A

Results are based on two-sided tests. For each significant pair, the key of the category. Significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because the sum of case weights is less than 1.
2. This category is not used in comparisons because its column proportion is equal to 0.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost table.

Table 3.20 – Segmentation for “Car” and “Bike” and Consumption Models (2 of 3)

				EC How environmentally concerned are you?		
				1 Little/no concern	2 Neutral	3 Very concerned
				(A) Column N %	(B) Column N %	(C) Column N %
P Product Category	7 Car	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	24,4%	28,2%	49,5% A B
			2 Circular economy	48,9%	60,6% C	40,4%
			3 Environmentally friendly	6,7%	7,0%	9,5%
			4 Conventional	20,0% B C	4,2% C	0,6%
	8 Bike	CM Which of these consumption models would you prefer to gain access to this product?	1 Shared economy	0,0% <sup>2</sup>	7,0%	4,7%
			2 Circular economy	66,7%	64,8%	73,2%
			3 Environmentally friendly	8,9%	9,9%	12,3%
			4 Conventional	24,4% C	18,3% C	9,8%

Results are based on two-sided tests. For each significant pair, the key of the category. Significance level for upper case letters (A, B, C): .05<sup>3</sup>

1. This category is not used in comparisons because the sum of case weights is less than 1.
2. This category is not used in comparisons because its column proportion is equal to 0.
3. Tests are adjusted for all pairwise comparisons within a row of each innermost table.

Table 3.20 – Segmentation for “Car” and “Bike” and Consumption Models (3 of 3)

# Appendix D

## Coded Material

Following are two tables showing how we coded the different variables and response alternatives of the questionnaire. The first table shows the coding of all variables (gender, age, educational degree, income and environmental concern) for the first section of the questionnaire: Demographics. The second table displays the coding of all variables (consumption models, consumption sub-models, product markets, product categories and motivators) for the second section of the questionnaire: Consumption models.

<b>Variabel</b>	<b>Response Alternative</b>	<b>Coded</b>
Gender	Male	1
	Female	2
	Other	3
Age	18-34	1
	35-49	2
	50+	3
Educational degree	Elementary School	1
	High School	2
	University	3
Income	0-14 999	1
	15 000-29 999	2
	30 000-44 999	3
	45 000+	4
Environmental Concern	Little/no concern	1
	Neutral	2
	Very concerned	3

<b>Variable</b>	<b>Response Alternative</b>	<b>Coded</b>
Consumption Models	Circular economy	1
	Shared economy	2
	Environmentally friendly	3
	Conventional	4
Consumption Sub-models	Buy second-hand (single owner)	1
	Restyle and repair (single owner)	2
	Buy together with friends/neighbours and share usage/ownership	3
	Rent (temporary single owner)	4
	Buy new, environmentally friendly (single owner)	5
	Buy new, conventional (single owner)	6
Product Markets	Clothing	1
	Tools	2
	Furniture	3
	Transportation	4
Product Categories	Prom dress/tuxedo	1
	Blazer	2
	Screwdriver	3
	Lawn Mower	4
	Dining Set	5
	Patio Furniture	6
	Car	7
	Bike	8

Motivators	Desire to own	1
	Social normalisation	2
	Flexibility	3
	Economic reasons	4
	Environmental reasons	5
	Frequency of usage	6
	Opportunity to test	7
	Unique	8
	Other	9

# Appendix E

## Other Motivators (Swedish)

### Motivators for consumption models for “Clothing”

#### *Motivators for “Circular Economy” for “Clothing”*

- Mest ekonomiskt och jag kan donera den vidare när jag använt den..
- Jag gillar att shoppa vintage
- Jag vill kunna utveckla mina kompetenser och visa att jag kan justera och utveckla det jag äger
- Använda den och sälja vidare
- Då kan jag sälja vidare efter att jag använt den
- Jag äger flera kavajer som behöver mindre lagningar

#### *Motivators for “Shared Economy” for “Clothing”*

- Jag har aldrig använt och kommer aldrig att använda smoking
- Har ärvt en kavaj av pappa som jag använder så frågan känns inte så relevant

#### *Motivators for “Environmentally friendly” for “Clothing”*

- Få har min storlek. Är för lång :)
- jag vill vara ensam ägare samtidigt som jag vill hjälpa miljön utan att göra avkall på att ha en vara som är unik.
- Passform o komfort. Tveksam om det finns ”miljövänliga kavajer”?
- Kombination av flexibilitet, ensamägare och vilja vara unik.
- Samma som förra gången, få har min storlek

#### *Motivators for “Conventional” for “Clothing”*

- Enklast, eftersom klänning för min kroppstyp kan vara svårt att hitta på annat vis.
- Se min förklaring om kläder på nästa fråga.
- Enklast
- Köper man en ny kostym/smoking köper man den måttsydd, alltså väldigt svårt att dela eller köpa begagnad. Å andra sidan kan man ha samma kostym hela livet
- Jag köper hellre en kavaj av bra kvalitet som jag vet att jag kan använda i flera år framöver, plus att min storlek är svår att hitta begagnad
- Jag hade bara valt första bästa som passade med hyfsat utseende. Miljötänket hade inte spelat någon större roll i det köpet.
- Kläder. Köper jag mycket sällan och använder mycket länge. Då vill jag att det ska vara exakt det plagget jag vill ha. Och då blir kvalitet och design mitt enda fokus. Inte miljö.
- Tyvärr. kläder är för mig ingen mängdkonsumtion.
- En kavaj som sitter bra (=perfekt, annat är katastrof) och i bra material är generellt svinsvårt att hitta, och vad jag upplevt bara i det konventionella utbudet. Kanske secondhand men tar för lång tid. Med ett sådant regelbundet användande är det dock lätt att motivera ett ensamt köp
- Samma

## Motivators for consumption models for “Tools”

### *Motivators for “Circular economy” for “Tools”*

- Bra funktionalitet är viktigast. Om en miljövänlig version har det väljer jag den

### *Motivators for “Shared economy” for “Tools”*

- Hade lånat av vänner/familj
- Skulle ha valt alternativ: Låna av vän/granne
- Jag känner redan många som äger sådana och skulle låna av dem som jag redan har ett nätverk med och litar på.
- Låna av föräldrar eller vän
- Hyra eller låna gratis av bekant - alltid någon som har
- Slippa förvaringen av för många maskiner.
- Saknar alternativet att hyra/ anlita personer till att klippa gräset så slipper jag tänka på egen gräsklippare

### *Motivators for “Environmentally friendly” for “Tools”*

- Jag vill ha möjlighet att nyttja garanti vid behov.
- Har inga grannar att dela med
- Jag vill ha möjlighet att nyttja garanti.
- Bekvämlighet
- Jag skulle köpa en självgående för att spara på min tid. Alla andra alternativ här tar MYCKET tid
- Betalar andra för att klipps

### *Motivators for “Conventional” for “Tools”*

- Tvivlar starkt på att det finns möjligheter att hyra en skruvdragare. Inte heller har jag funnit något större utbud av miljövänliga skruvdragare i butik och jag har inte heller någon skruvdragare att laga... att köpa konventionell blir därmed det enda realistiska valet
- En schysst skruvdragare behöver man alltid
- Enklast
- Ny robotgräsklippare. Jag får bra garanti samt spar tid i detlpgns loppet.
- Samma
- Jag skulle i detta fallet köpt en robotgräsklippare för att inte behöva göra själva arbetet.

## Motivators for consumption models for “Furniture”

### *Motivators for “Circular economy” for “Furniture”*

- Älskar mitt möblemang men den skulle behöva en uppgradering
- Jag vill inte hämta bordet från grannen varje kväll. Det skulle kräva för mycket interaktion med dem, vilket jag gärna slipper.
- Bästa möbelutbudet finns i andra hand!
- Begagnade möbler är ofta av bra kvalitet
- En kombination av pris och miljö
- Man lagar och använder saker man redan har innan man köper nytt.



### *Motivators for "Shared economy" for "Furniture"*

#### *Motivators for "Environmentally friendly" for "Furniture"*

- Skulle lätt kunna tänka mig att köpa begagnat. Idagsläget är det inte alls aktuellt för mig stt köpa en matsalsmöbel på 6000kr så tänkte mig in i hur jag skulle tänka i framtiden. Det svåra med begagnat är att man inte vet kvaliteten och utbudet
- Jag vill kunna använda garantin om nödvändigt
- Utemöbler blir slitna med åren, därför skulle jag köpa nya så att jag själv får slita
- Underhållsfria

#### *Motivators for "Conventional" for "Furniture"*

- Större chans att hitta bra och snygga möbler än om man skulle köpa begagnat, annars skulle det vara att föredra.
- Därför att begagnade utemöbler blir sunkiga jävligt snabbt
- Enklast.
- Ofta ganska svårt att hitta rätt utemöbler begagnat, annars hade jag köpt begagnat.

### Motivators for consumption models for "Transportation"

#### *Motivators for "Circular economy" for "Transportation"*

- Jag har redan en bil
- ugh, skulle egentligen aldrig äga/köpa en bil om jag använder den så sällan
- Det är en väldigt svår fråga och beror egentligen helt på hur vägen till affären ser ut samt vilket skick bilen jag redan har är i. Av säkerhetsskäl (vi säger att den är typ 20 år och skulle inte klara en krock särskilt bra) skulle jag nog ändå välja att köpa en begagnad
- Hade velat köpa begagnad tillsammans med grannar osv
- För 250' kr får du inte en bra begagnad bil
- Inget av ovanstående? Skulle åka kollektivt alt låna av bekanta.
- En cykel som används man gång i veckan kan lika gärna vara begagnad, till skillnad från klädesplagg som man ska ha på sig
- Handlar om både ekonomi och miljö. Billigare samt miljövänligare!
- Cyklar blir stulna lätt

#### *Motivators for "Shared economy" for "Transportation"*

- Saknar alternativet att hyra vid enstaka tillfällen eller bilpool det är ett klart positivt alternativ.
- Bilpool
- Förmodligen skulle jag åka taxi.
- Egentligen skulle jag hellre ändra mitt konsumtionsmönster och bara handla mha bil man gång/ månad. Resten med cykel.
- Hade gått med i en bilpool pga vill inte äga en bil
- Jag skulle nog köra på taxi eller ännu bättre ordna shoppingturer med bekanta
- Hade inte köpt en bil om jag använt den så sällan
- Jag väljer bort bilen
- Kan ej sköta bil
- Kör abbonemang likt styr och ställ (gbg) malmö by bikes
- Använder Styr & Ställ i Göteborg

*Motivators for “Environmentally friendly” for “Transportation”*

- För att handla lokalt skulle jag aldrig använda bil

*Motivators for “Conventional” for “Transportation”*

- Trafiksäkert med ny cykel som man själv har kontroll över.
- Återigen, vill ha garantin