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Abstract

The purpose of the thesis was to profile young Finnish female consumers based on their consumption motives and habits. The concept of consumption was approached from a holistic perspective, entailing the process of consumption from purchasing to using and disposing of clothing. This study addressed the following research questions relating to fashion consumption:

- What motives drive the fashion consumption of young women in Finland?
- What is the role of C2C channels in fashion consumption?
- What is the role of ethical consumerism in fashion consumption?
- What are the types of consumers that exist in the Finnish fashion market?

The complete process of consumption has not been researched thoroughly as a continuum before, especially in relation to attitudes and motives. Another important theme of the study were niche phenomena of the industry, such as C2C consumption and ethical fashion, which offer opportunities for alternative consumption methods.

The empirical section of the study utilized quantitative methods to investigate current consumption habits. A survey was distributed to university students generating more than 500 responses. The data was processed using a factor analysis to recognize structures within the data. These attributes were utilized further in an exploratory cluster analysis, which yielded three different consumer types that showcased interesting behavior patterns in relation to pre-existing literature. The consumer types were named the *ethically oriented consumer*, the *second hand shopper* and the *impulsive trend-follower*. The results show that the consumer field of fashion is fragmented as consumers are driven by differing attitudes and motives. Overall, the study contributes to a body of ethical literature and showcases that consumption habits could be influenced by educating consumers about more ethical consumption practices.

Key words	Fashion consumption, ethical consumption, C2C consumption
Further information	



**UNIVERSITY
OF TURKU**

Turku School of
Economics

**MODERN FASHION CONSUMPTION:
Profiling female fashion consumers in Finland**

Master's Thesis
in Marketing

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The originality of this thesis has been checked in accordance with the University of Turku quality assurance system using the Turnitin OriginalityCheck service.

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1 INTRODUCTION

1.1 Changing clothing consumption

Fashion has grown into an industry of major social and economic significance. In a matter of decades, the industry has become a global, complicated ecosystem employing 9,3% of the world's employees and amounting to 4% of the world's exports. (World Trade Organization 2008¹.) According to Remy, Speelman and Swartz (2016), global clothing production doubled from 2000 to 2014. With the encouragement of low prices and constant availability, consumption has accelerated alongside production (Kozłowski & Bardecki 2012). Modern clothing consumption is defined by an unprecedented amount of options. The consumer field has become highly fragmented, with new forms of consumption lifting the boundaries of time and space. Technology is one of the main factors behind changing clothing consumption habits. In recent years, the fashion industry has been defined by a shift from offline to online. According to Bowsher (2018), the online retail business is currently growing at the expense of offline commerce. The popularization of ecommerce has made fashion available all over the world at all times.

Over the decades, mass produced, basic clothing has evolved into an ever-changing cycle of new trends. With growing consumer demands and production volumes, clothing manufacturing has been widely moved to developing countries in the pursuit of lower labor costs. Cheap resources and efficient supply chains have paved way for a business model called fast fashion. As a result of high volumes and low costs, clothes have become extremely affordable all over the world. (Bhardwaj & Fairhurst 2010.) Consumers have grown accustomed to purchasing more than they need and disposing of clothing prematurely. (Kozłowski et al.) The current state of global clothing consumption can be widely characterized as unsustainable. Horvath and Adiguzel (2017, 300) state that compulsive, hedonistic buying behavior has become a problem across the globe.

Contradicting the dominance of fast fashion, sustainability has become a megatrend in the clothing industry. Especially the young generation has begun to demand transparency and sustainability from fashion retailers. (McKinsey 2019, 16.) Consumers have increasingly become aware of the social and environmental issues in fashion, leading to an increased demand of greener products. Increased media coverage and awareness has also lead to an upsurge in the amount of sustainable clothing brands. Ethical fashion production has seen a steady rise in the last two decades, providing an alternative to the

¹ according to Caniato, Caridi, Crippa & Moretto, 2011, 1

fast moving cycle of low quality, trendy clothing. (Armstrong et al. 2015.) Ecommerce has not only fueled the purchasing of new clothing, but has also had an effect on the global consumer-to-consumer (C2C) market. Previously, it has been possible to purchase and sell used clothing at local flea markets, whereas now second hand consumption is possible via different websites, mobile applications and social media. The second hand market has seen significant growth since the 2000's. (Guiot & Roux 2010.) The popularity is heightened by the fact that the stigma of used clothing has gradually faded and sustainability has become a trending topic (Ferraro, Sands & Brace-Govan 2015, 262). Second hand consumption has the benefit of reducing the demand for new clothing production, while also reducing the amount of textile waste that would otherwise occur. The sustainable movement has also been supported by the emergence of other alternative forms of consumption. Circular economy, sharing economy, "lowsumerism" and other macro-trends are challenging traditional consumption. (Todeschini et al. 2017, 759-760.) New, emerging business solutions are basing their products and services on recycling, upcycling, and second hand clothing, as well as rental and sharing opportunities. There is debate as to whether businesses or consumers have the primary responsibility in improving the sustainability of consumption (Claudio 2007). However, consumer habits do have a undeniable impact on the outlook of the fashion industry.

Consumer habits are driven by different values, ideologies and personal motivations (Manchiraju & Sadachar 2014). One might base decisions on low prices, while another might seek the latest trends. When one invests in timeless clothing, someone else might limit consumption to environmentally friendly brands or second hand clothing. Some would only buy new clothes when faced with an obligatory need. The field of fashion currently offers a unique positioning for the consumer: one can buy whatever whenever from all over the world. Therefore, consumer behavior within an endless pool of options provides interesting insight into the motivations behind fashion consumption.

1.2 Research gap and relevance

This study aims to cover new ground by considering the whole process of consumption from buying to using and disposing of clothing. Much of previous research focuses on clothing purchase behavior, whereas the usage and disposal behavior of consumers carries increasing importance. Therefore, the theoretical and methodological sections of this study examine consumption from a broader angle. All three phases of the product life cycle have a significant role in the overall sustainability of consumption (Armstrong et al. 2015, 30), which is why it is important to consider them as a continuum rather than separate entities. To the best of the author's knowledge, the whole consumption process in its entirety has not been examined in previous studies.

Fashion is one of the most polluting industries (Perry 2018), which makes its sustainability an important managerial topic. Although ethical fashion consumption has become a popular research topic during the last decade, few have addressed the potential of modern C2C channels as a means of sustainable consumption. This study considers the C2C market from a more comprehensive, global perspective. The modern C2C phenomenon has been especially popular in Finland, where Facebook among other websites and applications function as important channels for exchange (Association of Commerce 2015). Traditional forms of second hand shopping, such as flea markets, are popular in Finland throughout all social classes and age groups (Vihreät Vaatteet, 2016), thus providing modern C2C channels a fruitful foundation. Therefore, it's interesting to investigate how widely consumers have adopted new C2C channels and whether sustainability plays a role in their adoption. Second hand clothing is a growing segment within the clothing industry (Guiot & Roux 2010), offering a more sustainable option for not only buying, but also for disposing of clothing.

As mature online shoppers (Postnord, 2017), Finnish consumers are good research ground for examining the motives and habits regarding modern consumption channels. To the best of the author's knowledge, the amount of previous research relating to fashion consumption in Finland is very limited. Within the Finnish context, this study strives to offer insight into the current state of fashion consumption with a focus on young female consumers. Young women represent an active segment in the fashion market (Horvath & Adiguzel 2017), thus offering more thorough insight into the vast pool of consumption opportunities. The global clothing market for women is larger than men's and women generally display more frequent purchase behavior in the clothing category. According to Sihvonen and Turunen (2016), women also represent an active consumer group in the C2C category. Women are also more likely to shop impulsively with hedonistic motives, whereas men would typically find shopping more of a duty than a pleasure. (Sebald & Jacob 2017, 188-191.) Women thus represent a more adventurous consumer group, which is suitable for this study, as it also relates to the adoption of new forms of consumption. This study focuses particularly on young consumers as the younger generation is more likely to adopt new consumption channels such as social media and mobile applications (Park and Lee 2017, 1405). According to McKinsey (2019, 45), young consumers also display a higher interest towards sustainability matters, which is an important theme in this study.

1.3 Purpose of the study

With the current volume of fashion consumption, the actions of both consumers and businesses have a large impact. In a complicated and dynamic consumption environ-

ment, it is interesting to investigate current consumption habits and motivations further. The purpose of this research is to profile fashion consumers in the Finnish context. Consumer motives and habits will be investigated in order to discover different consumer types. The purpose poses four research questions:

- What motives drive the fashion consumption of young women in Finland?
- What is the role of C2C channels in fashion consumption?
- What is the role of ethical consumerism in fashion consumption?
- What are the types of consumers that exist in the Finnish fashion market?

Consumption is defined as a process including buying, using, and disposing of apparel. This study examines the consumption process as a whole, investigating various motives and values behind consumption patterns. Two interesting elements of modern clothing consumption, C2C consumption and ethical consumption are granted separate research questions. Ethical consumption has become a megatrend that affects all parts of the industry. Ethicality as an element can be incorporated into all phases of the consumption process. Consumers can purchase ethically manufactured clothing and they can take care of the clothes to utilize their full potential before disposing of them. Consumers can also resell their clothing through different online and offline C2C channels to extend their lifetime further. The disposal of clothing can also be done in an ethical manner in comparison to throwing clothes away.

Building awareness is key in changing consumption behavior (Morgan & Birtwistle 2009). Further knowledge on the sustainability of consumption patterns would offer insight into the need for further education. Investigating the market potential of new, innovative and sustainable C2C and B2C businesses is also interesting as the importance of sustainability in the industry will continue to grow. McKinsey (2019) reports that the resale market of fashion could pose a significant competitor to fast fashion in ten years time.

1.4 Structure and key concepts

This study is based on a theoretical grounding in the fashion industry, fashion consumption and related ethical elements. Chapter two defines the workings of the fashion industry, introducing a categorization based on business models and design practices. This chapter also covers sustainability topics from a business point of view. Explaining the business logic of clothing manufacturing provides a better understanding of consumption related topics as well. The Finnish fashion industry and its sustainability are also assessed. The third chapter adopts a consumer point of view in examining the process of

consumption from purchasing to using and disposing of clothing. The psychological factors of consumption habits are investigated, as they are strongly present in fashion consumption. Defining the key motives for fashion consumption also sheds light on the factors behind ethical fashion consumption. This chapter also defines the modern channels of ethical consumption that have been largely enabled by technological advances.

After examining the theoretical background, chapter four explains the methodology of the study. A quantitative research method was chosen to best suit the purpose and research questions of the study. A survey was conducted to collect data on consumer behavior, which was then analyzed to reach conclusions on selected research questions. This chapter introduces the methods of data collection and analysis and evaluates the reliability and validity of the research.

Chapter five discusses the findings of the research. The current state of fashion consumption among young female consumers is discussed, as well as the roles of C2C commerce and ethical consumerism. The findings conclude in a categorization of different consumer types found based on analyzed data. The conclusions are presented in chapter six, which also assesses the limitations of the research.

The study contains different terms that require clarification in order to avoid misconceptions. This research addresses the fashion industry, focusing only on clothing and leaving out other related product categories such as shoes and accessories. Therefore, the terms *fashion industry*, *clothing industry* and *apparel industry* are used interchangeably. Another key concept, *ethical consumption*, is used interchangeably with *sustainable consumption*. Existing literature also refers to *green consumption* and *ecological consumption*. *Ethical consumerism* as a term refers to a pre-existing measurement scale by Tilikidou et al. (2012), which is introduced within the methodology in chapter 3.

C2C commerce has existed throughout time in various forms. It's significance in a contemporary context stems from its new forms and increased volume, as well as its internationalization. Traditional, physical flea market sales do not have notable growth opportunities as opposed to ecommerce, which has enabled consumers to reach each other online through countless platforms. Clothing is currently sold among consumers through national and international web sites, applications and market places, either directly or through a third party service. This evolution has made buying and selling used clothing an approachable option with an improved selection and larger reach. Having become a significant phenomenon in Finland as well (Association of Commerce 2015) it is an important element to be included in a study on current consumption habits. In this study, new C2C channels that are enabled by technology are referred to as modern C2C channels.

On a local scale in Finland it was deemed best to focus on consumers' involvement in the C2C phenomenon rather than all forms of new consumption. As an example, the Finnish market place does not currently have established and widely used clothing ren-

tal or sharing services or other equivalent business models due to a small market size. A questionnaire directed to a pool of respondents is more likely to yield fruitful responses if questions regard a phenomenon that is rather familiar in the Finnish marketplace, such as C2C commerce. The concept of clothing ownership is likely to change further in the coming years both in Finland and globally (McKinsey 2019, 39).

2 DEFINING THE FASHION INDUSTRY

2.1 The fashion system

The fashion industry is exceptional on many measures. Its complex and dynamic nature makes it a platform for constant, visible change. Seasons and cycles define the business that consists of designing, producing, distributing, marketing and retailing apparel. Fashion and styles change with the varying tastes and lifestyles of consumers, which are affected by political, economical and cultural factors. This creates a highly volatile and unpredictable setting for business forecasting and places further pressure on the flexibility of supply chains. During the last two decades, the industry has changed dramatically. It has evolved into a global source of extensive growth and significant economic output. The industry can be defined as a larger phenomenon called the fashion system, which carries substantial social and cultural importance. The fashion system not only covers the business of fashion, but also the art of fashion. It considers all aspects of the industry from production to consumption. (Čiarnienė & Vienažindienė 2014, 63-64.) Thus, the fashion system is a term describing the fashion industry in the broadest of manners.

The global fashion industry is currently valued at 1,2 trillion dollars equaling 2% of the world's gross domestic product (Maloney 2015, 1). Significant in size, the industry's worth can be divided into various sub categories. The largest sub category is womenswear, followed by men's and kids' clothing. The industry has a complicated structure and it employs a wide range of occupations. Bruce, Daly and Towers (2004, 151) state that the range of roles in both industrialized and lesser developed countries make the fashion industry a globally important sector with a major role in wealth creation and employment. The industry is labor-intensive and versatile, employing developers, project managers, advertisers, art directors, designers, models and manufacturers to name a few. (Maloney 2015, 1-2.) Fashion design is at the core of the apparel industry's creative process, which thrives on innovation and art (Navaretti, Falzoni & Turrini 2001). Fashion design activities are mainly located in a handful of fashion hubs. Cities such as Paris, Milan, London and New York employ the majority of successful designers. The geographical concentration of the industry's design function is exceptional. (Wenting & Frenken 2011, 1031.) Fashion design is a process lead by high-end designers, from where the styles and trends trickle down to be mass-produced by fast fashion manufacturers (Joy et al. 2012, 274-276). Unlike the design process, the manufacturing operations have spread all over the world. The pressure for cost reductions has increased as companies strive to gain advantage in an extremely competitive industry. This has resulted in moving manufacturing functions to developing countries, where lower labor costs

have reduced overall production costs. Clothing manufacture represents a large portion of exports for many developing countries. (Giustiniano et al. 2013, 2-3.) Clothing factories employ an enormous amount of unskilled labor working long hours with low wages (Navaretti et al. 2001, 3). Especially women in poor countries are increasingly being employed by the clothing industry. (Nordås 2004, 1.)

Today's fashion industry is a volatile business environment that demands extreme flexibility. Products with short periods of relevance define the industry. Especially for fast fashion, the sales periods for clothing can often be measured in months or weeks. The industry's distribution and supply chains have faced increasing pressure as consumers have grown more demanding. With a constant need to renew assortment, global supply chains have been optimized to cater new trends as fast as possible. The trend driven and unpredictable nature of fashion makes sales forecasting nearly impossible. As forecasting future demand and trends has proven difficult, the industry has concentrated on the agility of supply chains in order to gain market sensitivity. (Christopher, Lawson & Peck 2004, 2-4.) This has impacted research in the field of fashion, which increasingly addresses new solutions for supply chain management (see Bruce et al. 2014, Christopher et al. 2004). According to Giustiniano et al. (2013, 1), industry professionals are accepting the fact that demand for fashion products cannot be forecast. They use the word "chaos" to describe the working environment in the industry. Therefore focus has shifted from predictions to the strategic ability of providing products based on real-time demand.

Giustiniano et al. (2013, 2-4) have identified multiple factors that have changed the fashion industry during the last two decades. Firstly, globalization and the pressure for cost reductions have prompted significant change. Offshoring manufacturing processes has been an important means of reducing costs in a highly competitive, global market. Global use of resources and work force has come at the expense of longer lead times, as goods are imported from other continents. This is a significant trade-off for lower costs. Global supply chains have also proven difficult to manage, as local subcontractors have their own networks, making processes difficult to trace. On the consumption side, customer requirements have grown more demanding and sophisticated. Mass fashion has divided into segments as customer preferences have changed and consumers have learned to ask for more. Due to globalization and technological advances, consumers are immediately aware of new trends and thus expect companies to be able to deliver them efficiently. Consumer expectations place pressure on both product and service quality. Lastly, technology has changed industry fundamentals for both consumers and companies. Value chains have become efficient, flexible and automated while consumers have endless amounts of information and products available immediately. Companies have enormous amounts of consumer data, while consumers have access to all brands and products online. The industry has seen a significant shift from offline to online.

Technology has brought upon a range of new channels and changed industry dynamics from brick and mortar to an omnichannel environment.

2.2 Categorizing the fashion industry

According to Waddell (2004), the fashion industry can be divided into three categories based on levels of manufacture. These levels include mass production, ready-to-wear and haute couture. The basis for this division lies in the key drivers of the fashion industry. New ideas, trends, innovation and change are the forces that keep the fashion industry interesting. Without this creative force the entire business would decline. The levels support the process of creation. The highest level, haute couture is the source of novel designs and the pacemaker of the industry. Ready-to-wear conforms to haute couture and mass production cheaply imitates designer trends as they flow to the bottom of the pyramid. The levels are depicted in the pyramid below, showcasing mass production as the most voluminous business while haute couture remains exclusive and expensive. (Waddell 2004, 4-7.)

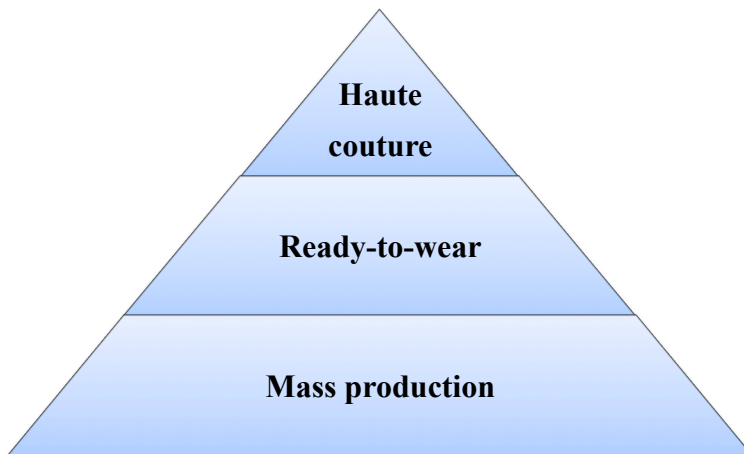


Figure 1 Industry categorization according to Waddell (2004)

The next chapters categorize the fashion industry according to what best serves this study on consumer behavior. Mass production has largely evolved into a concept called fast fashion, which is more characteristic to the modern fashion industry that has formed over the decades through technological progress and globalization. Fast fashion represents the majority of low price clothing on the market nowadays. The second category includes designer fashion as a whole, comprising both ready-to wear and haute couture. Ready-to-wear represents a middle ground for mid- to high-priced clothing, while the same designers often produce more expensive haute couture products in limited, exclu-

sive quantities. Haute couture is not available for average consumers, due to which it can be seen as the tip of the designer category. Therefore, it is natural to address ready-to-wear and haute couture as a mutual entity: designer fashion. The following describes the evolution of fast fashion and designer fashion and depict their roles within the fashion industry.

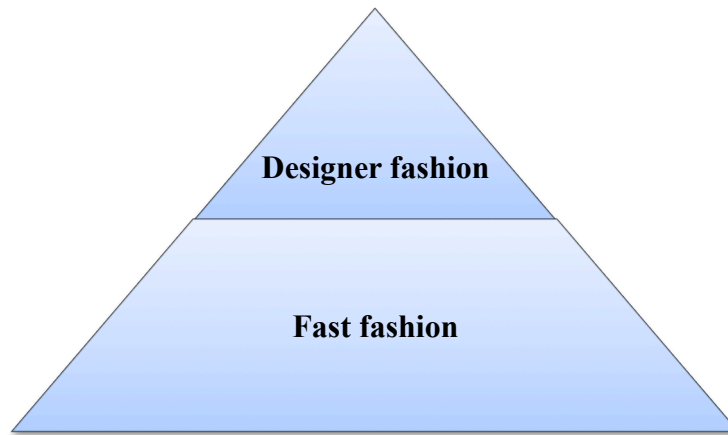


Figure 2 Categories for modern fashion consumption

2.2.1 From mass production to fast fashion

Mass production has made way for the global phenomenon of fast fashion. Fast fashion is a concept that industry changes have created and molded since the 1990's. Before that, mass production meant low cost, basic apparel that did not change often. Limitations in flexibility in both design and manufacturing meant relying on standardized clothing, such as Levis 501s, that were produced in significant quantities. The fashion industry has since experienced profound changes. Customers have become more demanding and suppliers face the pressure of providing constant change and lower prices. The shift took place as consumers grew more fashion-conscious and manufacturers realized that mass production was not the key to profit gain in the fashion industry. Fast fashion, also known as "throwaway fashion" has since reshaped the industry from both consumer and supplier perspectives. (Bhardwaj & Fairhurst 2010, 166-167.)

While mass production slowly followed trends and inspiration from haute couture and ready-to-wear (Waddel 2004), modern fast fashion competes with these categories in bringing new trends to the market. The process of adopting and copying styles happens in a matter of weeks or days. As haute couture fashion shows display collections of the following seasons, fast fashion companies react by copying the styles and making them available as quickly as possible. Fast fashion equals low price clothing that follows the trends of the luxury industry. The key features of fast fashion, low prices and

rapid cycles, encourage consumers to dispose of clothing with little consideration. (Joy et al. 2012, 272-274.) According to Claudio (2007, 449), prices have dropped to the point where people buy more than they need as disposing of extremely cheap clothing is easy. The competitive environment leads to increasing the number of “seasons” (the frequency of renewing entire merchandise) in order to provide new clothing lines effectively and flexibly (Bhardwaj & Fairhurst 2010, 165). Fast fashion producers race their products to market in order to beat designer brands, offering new trends immediately (Sull & Turconi 2008, 5).

Bruce & Daly (2006, 329) agree that fast cycles and renewed offerings are what attract fashion consumers to fast fashion. Leading fast fashion retailers can bring in new stock twice a week, while twice a year is the regular season pace outside the fast fashion environment (Miller 2012, 161). With continuous change, fast fashion creates the illusion of exclusivity, as products are available for only short periods of time. Originality and exclusivity are thus replaced with “massclusivity” and ever-changing trends. Quick turnover also contributes to consumers buying full priced products instead of having to sell at reduced prices. Consumers cannot afford waiting for sales, as the stock will be gone by the time of the sale season. This leads to higher net margins for fast fashion retailers. (Tokatli 2007, 23).

What distinguishes fast fashion companies are the short lead times that enable catering to the masses despite uncertain demand, and design capabilities that allow delivering the correct trends flexibly. According to Cachon and Swinney (2011), the presence of “quick response” and “enhanced design” strategies include a company in the field of fast fashion. The “quick response” strategy means that a company must be able to predict and react according to the movements of the unstable market place. It allows companies to match their supply to demand much more accurately. The flexible design capabilities also referred to as “enhanced design”, guarantee a company’s ability to seize opportunities and design proactively according to contemporary trends that may only last for weeks. Especially combining “quick response” and “enhanced design” strategies can be of great value to a fast fashion company. (Cachon & Swinney 2011, 778).

Bringing new trends to the market as fast as possible places significant emphasis on an efficient supply chain. The time aspect shows in shorter development cycles, efficient transportation and increased competitiveness. Supplier selection and buying has become strategic instead of being just an operational function. Frequent buying raises costs, but on the other hand it helps in controlling excess stock and decreasing lost sales. Time and cost have become key criteria when choosing suppliers. Fast fashion challenges traditional approaches to supply chain management on many levels. Adopting an agile perspective on supply chain management increases possibilities of financial success in the complex and dynamic fashion market. (Bruce & Daly 2006, 329-332.)

The ethical aspect of fast fashion is increasingly becoming a subject of concern. Fast fashion contributes significantly to the negative environmental consequences of the industry. Fast fashion companies (such as Swedish H&M) maintain a benchmark of “ten washes”. The companies acknowledge that by then, the clothing will probably have met its end due to poor quality or already being out of style. Disposability is thus built into the industry. This kind of “planned obsolescence” results in severe problems with textile waste. (Joy et al. 2012, 275-276.) People generally throw clothes away instead of recycling or passing them on for reuse. With accelerating consumption of the new and disposing of the old, the majority of apparel waste ends up in landfills. (Kozlowski et al. 2012, 16.)

Fast fashion employs a significant amount of people mainly in developing countries. This has become a widespread standard for clothing manufacturers due to low cost labor and loose regulations regarding employment standards and the environment. Clothing factories in developing countries have earned the name “sweatshop” for their poor working conditions. Child labor, health and safety issues, nonexistent wages and lacking employee rights are still prevalent in the supply chains of many operators in the clothing industry. (Kozlowski et al. 2012, 16.)

2.2.2 *Designer fashion*

To the consumer, designer fashion’s most defining difference to fast fashion is the price range. Fast fashion was defined as low-cost, but with designer fashion prices can vary significantly. At the other end of designer fashion there are accessibly priced ready-to-wear brands that do not follow the fast fashion mentality of introducing new stock every week. At the other end there are very expensive and exclusive ready-to-wear collections from luxury brands. The high-quality designer fashion market utilizes modern technology and moderately-paid workers in its processes. A key competitive advantage in the industry is to be able to apply consumer’s tastes and preferences into designs and, maybe even more importantly, to be able to create and redefine them. Although the high quality fashion industry is mostly located in developed countries, a trend of moving a portion of manufacturing processes to developing countries has arisen. (Navaretti et al. 2001, 3.) Especially affordable designer brands manufacture a majority of clothes in developing countries. Some designer brands, such as Calvin Klein, have also been reported for using sweatshop labor in its manufacturing. (Phau, Teah & Chua 2014, 169.) Designer fashion is thus not free of the environmental and social issues that are prevalent in the fast fashion industry.

Ready-to-wear, also referred to as *prêt-à-porter*, falls between mass production and haute couture on all measures. It takes inspiration from haute couture designers but eli-

minates the time consuming process of measuring, sewing, and fitting to measure. Like mass produced fashion ready-to-wear can be chosen off the rail in different colors and sizes. Ready-to-wear utilizes the same logic of manufacture as mass production, but it refers to clothing that falls into the designer category. Ready-to-wear represents the commercial side of designer fashion. While mass produced clothing is made in the thousands, ready-to-wear is manufactured in the hundreds. Ready-to-wear represents an important category where most designers operate today. Especially in Europe, the ready-to-wear business developed from couture houses. The ready-to-wear market started expanding in the 1950's, when the sewing machine was invented. (Waddell 2004, 23-30.)

Luxury fashion products are significant in value, whereas fast fashion represents the leader in volume. Luxury is often defined as a rare experience due to its exclusivity or steep price. The concept of luxury is often tied to fashion as clothing forms a major part of the world's luxury market. The heritage of haute couture strongly links fashion to the luxury industry. Designer luxury items, such as handbags, may have a 6-month long waiting list due to limited availability. These kinds of restrictions maintain the status value and exclusivity of luxury items. (Jackson 2004, 155-157.) Although price, rarity, quality, aesthetics and value are essential features of the luxury fashion industry, they alone cannot capture the meaning of the industry. Exceeding the traditional definition of luxury goods, brands represent a space for symbolic fulfillment as well. The boundaries of luxury have evolved with an increasing amount of different lifestyles to cater to. A universal definition of the luxury fashion industry can hardly be formed. (Djelic & Ainamo 1999, 624.)

Haute couture is a term used for made-to-measure luxury fashion. It differs significantly from both mass production and ready-to-wear fashion. Couture is the art of skillful dressmaking, and thus the manufacturing requires a lot of time and effort. Haute couture's literal meaning is the high form of sewing or stitching. The origins of the luxury fashion industry lie in France, where a handful of Parisian haute couture houses dominated the field in the end of the 19th century. (Djelic & Ainamo 1999, 625-626.) Couture houses are lead by designers who present as figureheads for their brands. The designer alone receives credit and responsibility of the reputation and success of the brand. The first couture house was set up by Charles Frederick Worth in the 1860's. The art of dressmaking itself dates back to medieval times. Haute couture is partly just a form of art that is not necessarily meant to be worn. Unpractical pieces may work as exemplar work and inspiration that depicts the season's trends. (Waddell 2004, 10.)

The hierarchical relationship of mass production and haute couture was very different from how fast fashion companies and luxury fashion houses collaborate today. Instead of only copying, fast fashion players like Swedish H&M have co-created collections in collaboration with the likes of Stella McCartney, Jimmy Choo and Marni. De-

signer fashion lacks the volume of fast fashion, and collaborations are a way for them to engage with large audiences through well-known fast fashion retailers. This way, expensive brands have a channel for reaching potential consumers who would not visit their high-end stores. Vice versa, fast fashion retailers gain fashion credibility, increase their brand equity and improve their brand image through collaborations with famous luxury brands. Co-branding offers both parties increased exposure with shared marketing efforts (Shen, Jung, Chow & Wong 2014, 101.)

Ethical clothing brands are usually positioned in the ready-to-wear category as ethical manufacturing processes lead to higher costs, which are visible in the consumer price. It is thus not possible to produce clothing sustainably with fast fashion prices. However, ethical fashion is not automatically expensive. Affordably priced ethical brands, such as American Apparel and People Tree have been used as examples of the possibility of delivering more sustainable products at a reasonable price point. (Rudjareet 2017, 14.)

2.3 Industry sustainability

The fashion industry and its sustainability have faced extensive public scrutiny due to high profile cases of questionable practices. Problems in the industry rotate around the environmental impact of clothing manufacture and disposal, and the rights and working conditions of low-wage employees. At the same time the fashion industry provides an important economical stepping-stone for developing countries. However, globalized operations pose a significant challenge to sustainability. With complicated, global networks of contractors and subcontractors, it has proven difficult to fully manage sustainability matters throughout the product lifecycle. (MacCarthy & Jayarathne. 2012.)

Unethical practices have surfaced especially in the field of fast fashion. Numerous scandals regarding labor conditions and ecological implications have focused attention on industry practices. (Stewart 2013, 128.) The fashion industry traditionally lacks an environment of transparency (Rudjareet 2017, 12). McKinsey (2018, 27) found that approximately 42% of large fashion companies disclose their supplier information. Without transparency, consumers have difficulties in selecting more environmental options.

Adopting more sustainable business practices is currently a widespread movement in the industry (McKinsey 2018, 62). Companies are under increased pressure to provide more transparency into the operations of their supply chains. Regulations and codes of conduct have become commonplace to ensure ethical business practices. Consumers have also begun to demand more responsibility from fashion companies on both social and environmental terms. (MacCarthy & Jayarathne 2012, 2.) However, with increasing

global fashion consumption (McKinsey 2018, 35), the fashion industry needs to find ways to decrease its ecological footprint as soon as possible.

2.3.1 Social issues

The fashion industry employs millions of low-wage garment workers in developing countries. For example, American retailers source their clothing from approximately 150 undeveloped countries, where sweatshops are commonplace. (Phau, Thea & Chuah 2014, 169.) Globalized supply chains have made it challenging to maintain control over complicated networks of suppliers and their suppliers. Developing countries lack similar standards and labor laws as developed countries, meaning that working conditions are often inadequate or poor. (Fuchs et al. 2013².) Sweatshop labor is among the most criticized practices in the industry. According to Donnelly (2013, 1) the lack of a unified definition for sweatshop labor makes it even more difficult to address the issue on an international scale. Sweatshop labor can be defined as work that does not comply with international laws and norms, for instance, hazardous working conditions, unreasonable working hours or compensations that falls below the minimum wage. Child labor is often associated with the term sweatshop as well. (Donnelly 2013, 1-2.)

Various sweatshop and child labor scandals have emerged over the years involving famous brands such as Nike, H&M and Adidas among other large brands. In addition to brands in lower price categories, luxury brands have reportedly used sweatshop labor as well. (Phau et al. 2014, 169.) Garment workers' health and safety are often compromised in crowded factories that do not measure to western safety standards. Insufficient safety measures have caused deaths and injuries across factories in numerous developing countries. The most famous incident happened in 2013 at the Rana Plaza clothing factory in Bangladesh, where 1134 people lost their lives due to an unmaintained factory building that eventually collapsed. Workers were forced back inside the building against their will although the walls showed significant cracks before the accident. (Prentice, Neve, Mezzadri & Ruwanpura 2017, 158.)

News about significant accidents like Rana Plaza receive the most media attention, but they do not shed light on the daily work of garment workers. A large portion of factory workers face hazardous working conditions every day. Current research has focused merely on the technical safety of buildings instead of considering the wellbeing of employees. Social issues, such as the treatment of workers, stress, hunger, and physical exhaustion are defining factors of everyday work. Workers report being forced to work

² according to Phau et al. 2014, 171

over time and at an unreasonable rate of productivity. Working in factories, employees also become prone to back pain, eye problems, coughs and allergies. (Prentice et al. 2017, 158-159.)

Mainly due to external pressure, many companies have adopted voluntary codes of conduct that follow the core guidelines of International Labor Organization (ILO). However, monitoring a global supply chain has proven difficult. Even with codes of conduct and regular audits, it is difficult to have full control over global supply chain operations. (Prentice et al. 2017, 158.) Emmelhainz and Adams (2006, 52-53) report that codes of conduct are often lacking in detail, leaving room for unethical behavior. Another issue lies in the insufficient monitoring and enforcement of required actions, which leaves factories unmotivated to change their practices. Universal codes of conduct may not translate into all local cultures either. Their interpretation can take unwanted forms and the benefits may remain minimal. In addition, the garment industry has a very different history in different countries, which further complicates the application and monitoring of a general set of rules. Depending on whose interest is being served, audits can prove extremely biased. In addition, the fact that audits are rarely unannounced provides the opportunity for factory management to polish their appearance. Although child labor and forced labor are prohibited, a factory could remove certain employees from their premises during audits. Factories are also known to train employees on how to answer questions about working conditions. Studies show that auditing factories has led to a quantifiable improvement in safety conditions, but these improvements are usually limited to altering the physical infrastructure (fire escapes, bathrooms etc.) while ignoring significant social issues. (Prentice et al. 2017, 158.)

Although working conditions do not meet the standards and regulations of developed countries, Powell and Skarbek (2006, 263) argue that foreign clothing companies provide above average wage and benefits to factory workers. Sweatshop labor divides opinions, as clothing manufacturing has provided an important stepping-stone for developing countries. Opposing opinions exist on the ethical state of current supply chain practices. The moral legitimacy of sweatshops has been defended with the argument that ultimately, sweatshop workers have made the decision to work in particular factories. This would indicate that sweatshop work is their best option from an admittedly limited pool of options. By limiting the operation of sweatshops, garment workers would be robbed of their best option for employment. Thus the right to interfere by applying changes, rules and limitations to sweatshop work would be questionable. According to these arguments, western companies and governments should not attempt to change working conditions or minimum wages in these countries. In order to achieve improvements in working conditions, voluntary self-regulation on the supplier's part would be the optimal means. (Zwolinski 2007, 690-695.)

2.3.2 *Environmental issues*

Garment manufacturing has a far-reaching environmental impact both globally and locally in the area of manufacture. As a majority of the world's clothing is manufactured in developing countries, those countries experience the environmental damages first hand. The fashion industry has a disproportionately large environmental footprint compared to other industries. This footprint consists not only of the manufacturing phase, but also the use and disposal phases of the garment's lifecycle. The ongoing washing and tumble-drying of clothing represents a key portion of the environmental strain. Another important issue arises with the disposal of clothing and the waste that is generated annually. While people dispose of great amounts of textiles annually, only a small part of this is recycled and repurposed. Otherwise the textiles go through local waste management. In developing countries, the lack of sophisticated waste management means that clothing ends up in landfills. (Pedersen & Netter 2014, 247-248.)

The manufacturing process of clothing has numerous phases including material production, cutting, sewing, knitting, dyeing, washing and finishing. Clothing manufacturing is resource-heavy and these processes use lots of water and energy as well as different chemicals and pesticides. The manufacturing process also releases different harmful compounds in local water masses, eventually contaminating the environment. The environmental damage also has an effect on the health of local populations as cancers and other diseases increase due to a toxic living environment. (Hossain 2015, 36-37.)

The environmental impact of clothing manufacturing depends greatly on the materials used (Curwen, Park & Sarkar 2012, 35). Cotton is one of the most widely used materials for clothing, as well as one of the most polluting crop yields in the world. Cotton farming requires large amounts of water and is typically associated with heavy use of pesticides. (Pedersen et al. 2014, 247.) Cotton farming alone amounts to 3.14% of the global water footprint (Mekonnen & Hoekstra 2010³). In addition to natural materials like cotton, silk and wool, the industry is widely dominated by synthetic materials such as polyester and acrylic. Another problem arises with the mixed use of natural and synthetic materials. While for example cotton would decompose, combining it with synthetic polyester creates a problematic end product. Blended products thus contribute to the issue of clothing waste. (Deraniyagala 2017, 654.)

With cotton farming industrializing over time and eventually dominating the clothing market, synthetic dyes replaced natural ones. Traditional, natural dyes could not produce the same deep and vibrant hues on cotton as synthetic dyes could. Fashion's demand for a wider color palette ultimately shifted the emphasis to synthetic dyes. With the

³ according to Hossain 2015, 37

mass production of synthetic dyes, factories could scale up production and transform traditional coloring processes. The pretreatment, dyeing, printing and finishing of garments use a lot of water and chemicals in the process. Water masses quickly began to contaminate due to leakages of synthetic dyes and auxiliary chemicals. The fashion industry is among the largest producers of waste water. Although the toxic water goes through a treatment process, it leaves behind hazardous waste as a byproduct. The waste contains residues of reactive and acid components, which are released into the environment if not managed correctly. The industrial sludge is often placed in landfills, where it causes damage to the soil, ground-water, air quality and local living conditions. These severe problems have an impact on surrounding communities, putting the ecosystem and the population's health at risk. Improperly managed waste is a problem especially in the developing countries, where standards and requirements are not always in place. Continuing demand for bright colored clothing calls for improved systems in textile dyeing. Especially synthetic, neon colors are impossible to separate from waste water with conventional techniques. (Deraniyagala 2017, 653-663.)

Spragg (2017, 499-504) raises the issue of sales forecasting, which is often inaccurate. While overproduction forces companies to sell their remaining stock at discounted prices, understocking causes the loss of sales. Overproduction also causes a larger problem in straining the environment by using more resources than necessary. This is worsened by the fact that companies have to dispose of the remaining stock at the end of the season. Overly high discounts may hurt brand image and allow consumers to grow accustomed to waiting until the end of the season to buy the clothes at very low prices. Especially designer brands are careful about brand image and excessive markdowns. Companies do not have a habit of being transparent about overstock management. Some cases of unsustainable practices have made headlines, such as Swedish fast fashion giant H&M and Danish Bestseller (parent company to Jack & Jones And Vero Moda) who have been accused of burning significant amounts of clothing every year (Greenpeace, 7.5.2018). Hvass (2014, 22) points out that traditionally, clothing companies have focused on improving upstream supply chain practices, which include the beginning of the product life cycle from sourcing materials to manufacturing and distributing. Post-retail stock management, also known as downstream supply chain management (e.g. recycling schemes), has only received attention in the recent years.

2.3.3 Ethical fashion

The ethical fashion market has experienced significant growth in the 21st century and McKinsey (2018, 62) predicts that sustainability will be a driving force for innovation in the fashion industry in 2018. In this chapter, ethical fashion is examined from an in-

dustry point of view. This includes ethical manufacturing of clothing, sustainable business models and a “green” positioning of a brand. Ethical fashion consumption from a consumer point of view is addressed in later chapters.

Sustainable business models have become an important managerial topic in recent years. Balancing sustainability and business objectives has proven to be a contemporary challenge in the field of fashion. (Caniato et al. 2011, 1-2.) The concept of sustainability includes social, environmental and economical elements (Hill & Lee 2015, 205). Ethical fashion is a term used interchangeably with others describing a similar phenomenon: green-, eco- and sustainable fashion. The term first appeared in the 60’s, when consumers first noted the environmental impact of the clothing industry. In the 80’s and 90’s fashion companies saw the rise of anti-fur campaigns. General interest in ethical fashion increased in the late 90’s. Today, sustainable fashion has become a megatrend forming a slow fashion movement as a response to fast fashion and unsustainable business models. Ethical fashion is related to multiple elements that define its sustainability throughout the supply chain. Among these are decent working conditions and organic, ecological processes and materials (Johnston, 2012⁴). In addition, the business model needs to display a degree of transparency and traceability along with industry certificates related to ethical fashion (Henninger, 2015, according to Henninger et al. 2016). The concept of ethical, sustainable fashion is still lacking a concrete definition and guidelines for business practices. (Henninger et al. 2016, 400-401.)

Joergens (2016, 361-362) agrees on the lack of industry standards in defining ethical fashion. According to her, ethical fashion is produced following fair trade principles, respecting the environment and the working conditions of employees. Thus, sweatshops and inorganic materials, both widely used in the clothing industry, are not part of the ethical fashion business. According to Shen, Wang, Lo and Shum (2012, 235) ethical fashion brands are steering away from common but harmful actions of many fashion brands. Unethical but widespread business practices often take place in third world countries. According to Deraniyagala (2017, 654) the fashion industry has been slow to accept an ethical orientation, as catering trends and answering to consumer demands has been the main business focus so far. The contradiction in the industry is that an ethical approach takes away from the focal element of constant renewal that consumers have learned to demand. Instead of adopting sustainability as a source of innovation, the industry has delivered merely what is required. Deraniyagala (2017, 654) argues that instead of being part of corporate social responsibility, sustainable practices should be driving the design function. Curwen et al. (2012, 34-35) report that approximately 80% of a garment’s environmental impact is defined during the design process. The design

⁴ according to Henninger, Alevizou & Oates 2016

phase determines the materials, resources, quality and durability of the end product. In order to design sustainably, the company must establish tight relationships throughout its supply chain. The company must also have an overall orientation and ideology of sustainability, in order to enable designers in selecting sustainable options along the design process. All materials and resources used in the production process define the environmental impact of the end product. Life cycle analysis (LCA) is a tool often used to audit different phases of the garment's life cycle. It has been used by the likes of Nike and Patagonia to track energy consumption, waste generation, emissions and water use, and to determine areas of potential improvement.

In the absence of a proper definition, sustainability matters are regulated by different voluntary contracts that indicate a company's stance on sustainable business practices. One factor that is pushing fashion companies to adopt more sustainable practices throughout their supply chain is the fact that they are usually responsible for the sustainability of their suppliers and business partners as well (Caniato et al. 2011, 2). The Accord contract is one of the most widely adopted industry standards setting regulations on supply chain management. It originates from the aftermath of the Rana Plaza incident, which sparked conversation about sustainability worldwide. The main limitation of the Accord contract is that it only concerns suppliers located in Bangladesh. (Bangladeshaccord.org) Another system used to control the supply chain, the Business Social Compliance Initiative (BSCI), is a supplier audit program used by over 1000 fashion companies globally. (Härri & Moilala 2014.) Eco-labeling, fair trade standards and organic certifications are also widely adopted. They may sometimes be difficult for consumers to interpret, as there are almost 100 different labels related to the social and environmental sustainability of garments. Especially organic cotton farming has increased due to the significance of cotton's environmental impacts. For instance, the prerequisites of certified organic cotton garments are that they consist of 100% organic fibers and that no pesticides or fertilizers were used in the process of cotton manufacturing. (Ethicalfashionforum.com)

Curwen et al. (2012, 43) conducted a case study to shed light on typical challenges that companies face in adopting ethical business practices. The biggest barriers included the maintenance of product value, quality and aesthetics as well as coping with higher material and labor costs while meeting supplier needs. The financial implications of a more sustainable product are difficult to add on top of the consumer price, as consumers are often not willing to pay such a premium for the added sustainability. What turned out to facilitate the shift to ethical manufacturing were creativity in design and material use, knowledge sharing and flexibility within supply chains. Hill and Lee (2015, 206-207) agree that establishing a profitable, sustainable business model requires a lot of changes and effort as well as a shift in business logic. Many less sustainable brands introduce new collections on a frequent basis, while more sustainable companies may

present a new collection twice a year. Companies have to consider all necessary technical changes as well as the public opinion, as the consumer is what keeps the company in business. According to Joergens (2006, 364) sustainable business practices are not only a viable option for expensive designer brands, but for brands at affordable price points as well. He presents American Apparel and People Tree as examples of accessibly priced, ethically manufactured brands that challenge the idea of high price of sustainability. Claudio (2007, A453) agrees that “eco-fashion” is being manufactured at all price points from casual clothes to haute couture.

Ethical fashion companies have different processes and policies in place to reduce their environmental impact. Companies like Patagonia, Levi’s, American Apparel and People Tree among others strive to control negative environmental externalities by paying attention to the materials used and increasing transparency in supply chains. Avoiding the use of fur and favoring organic fair trade cotton are common practices among ethical brands. (Pedersen et al. 2014, 247.) The concept of circular economy has encouraged companies to pay attention to their material use. Upcycling and recycling have been integrated by numerous brands from different price points. Upcycling refers to the use of existing waste materials to design something of equal or better quality and value than the original product. Recycling refers to converting existing material to new, different products. Upcycling and recycling decrease the need of new materials, but also require changes in cost structure, energy use and other processes. For example Adidas has used recycled plastic waste recovered from oceans to produce its sneakers. (Todeschini et al. 2017, 761-765.) Piñatex is another example of a newly discovered material that can work as a replacement for leather in shoes, accessories and clothing. It’s made from pineapple leaves’ fibres, thus utilizing pre-existing agriculture more efficiently. (Piñatex 2018.) In order to affect supply chain practices, companies have established networks for sustainable clothing, traceability programs and environmental performance measures. (Pedersen et al. 2014, 247.) Asket, a Swedish clothing brand, recently introduced a new label found in every piece of clothing that allows the consumer to trace through the whole process of manufacture. The label informs the consumer of where each step of the process took place for that particular garment. (Asket.com, 7.5.2018.)

According to Dahl (2010, A247), the undefined nature of ethical fashion exposes the concept to misuse and exploitation. The term “greenwashing” refers to companies communicating more environmental benefits or less environmental harm than they actually deliver. Vague and empty environmental promises are not a new occurrence, but they are on the rise in industries that face increasing consumer demand for sustainable products and services. Greenwashing can therefore be a way to increase market share and improve corporate image. Caniato et al. (2011, 2) have found companies increasingly placing themselves in the “green segment” without introducing any significant changes to their business models. This way companies can integrate a new dimension of

quality into their products without additional effort or cost. This is misleading to consumers and takes away from the credibility of truly ethical practices.

2.3.4 Finnish fashion

The majority of the clothing sold in Finland is manufactured abroad. The Finnish fashion industry relies heavily on imports, which amounted to 51 million kilos in 2013. Based on Finnish customs statistics, the most important sources of import included China (42%), Bangladesh (13%), Sweden (8%), other EU countries (8%) and Turkey (5%). However, most of the clothing imported from Europe is manufactured outside of EU and imported to Finland by European fashion brands. Eastern European countries are among the only remaining significant clothing manufacturers in Europe. Most of the countries that import to Finland, including Eastern Europe, have a high-risk profile regarding human rights violations according to the BSCI system. Thus the workers that manufacture clothing for most Finnish brands are also exposed to the risk of unethical working conditions. The Business Social Compliance Initiative is a supplier audit program used by over 1000 companies globally. Most of the surveyed Finnish companies were also part of the program. The program recommends practices on reasonable pay, but does not specifically demand paying a living wage. Only one of the companies had signed the Accord contract. (Härri & Moilala 2014, 5.)

Eetti Ry, a Finnish ethical trade organization, conducted a survey to map out the state of sustainability among Finnish clothing brands. The research included nine of the largest clothing companies in Finland. Eetti Ry found that Finnish fashion companies consider ethical implications more important than before. Despite this, ethical practices are not in the forefront of the Finnish fashion industry. Various Finnish brands manufacture their garments in developing countries without full control over the working conditions of the garment workers. Some of the companies reported to auditing factories themselves, while many relied on the inadequate BSCI-program. The BSCI focuses on controlling the factories instead of modifying the client companies' business and buying practices. Most of the Finnish clothing companies reported to paying attention to their buying practices especially in the selection of new suppliers. On the other hand, some stated that they end supplier relations in the case of human rights violations instead of working to improve the conditions in the factory. None of the Finnish companies surveyed were committed to paying garment workers a living wage. A living wage means that one can support a family of four while saving a small portion of the salary. The BSCI annual report discloses that in Bangladesh, 40% of garment workers' salaries fail to reach even the local level of minimum wage. (Härri & Moilala 2014, 5.) According

to Telkki (2015), numerous developing countries have minimum wage levels that should be tripled in order to reach a reasonable living wage.

3 MODERN FASHION CONSUMPTION

3.1 The process of consuming

The consumption of clothing is often interpreted as the purchase of clothing in industry research. This chapter lays out the concept of consumption as a wholesome process that encompasses the purchase of clothing to wearing and disposing of them. As fast fashion continues to take over the market, numerous clothing brands sell their stock with a built-in agenda of short-lived use (Joy et al. 2012, 275-276). Once new trends emerge, old, cheap clothes are often disposed of to make room for new purchases. From an ethical perspective, it is not only crucial to consider responsible buying behavior, but also how long consumers use particular clothing items and how they are taken care of in order to make them last. Claudio (2007, A449-A450) refers to this as the life cycle of clothing, and highlights the power of the consumer regarding the sustainability of the fashion industry. According to him, the biggest advances in sustainability come with fewer purchases, quality awareness, and the recycling of used clothing. Claudio (2007, A452-A454) argues that in the end, consumers have the biggest responsibility, because their choices have an impact throughout the consumption process. Consumers face multiple options when buying, using, taking care and disposing of clothing. Therefore this research considers consumption from a wider perspective than mere buying behavior. In order to evaluate the prominence of ethical factors behind consumption decisions along the product life cycle, the next chapters describe the current state of fashion consumption and introduce different consumption alternatives that are available to consumers nowadays.

Figure 3 below depicts the different phases of the consumption process. One can purchase new or used clothing through various channels, after which the clothing is most often taken into use. The duration of use depends on the quality of clothing, how it is cared for and whether the owner still wants to keep using it. (Claudio 2007, A449-A450.) As Birtwistle and Moore (2006) state, the fast fashion phenomenon encourages a throwaway culture of few uses, which can, at worst, lead to a clothing item being disposed without ever being used. This is depicted in the figure as a marginal route leading straight from purchasing to disposing. The more common route leads from purchasing to using and further onto disposing. After a period of usage, the consumer decides on a means of disposal. These can include throwing clothes away, recycling, donating, passing down, reselling, repairing and swapping (Lee et al. 2013). Depending on the disposal method, the lifecycle of clothes may not end there. The clothing may start a new life at the “purchasing” phase of the process if it’s resold, or its usage phase could be continued by repairing it, for instance.

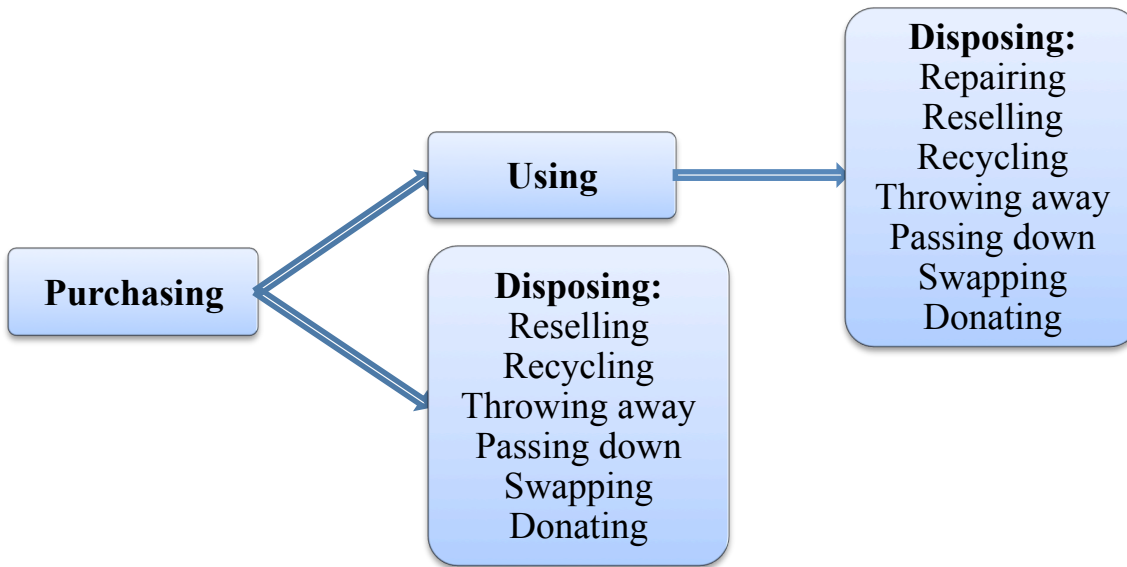


Figure 3 The process of consumption

3.1.1 *Purchase behavior*

Armstrong, Connell, Lang, Ruppert-Stroescu and LeHew (2016, 417-418) describe the present state of fashion consumption as a time of intense and rapid fashion acquisition. The volume of global clothing manufacturing doubled from 2000 to 2014, mirroring the development of consumers' purchase behavior (Remy et al., 2016). Need-based shopping has been widely replaced by shopping with recreational motives. The current consumption culture is defined by abundance and is essentially driven by the fast fashion industry (Armstrong et al. 2016, 417-418.). Giustiniano et al. (2013, 3) characterize contemporary fashion buying behavior with high impulse tendencies. Points-of-purchase are typically the places where buying decisions take place. Global fashion consumption is changing rapidly as sales are moving online and consumers have new kinds of access and information channels. Consumers are faced with an endless amount of choices.

In the 21st century, the most important megatrend of fashion shopping has been the shift from offline to online. Being able to balance growing online sales with decreasing offline operations has also become one of the biggest challenges for a number of fashion companies. Many have opted for a strategy including both online and offline, while purely digital players have emerged and succeeded in the market as well. (Kesteloo & Hoogenberg 2013.) Furthermore, Park and Lee (2017, 1398) describe recent industry development as a shift from a multichannel to an omni-channel retail environment. While a multi-channel approach has considered the dilemma of online and offline integ-

ration, omnichannel retailing works to create a seamless consumer experience from offline and online retailing to smart devices and traditional channels, such as TV and radio. With the rise of online shopping, traditional brick-and-mortar shops have had to consider extending their physical presence online. Today, the omni-channel setting requires a more complex inclusion of all consumer touch-points. According to Park and Lee (2017, 1399), the variety of channels of commerce and communication is further complicating interaction with consumers. Consumers have adopted a variety of smart devices that complement shopping processes. These technologies are also changing the nature of customer relationship management. Smartphones, tablets and social platforms have formed an omnipresent means of purchasing online, which continues to shape modern consumer behavior. Smart devices not only offer another purchase channel, but they function as a research tool for exploring options for points-of-purchase, sales, bargains, alternative products or additional product information. Social media has adopted a similarly multitasking role. Consumers are continuously exposed to new trends through different social platforms. Social media as a real-time trend-feed has had an impact on companies' focus in bringing products to market as fast as possible. (McKinsey 2018, 18.) Social media not only provides trends and inspiration, but operates as its own point-of-purchase as well. The most prominent social media sites and applications provide consumers the option of purchasing items directly through a company's social media page. In addition, the reported influence that social media content has on consumers' buying behavior is significant in the clothing category. (Chahal, 2016.)

Swedish logistics company Postnord conducts annual surveys in European countries to monitor the current state of e-commerce. Clothing e-commerce is among the largest areas of growth throughout Europe, but especially in the Nordics. The boundary between online and offline is becoming vague. It's common that the purchase process happens partly online and offline. Consumers may do research online before buying a product in store, or they may try out products in store before buying them online. Furthermore, the transaction may happen online, but products may be picked up from a physical store location. As online shopping becomes the new norm, consumer expectations grow on all fronts. Online shoppers expect fast delivery times and more transparency in parcel deliveries. In addition, consumers want to shop on localized pages in their own language and to be able to select their preferred payment and delivery methods. The research results highlight the importance of a sophisticated omnichannel strategy and the ability to offer consumers personalized shopping experiences. Especially in the Nordics, online shopping offers access to products that cannot be found in physical stores in smaller cities. Clothing and footwear (grouped as one category in the report) represents the most significant category for online shopping in Finland and other Nordic countries as well. Due to the nature of clothing shopping and size and fit issues, clothing

and footwear as a category accounts for the largest share of returns that occur within ecommerce. (Postnord 2017, 1-11.)

Modern consumer behavior combines online and offline elements in multiple ways. Postnord (2017, 13) brings attention to the topics of webrooming and showrooming, which both have an important role in the clothing category. Webrooming refers to consumers using online channels for research prior to purchasing a product in store. As the opposite, showrooming involves consumers trying out products in physical stores before ultimately purchasing them online. Postnord (2017, 13) predicts that the division between online and physical commerce will soon be obsolete, as omnichannel strategies form seamless user experiences. However, the omnichannel environment has already changed the field of commerce. In 2017, many fashion companies were forced to close down a record amount of physical stores, leading to online channels gaining further ground. (Danziger 2018.)

Smart phones have had a considerable impact on consumer purchase behavior within both physical and online commerce. They not only work as a purchase channel, but provide a two-way means of convenient communication. As consumers have their smart phones with them most of the time, they have timely access to necessary communication and information. Consumers may conduct product research, search for physical store locations, check stock levels in physical stores, photograph potential purchases or find additional product information while in-store. Vice versa, companies have the opportunity to connect with consumers to communicate offers and information by text messages, push notifications and emails. (Postnord 2017, 12.) Park and Lee (2017, 1405) report that consumers' choice of purchase channel is affected by many factors. Especially younger consumers uplift the increasing potential of smart device shopping. Mobile consumers are also sensitive to deals and bargains, while more expensive purchases are often made through other channels. Devices' small screens limit the mobile channel, which makes mobile more valuable in combination with other channels. Mobile often works as a preliminary information channel before completing the purchase in another channel. However, Postnord (2017) notes that companies have invested heavily into making their mobile sites and applications as user friendly as possible. In addition, mobile seems to be establishing itself as a viable channel to support the whole purchase process alone.

Andersen and van Leeuwen (2017, 203-204) have observed the nature of online shopping sites, and found that they integrate multiple elements of traditional, physical sales interaction and content, which is normally found in separate media. The research was conducted on the website of German fashion ecommerce company Zalando. The exploration of the site showed that in addition to products and product information, shopping sites may include their own fashion magazines, fashion photography, influencer content, and style guides among other elements. The content found on the site was

complete with pathways to product pages and the use of persuasive, commercial language played a large role. According to Andersen and van Leeuwen (2017, 203), such shopping platforms bring the notions of “exchange of information” and “exchange of goods and services” closer together. Online fashion shopping platforms not only offer the possibility of buying products, but a place to spend time, explore content and find influences and inspiration. Shopping is no longer defined only by making purchases, but forms a multifaceted experience designed by the consumer.

In addition to buying new clothing, fashion acquisition can be defined as purchasing second-hand clothing, receiving hand-me-down clothing, and exchanging and repurposing clothing. Although interest in the second-hand category has become significant, data concerning the market share of used clothing is often ignored in industry statistics and research. In the recent years however, second-hand consumption has seen significant growth in western countries. (Liang & Xu 2016, 121.) Modern second hand consumption will be further addressed in chapter 3.3.2.

3.1.2 The usage and disposal of clothing

Accelerated clothing consumption has shortened the life cycle of apparel. With the increased purchase frequency that fast fashion promotes, consumers are disposing of outdated styles faster than ever. Consumers keep clothing for shorter time periods, encouraged to buy into new trends that are affordable and easily available. (Birtwhistle & Moore 2007, 2010-2011.) According to Joy et al. (2012, 283), disposability is an important component of fast fashion. As trends pass, there is no need to invest in higher quality apparel, as the trend will wear out with the clothes. Fast fashion companies themselves have created a benchmark of ten washes, after which the clothing will have lost its original shape and quality due to low quality materials and manufacturing.

Disposed clothing has expanded into a large business. In 2013, the world exported 3.9 million tons (kg) of used clothing (UN Statistics⁵). According to the Council of Textile Recycling (2014), American consumers annually discard approximately 32kg of solid clothing and textile waste per person. In United States alone, post-consumption clothing waste increased by 40% from 1999 to 2009. (Armstrong et al. 2016, 418.) In comparison, Finnish consumers dispose of approximately 70 million kg of clothing and textile waste annually, which amounts to 13 kg per citizen. However, the disposal of clothing is on the rise in Finland as well. A couple of decades ago, textile waste was not

⁵ according to Manner (2017)

a similar issue as consumers purchased less and clothes were of better quality. (Manner 2017.)

Lee, Halter, Johnson and Ju (2013) conducted research on young consumer's clothing disposal habits, and found that knowledge of socially responsible disposal methods is often lacking. Disposal habits were widely affected by the social consciousness of the consumer. Giddings (2005, 224⁶) defines social consciousness as "personal awareness of social injustice". Consumers are offered numerous opportunities to purchase sustainably, but for socially conscious consumers this is not sufficient. The socially conscious consumer wants to extend the sustainability to further stages of consumption, including disposal. Clothing disposal can happen for a number of reasons, but it ultimately occurs when a clothing item has "outlived its purpose". The means of disposal have been categorized in multiple studies (see Jacoby et al. 1977, Harrell & McConocha 1992, Winakor 1969, Solomon & Rabolt⁷). The options include keeping, throwing away, handing down, selling, exchanging, repurposing, repairing and donating used garments. Most consumers use multiple methods of getting rid of old clothing. Common motives for disposing used clothing involve outdated styles, the arrival or new trends, low quality, poor fit, and boredom with the particular item. In addition, apparel may be bought for a specific occasion, making it redundant afterwards. Clothing as a category is prone to less hesitant disposal habits compared to other consumer goods, such as home appliances. According to Lee et al. (2013), some consumers feel that the responsibility of sustainable clothing disposal could be shared with fashion companies. Some companies do have recycling programs in place. In Finland these include H&M, Kappahl, Lindex and Filippa K among others (Norokorpi 2016).

Jacoby et al. (1977⁸) recognized three main factors in their framework for clothing disposal. These included psychological factors, such as personality, attitudes, values, social awareness. Another factor was formed by intrinsic attributes to the product, such as cost, condition, value, style and durability. Thirdly, decision-making was affected by situational factors such as changing trends, available storage space and consumers' current financial situation. Joung and Park-Poaps (2011, 692-694) found that certain motivations for the disposal of clothing were linked to particular disposal methods. Their study observed 232 clothing and textile undergraduates and the underlying motivations of their clothing disposal habits. Four methods of clothing disposal (resale, reusing, discarding and donation) were connected with five common motivations (environmental, charity, convenience and economic). The resale and reuse of clothing were linked to economically motivated behavior, while environmental behavior was in line with resel-

⁶ according to Lee et al. (2013, 68)

⁷ according to Lee et al. (2013, 68)

⁸ according to Birtwhistle & Moore (2007)

ling and donating. Charitable motives most often led to the donation of clothing, while discarding clothing was an action motivated by convenience. Consumers' environmentally motivated disposal habits were also influenced by environmental attitudes and beliefs of family and friends.

When observing the state of global clothing disposal, it is important to not only think of good ways to dispose of clothing, but ways of decreasing consumption altogether. Lee et al. (2013, 75) explored the concept of future clothing disposal and highlighted the importance of reducing overall clothing consumption in order to reduce the need of disposal. They noted that participants of their study became aware of their overconsumption habits when recognizing the amount of unused clothing they owned. Lee et al. (2013, 75) concluded that educating young consumers about socially responsible consumption and clothing disposal could be an efficient way to impact future consumption. Decreasing consumption and therefore decreasing disposal is an effective means of waste prevention. In contrast, donating and recycling clothing may not always be as beneficial as consumers think. Only a small portion of donated clothing is truly reusable. Furthermore, disposed clothing is not donated to African countries, for instance, but resold there instead. This has had a paralyzing effect on local textile industries in developing countries. (Manner, 2017.) According to estimates, in some cases burning disposed clothing in Finland could be better for the environment than shipping them to third world countries, where they often end up in landfills due to the lack of sophisticated waste management systems (Roivainen 2017).

3.2 Fashion and the consumer

Consumers often develop deep and lasting relationships with clothing brands. In addition, consumers play a significant role in building those brands together with fashion companies. Branding can be seen as a strategic measure to personify products and integrate them into people's values and lifestyles. (Power & Hauge 2006, 2-4.) Dressing up is an important form of self-expression. Clothing choices imply status, values, mood, personality, and importance. (O'Cass & Frost 2002, 68.) The fashionability, sustainability or prestige, for instance, plays a major role as consumers select what to wear. The next chapters examine how consumers communicate with their consumption choices and how personal values and motives define consumers' habits as well as their stance on sustainability matters.

3.2.1 *Symbolic consumption*

Purchasing and consuming clothes are strongly tied to a range of feelings and emotions. Positive emotions inflicted could be, for instance, excitement or pleasure. The relationship between feelings and brands is significant as it is directly linked to purchase behavior. Positive feelings have the power to increase the time and money consumers spend in interaction with a brand. Thus, thorough knowledge of feelings and attitudes not only makes predicting consumer behavior easier but also carries economic value. Objects can assume symbolic values once consumers give them intangible meanings beyond physical characteristics (Levy 1959⁹).

Clothing and fashion brands are often evaluated based on their symbolic meanings. Expensive pieces of clothing can even be categorized as symbols of achievement. A fixation on economic imbalances in societies lays the groundwork for status symbols. Fashion consumption is highly social as the meanings and symbols are constructed socially in relation to others. (O’Cass & Frost 2002, 71-73.) Purchasing luxury goods can be a way of conveying prestige. Especially luxury consumption is found to contain a strong social aspect. Consuming luxury fashion can function as a symbol of belonging in a social group. Recognition among peers can significantly affect the behavior of a luxury consumer. Luxury products can thus function as status symbols. (Shen et al. 2014, 105.)

Banister and Hogg (2003, 850-855) have conducted research on negative symbolic meanings and their effect on fashion consumption. They point out that consumers define themselves also through the fashion products that they neglect in addition to what they choose to consume. Both negative and positive symbolic meanings have a defining impact on consumer behavior and purchase decisions. Interestingly, companies do not necessarily have extensive control over the symbolic meanings of their clothing. Symbolic meanings are, by definition, constructed and maintained socially and thus work as a means of communication. Fashion is a social tool that allows consumers to express individuality and to fit in simultaneously. Therefore fashion is inherently linked to one’s self-esteem. The protection and confirmation of self-esteem determine much of consumer behavior in the fashion industry.

According to Miller (2013, 161), hedonism can be seen as a driving motivation for many fashion consumers. Especially luxury products may signify personal pleasure, happiness and instant gratification for a consumer. Hedonic consumers have also been found to buy and pay more than non-hedonic or utilitarian consumers. Hedonism also has an impact on buying frequency and brand loyalty. Miller (2013, 168) also found,

⁹ according to Banister & Hogg (2004, 851)

that fast fashion consumers gain hedonistic pleasure in the creative process of shopping, selecting clothing items and creating unique, inimitable “looks” at a cheap price. Personal style and looking good were also key drivers for hedonistic shopping in the fast fashion environment. Creating a feeling of rarity and exclusivity is thus important in both fast fashion and designer fashion categories. This also enforces the difference between fast fashion and the notion of mass produced clothing. The creation of different “looks” as a hedonistic factor also implies that hedonistic responses do not end after purchasing the item, but continue in owning and using it. Miller (2013, 168) introduces the idea of “adventure shopping”, where the consumer seeks excitement and stimulation in the process of clothing shopping. Another concept, “idea shopping”, describes the enjoyment in finding new styles and innovations while shopping.

Consumers’ need for uniqueness connects positive emotions with low similarity to others. Clothing and the choice of what to wear are strongly connected with the aspiration of being unique. A high degree of uniqueness is a characteristic shared by all categories of the fashion industry. While luxury brands enable differentiation through exclusivity, fast fashion brands offer uniqueness through newness and trends. According to Joy et al. (2012, 276), fast fashion offers consumers access to multiple temporary identities that they can explore at a low cost. The need for uniqueness can be divided into three categories. The first group would choose products with a differentiating factor that are still accepted by others. The second group would favor products that are unlikely to become very popular, thus maintaining their individuality. The last category includes people who choose unique products that do not comply with group norms. (Shen et al. 2014, 104.)

Quartz and Asp (2015, 10) highlight the fact that all people are consumers and consuming exceeds mere materialistic dimensions. Materialistic things have a strong symbolic nature that defines experiences, life styles and identities. The clothing people wear is a means of communication, a way of defining who you are to both others and yourself. Consumerism forms symbols and signals that give away personal values, fears and desires, ultimately expressing a whole lifestyle. Most of this communication happens subconsciously, but it unquestionably extends from clothing and hobbies to living and beyond. While consumerism has its origins in the western countries, it has spread globally despite religious and political environments that do not agree with the ideology. Although consumption forms a dominant aspect of people’s lives, many have difficulties in explaining their motivations behind purchase decisions. Quartz and Asp (2015) studied the underlying factors of consumer behavior through brain imaging, introducing the concept of “cool consumption”. It refers to consuming in the pursuit of being cool. The study showed that simply looking at “cool” products activated the same areas of the brain as social interaction. While social environment has shaped the brain regarding consumption, evolution has had a major impact as well. The modern consumption is

largely steered by underlying ancient desires and motivations. Quartz and Asp (2015) identified the “rebel instinct” and the “status instinct” to offer a biological explanation for consumption motives. Looking at evolution, humans have always had a natural tendency to seek status and promote rebellion by disliking subordination. According to their research, modern consumption builds upon these two instincts. While most theories view status-seeking consumption behavior as differentiating and competitive, Quartz and Asp (2015, 25) point out unifying qualities that stem from evolution.

3.2.2 *Personal values and motivations*

Consumer demands have become extremely sophisticated (Birtwistle & Moore 2007, 211). They also strongly mirror consumers’ personal values and motivations as consumers seek for brands they can identify with (McKinsey 2018). Different clothing attributes, also known as intrinsic and extrinsic cues, largely determine consumers’ purchase decisions. The intrinsic cues contain the aesthetics, appearance and utility of the garment, while extrinsic cues include attributes like brand, store or price. (Park & Sullivan 2008,184.) Product attributes have a defining power over consumer decisions. According to Yoo et al. (2000¹⁰), product quality is one of the most important factors when evaluating a brand’s overall value. Further attributes such as price and style continue to drive consumers (Park & Sullivan 2008,184), but niche motivations from veganism to green consumption are gaining ground due to modern consumption patterns (Todeschini, 2017, 761-763). According to Joergens (2006, 370), especially young consumers are widely influenced by the price factor, as low-priced clothing continues to appeal to young, fashionable consumers.

Purchase behavior can be driven by hedonistic or utilitarian motives. Both can also occur simultaneously. Hedonistic shoppers emphasize the shopping experience as a source of enjoyment and entertainment. Shopping does not only occur based on need, but is done for the pleasure of shopping itself. Being available always and everywhere, shopping has become a socially accepted, hedonistic lifestyle activity (Horváth and Adıgüzel 2018, 300). On the contrary, utilitarian shoppers do not have an emotional connection to shopping, as it’s seen as a task that should rather be done as efficiently as possible. Utilitarian shopping behavior is mostly prompted by actual needs. (Sebald & Jacob 2017, 188-191.) Another contemporary topic in modern consumption is compulsive buying. It’s defined as excessive, repetitive buying, which stems from mainly hedonistic motivations. Furthermore, compulsive purchasing may occur as a response to

¹⁰ according to Shen et al. (2012)

negative feelings, low self esteem or in pursuit of sensation and excitement. Compulsive purchase behavior is even connected to hiding behavior, which occurs when shoppers feel guilty about their purchases. (Horváth and Adigüzel 2018, 300.) Comparing hedonistic and utilitarian motives, women and men have been found to display different behavior in clothing consumption. Among females, recreational and hedonistic motives often surpass utilitarian ones. Women also perceive shopping as a social activity, where they value interaction with peers. Men tend to appreciate convenience and time efficiency. Utilitarian motives dominate men's purchase habits, making clothes shopping more of a task than a source of pleasure. Men also trust the internet more than women, thus finding online shopping a good and convenient alternative to brick and mortar. Women have a stronger need for being able to experience the fabric and the feel of the garment in person. (Sebald & Jacob 2017, 188-191.)

Salomon and Rabolt (2004¹¹) have stated that sustainability is not something consumers consider when making purchasing decisions. However, in 2018, McKinsey (2018, 62) reports that the millennial generation is displaying stronger interest for increased transparency and sustainability than any prior generation. According to their study, 66% of millennials were prepared to spend more on an ethical option when shopping for clothes. On the other hand, many consumers continue to place more importance on the fashionability of garments on the expense of sustainability (Joergens 2006, 364). Even as ethical fashion represents a small portion of the industry, it's quickly growing. The increasing interest in ethical fashion is fueled by multiple motives. Therefore, the ethical consumption movement can be divided into numerous subcategories. The green consumer can have a particular interest in e.g. veganism, decreased consumption in general or merely high quality clothing, which is more often produced in an ethical manner. The concept of "lowsumerism" is associated with consumers that seek to limit their total consumption, resulting in a minimalistic lifestyle. "Lowsumerism" contains the notion of criticality towards consumption, which means that, for instance, clothing purchases are limited to only what is absolutely necessary. Some consumers also believe the sustainability in fashion consumption is achieved through building a minimalist capsule wardrobe that contains high quality basics. The vegan movement entails consumers that are dedicated to consuming animal-free products, be it food, clothing, or other product categories. A number of fashion companies have entered this niche field in order to cater to this specific audience. Vegan fashion is also aligned with the values of those who are generally interested in animal rights but not necessarily committed to a fully vegan lifestyle. (Todeschini 2017, 762-763.) According to Joy et al. (2012, 280-282) there is an existing contradiction between young consumer's interest in fashion and en-

¹¹ according to Joy et al. (2012)

vironmental sustainability. The interest in new styles and trends is difficult to combine with environmental values.

Yan, Bae and Xu (2015) conducted research into the motivations behind second hand clothes shopping. According to their findings, second hand consumption is closely tied to price sensitivity and ethical consumerism. Especially young second hand shoppers value the “vintage” look of clothing as well as the possibility of finding unique garments. Young consumers also felt the need to identify as “green” consumers through second hand consumption. Guiot and Roux (2010, 355) agree that motives for second hand consumption are not merely economical, but have recreational elements as well. Second hand consumption offers an opportunity for “treasure-hunting”, finding one-of-a-kind pieces that support the desire of being unique. Another key driver behind second hand shopping is seeking items that are not available as new products on the market. Guiot and Roux (2010, 364) also separate critical and economical consumption motives. Critical motives are connected to the desire to decrease the consumption and waste generation that the conventional market place encourages. Economical motives describe the objective of saving money by purchasing second hand. Critically motivated consumers were more likely to recycle and have anti-materialist attitudes, while economical benefits were not connected to a more sustainable lifestyle.

3.3 New ways of ethical consumption

3.3.1 *Ethical fashion consumption*

Ethical manufacture of fashion was described in chapter 2.3.3. It represented one half of a solution to a vastly polluting industry. The other half is defined by consumption habits. The business of ethical fashion and ethical consumer behavior form a combination that has great potential in decreasing environmental and social problems in the fashion industry. Thus this division recognizes that both companies and consumers have responsibilities regarding ethical matters. As previous chapters, this chapter examines consumption as a whole, including purchase, usage, and disposal behavior. Ethical purchase behavior can be seen as purchasing ethically made clothing or second hand garments. What should be emphasized is that the most sustainable option is to refrain from buying altogether whenever possible. Ethical usage and disposal behavior translate to taking good care of clothes, repairing them when necessary and discarding them in an appropriate manner, such as swapping, reselling or recycling.

“Sustainable consumption is consumption that supports the ability of current and future generations to meet their material and other needs, without causing irreversible damage to the environment or loss of function in natural systems.” - Jackson (2003, 14¹²)

According to Birtwistle and Moore (2007, 210), sustainable consumption became an established term in the beginning of the 1990’s. It has become a relevant topic across all industries, but especially in fashion, where industry developments have been negative in regards to sustainability. The concept of sustainable consumption has since become increasingly popular across global markets (Manchiraju & Sadachar 2014, 357). Consumer awareness of sustainable consumption is steadily rising. According to Claudio (2007, A454), consumer responsibility is key in decreasing the negative effects of the fashion industry. The range of sustainable alternatives has grown while sustainability has reached more and more media coverage. As a consequence, consumer awareness of ethical fashion and ethical consumption has increased significantly.

Consumers have different options when it comes to purchasing ethically. Certain brands have specialized in ethical fashion, promoting transparency throughout their supply chains and steering clear from environmentally harmful materials, chemicals and processes. These brands tend to include an ethical aspect in their brand marketing as well. (Claudio A452-454.) In addition to buying new, second-hand clothing offers a sustainable option. Second-hand clothing has traditionally been available at physical flea markets, but social media, the sharing economy and new technologies have brought about new ways of second-hand shopping. (The Association of Commerce 2015.) However, some consumers attach negative associations to second-hand clothing and would rather purchase new clothing items. Two main reasons for avoiding second-hand are the stigma of poverty and the perception of contamination. Some consumers find the thought repelling that someone else would have already used their clothes. (Yan et al. 2015, 88.)

Ethical purchase behavior is not only about the choice you make when shopping, but also whether you shop at all. Decreasing consumption through fewer purchases and durable clothing choices is paramount to consuming responsibly. (Claudio 2007, A454.) With higher quality purchases, the need for frequent buying decreases. Consumers should thus focus on quality over quantity in order to consume ethically. The choices that are made post-purchase have a big impact as well. Sustainable use and disposal of clothing are important because of the impact that clothing waste has on a global and local scale. Careless use and disposal are also a waste of resources. By considering the usage, maintenance and storage of clothing, consumers can extend the duration of gar-

¹² according to Birtwistle and Moore 2007

ments and therefore avoid disposing of them as quickly. Repairing and repurposing are other ways of giving clothing another opportunity and an extended product lifetime. It is also recommended to wash clothing in cooler water to save energy. (Henninger et al. 2016, 401.) Different disposal methods were defined in chapter 3.1.2. Unlike throwing clothes in the trash, donating, recycling, and reselling are means for more sustainable disposal. It is still important to consider that recycling cannot be considered a deed that rules out the environmental strain of the initial purchase. Only a small portion of donated clothing is fit for reselling, and the rest ends up being burned or sent abroad. A significant amount ends up in less developed countries, where waste management systems are not capable of handling large masses of textile by burning, for example. Thus a large part of disposed clothing ultimately ends up in landfills. (Roivainen 2017.) As Jacoby stated in 1977¹³, sustainable consumption contains pre-purchase, purchase and post-purchase components.

Attitudes towards sustainability often fail to convert into purchase behavior. Hill and Lee (2015, 205) note that consumers' sustainable actions regarding consumption are often very limited compared to the socially responsible attitudes and values they communicate. Joy et al. (2015, 286) highlight that certain barriers for ethical fashion consumption do exist among fast fashion consumers. Considering the nature of fast fashion, ethical fashion often fails to cater to the trend-oriented, fashion-forward, younger crowd. Young consumers who frequent fast fashion retailers, reported eco-fashion as being out of touch with current fashion. Interestingly, young consumers who cared about sustainability in numerous other areas of their daily life (such as food, water and electricity consumption, and recycling) saw fast fashion as an exception. The consumers that took part in their study saw fast fashion as the only option for clothes shopping and conveyed sustainability as having very little significance in their fashion purchase behavior. In order to buy into eco-fashion, they felt that the sustainable initiative would have to come from leading fashion brands for it to be credible in terms of style. It seems that sustainability is still not a priority in clothes shopping for many consumers.

Other barriers for adopting more sustainable shopping habits are the price and availability of ethically manufactured clothing. According to Joergens (2006, 362-364) sustainable products have traditionally been difficult to find. In addition to vast availability, fast fashion has the advantage of being cheap, and ethical fashion brands cannot, in general, match those prices. Ethical manufacture often means producing clothing in more developed countries, whereas fast fashion benefits from extremely cheap labor in developing countries. Interestingly, McKinsey (2018) found that 66% of millennials report to

¹³ according to Birtwhistle & Moore (2007)

being willing to spend more on brands that are sustainable. Overall, the topic of sustainability has grown significantly in importance among younger consumers.

3.3.2 Modern C2C consumption

Reselling and exchanging goods among consumers are growing trends that have found new channels within ecommerce. With the emergence of new online platforms, the modern C2C clothing market is reaching a wider audience than ever before. The phenomenon of “peer commerce” (Association of Commerce, 2015) is also a shift towards more sustainable consumption habits, as reselling and exchanging are forms of recycling. Physical flea markets, second hand shops, and vintage stores have traditionally formed a base for the consumer-to-consumer clothing market, which has existed throughout time. New technologies, however, have opened up platforms for new kinds of exchange. The second hand clothing industry has taken new forms both in Finland and on a global level. Modern, social approaches to fashion commerce include swapping, renting, and purchasing in a variety of channels (Niinimäki et al. 2015, 1880). A defining factor is that a majority of these new channels are enabled through the internet. Like with ecommerce in general, technology has brought a wide selection of second-hand clothing within the reach of all consumers. This has enabled significant growth for the second-hand fashion industry. According to Kestenbaum (2018), 44 million women shopped second hand clothing in 2017. The global figure increased by 25% from 2016. While traditional second hand shopping in Finland is popular across all age groups (Vihreät Vaatteet, 2016), modern channels for exchange are often more widely adopted by young consumers (Niinimäki et al. 2015).

C2C consumption extends to both cheap fast fashion as well as expensive designer fashion. Some consumers even purchase new clothes based on their future C2C resale value. (Sihvonen & Turunen 2016.) Clothing C2C commerce is nowadays present in social media, mobile applications and websites focused on “peer commerce”. The Association of Commerce (2015) lists Facebook as one of the most common channels of C2C commerce in Finland. Facebook has built a significant presence as an online marketplace. In Finland, the most popular fashion C2C sales groups have over 20 000 members. Sihvonen and Turunen (2016) studied the nature of Facebook C2C groups and found that they are categorized based on the style and brand of clothing sold. Examples of Facebook groups included “quality brands”, “brand clothing”, “semi-brand clothing” and “minimalist flea market” to name a few. Facebook groups are based on trust among buyers and sellers, and they usually have a group admin to take care of any arising problems. Consumers agree on the prices and details of the purchase process themselves. The Association of Commerce (2015) also lists Tori.fi as a popular C2C

channel, which caters to consumers across numerous categories in Finland, including clothing. Most online market places rely on trust, as consumers deal with strangers as they sell and buy clothing from each other, often without an intermediary (Sihvonen and Turunen 2016, 288). The Finnish consumer-to-consumer environment has also seen the surfacing of new kinds of channels. The Finnish mobile application Zadaa works solely as an online flea market platform, unlike Facebook, which offers users a variety of other features. Zadaa is an app that connects consumers with other consumers who share the same clothing or shoe size. Users can buy and sell clothing, accessories and shoes through the app, which is already available in three countries. Platforms like Zadaa also have the benefit of functioning as an intermediary, decreasing the risk of not receiving a product or payment as agreed. (Zadaa.co, 2018)

On a global scale, second hand luxury and vintage sales have grown significantly due to C2C ecommerce companies like eBay, Vestiaire Collective and Real Real among others. Vestiaire Collective, a leading online C2C platform, delivers clothing and accessories from user to user worldwide while also ensuring the authenticity of the garment. Users post pictures of their clothes or accessories online and anyone can buy them through the platform. Vestiaire Collective is focused on luxury brands, stocking bags and watches valued up to over 100 000 euros. They also sell clothing and accessories from all popular high street brands, such as fast fashion chain Zara. (vestiairecollective.com.) Other similar competitors include, for instance, RealReal.com, Rebelle.com and Styletribute.com. eBay is an online marketplace established in 1995 and it is currently available in 180 countries worldwide. It was one of the first online market places to connect consumers selling and buying new and used items. eBay operates across a number of consumption categories, clothing being one of them. (ebayinc.com, 20.5.2018.)

Pedersen and Netter (2015, 258-259) have conducted research in the niche field of collaborative consumption in the fashion industry. Collaborative consumption involves those consumption activities that are based on collaboration and sharing of products and services. Although the concept has yet to capture significant market share in the industry, Pedersen and Netter (2015, 258-259) expect to see an uplift in collaborative fashion consumption in the future. New business models and initiatives have increasingly formed around the idea of swapping, sharing, renting and reselling clothes. Redistribution of neglected apparel could have major financial potential. In the UK, the estimated value of unused clothing was over 30 million euros in 2012 (WRAP, according to Pedersen & Netter 2015, 259). This included clothing that had not been worn in over a year. Sharing economy is also establishing its position in clothing consumption. (Norum & Norton 2017, 209.) McKinsey (2018, 17-18) explored new, innovative business models in their annual report on the fashion industry. Many of the emerging start-ups relied on business models related to the concept of sharing economy. VillageLuxe, for instance, is

a luxury rental site that builds on the megatrend of sharing and monetizing on underused assets. VillageLuxe currently operates in NYC, where the density of the population allows for a well-connected user base. Users of the site are welcomed by invitation only, after which they can rent clothing, shoes and accessories within the community on a weekly basis. This reduces the need of buying a new dress for every event, for example (Villageluxe.com 20.5.2018). Another example, Grailed, defines itself as a community marketplace for men's fashion. McKinsey (2018, 17-18) describes these companies as industry disruptors that are shaping the future of the ever-changing fashion industry.

Vintage is a separate category of second hand clothing that is not necessarily used, but merely pre-owned. Vintage clothing items are unique pieces that are at least 20 years old and represent a specific decade and style. Vintage items are characterized as clothes that are unlikely to be found new in store. (Sihvonen & Turunen 2016, .) Many small vintage shops have found a sales channel in Instagram, widening their audience from the locality of their physical shop. The vintage shops create Instagram accounts and post pictures of the clothing, giving followers a chance to place an order through email, for instance, based on information from the account. Purchasing could also be as easy as commenting on a picture seen on social media. Stratton and Bhasin (2018) call the phenomenon a "new breed of shoppers" engaged in social commerce. Social platforms are also steadily modifying their service offering to better suit the needs of modern consumption practices. (Stratton & Bhasin 2018.)

Pedersen and Netter (2015, 258-259) also introduce a lesser known concept, fashion libraries. Generally, a fashion library functions as a shared closet for members only. Membership fees are often included, providing users access to a selection of clothing. No further rental fees are charged, and consumers are allowed to check out a certain amount of clothing items for a fixed time period. For example the Helsinki Fashion Library has a selection of more than 750 items that are available to its approximately 100 members. Motives for using such libraries range from pursuing sustainability to having access to different styles. Salmi (2018) reported on the expansion of Vaatepuu, a clothing library that strives to make high quality Finnish design accessible for everyone. With an increasing customer base, the clothing project aims to reduce the ecological footprint of fashion consumption while catering high quality garments to its customers. By renting special clothing from a library, customers would only need to own a core set of good quality basics to accompany their rental pieces. Clothing libraries rely on physical stores from where they lend clothes, but many of them have a presence in social media as well. This enables consumers to check availabilities and reserve certain items before picking up the clothes in store.

The connection between sustainability and second hand purchasing was described in chapter 3.2.2. Modern C2C consumption has taken different forms from traditional flea

market consumption behavior. Different platforms offer specific communities for different kinds of clothing. Modern C2C consumption could offer access to designer clothing for instance, or work as a channel for disposing of old clothing at higher prices than at a physical flea market. Thus, it is interesting to investigate what is the role of ethical consumerism in the modern environment of C2C consumption.

3.4 Fashion consumption in Finland

The Finnish Textile and Fashion Association compiles a yearly report on Finnish fashion consumption. According to the report, Finnish people spent 658 euros on clothing on average in 2016. This amounts to a total industry worth of 3,3 billion euros. Although spending on clothing has increased throughout the 21st century, its relative portion of total private spend has decreased. This is due to the fact that clothing prices have decreased since the year 2000, enabling larger consumption with a decreased relative spend. Also the growth of the Finnish population has increased the overall industry worth. The below figure depicts the development of consumption from 1975 to 2017. It combines clothing and footwear as the categories are usually combined in reporting. (Tilastokeskus, 2017¹⁴)

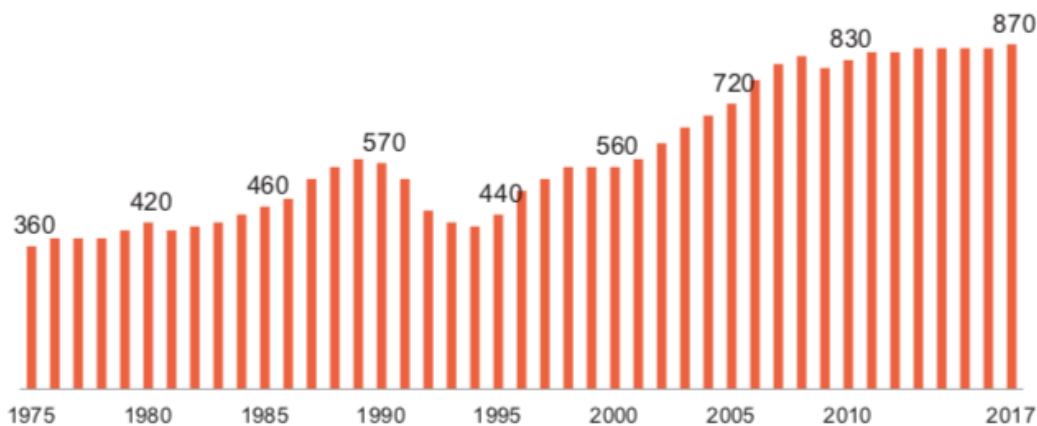


Figure 4 Euros spent on average on clothing and shoes in Finland from 1975 to 2017

Over 40% of Finnish people favor domestic fashion brands when shopping, but feel that they're not widely available. The most common points of purchase convey an appreciation for convenience and low prices. According to research done by the Association of Finnish Fashion and Textiles, the Swedish fast fashion chain H&M is the

¹⁴ according to Suomen Muoti ja Tekstiili ry (2017)

most popular place for clothes shopping among Finnish female consumers. The second most popular choice is Prisma, a Finnish hypermarket chain that has a presence throughout the country. Supermarkets generally cater to an older segment, while fast fashion is popular in the younger age groups. Supermarkets are also strongly represented in the study as older people have better buying power. Especially young people have also shifted much of their clothing spend online. Interestingly, the survey found traditional and online flea markets the third most popular purchase channel. Among male consumers, C2C channels were not mentioned as a main point-of-purchase. (Finnish Fashion and Textile, 2017.)

While consumers still focus the majority of spend on brick and mortar stores, online shopping has seen extensive growth. Online shopping has become an established form of commerce among Finnish fashion consumers. Young consumers are leading the movement, but to an extent, Finnish women purchase online across all age groups. (Finnish Fashion and Textile, 2017.) According to Postnord (2017), the drivers of online shopping in Finland include the potential of saving time and money, and shopping whenever and wherever, adding to an allover experience of convenience. Finland stands out as the Nordic country relying most on international ecommerce. Ecommerce sites in China, UK, Sweden and Germany were the most popular destinations for clothing online shoppers. (Postnord 2017, 1-11.)

In addition to purchasing newly made clothing, Finnish consumers frequent flea markets across all age groups and social classes (Vihreät Vaatteet, 2016). Accompanying traditional flea markets, new forms of C2C commerce have surfaced with the growth of ecommerce. With new kinds of online market places changing the field, consumer behavior in the C2C market has also evolved. The Finnish Association of Commerce (2015) conducted research on the Finnish consumer-to-consumer market and found that it has quickly grown from a marginal phenomenon to large-scale commerce. Hannu Saarijärvi (Koikkalainen 2016) states that the growth of “peer commerce” does not only stem from technological advances, but also a shift in attitudes. Buying used items is no longer stigmatized as it might have been 20 years ago. He also claims that people have achieved a greater awareness of the impact of their consumption. In Finland, the total value of the C2C market is estimated at 300-400 million euros annually. The differentiating factor from traditional second hand commerce is that it takes place on different internet forums, online marketplaces and platforms. Two thirds of Finnish internet users reported to having bought something from another consumer through an online marketplace. Online consumer-to-consumer consumption has become especially popular among young consumers. The most common consumer products sold and bought include home electronics, clothing and shoes, furniture and sports equipment. According to the report, consumers are drawn to the C2C market in pursuit of lower prices and good bargains. While 78% of C2C consumers reported financial savings as a

key motivation, a third of consumers reported to actually enjoying the new type of commerce. (Finnish Association of Commerce, 2015.) From a research perspective, it is important to highlight that the C2C market is also a more ethical option than buying new products. Regarding this study, it is relevant to examine whether the price factor dominates in the Finnish C2C fashion market as well or if ethical motives play a role in modern C2C consumption.

Finnish consumers dispose of approximately 70 million kg of clothing and textile waste annually, which amounts to 13 kg per citizen. 55 million kg end up as waste, which is then burned by Finnish power plants. Previously a part of textile waste ended up in landfills, but it became prohibited in 2016. (Liukkonen 2016.) In 2017, UFF, a Finnish clothing recycling and donations operator, reported to receiving 15 million kg of clothing a year, which is 3 kilos per citizen. Other popular donation channels include the Finnish Red Cross. (Manner 2017.) Finnish people are thus more likely to dispose of their old clothing by throwing it away rather than recycling.

4 METHODOLOGY

This chapter introduces the methodology of this study. This is followed by an assessment of the methods of data collection and analysis. Lastly, the reliability and validity of the research will be discussed.

A quantitative approach was chosen for this study as it is considered an appropriate method for examining causality and correlation between different phenomena (Malhotra & Birks 2006, 132-133). The decision was made based on the purpose of this study and the nature of the research questions. This study attempts to profile consumers based on clothing consumption habits and self-reported motives, attitudes and values. A quantitative approach was deemed useful in recognizing structures within consumer behavior to be able to find homogenous groups that represent certain behavior patterns.

4.1 Data collection

An online survey was selected as the means of data collection. A survey provides a useful way of quantifying the opinions of a sample of a population. Using a sample, a selected portion of a larger group, enables faster and cheaper data collection compared to examining the larger group as a whole (Schofield 2006, 26-27). A Webropol survey was used to collect responses from female respondents aged 18-26. Online surveys have been found to be a particularly suitable form for reaching young respondents (Van Selm & Jankowski 2006, 437). The respondents had to be enrolled either in Turku School of Economics or the Humanities Faculty at University of Turku to take part in the survey, as internal channels offered a convenient means of reaching a large amount of potential respondents. The survey was distributed through email lists for the faculty of humanities and economics and the data was gathered between 11.4-11.5.2018. The survey link was kept open for four weeks in order to gather a sufficient number of responses. The survey consisted of three sections. The first part gathered respondents' background information and the second part focused on questions regarding fashion consumption habits and motives. The last section measured ethical consumerism among respondents. The survey items contained both positive and negative wordings in order to sustain the attention of the respondents throughout the survey. Some questions also intentionally overlap with each other and thus measure the same thing. Especially when examining ethical consumer behavior, it is useful to confirm the behavior patterns with additional questions. According to Hill and Lee (2005, 205), consumers have the habit of reporting more ethical behavior than what actually takes place in reality. This is known to make the research of ethical consumerism more challenging, which will be considered in further analysis.

4.1.1 Selection of respondents

In order to successfully select a sample, the population of the research had to be defined. The population of the study depends on the potential generalization of the results. For this study, the population consisted of young Finnish women. The sampling frame were the students in University of Turku (Humanities and Business faculties) who had the opportunity of participating in the survey, while the final sample of 576 students were the ones who participated. To the author's knowledge, very little research has been conducted on the fashion consumption habits of Finnish consumers. Finnish consumers were also a relevant audience based on the research questions. The contemporary phenomenon of C2C consumption has seen significant growth among Finnish consumers in the last years (Finnish Association of Commerce 2015), which plays a key role in this study as it affects multiple phases of the consumption process and is also a relevant theme regarding ethical consumption.

Young women were chosen as the population for multiple reasons. First of all, women's clothing market is significantly larger than men's. (Infantes 2017) In addition to purchasing more clothing in general, women have different consumption patterns compared to men that were deemed more favourable for the purpose of this study. Women consume fashion on a more frequent basis, which was a more optimal setting in order to have survey respondents estimate their consumption behavior during the last six months. (Sebald & Jacob 2017, 188-191.) In comparison, if one only purchases clothing once a year, the survey is harder to build around such different consumption profiles. 3-6 months offers a reasonable time window for respondents to be able to fairly accurately estimate their past actions. In addition to differences in general fashion consumption behavior, women also represent a different profile in second hand clothing consumption (Finnish Fashion and Textile, 2017), which was an important theme in this study. Different channels have enabled buying and selling second hand clothing online. Facebook is currently one of the most popular channels for C2C exchange in Finland (Association of Commerce, 2015). The most popular Facebook groups have thousands of active users, of which most are women (Sihvonen & Turunen 2016, 288). To achieve high quality survey results, examining women as the more active consumer group in both fashion consumption and more specifically, C2C consumption, was deemed the most fruitful.

The age of respondents was limited to 18-26 years. Young consumers were the most relevant group for this study, as the research questions were related to the adoption of modern consumption channels. According to Park and Lee (2017, 1401), young consumers are more likely to use mobile shopping channels compared to the older consumer segment. Young consumers thus have a lower threshold for adopting new consumption channels. Lim, Osmanb, Salahuddinc, Romled and Abdullahe (2016, 401) agree that online shopping in general has been particularly popular among generation Y. Younger

consumers also demonstrate a higher interest towards fashion than older consumers (Joergens 2006, 362), which is why this age limitation was appropriate for this study.

In the light of the ethical perspective of this study, it's also worthwhile to consider that young consumers have a defining role in future ethical consumption. As drivers of the clothing industry, young consumers could also have a large impact in how fashion companies operate in the future. (Joergens 2006, 362.) This, in turn, means that the potential ethical consumption behavior of young consumers will have a larger impact on the fashion industry in the future. McKinsey (2018) states that millennials have a remarkable level of awareness and interest towards the sustainability of fashion. They found that 66% of millennials are willing to spend more money on an ethical fashion brand, thus paying a premium for sustainability.

4.1.2 Sample attributes

The survey received 576 responses altogether. Slightly more responses were received from students in the humanities faculty (327) compared to business students (249). The survey contained an initial section to collect background information from respondents. Considering the faculty, age and income level of the respondents may provide further insight into different aspects of consumption behavior. Especially the income level of respondents is an important factor when examining fashion consumption patterns.

Three age categories were provided in the survey to break down the respondent pool into different profiles. As the study examines ethical consumerism, it is interesting to see whether ethical consumption behavior varies in different age groups. Fast fashion chains are known to target young consumers (Morgan & Birtwistle 2009), but on the other hand, the millennial consumer is said to have a critical attitude towards traditional, unsustainable business practices that do not reflect the generation's values (McKinsey 2018). The age limitation also follows that of Joergens (2006) in his study on young consumers and ethical consumption behavior. The border figures, 18 and 26, are also age groups that are eligible in the Finnish university environment. However, 18-20 year olds represented a smaller portion of the respondents, while 21-23 and 24-26 both collected at least 40% of the answers. This mirrors the age distribution of Finnish universities. According to a Finnish news paper (Harmaala & Tiihonen 2017), less than 30% students who begin their studies are under 20 years old. This survey was directed to both bachelor's and master's students, which explains the lower amount of 18-20 year-old respondents.

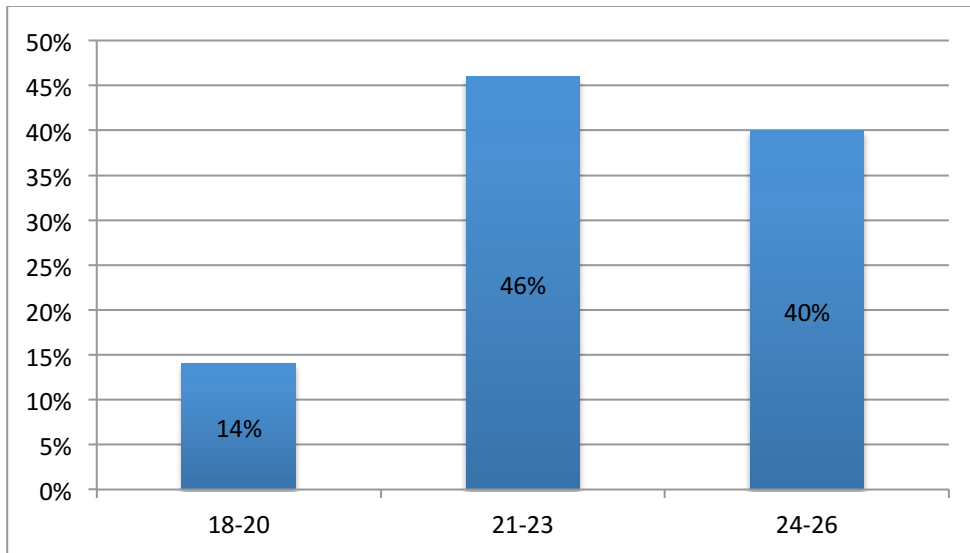


Figure 5 Respondent age chart

As defined in the survey, monthly income included both the student allowance and any other income that students may receive. The income distribution is weighing strongly on the left, as students typically have limited income levels. The student allowance in Finland can be above or below 500 euros depending on when students have started their studies and which allowances they're receiving. Thus the students that reported to earning 0-500 euros are likely to have the student allowance as their sole income. While many have additional income, it was rare for students to earn more than 1500 euros per month. Only 11% reported to earning more than 1501 euros on a monthly basis (due to low figures the categories of 1501-2000 and >2000 euros are combined in Figure 6). Students that earned the most are likely to be already working fulltime while maintaining they're student status, which is especially a possibility in the highest age group of 24-26 years.

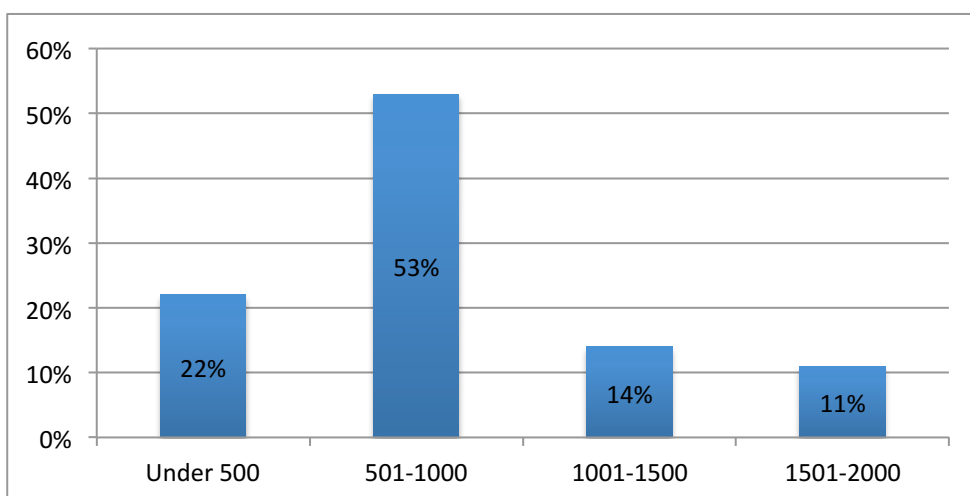


Figure 6 Respondent income chart

4.2 Measures

4.2.1 *Survey questions*

The first section of the survey contained questions regarding fashion consumption, including purchasing, using and disposing, as well as second hand consumption. Most questions involved a time limit (e.g. “during the last three months”) in order to help respondents better estimate their past actions and to extract more accurate data. The time frame also makes past actions more concrete, making it more likely for the survey to generate truthful answers. In addition to concrete actions, some of the survey questions were related to motives and attitudes regarding consumption.

The second section measured ethical consumerism. The measures surrounding ethical consumerism were based on the ECCB-framework (Ecologically Conscious Consumer Behavior) by Tilikidou et al. (2002). The original set of questions was narrowed down from 63 to 14 questions. The amount of questions had to be limited in order to maintain the interest of respondents. Some of the questions were also less relevant for this particular study. Questions that did not concern general consumption habits or could not be related to clothing consumption were excluded from the questionnaire to avoid confusion.

The below table displays the references that were used in formulating the survey questions. The survey also contained the author’s own questions, since previous quantitative research has not thoroughly addressed the whole consumption process or specific aspects of modern consumption practices (to the best of the author’s knowledge). Own questions were straight forward and covered different aspects surrounding the consumption process, such as how much money consumers have spent on clothing over the last three months, or whether respondents would purchase more clothing if they could afford it. The author’s own questions were also based on topics that were covered by theory, such as price or impulsiveness to name a few.

Table 1 Literature supporting the main themes of the survey

Theme	Reference	Items
Sustainable clothing consumption	Cf. Fischer et al. 2007	6.5 I try to buy clothes that are durable and high in quality.
		6.11 I avoid buying clothes that are manufactured in countries that often have poor working conditions.
		7.4 I often air out my clothes to avoid washing them too often.
		7.5 Instead of buying a new piece of clothing for an event, I often borrow from my friends.
		8.2 I dispose of clothes if they're not in fashion anymore.
		11.1 I have bought second hand clothing during the last six months.
Disposal motives and methods	Cf. Lee et al. 2013	7.2 I repair or have someone repair my clothes to increase their longevity.
		8.1 I dispose of clothes if they're in bad condition.
		8.3 I dispose of clothes if the size or fit is not good.
		8.4 I dispose of clothes when I've grown bored of them.
		9.1 I have disposed of clothing through regular waste disposal during the last six months.
		9.2 I've recycled some of my clothes during the last six months (Red Cross, UFF etc.)
		9.3 I've passed down my old clothes to friends or family during the last six months.

		9.4 I've exchanged clothes with friends during the last six months.
		9.5 I've sold my clothes via internet during the last six months.
		9.6 I've sold my clothes at a physical flea market during the last six months.
Second hand consumption	Cf. Yan et al. 2015	10.4 I don't buy second hand clothes because I don't like the idea that someone has already used them.
		10.5 I buy second hand clothes because of lower prices.
		10.6 I buy second hand clothes because I appreciate the uniqueness of the clothes.
		10.7 I buy second hand clothes because it's more sustainable than buying new clothing.
Ethical consumerism	Tilikidou et al. 2002	12.1 I choose the environmentally friendly alternative of a product, if there is one, regardless of price.
		12.2 I choose the environmentally friendly alternative of a product, if there is no significant price difference.
		12.3 I am interested in asking about the environmental consequences of a product before buying it.
		12.4 Whenever I have the choice, I choose the less polluting product.
		12.5 I try to avoid environmentally harmful products.
		12.6 I try to use less water.
		12.7 I try to use less energy.

		12.8 I have discussions with my family and/or friends about environmental issues.
		12.9 Discussions about environmental issues are very boring.
		12.10 I have never been seriously concerned about issues such as ground water and sea pollution.
		12.11 I don't think that I have anything to do with the destruction of animals or plants.
		12.12 Plants and animals exist primarily to satisfy humans.
		12.13 Environment protection is the most important problem of our time.
		12.14 The benefits of modern consumer products are more important than pollution, which results from their production and use.

4.2.2 *Reliability and validity of measures*

Behavioral research is prone to measurement errors, which gives reason to verify the reliability and validity of measures. The measures used in this research consisted of a section measuring the attitudes, motives and behaviors related to each phase of the clothing consumption process. The first section addressed clothing consumption with an emphasis on respondents' recent behavior. These questions were formed to map out current consumption habits and address different phases of the consumption process. The second section measured ethical consumerism, a concept modified based on the research of Tilikidou et al. (2002).

An exploratory factor analysis was conducted separately for both item sections in order to identify components that could be further used in a cluster analysis. The factor analysis measures to what extent respondents experienced that a certain set of questions is measuring the same concept. This enables the elimination of poorly functioning

items. The factor analysis ensures validity by confirming that the items are measuring what they should be measuring. (Malhotra & Birks 2006, 314.)

A factor analysis was conducted for items Q5-8 and Q10 using the Varimax rotation. The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) was .881, which is a satisfactory value, as the desired minimum value for the measure is .6. The KMO measures whether the items of the scale contain clear correlations and are valid for further analysis (Field 2012, 683-685). As a result of the factor analysis, four components (K1.1-K1.4) out of eight were selected for further analysis. Some components were left out due to cross loadings or for having less than two item loadings. See table 2 for the components and included items.

Upon performing the factor analysis for the concept of ethical consumerism (Q12), the items loaded on three different components: pro-environmental purchase behavior, activities, and attitudes (ECCB framework by Tilikidou et al. 2002). The Kaiser-Meyer-Olkin measure of sampling adequacy (KMO) received a value of 0,88, which is sufficient. Two components (K2.1, K2.2) were selected to be used in the cluster analysis. In this research, a loading of more than .3 was deemed sufficient, although Hair et al. (2006) state that strict limits for factor loadings do not necessarily exist. All six components were tested for Cronbach's alpha to ensure reliability. According to Malhotra and Birks (2006), a Cronbach's alpha value is acceptable when it reaches a figure higher than .6. All chosen components were suitable for further processing with a satisfactory Cronbach's alpha. The differences between the means of the components were also statistically significant according to the Anova table (Sig. = .000).

Behavioral variables are often ambiguous, (Nummenmaa 2009, 246). An existing form of measurement was used to measure ethical consumerism in order to produce reliable results. The questions were based on a condensed version of the ECCB-framework by Tilikidou et al. (2002). According to the framework, ecologically conscious consumer behavior consists of four components: pro-environmental purchase behavior, pro-environmental activities, pro-environmental attitudes, and recycling attitudes. The last component (recycling attitudes) was left out as the measures were not as general and could have thus confused respondents. This framework was deemed best to cover the concept of ethical consumerism in terms of validity, as it takes multiple aspects of ethical consumer behavior into consideration. Errors in validity could also be caused by, for example, the dishonesty of respondents. This may occur if respondents experience any social pressure to respond in a certain way. (Alkula et al. 2002, 89-91.) Ethicality may be a topic that could cause some to respond a certain way or to exaggerate or underestimate their behavior out of social pressure (Hill & Lee 2005, 205).

Table 2 Component items and the reliability of components

Component	Item	Cronbach's alpha
1.1 Ethical clothing purchase behavior	6.4 I favor Finnish brands when shopping for clothing.	.897
	6.6 I care about the working conditions in which my clothes are made.	
	6.7 I usually find out about the ethicality of a brand before purchasing.	
	6.8 I do not care where and how my clothes are made. (reversed)	
	6.9 The contents of my wardrobe show that I care about the ethicality of my clothes.	
	6.10 I favor ethical brands when shopping for clothes.	
	6.11 I avoid buying clothes that are manufactured in countries that often have poor working conditions.	
1.2 Tendency to purchase used clothing	10.1 I have a positive attitude towards second hand clothing.	.845
	10.2 I would like to purchase second hand clothing more often.	
	10.4 I do not buy second hand clothes because I do not like the idea that someone has already used them.	
	10.5 I buy second hand clothes because of lower prices.	
1.3 Impulsive fashion orientation	5.1 I would buy more clothes if I could afford it.	.619
	5.2 I buy clothes online more often than from brick and mortar stores.	
	5.3 I buy clothes every month.	
	5.4 I buy clothes spontaneously, for example for an event on the same night.	
	7.3 I might wear certain clothes only once or twice before disposing of them.	
1.4 Tendency to take care of clothing	7.1 I try to prolong the lifetime of my clothes by taking good care of them.	.696
	7.2 I repair or have my used clothing repaired to lengthen the duration of its use.	
2.1 Ethical behavior	12.1 I choose the environmentally friendly alternative of a product, if there is one, regardless of price.	.812
	12.2 I choose the environmentally friendly alternative of a product, if there is no significant price difference.	
	12.3 I am interested in asking about the environmental consequences of a product before buying it.	

	12.4 Whenever I have the choice, I choose the less polluting product.	
2.2 Ethical orientation	12.10 I have never been seriously concerned about issues such as ground water and sea pollution.	.618
	12.11 I do not think that I have anything to do with the destruction of animals or plants.	
	12.12 Plants and animals exist primarily to satisfy humans.	
	12.14 The benefits of modern consumer products outweigh the harm caused by pollution, which results from their production and use.	

4.3 Data analysis

4.3.1 Preparing the data

Upon closing the survey link, the data was extracted in Excel form and moved to IBM SPSS for further analysis. Answers were collected for most questions using a 5-point Likert scale. Respondents could select an answer between 1, “strongly disagree” and 5, “strongly agree”. 3 stood for a neutral response. Respondents were also given the opportunity to answer “0”, which stands for “I don’t know”. Answering was mandatory, however, Webropol still returned a few missing values for some of the survey questions. Each question was missing between 7 to 14 values, which amounts to 1,4% of missing answers altogether. This is not a significant amount in relation to the sample size of 576 responses.

In order to prevent any distortion of results, the “I don’t know” answers were also analyzed with a frequencies analysis. Answering “3” on the Likert scale implies that the respondent neither agrees nor disagrees with the statement. However, answering “0” instead of the neutral option “3” could indicate, for instance, the lack of knowledge of a respondent. Especially questions regarding ethical consumerism may be difficult for respondents to define accurately. Table 3 elaborates on the questions that received more than 4% of “I don’t know” answers.

Table 3 High shares of “I don’t know” responses

Statement	Share	Amount/Total
The benefits of modern consumer products are more important than pollution, which results from their production and use.	12.3%	71/576
I buy used clothing because of the opportunity of finding unique clothing items.	8.0%	46/576
I buy used clothing because of its cheaper price.	6.1%	35/576
I buy used clothing because it is more ecological than buying new clothing.	5.2%	30/576
The contents of my wardrobe are an indicator of my ethical consumption behavior.	5.0%	26/576

As seen in table 3, the fact that the survey questions were obligatory caused some respondents to resort to the “I don’t know” option. It is likely that these respondents do not use second hand channels at all, which made answering follow-up questions impossible. Additionally, assessing the ethics of one’s own behavior may be difficult for respondents. The fashion industry and its multi-faceted ethical components may appear complicated to an average consumer. Considering the lack of transparency and the undefined nature of ethical fashion (Joergens (2016, 361-362), the results are understandable. The total of “I don’t know” answers amounted to 1,41%, thus representing a minimal portion of the total responses. To exclude them from further analyses, both missing values and “0” values were recoded as missing values in SPSS.

The survey also contained negative items that required additional processing. Negatively phrased items were reverse coded in SPSS in order to align the logic of the responses.

4.3.2 *Analyzing the data*

The analysis of data was conducted in IBM SPSS. The program was utilized for cleaning, describing, preparing and analyzing the data. Most importantly, this research employed the factor and the cluster analyses to provide intended results. The means of analysis were chosen based on the research objectives.

The results of the research describe the consumption habits of the respondents. Means of all items are examined to explain the data. Questions 1-4 of the survey offered background information on the respondents, such as age and monthly income. The data

regarding respondents' background information was taken into consideration using Pearson correlation analyses and cross tabulation.

Finally, two different analyses were conducted to identify different consumer types based on the survey data. A factor analysis revealed the mutual loadings among different items. Factor analysis is an exploratory method that identifies underlying structures within data. It is useful for observing correlations among a large set of variables. The analysis was conducted using Varimax rotation, which is an orthogonal method widely used in marketing research. (Hair et al. 2014, 89-91.) After the factor analysis, certain items were eliminated from further analysis due to cross-loadings. 16 components were initially identified, which were further examined to narrow down the selection. 6 components were selected based on what best supported the theoretical framework and the research objectives. The validity of the six components was tested using Cronbach's alpha.

An exploratory cluster analysis was used as a subsequent method after the factor analysis. While the aim of the factor analysis was to group items that load together, the cluster analysis was used to identify consumer groups based on the resulting components of the factor analysis. The factor analysis thus provided consumption related attributes that differentiated the different clusters from each other. The cluster analysis was executed using 2, 3 and finally 4 clusters, out of which 3 turned out being the most suitable option considering the components and the data output. The goal of the cluster analysis is to find a simple structure that represents homogenous groupings while suiting the context of the study (Hair et al., 424).

4.4 Reliability and validity

The quality of quantitative research is evaluated by assessing the reliability and the validity of the study. Reliability refers to the consistency of the research methodology. It determines whether the methods used are able to perform reliably when used in another setting or by another researcher. (Saunders & Lewis 2012, 127-128.) The reliability of this research was increased by describing the execution and methodology in a detailed manner in order to enable for the study to be repeated if necessary. An online survey enhances the trustworthiness of the study by increasing the objectivity of the research as the researcher is not able to influence the respondents at the time of data collection. A survey can also be reused in the same format.

Validity refers to whether the measures truly measure what they are supposed to, and therefore, whether the findings actually describe the correct phenomenon. Internal validity is concerned with whether the methodology exposes the findings to different bias. External validity refers to whether the findings can be further generalized beyond the

respondent pool. (Saunders & Lewis 2012, 127-128.) The validity of the research was maximized beforehand with the careful selection of measures. Measuring ethical consumerism was done through examining consumer attitudes, activities and behavior according to the ECCB-framework (Tilikidou et al. 2002), which has been tested in prior use. The measure of ethical consumerism was also tested using a factor analysis. Due to existing research gaps and the contemporary nature of the research topic, it was also necessary to create new measures. In order to investigate the current consumption habits of young Finnish women, the researcher's own measures were added to compliment existing measures. This was necessary considering the fact that clothing disposal and online second hand shopping have not been thoroughly covered in existing quantitative research (to the best of the author's knowledge). This poses a slight risk to validity, however, in social sciences it is natural that research questions cannot be repeated endlessly (Alkula et al. 2002, 93).

The validity of quantitative research is dependent on successful data collection (Malhotra & Birks 2006, 314). The validity of research could be compromised if the survey questions are poorly formed or if the respondents have an incentive to answer dishonestly. According to Alkula et al. (2002, 89-91) responses may be affected by social pressure. Respondents may feel the need to answer according to external expectations or according to what is generally acceptable. In this research, the presence of an ethical element may pose a slight risk to validity, which is taken into consideration when analysing the survey data. According to Hill and Lee (2015, 205), people tend to report more ethical behavior than what is observable in their actions. This is called the attitude-behavior gap. While multiple studies have reported a significant level of ethical beliefs and attitudes among consumers, they do not seem to transfer into purchase behavior. Ethical attitudes and beliefs also seem to be growing at a higher rate than ethical behavior. (Carrigan & Attala 2001, 566.) The attitude-behavior gap is taken into consideration in examining the results in chapter 5. To minimize the risk, multiple questions measuring the same concepts were included. These were worded in ways that required the consumer to reflect on past actions instead of merely stating what they would do in a hypothetical situation.

Using an online survey to collect data minimizes the risk of bias, as the researcher is not present and thus cannot influence the respondents during data collection. According to Aaltola and Valli (2001, 101-102), survey research contains the risk of ambiguity; respondents may misunderstand some of the research questions. As the survey takes place online, respondents cannot ask for clarification during responding. To minimize this risk, the survey was tested by acquaintances of the researcher prior to further distribution. Minor improvements were made on the phrasing of the questions based on feedback. To further decrease the risk of error on the respondent side, the survey questions were translated into Finnish. The wording of questions plays an important role in gathe-

ring results in a trustworthy manner. The survey contained reverse items to maintain the concentration of respondents and to confirm truthful answers by prompting respondents to answer the question from another point of view. To further improve the validity of the study, multiple questions were presented for some topics measuring the same concept. The external validity of the research and thus the generalizability of the research were improved due to the large sample size that included respondent across different ages and faculties. (Field & Hole 2003, 57.)

5 RESULTS

This chapter discusses the results of the study and proceeds through the research questions that were initially outlined. In a continuously changing fashion market, the purpose of this study was to profile young Finnish female consumers based on their consumption motives and habits. Considering the dominance of fast fashion consumption (Bhardwaj & Fairhurst 2010) and on the other hand the popularization of niche phenomena such as increasing ethical awareness (McKinsey 2018) and emerging consumption channels, the current state of consumption is an important indicator of the direction in which the industry is headed.

The results are discussed from a comprehensive perspective that considers all phases of the consumption process (see figure 7). The first section discusses the motives related to young women's consumption habits. Later, the impact of C2C-channels and ethical consumerism are addressed. The last section of the results divides respondents into three consumer types based on a cluster analysis, which provides an overview of the consumer profiles currently found in the Finnish fashion market place.

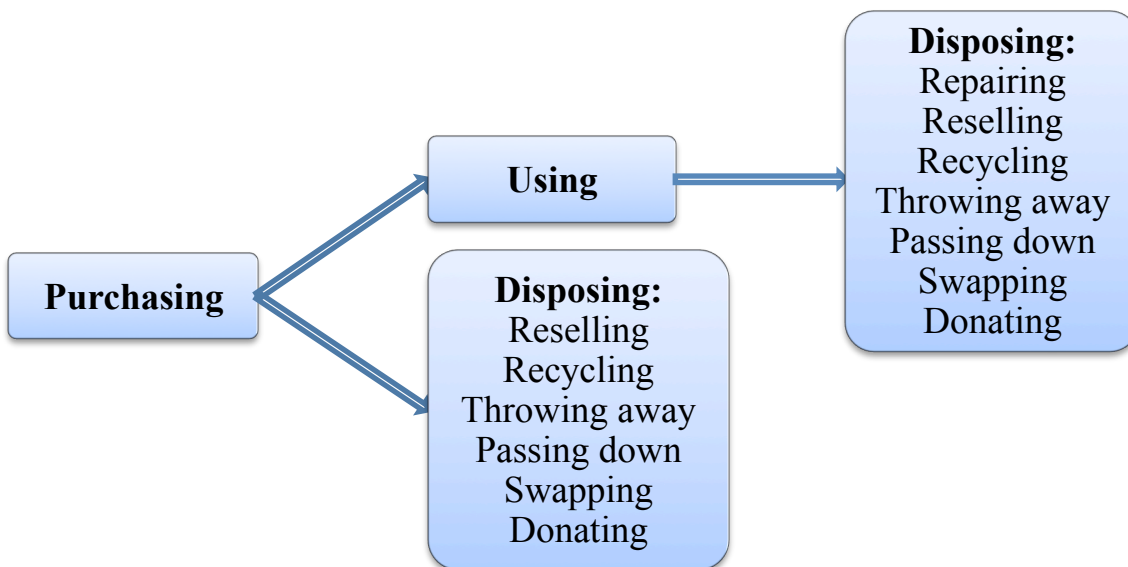


Figure 7 The process of consumption

5.1 Motives affecting the consumption habits of young women

5.1.1 Purchase behavior

The purchase behavior of young women is driven by a range of motives, values and external factors. These were examined using various survey questions surrounding the consumption patterns of the respondents.

Figure 8 elaborates on the spending on clothing over the last three months (from the moment of data collection). A significant amount of respondents (36%) use very little money on clothing, reporting a spend of 0-100 euros over the last three months. The largest share of respondents (45%) are placed in the second category, having spent 100-300 euros on clothing. 15% of respondents reported their spend at 300-600 euros. Spending over 600 euros over the last three months was very rare, as only 2% indicated a spend of 600-1000 euros and another 2% reported spending over a thousand euros on clothing.

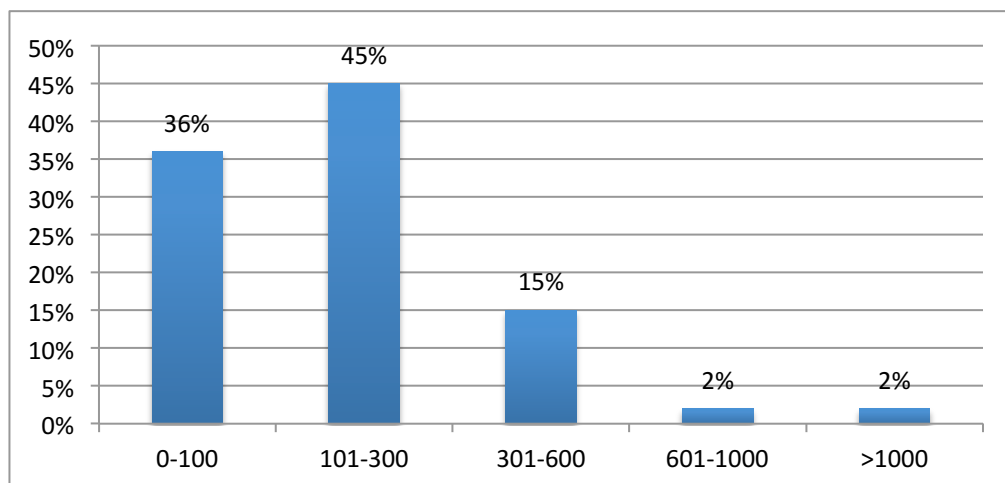


Figure 8 Euros spent on clothing over the last three months

A Pearson correlation analysis between the amount of money spent on clothing and respondents' monthly income revealed a mild correlation of .362. This indicates that additional income does not often translate to additional clothing purchases, as the correlation is not very strong. Respondents were also asked whether they would purchase more clothes if they had more money. Interestingly, the mean for Q5.1 was 3.65 (Likert 1-5), indicating that respondents would buy more clothes if they had more money. This could be a desire related to the aspirational nature of clothing purchases (Banister & Hogg 2004, 851), but one that does not necessarily realize in practice.

The correlation analysis also showcased a slight negative correlation of $-.300$ between monthly income and the importance of low clothing prices. Naturally, an increase in income partly removes the pressure of purchasing low priced items. Price is an evident factor in purchase behavior among young consumers, since the monthly income of students (in this case all respondents are students) is most often limited. Joergens (2006, 370) as well as Park and Sullivan (2008, 184) agree that the price factor plays an important role in influencing the purchase behavior of young consumers.

Question 5, the first Likert-scale set of questions, explored the purchase habits of the respondents. Figure 9 depicts the profile of means of responses. Respondents reported to buying clothes for the long term, as well as making need-based decisions when shopping. A particular need seems to be a more significant motive for purchasing than a spontaneous urge. Among respondents, it was rather rare to buy clothing on a monthly basis. The responses also suggest that brick and mortar continues to be the most important channel despite the aggressive growth of online clothing retail (Fung 2018). Respondents mostly disagreed with the thought of favoring online channels instead of physical retail locations.

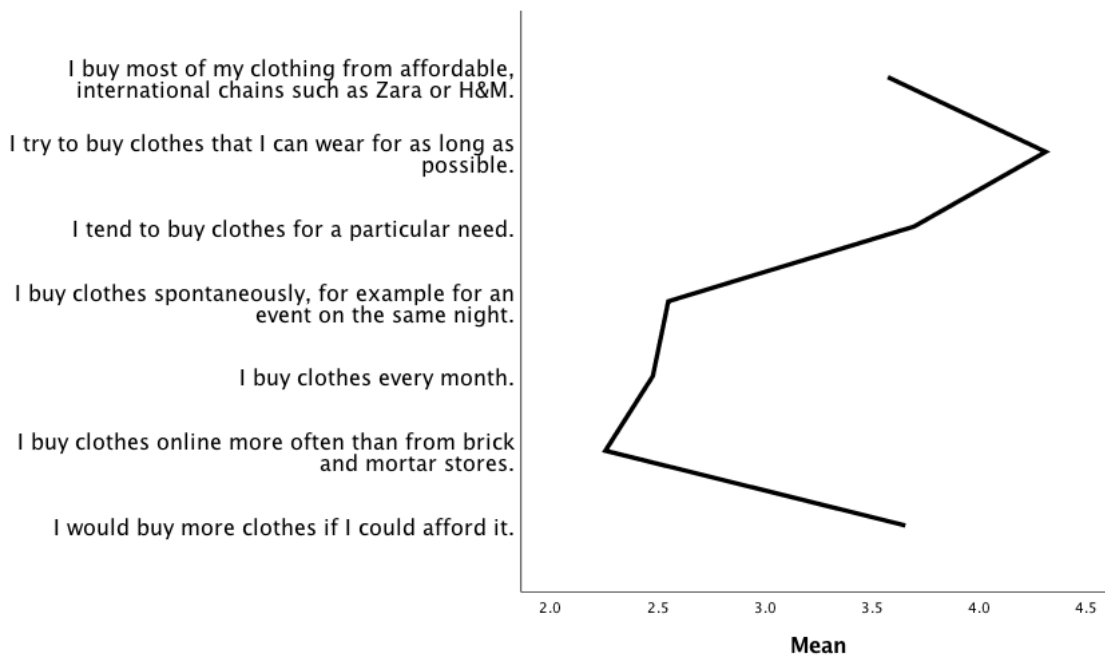


Figure 9 Profile of means: Q5. Clothing purchase behavior

A large share of respondents agreed to buying most of their clothing from affordable chains such as Zara or H&M. This forms a slight contradiction with wanting to buy durable clothing, as the likes of H&M and Zara are renowned for relying on a 10-wash benchmark for their clothing, after which the clothing has seen its best days. The concept of disposability also encourages consumers to purchase low priced items as passing trends fade with the clothes themselves. (Joy et al. 2012, 275-276).

Question 6 investigated the motives, attitudes and values related to clothing purchase behavior. Respondents strongly agreed to being prepared to pay a higher price for higher quality clothing. According to Yoo et al. (2000¹⁵) product quality is one of the most important factors when evaluating a brand's overall value. On the other hand, the results indicate that price plays an important role in purchase decisions and, furthermore, many found low clothing prices important.

Respondents were not very selective regarding the manufacturing country of clothing either. There was a slight disagreement for Q6.11 regarding the avoidance of purchasing clothing that is made in countries that have a reputation of bad working conditions and modern slavery. On the other hand, respondents cared about the conditions in which their clothing was made, although this did not seem to lead to significant actions. Overall, questions regarding concrete actions did not score highly: respondents did not report to widely favoring ethical brands and they felt that the contents of their wardrobes would not indicate an interest towards ethical fashion. Also, respondents were not in the habit of researching the ethicalness of the brands they buy. A correlation analysis reveals that buying the majority of clothes from fast fashion chains is negatively connected to researching the ethicalness of a brand before purchasing. The negative Pearson correlation figure was fairly strong at -0.498 .

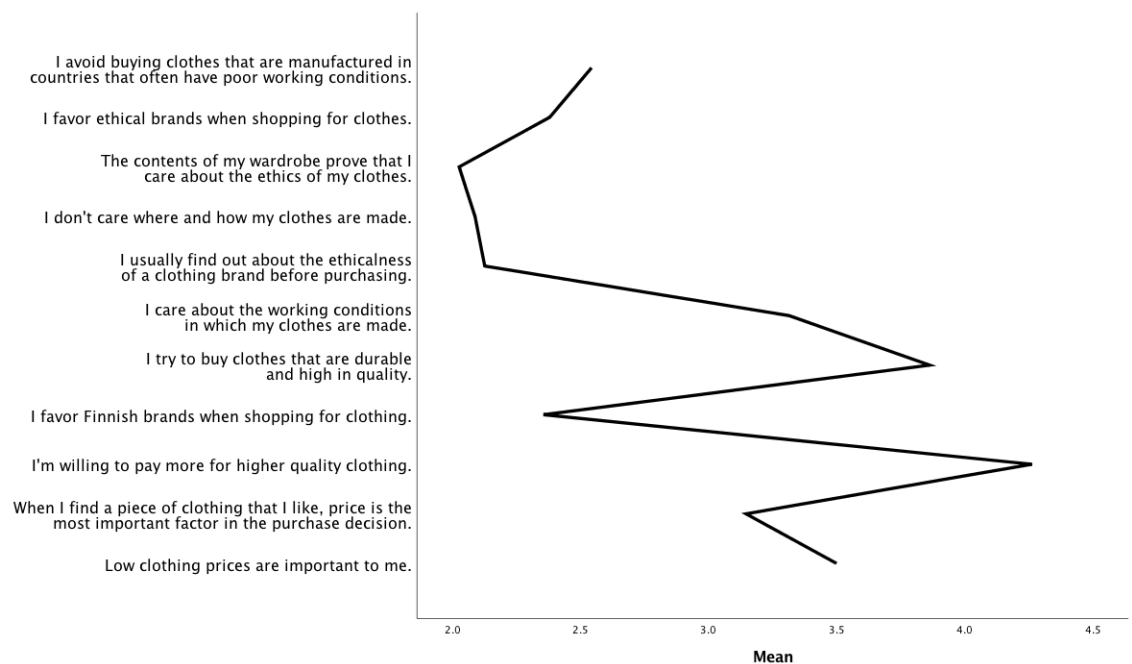


Figure 10 Profile of means: Q6. Motives and attitudes in clothing purchase behavior

¹⁵ according to Shen et al. 2012

It also seems that younger consumers are not as interested in Finnish fashion as older generations. According to Finnish Fashion and Textile (2017), over 40% of Finnish consumers favor domestic fashion brands when shopping, whereas the mean for Q6.4 (I favor Finnish brands when shopping for clothing.) was only 2.4 (closest to “disagree”). This could be impacted by the fact that young consumers seem to favor international fast fashion chains as well as online shopping, which conveniently removes locational boundaries. The globalization of the fashion industry has also made a wider offering available to Finnish consumers. As Postnord (2017, 1-11) reported, Finnish consumers most often direct their online purchases abroad.

Opposing elements arise from the survey results. Overall, respondents indicate the desire to purchase durable, good quality clothing, while being prepared to pay a premium for it. Responses also imply an interest towards ethical matters. However, many indicate that they mostly shop at international fast fashion chains and appreciate low clothing prices. There is also little interest towards researching ethical brands prior to purchase. This contradiction is supported by previous findings. According to Joy et al. (2012, 280-282) there is an existing conflict between young consumer’s interest in fashion and environmental sustainability. The interest in new styles and trends, however, is difficult to combine with environmental values. Q6 will be further analyzed from an ethical point of view in chapter 5.3.

5.1.2 Usage behavior

The usage phase of the clothing’s life cycle has a significant environmental footprint (Armstrong et al. 2015, 30). The way clothing is taken care of during use largely defines how quickly the clothing needs to be disposed of. Certain actions can prolong the lifetime of clothing, thus contributing to a more sustainable way of consuming.

Figure 11 elaborates on the survey results regarding Q7, which covered the usage phase of clothing consumption. Respondents agreed with taking care of their clothes to prolong their lifetime. Repairing (either by themselves or by using a repair service) was a common means of avoiding disposing of clothing ahead of time. Some reported to airing out their clothes to keep them in good condition without having to wash them too often. It was less frequent, however, to reside in borrowing clothing from a friend in the case of an event that required a specific type of outfit. Respondents also disagreed with wearing certain pieces of clothing only a couple of times before disposing of them. This kind of usage behavior is often associated with fast fashion and purchase behavior that favors spontaneity and trends (Bhardwaj & Fairhurst 2010, 166-167.)

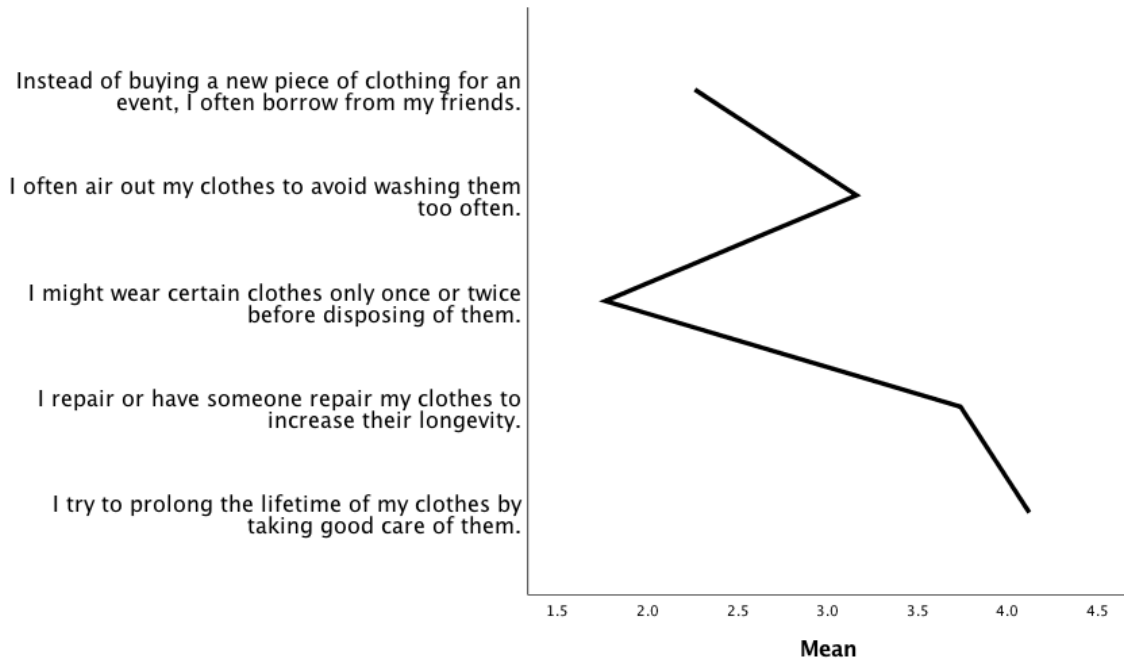


Figure 11 Profile of means: Q7. Clothing usage behavior

5.1.3 Disposal behavior

According to Raghavan (2010¹⁶), clothing disposal is defined as “a consumer’s attempt to get rid of a product that has outlived its purpose”. Consumers typically use more than one method for disposing their unwanted clothing. Understanding disposal habits is important as clothing disposal has significant environmental implications and generating knowledge and awareness around the topic may shed light on further needs for education and can contribute to the development of more sustainable consumption practices. (Lee et al. 2013, 68.)

Table 4 describes the disposal activities that respondents engaged in over the last six months. Six months was considered an appropriate time frame for observing disposal habits, as consumers were not thought to engage in disposal activities on a monthly basis. Seasonal changes may also have an effect on disposal, especially in Finland where people use a different set of clothes for summer and winter. A six-month time frame offered enough time to include potential seasonal wardrobe cleanings into the data. Responses were collected on a yes/no basis, excluding the amount of times a single respondent has engaged in a particular means of disposal. This offered a simpler survey setting for respondents. The results do not indicate the actual amount of clothing that is

¹⁶ according to Lee et al. 2013

disposed via each channel, but rather the share of respondents that engage in a certain means of disposal.

The most popular means of disposal turned out to be giving used clothing to friends or family. Over half (55%) of respondents had passed on their old clothing over the past six months. The second most common means of disposal was recycling (54%), which was defined as donating clothing to organizations such as the Red Cross or UFF (a Finnish organization). As mentioned earlier, UFF receives an average of 3kg of clothing yearly per capita in Finland (Manner 2017). The least used means of disposal was swapping with friends or family, which 19,5% of respondents had done in the last six months. Approximately one fourth of respondents had resold their previously used clothing. An important finding is that online reselling has become nearly as common as traditional offline reselling at flea markets, for example. With a 2,1 percentage point difference to offline reselling, online reselling has become a significant means of disposal.

A remarkable amount of clothing still ends up being thrown away as general waste. More than a third (38,3%) of respondents reported to having thrown clothing in the garbage over the last six months. As stated in chapter 3.4, it is probable that the amount of clothing that ends up as waste is higher than the amount that is recycled (Manner 2017). However, two of the most popular disposal habits (giving to friends/family and recycling) represent more sustainable means of disposal. Finland also has a highly developed waste management system, which means that to some extent, it is preferable to handle textile waste domestically rather than over-exporting to developing countries (Roivainen 2017).

Table 4 Means of clothing disposal over the last six months

Means of disposal	Yes		No	
	%	Count	%	Count
Garbage disposal	38,3%	220	61,7%	354
Recycling (Red Cross/UFF e.g.)	54,0%	309	46,0%	263
Giving to family/friends etc.	55,1%	316	44,9%	258
Swapping with family/friends etc.	19,5%	112	80,5%	462
Reselling online	24,8%	142	75,2%	431
Reselling offline	26,9%	154	73,1%	419

Koch and Domina (1999¹⁷) have divided common reasons for clothing disposal into four different categories. Reasons for disposal may be the outdated style of clothing,

¹⁷ according to Yan et al. 2015

poor size or fit, bad condition as the clothing wears out, or boredom with the clothing item. Outdated style was the only disposal reason respondents disagreed with. Becoming bored of a piece of clothing divided opinions, as many both agreed and disagreed with that statement. Poor fit or size and bad condition were the most popular reasons for disposing of clothing.

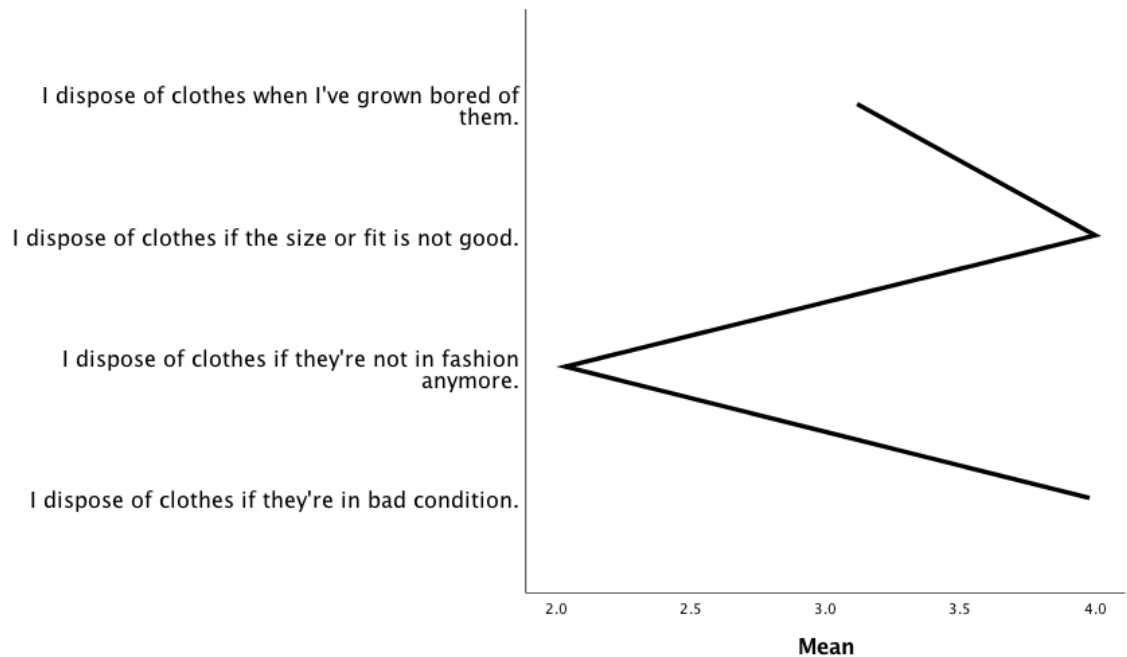


Figure 12 Profile of means: Q8. Motives for clothing disposal

5.2 The role of C2C channels in fashion consumption

The Finnish C2C market is an active consumption environment (Association of Commerce, 2015). Finnish consumers frequent flea markets across age groups and social classes (Vihreät Vaatteet), while online C2C commerce has also seen a steady rise in the recent years (Association of Commerce 2015).

According to findings, the respondents had a very positive attitude for purchasing second hand clothing. 61,5% strongly agreed to having a positive mindset towards buying second hand clothing. Only 2,3% strongly disagreed. More than a fourth (26,65%) of respondents agreed (agree or strongly agree) that they buy a major share of their clothing used. A majority of 70,3% (agree or strongly agree) also indicated that they would like to purchase a larger share of their clothing used than they currently do. Overall, the results indicate strong potential in the area of second hand commerce. However, more than 15% (agree or strongly agree) of respondents also said that they do not buy second hand clothing because they do not like the thought that someone else has already used

the clothing. According to Yan et al. (2015), the perception of contamination is indeed a common barrier for second hand shopping.

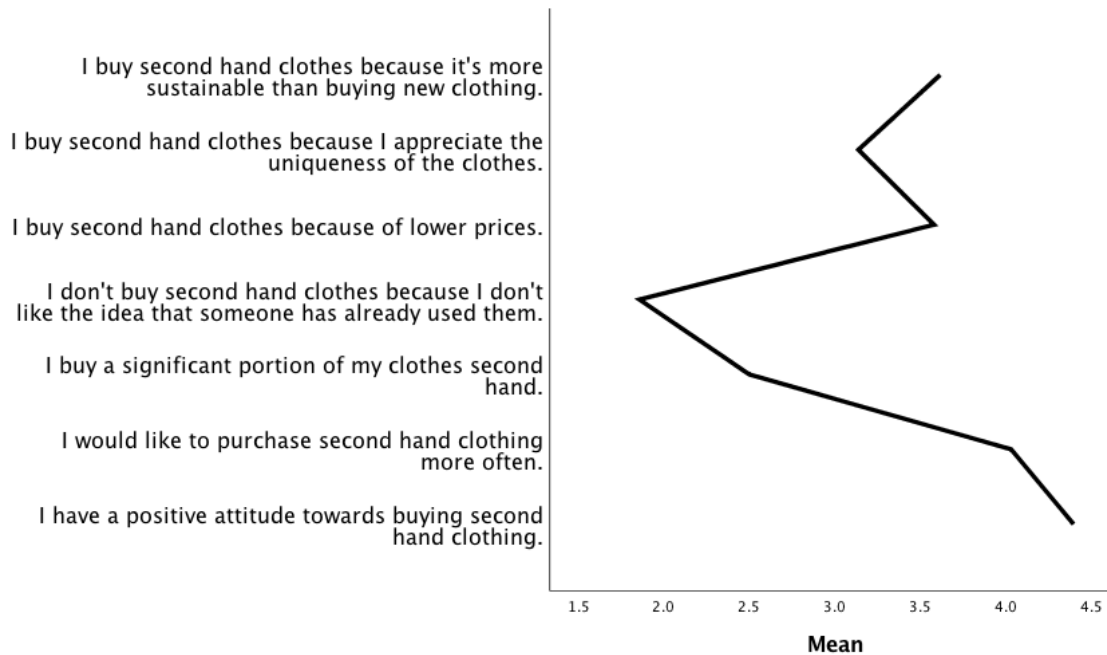


Figure 13 Profile of means: Q10. Attitudes towards second hand shopping

According to the survey results, 53,8% of respondents purchased used clothes during the last six months. Table 5 outlines the different channels that respondents used for second hand shopping. Nearly half (43,8%) of respondents purchased clothes from physical fleamarkets or other offline channels. These could include vintage shops, for instance. The other three channels were earlier defined as modern C2C channels. As visible in the table, the adoption rates of these channels seem to reflect the effortlessness of purchasing. Facebook flea market groups are one of the most popular channels for C2C clothing consumption in Finland (Association of Commerce 2015). As the majority of young consumers have a Facebook profile, few barriers exist to entering the Facebook groups for browsing and buying. One can also set up notifications for new posts in groups. The use of a mobile application requires separately downloading the application on one's phone, given that the consumer is aware of such an application. As there is no prior access to viewing the clothing selection in a particular application, consumers could lack an incentive for downloading a new application in the first place. Lastly, international online channels such as eBay and VestiaireCollective contain the limiting factors of trust and international delivery and returns. C2C consumption is based on trust (Sihvonon & Turunen 2016), which could be harder to establish with an unknown vendor in an international setting. International shipping fees are also more expensive, which could affect a purchase decision especially if the piece of clothing is of low price

itself. Overall, the findings indicate that traditional offline channels are significantly more popular for purchasing used clothing than modern online channels. This strongly contradicts the findings in chapter 5.1.3, which found that online C2C disposal channels have essentially become as popular as offline channels. Online C2C channels have thus been adopted more widely for the purpose of disposal rather than purchasing. Overall, however, purchasing second hand (53,8% of all respondents) is still more popular than reselling items (26,9% sold offline and 24,8% sold online).

Table 5 Purchase channels for second hand clothing during the last six months

Purchase channel	Yes		No	
Offline (e.g. fleamarket)	43,8%	252	56,2%	323
Local online channel (e.g. Facebook group)	15,1%	87	84,9%	489
Mobile Application (e.g. Zadaa)	8,5%	49	91,5%	527
International online channel (e.g. Ebay)	4,7%	27	95,3%	548

Three different motives for second hand purchasing were investigated through the survey. According to Yan et al. (2015), second hand consumption is widely driven by low prices, ecological motives, or the possibility of finding unique items. Consumers who agreed or strongly agreed with any of the motives (displayed in figure 14) were also significantly more likely to have used each of the second hand channels outlined in table 5. Figure 14 compares the motives for purchasing second hand fashion. Combining three Likert statements, the figure depicts the popularity of each motive. Respondents recognized the uniqueness of second hand clothing as the least motivating factor for second hand shopping. Interestingly, respondents reported that ecological motives were as defining as low prices in second hand consumption. Responses for the two motives resulted in the same mean of 3,4. The distribution of answers was different, however. While the price motive gathered a large amount of “agree” responses, ecological motives collected the most responses in the “strongly agree” section. This signifies a stronger relationship with ecological and thus ethical consumption matters. Green consumption and environmental topics are strongly related to personal values (Manchiraju & Sadachar 2014), which may have prompted a stronger response from respondents. In comparison, price motives did not generate such an emotional response, making “agree” an adequate option.

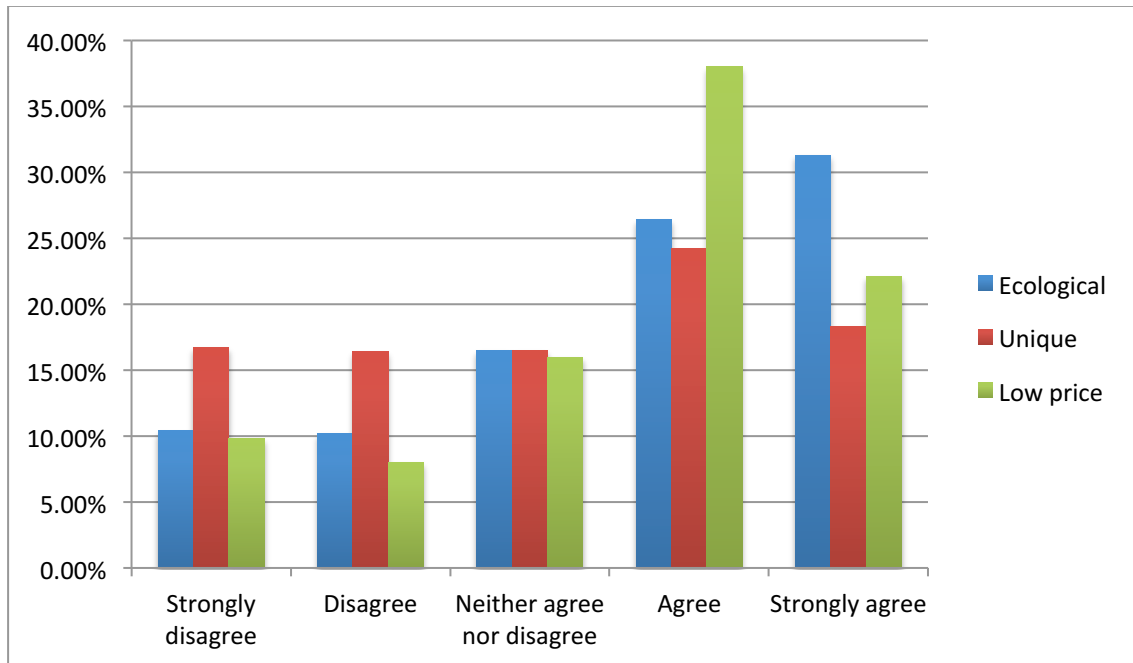


Figure 14 Motives for purchasing second hand fashion

The role of monthly income was insignificant in relation to second hand purchasing. A minor negative correlation of -0.086 existed between Q3 (monthly income) and Q10.3 (buying a significant portion of clothing used). This supports the finding that price is not the only factor motivating consumers in second hand consumption.

5.3 Ethical motives in fashion consumption

Ethical consumerism is a concept that was modified from the measurement scale for ecologically conscious consumer behavior (ECCB) by Tilikidou et al. (2002). It consists of items related to pro-environmental purchase behavior, activities, and attitudes. The measurement scale for ethical consumerism contained 14 questions. For further analysis, negatively phrased questions were reversed, so that values 1-5 would consistently indicate the strength of ethical consumerism (1=least ethical, 5 most ethical).

The attitude-behavior gap (Carrigan & Attala 2001, 566) becomes clear in responses for Q6. Respondents state that they care about the working conditions in which their clothes are made, as well as where and how they are made. However, respondents did not report to avoiding buying clothes that are manufactured in countries that have poor working conditions nor did they favor ethical brands when shopping for clothes. Importantly, consumers disagreed (mean 2.0) with the statement that the contents of their wardrobe prove that they care about the ethics of their clothing. This item allowed the respondents to answer only based on past actions without any hypothetical aspects to

the question. It sets a more realistic tone to the ethicality of the respondents' actions compared to highly ethical attitudes.

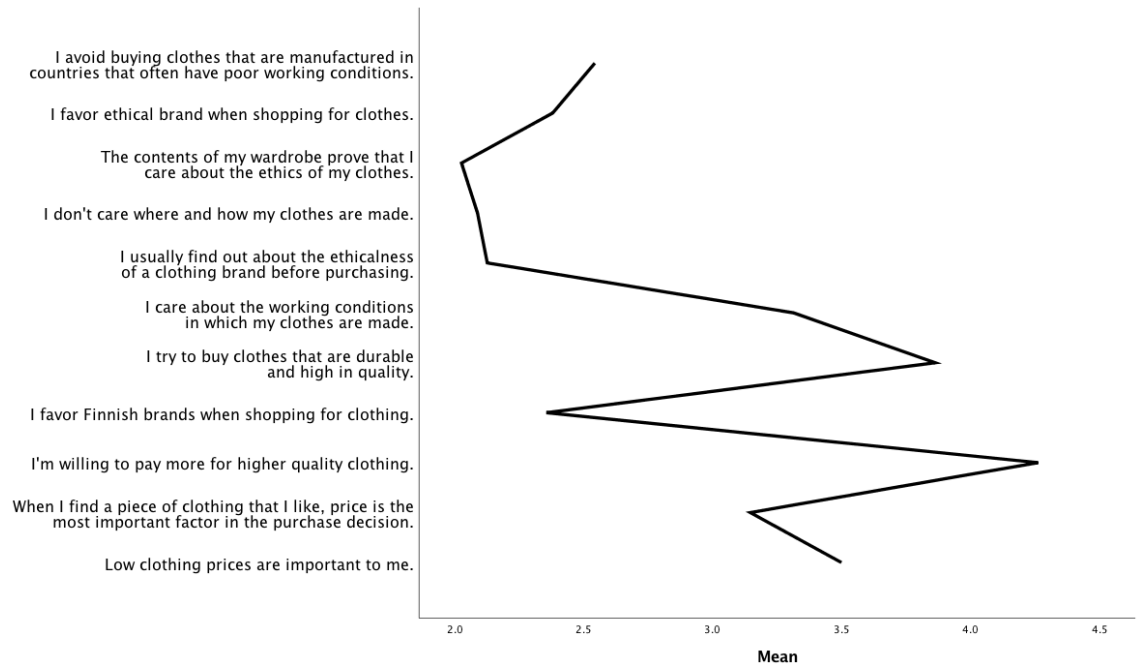


Figure 15 Profile of means: Q6. Motives and attitudes in clothing purchase behavior

Overall, respondents scored quite highly for items related to ethical consumerism. Figure 16 showcases the profile of means for the 14 items related to ethical consumerism. Responses were on the positive side for actions such as discussing environmental topics as well as limiting the consumption of water and energy. Respondents indicated selecting an environmentally friendly product if the price was not different (mean 4.3), but were not as agreeable to paying a premium on more sustainable products (mean 2.5). This somewhat contradicts with McKinsey's (2018) findings of young consumers being willing to pay a premium for ethically manufactured clothing. Interestingly, respondents were quite interested (mean 3.6) in asking about the environmental consequences of products pre-purchase, whereas interest towards researching the ethicality of a brand was mild (mean 2.1).

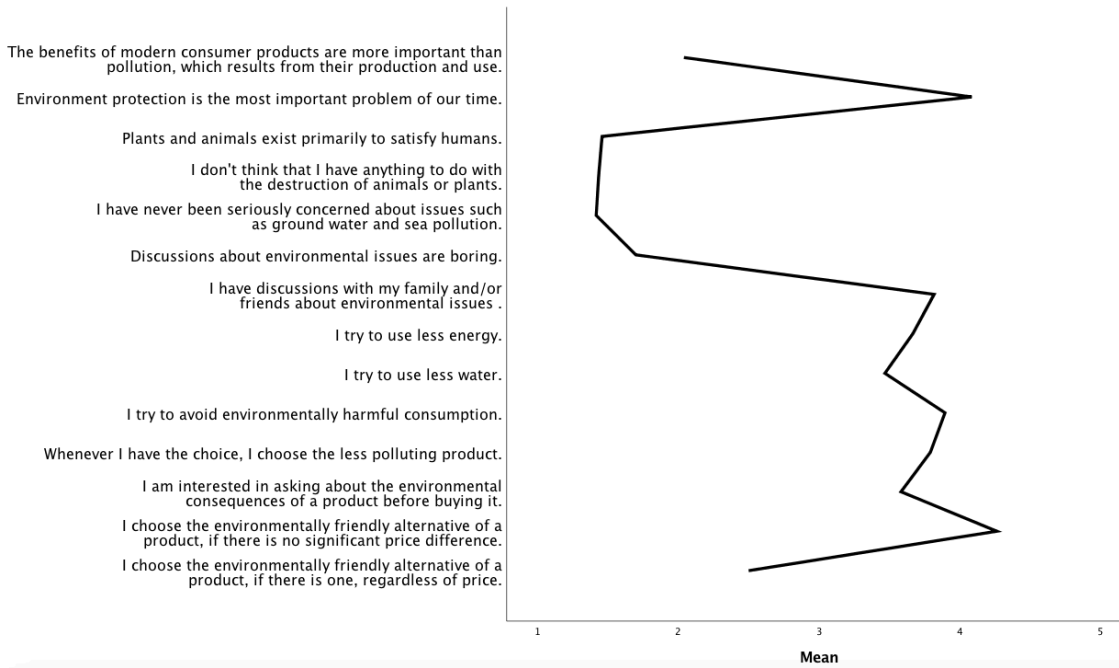


Figure 16 Profile of means: Q12. Ethical consumerism

5.4 Consumer types

The survey offered in-depth insights into the whole consumption process of the respondents. Based on the survey data, respondents were categorized into different consumer types to further understand the typical consumption profiles in the Finnish fashion market. A cluster analysis was used to group respondents based on their characteristics. While clustering the data to find homogenous groups, a cluster analysis also strives to maximize heterogeneity among different groups. Before conducting a cluster analysis, an exploratory factor analysis was performed (see methodology: 4.2.2). While cluster analysis groups objects together, a factor analysis enables the grouping of variables. (Hair, Black, Babin & Anderson, 415-420.) Therefore the factor analysis worked as an initial analysis before clustering the pool of respondents into groups. The following six components (table 6) were chosen for the cluster analysis based on their relevance regarding the theoretical framework.

Table 6 Six components selected for the cluster analysis

Component	Item
1.1 Ethical clothing purchase behavior	6.4 I favor Finnish brands when shopping for clothing.
	6.6 I care about the working conditions in which my clothes are made.
	6.7 I usually find out about the ethicality of a brand before purchasing.
	6.8 I do not care where and how my clothes are made. (reversed)
	6.9 The contents of my wardrobe show that I care about the ethicality of my clothes.
	6.10 I favor ethical brands when shopping for clothes.
	6.11 I avoid buying clothes that are manufactured in countries that often have poor working conditions.
1.2 Tendency to purchase used clothing	10.1 I have a positive attitude towards second hand clothing.
	10.2 I would like to purchase second hand clothing more often.
	10.4 I do not buy second hand clothes because I do not like the idea that someone has already used them.
	10.5 I buy second hand clothes because of lower prices.
1.3 Impulsive fashion orientation	5.1 I would buy more clothes if I could afford it.
	5.2 I buy clothes online more often than from brick and mortar stores.
	5.3 I buy clothes every month.
	5.4 I buy clothes spontaneously, for example for an event on the same night.
	7.3 I might wear certain clothes only once or twice before disposing of them.
1.4 Tendency to take care of clothing	7.1 I try to prolong the lifetime of my clothes by taking good care of them.
	7.2 I repair or have my used clothing repaired to lengthen the duration of its use.
2.1 Ethical behavior	12.1 I choose the environmentally friendly alternative of a product, if there is one, regardless of price.
	12.2 I choose the environmentally friendly alternative of a product, if there is no significant price difference.
	12.3 I am interested in asking about the environmental consequences of a product before buying it.

	12.4 Whenever I have the choice, I choose the less polluting product.
2.2 Ethical orientation	12.10 I have never been seriously concerned about issues such as ground water and sea pollution.
	12.11 I do not think that I have anything to do with the destruction of animals or plants.
	12.12 Plants and animals exist primarily to satisfy humans.
	12.14 The benefits of modern consumer products outweigh the harm caused by pollution, which results from their production and use.

The final cluster centers were examined to characterize each cluster based on the components outlined above. The values indicate how strongly a component can be attributed to a certain cluster. Based on the components, the clusters were given names to describe the consumer types that each cluster represents.

Final Cluster Centers

	Cluster		
	1	2	3
K1.1	3.42	2.15	2.12
K1.2	4.43	4.30	2.36
K1.3	2.18	2.75	2.88
K1.4	4.35	3.72	3.36
K2.1	4.17	3.06	2.81
K2.2	4.64	4.35	3.99

Figure 17 Final cluster centers (means)

The exploratory cluster analysis (see methodology 4.3.2) yielded 3 clusters that all populate a significant amount of respondents. The clusters have been named the *ethically oriented consumers*, the *second hand shoppers* and the *impulsive trend-followers* based on defining characteristics of the clusters.

Table 7 Number of cases in each cluster

Cluster	Number of cases	% of total
Ethically oriented consumer	245	43%
Second hand shopper	218	38%
Impulsive trend-follower	108	19%

The next chapters discuss the different consumer types based on the cluster analysis. What is noteworthy is that all three clusters score the highest means on component 2.2, ethical orientation. According to Hill and Lee (2005, 205), consumers often have the habit of over-reporting their ethical attitudes, which may not convert into concrete ethical behavior. In addition, component 2.2 contained intangible questions that merely describe attitudes. In comparison, all clusters scored significantly lower on cluster K1.1, which challenges ethical behavior with questions such as 6.9 (“The contents of my wardrobe show that I care about the ethicality of my clothes.”). The components are used as a point of comparison to control and observe the effect of the attitude-behavior gap (Carrigan & Attala 2001, 566).

5.4.1 Cluster attributes

The below figure illustrates the means each cluster received for the components. The clusters were named based on the differences visible in the data. Higher scores for each of the components was defined as more ethical behavior, except for K1.3, impulsive fashion orientation, for which a low score would indicate ethical consumerism.

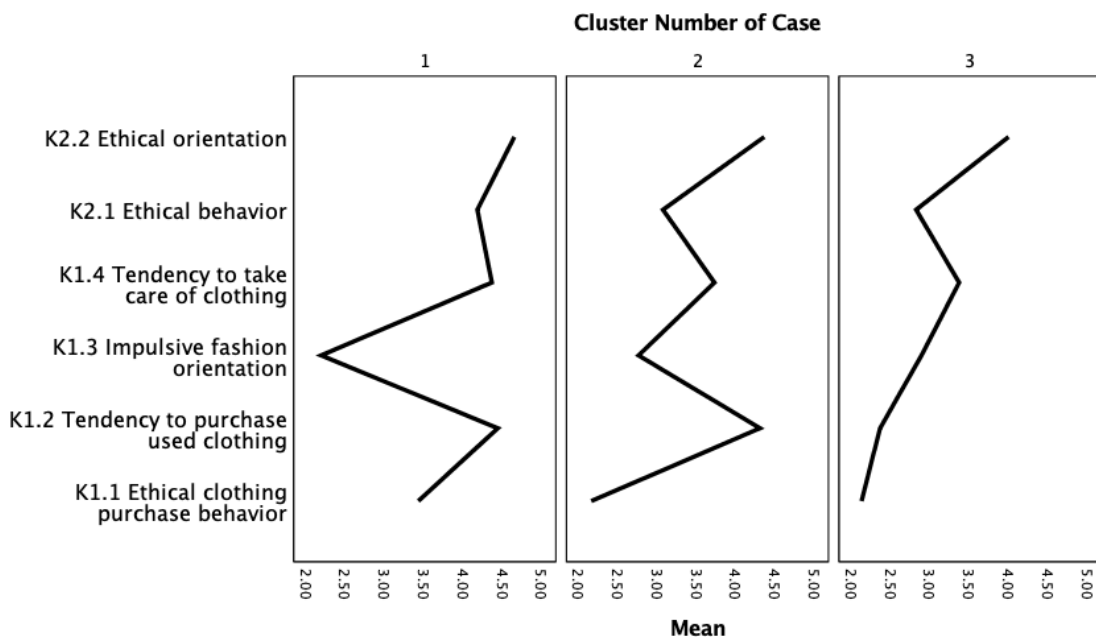


Figure 18 Profile of means: Cluster attributes

The first cluster, *ethically oriented consumers*, included 48% of respondents. This cluster scores highest on most of the components, except for K1.3 related to impulsive fashion orientation. Consumers in this group scored highly on ethical orientation with a mean of 4.64. To support this, the ethically oriented consumers also scored much higher

than other clusters for component K1.1, which evaluated ethical behavior with concrete past actions to minimize the risk of bias regarding the attitude-behavior gap (Carrigan & Attala 2001, 566) of ethical consumerism.

The second cluster, *second hand shoppers*, fall between the *ethically oriented consumers (1)* and the *impulsive trend-followers (3)* on many levels. For most components, the second cluster scored means that were less than those of the *ethically oriented consumers* but more than those of the *impulsive trend-follower*. The second cluster also reports a high ethical orientation, but falls significantly lower on K1.1 (ethical clothing purchase behavior) and K2.1 (ethical behavior), which both describe more concrete actions and thus form a higher threshold for over-reporting ethicality. What sets this cluster apart is the relatively high score on K1.2, tendency to purchase used clothing.

Respondents that belong in the third cluster, *impulsive trend-followers*, have a defining difference in the mean of component K1.3. This is the only component that sees a reversed order of means with the third cluster scoring highest and the first cluster scoring the lowest. The items within component 1.3 were related to frequent clothing purchases, a desire to purchase more often, and the habit of purchasing clothing spontaneously. Based on the mean of component K1.3, the third cluster was deemed to have more impulsive tendencies and a stronger fashion orientation. Impulsive trend followers are further defined by this component due to the fact that while consumers can over-report their ethical behavior, they may also under-report elements related to contradicting matters, such as over-consumption or lack of interest in ethical topics, as consumers tend to try to produce socially acceptable responses (Hill & Lee 2015, 205).

5.4.2 Cluster comparison

Members of the first cluster were older compared to clusters 2 and 3. Out of all age groups, the largest portion fell in the first cluster since the absolute amount of respondents in each cluster was the highest for cluster 1 (43% of respondents). However, 45.5% of the oldest age group belonged to cluster 1 whereas the figure was lower for the middle age group (41.3%) and the lowest for the youngest age group (40.7%). Also, only 15.2% of the oldest age group belonged to the *impulsive trend-followers*, whereas younger age groups had a larger representation. This would indicate that older consumers have a higher likelihood of consuming ethically.

Data also suggests that students in the humanities faculty are more likely to belong in the first cluster than economics students. While 51.4% of humanities students were categorized as *ethically oriented consumers*, only 32% of economics students belonged in this cluster. In fact, economics students were evenly divided across clusters, whereas humanities students were heavily weighted towards clusters 1 and 2, the more ethical of

the consumer groups. A larger portion of respondents were from the humanities faculty, which seems to partly explain the larger size of cluster 1, *ethically oriented consumers*.

Interestingly, cluster 3, the *impulsive trend-followers*, reported the highest incomes compared to the other two clusters. Cluster 3 scored relatively lowest on the two lowest income brackets, and highest on the three highest income brackets. This contradicts the notion that a higher income would allow consumers to make more conscious purchases. In addition to having higher income levels, the *impulsive trend-followers* also reported the highest spends on clothing. Cluster three was the only one with some respondents indicating spending more than 1500e over the last three months. Cluster three also had the lowest relative representation in the lowest-spending segments. The ethically oriented consumer was heavily weighted in the low-spend categories. 48.2% of them reported the lowest spend option of 0-100e over the last three months. The second-hand shoppers were spread out more evenly but with a focus on the lower categories.

There were important differences in the clothing usage behavior among different clusters. 53% of *ethically oriented consumers* strongly agreed to taking care of their clothes to prolong the usage period (Q7.1). However, for *second-hand shoppers* the figure was a lower 29% and for *impulsive trend-followers* an even lower 21%. Disposal motives did not indicate drastic differences among clusters. Boredom (Q8.4) and being out of fashion (Q8.2) were more likely as motives among *impulsive trend-followers*, but they were not dominant motives for any of the clusters.

The motives for engaging in C2C commerce were also very different for each consumer type. *Ethically oriented consumers* found ecologicality to be the driving factor for second hand consumption (58% strongly agreed). In comparison, only 27% strongly agreed that they purchase second hand clothing due to low prices. For *second hand shoppers*, price (29% strongly agree) was a more important motive for second hand consumption than ecologicality (17% strongly agree). The *impulsive trend-followers* found neither important. Instead, 41% strongly disagreed price would motivate second hand consumption, and 46% strongly disagreed with the role of ecologicality as a motive in second hand consumption. As seen in figure 18, the tendency for purchasing used clothing was low for the cluster. For *impulsive trend-followers*, the perception of contamination was an important barrier to second hand consumption, whereas the other clusters strongly disagreed with this. As for modern C2C channels (Q11.3-11.5) a minority of both *ethically oriented consumers* and *second hand shoppers* reported engagement. 20% of ethically oriented consumers had bought clothing from local channel such as Facebook flea markets, whereas only 16% of *second hand shoppers* had done the same. However, for mobile applications and international C2C channels the adoption rate for *second hand shoppers* was higher than for *ethically oriented consumers* with a rate of 9% for applications and 8% for international channels.

6 DISCUSSION AND CONCLUSIONS

6.1 Main findings

The following chapters discuss the main findings surrounding the research questions of the study and reflect the findings on the theoretical framework. The main contribution of this study was the classification of consumer types currently found in the Finnish fashion market place. In addition, the study explored multiple contemporary phenomena that impact all phases of the consumption process.

6.1.1 *Consumption motives*

This study addressed the whole process of consumption from purchase behavior to usage and disposal behavior. Overall, young Finnish consumers have access to an unprecedented multitude of consumption channels both locally and globally. Within a dynamic industry, consumer behavior evolves quickly. This study provided an overview of current consumption patterns among young Finnish female consumers.

Overall, respondents did not buy clothing excessively. Based on survey results, a large share of consumers abstained from purchasing clothing on a monthly basis and the sum spent on clothing over the last three months was fairly low for most respondents. The spending habits of young consumers are impacted by monthly income, which may be limited to mere student allowance for full-time students. The purchase behavior of young consumers is weighted towards affordable fast fashion retailers. This is understandable considering the widespread presence of these retailers, also in Turku, where this study was conducted. Unlike older women, young consumers didn't display a particular interest towards Finnish fashion brands. Regarding purchase channels, offline was still interestingly dominant among young female consumers, who would pose a prime target for online fashion shopping.

According to Lee et al. (2013), clothing disposal habits are impacted by the social consciousness of consumers. However, clothing disposal is a complicated topic. Lee et al. (2013) also state that consumers often lack knowledge of what happens to clothing after different means of disposal. Especially the knowledge of ethical means of disposal was found lacking. Among respondents, passing down to friends and family was the most popular means of disposal, followed by recycling. However, more than a third of respondents reported having thrown clothing in the trash within the last six months. Overall, respondents' disposal habits were diverse. The fact that disposal habits didn't display such drastic differences among clusters could indicate the lack of a clear idea of

what means of disposal are more sustainable than others. After all, even the sustainability of recycling was questioned in chapter 3.3.1, as the clothes rarely end up being repurposed but might in fact cause issues in the waste management systems of developing countries (where used clothing is often imported) instead (Roivainen 2017).

Three consumer profiles were formed based on the consumption patterns of respondents. The cluster analysis revealed an overall ethical orientation among all clusters, which was examined critically due to the sensitive nature of ethical consumerism in consumer research. The first cluster, *the ethically oriented consumers*, displayed the most ethical behavior regarding all consumption attributes (components K1.1-K2.2). They didn't purchase clothing very often, and they implied a strong interest for second hand fashion and taking good care of clothing. C2C consumption was mainly driven by ecological reasons, although price consciousness had an impact as well. The first cluster had a very high representation of humanities students, whereas economics students were more evenly split throughout the clusters.

The second cluster, *second hand shoppers*, expressed ethical attitudes but significantly lower scores for ethical behavior. What set the cluster apart was their particular interest for second hand consumption. Contradicting the motives of the *ethically oriented consumers*, the second hand shoppers were mainly driven by price when purchasing second hand clothing. The *second hand shoppers* also expressed a consistent interest in all of the modern C2C channels that were included in the survey.

Cluster 3, the *impulsive trend-followers*, displayed the least ethical attitudes and behavior. This consumer type expresses typical behaviors of a fast fashion consumer. Behavior is driven by trends, newness, fashionability and a short term orientation (Joergens 2006). This cluster also supports Hill and Lee's (2015, 205) statement on the over-reporting of ethicality, as there is no further evidence of ethical behavior beyond attitudes. Joy et al. (2015, 286) found that some fast fashion consumers feel like ethical clothing brands are not a serious option due to being so out of touch with fashionability. There may be a desire to consume more ethically (cluster 3 reported a relatively high ethical orientation) but they simply do not think it is a viable option considering how "ugly" ethical fashion stereotypically is. For *Impulsive trend-followers*, fast fashion consumption did not seem primarily driven by the price factor, as this cluster reported the highest monthly incomes, which supports the importance of the fashionability motive. Cluster 3 also strongly disagreed with clusters 1 and 2 on second hand consumption. Not only did they not engage in it, they found neither price nor ethicality to be a motivating factor in regards to second hand consumption.

6.1.2 *The role of C2C channels in fashion consumption*

The results of the study indicated an overall positive attitude towards second hand consumption. A majority of 70,3% ("agree" or "strongly agree") also indicated that they would like to purchase a larger share of their clothing used than they currently do. The findings indicate increasing opportunities in the business of used clothing. In comparison to respondent attitudes, the adoption rates of modern C2C channels are still relatively low. While 44% of respondents had purchased second hand clothing from a traditional offline C2C channel, the figure was lower for modern C2C channels. 15% had bought at a local online channel (e.g. Facebook), 9% had used a mobile application (e.g. Zadaa) to purchase used clothing and only 5% purchased from an international online channel (e.g. VestiaireCollective). As stated in results, the convenience of each channel is seen in the adoption rate.

An important finding of the study was that the role of modern C2C channels is more significant in the disposal phase of consumption. 25% of respondents had sold their clothes through an online channel (e.g. Facebook) whereas offline points of reselling were used by 27%. When it comes to reselling as a disposal method, modern C2C channels have become almost as popular as more traditional offline reselling channels. Although the adoption rates are fairly even, it should be noted that the online environment allows for selling specific clothing items through specific channels, whereas offline reselling often happens in bulk at a flea market, for instance. To conclude, the role of C2C channels is currently relatively more prevalent in the disposal phase of the consumption process rather than the initial purchase phase.

Despite the positive outlook toward second hand consumption, more than 15% (agree or strongly agree) of respondents also said that they do not buy second clothing because they do not like the thought that someone else has already used the clothing. This supported the previous findings of Yan et al. (2015), who found that perception of contamination is indeed a common barrier for second hand shopping.

6.1.3 *The role of ethical consumerism in fashion consumption*

In addition to the concept of ethical consumerism (Tilikidou et al. 2012), this chapter evaluates additional ethical drivers that emerged from the results of the study.

The results of the study confirmed previous findings on the gap between ethical attitudes and behavior (see Lee et al. 2015, Carrigan & Attala 2001). The cluster analysis showcased that all consumer groups scored highly on ethical orientation, regardless of further indication of ethical behavior. Two components of the cluster analysis were based on the concept of ethical consumerism (Tilikidou et al. 2012). All three consumer

types scored highly on component K2.2 (ethical orientation) but clusters 2 and 3 scored significantly lower on K2.1 (ethical behavior). The division between attitudes and behavioral items offered a chance to observe potential differences. Furthermore, component K1.1 measured ethical purchase behavior from a clothing specific point of view, which offered another point of comparison and also received lower scores than ethical orientation. Overall, respondents did find ethical topics interesting and important, but seemed indifferent towards researching the ethicality of a fashion brand before purchasing, for instance. In other words, a large share of respondents are interested in sustainability, but not as interested in finding out what is sustainable.

Ethical consumerism has an effect throughout the consumption process. Based on the three consumer types, there were observable differences in purchase, usage and disposal behavior. Based on the findings, an *ethically oriented consumer* is more likely to purchase clothing less frequently (Claudio 2007), buy second hand clothing (Yan et al. 2015), take care of their clothing (Henninger et al. 2016) and is less likely to dispose of clothing due to boredom or lack of fashionability, which represent a few exemplar aspects of ethical fashion consumption.

Although McKinsey(2018) highlighted the importance of ethicality among millennial consumers, Manchiraju and Sadachar (2014) have connected ethical consumerism with age. The findings of this study support the correlation, as cluster 1, *ethically oriented consumers*, represented the oldest age groups whereas cluster 3, *impulsive trend-followers*, were the youngest. In this case the age pool was limited, however, and an older pool of respondents could offer an interesting point of comparison next to a student sample.

6.2 Theoretical implications

To the best of the author's knowledge, this is the first study that examines the field of fashion consumption from a holistic perspective. Considering all phases of the consumption process allows the consideration of ethicality as a continuum, in which all phases are related to one another. Previous studies on ethical fashion have largely emphasized a supply chain perspective or the purchase behavior of consumers. This study provides a new angle on consumption especially in the Finnish fashion market. By considering the whole process of consumption, this study offers insight into the complete product lifetime of clothes.

Sustainability is a contemporary topic in the fashion industry. As a voluminous industry, it has a major role in global sustainability matters. Sustainability fathoms both the consumption and manufacture of fashion, which both currently have significant social and environmental consequences. Many argue that pressure from consumers is key

in shifting the practices of large organizations in a more ethical direction. An important motive for studying fashion consumption from an ethical perspective is the generation of knowledge in order to change future consumption habits. For instance, Morgan and Birtwistle (2009) state that their research strives to investigate consumers' lack of understanding to find solutions to address the issue of unsustainability in the fashion industry. Increasing knowledge by educating consumers could indeed have the potential to alter consumption habits to decrease the overall environmental and social impact of the industry. In order for consumers to be able to consume sustainably, they need to be conscious of how they consume. Manciraju and Sadachar (2014) have found that consumers' values have a significant impact on ethical consumption behavior in the fashion category. Knowledge generation could positively impact the values and attitudes of consumers towards a more sustainable mindset, eventually reflecting into concrete behavior.

Another important dimension of this study was the inclusion of modern C2C channels as consumption alternatives. The different forms of modern consumption are not widely covered in pre-existing research. Due to the consideration of the whole consumption process, this study also allowed for comparing C2C channels in the purchase and disposal phases of consumption.

6.3 Managerial implications

The consumer profiles found in this study provide an overview of the fashion market place in the Finnish context. This gives businesses the opportunity to know the current consumer field within the field of fashion, especially from an ethical point of view. The consumer types are driven by different values and motives, which are relevant for companies to reflect on their message and offering. Data on consumer behavior should function as a basis for any company in the fashion business formulating a strategy.

From a managerial point of view, this study also sheds light on the willingness of female consumers to adopt new forms of fashion consumption. Significant but marginal phenomena of the fashion industry, such as ethical fashion, modern C2C commerce, sharing economy, and the shift of ownership provide ample business opportunities within a voluminous, global industry. Learning more about consumer motives and attitudes towards purchasing second hand clothing and using alternative and emerging consumption channels provides insight into further opportunities in the industry. The business around second hand consumption has grown tremendously and is projected to continue on its growth path. In addition to potential business growth, new channels and the popularization of ecommerce free businesses from geographical boundaries.

The study also offers managerial insight on ethical matters. It provides insight into the attitude-behavior gap (Carrigan & Attala 2001) in the Finnish context as well as consumer attitudes towards paying a premium for ethical clothing. Businesses focusing on sustainability may also need to consider their tone of voice and the need for education, since consumers might lack knowledge relating to ethical matters throughout the consumption process (Lee et al. 2013).

6.4 Limitations and suggestions for future research

This study has limitations that provide new research opportunities in the field. First of all, the study focuses on the Finnish consumer market. Fashion is a global industry that has increasingly shifted online, meaning that the global consumption environment is interconnected. The local perspective to fashion consumption does not allow for global generalization of findings. The criteria for respondents further limit the generalizability of this study. The survey responses were collected among university students, who do not represent the whole population of young Finnish women comprehensively. Young female consumers have been found to have much more interest for fashion than older age groups (Joergens 2006), which also prohibits generalization to other age groups. The consumption patterns are likely to differ in different age groups especially regarding C2C consumption, as younger consumers are more likely to adopt new consumption channels (Park and Lee 2017, 1405). Men were also not included in the sample. Manchiraju and Sadachar (2014) have found that in addition to age, gender plays a role in the likelihood of ethical consumption. According to their findings, women are more likely to adopt ethical consumption behaviors. Men tend to demonstrate very different fashion consumption behavior in general (Sebald & Jacob 2017, 188-191), meaning that conclusions cannot be directly extended to the male category based on this study. It could be a topic of interest to conduct further research into how men or older women consume fashion and whether modern phenomena, such as online C2C consumption have a similar effect on consumption habits.

Studying ethical consumer behavior has its complications. According to Hill and Lee (2015, 205), consumers have a habit of over-reporting their ethical behavior. In reality, self-reported ethical attitudes do not convert to concrete actions as often. Thus, the ethical orientation of respondents was examined critically and other confirmatory survey items were included to reassess the relationship between ethical attitudes and actions. Respondents may lie or exaggerate actions related to ethical consumer behavior as well, but the risk was minimized by using questions with different angles and reversed survey questions.

The topic of the survey was also communicated to potential respondents before having to open the actual survey. This might have affected the selection of respondents as certain kinds of consumers may have found the topic of fashion consumption more interesting than others.

7 SUMMARY

The purpose of the thesis was to profile young Finnish female consumers based on their consumption motives and habits. The concept of consumption was approached from a holistic perspective, entailing the complete process of consumption from purchasing to using and disposing of clothing. While the fashion industry has grown and globalized, consumption patterns have evolved significantly during the last decades. In a time where fashion is available around the clock and consumers have access to endless information and consumption channels, the current state of consumption can provide interesting insight into where consumption is headed. This study addressed the following research questions relating to fashion consumption:

- What motives drive the fashion consumption of young women in Finland?
- What is the role of C2C channels in fashion consumption?
- What is the role of ethical consumerism in fashion consumption?
- What are the types of consumers that exist in the Finnish fashion market?

The theoretical framework centered around the development and the workings of the fashion industry, as well as different elements of consumer behavior. The whole process of consumption was covered in detail with an ethical perspective in mind. The complete process of consumption has not been researched thoroughly as a continuum before, especially in relation to attitudes and motives, which were covered by this study. Another important theme of the study were niche phenomena of the industry, such as C2C consumption, ethical fashion, the shift of ownership in clothing consumption and the new platforms that offer opportunities for alternative consumption methods.

The empirical section of the study utilized quantitative methods to investigate current consumption habits among young Finnish women. A survey was distributed to students aged 18-26 in the economics and humanities faculties of the University of Turku. The survey generated more than 500 responses, which offered a solid basis for further analysis. The survey consisted of a section assessing the consumption habits and motives of respondents as well as another section evaluating the respondents' level of ethical consumerism from multiple perspectives. The data was processed using a factor analysis to recognize structures, components, within the data. These attributes were utilized further in an exploratory cluster analysis, which yielded three different consumer types that showcased interesting behavior in relation to pre-existing literature.

The consumer types were named the *ethically oriented consumer*, the *second hand shopper* and the *impulsive trend-follower*. Interestingly, all types reported a high ethical orientation, however, responses to items assessing actual ethical behavior proved contradictory for *second hand shoppers* and *impulsive trend-followers*. The over-reporting

of ethical attitudes is common (Hill & Lee 2015, 205), which was taken into consideration in analyzing the results of the study. The characteristics of different consumer types supported the theoretical framework. *Ethically oriented consumers* were more likely to engage in more ethical activities throughout the consumption process, while *second hand shoppers* expressed strong financial motives. The *second hand shoppers* not only frequented traditional C2C channels, but the adoption rates for modern channels of C2C commerce were relatively high as well. *Impulsive trend-followers* differed significantly from the other clusters. They reported the least ethical attitudes, motives and behavior and expressed typical consumption patterns of fast fashion consumers. This consumer type was also strongly positioned against second hand consumption, which in itself is very popular in the Finnish context.

The results show that the consumer field of fashion is fragmented and consumers are driven by differing attitudes and motives. The study also sheds light on alternative consumption habits and their adoption rates, which offers insight into further potential for businesses in the field. Overall, the study contributes to the body of ethical literature and showcases that consumption habits could be impacted through educating consumers about more ethical consumption practices.

REFERENCES

- Andersen, T. – van Leeuwen, T. (2017). Genre crash: The case of online shopping. *Discourse, Context & Media*, Vol. 20, 191–203.
- Armstrong, C. – Niinimäki, K. – Kujala, S. Karell, E. – Lang, C. (2015). Sustainable product-service systems for clothing: exploring consumer perceptions of consumption alternatives in Finland. *Journal of Cleaner Production*, Vol. 97, 30–39.
- Armstrong, C. – Connell, K. – Lang, C. – Ruppert-Stroescu, M. – LeHew, M. (2016). Educating for sustainable fashion: Using clothing acquisition abstinence to explore sustainable consumption and life beyond growth. *Journal of Consumer Policy*, Vol. 39 (4), 417–439.
- Asket (2018). *Essentially different*. Available at: <https://www.asket.com/about/> (Retrieved 7.5.2018)
- Accord (2018). *Safe workplaces*. Available at: <http://bangladeshaccord.org> (Retrieved 8.8.2018)
- Banister, E. – Hogg, M. (2003). Negative symbolic consumption and consumers' drive for self-esteem: The case of the fashion industry. *European Journal of Marketing*, Vol. 38 (7), 850–868.
- Bhardwaj, V. – Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *The International Review of Retail, Distribution and Consumer Research*. Vol. 20 (1), 165–173.
- Birtwhistle, G. – Moore, C.M. (2007). Fashion clothing – where does it all end up? *International Journal of Retail & Distribution Management*, Vol. 35 (3), 210–216.
- Bowsher, E. (2018) Financial Times: *Online Retail Sales Continue to Soar*. Available at: <https://www.ft.com/content/a8f5c780-f46d-11e7-a4c9-bbdefa4f210b> (Retrieved 4.1.2019)
- Bruce, M – Daly, L. – Towers, N. (2004). Lean or agile: A solution for supply chain management in the textiles and clothing industry? *International Journal of Operations & Production Management*, Vol. 24 (2), 151–170.
- Bruce, M. – Daly, L. (2006). Buyer behaviour for fast fashion. *Journal of Fashion Marketing and Management*, Vol. 10, (3) 329–344.
- Cachon, G. – Swinney, R. (2011). The value of fast fashion: Quick response, enhanced design, and strategic consumer behaviour. *Management Science*, Vol. 57 (4), 778–795.
- Caniato, F. – Caridi, M. – Crippa, L. – Moretto, A. (2011). Environmental sustainability in fashion supply chains: An exploratory case based research. *International Journal of Production Economics*, Vol. 135 (2), 659–670.

- Carey, L. – Cervellon, M. (2014) Ethical fashion dimensions: pictorial and auditory depictions through three cultural perspectives. *Journal of Fashion Marketing and Management*, Vol. 18 (4), 483–506.
- Carrigan, M. – Attala, A. (2001) The myth of the ethical consumer – do ethics matter in purchase behaviour? *Journal of Consumer Marketing*, Vol. 18 (7), 560–577.
- Chahal, M. (2016) Marketing Week: *Social commerce: How willing are consumers to buy through social media?* Available at: <https://www.marketingweek.com/2016/03/23/social-commerce-how-willing-are-consumers-to-buy-through-social-media/> (Retrieved 20.7.2018)
- Christopher, M. – Lawson, R. – Peck, H. (2004). Creating agile supply chains in the fashion industry. *International Journal of Retail and Distribution Management*, Vol. 32 (8), 367–376.
- Čiarnienė, R. – Vienožindienė, M. (2014). Management of contemporary fashion industry. *Procedia – Social and Behavioural Sciences*, Vol. 156, 63–68.
- Claudio, L. (2007). Waste couture. *Environmental Health Perspectives*, Vol. 115 (9), A449–A454.
- Curwen, L. – Park, J. – Sarkar, A. (2012). Challenges and solutions of sustainable apparel product development: a case study of Eileen Fisher. *Clothing and Textiles Research Journal*, Vol. 31(1), 32–47.
- Dahl, R. (2010). Green Washing: Do You Know What You're Buying? *Environmental Health Perspectives* Vol. 118(6), A246–A252.
- Danziger, P. (2018) Forbes: *9 Fashion Retailers On Life Support*. Available at: <https://www.forbes.com/sites/pamdanziger/2018/01/14/9-fashion-retailers-on-life-support/#6e0d7e8259ef> (Retrieved 1.10.2018)
- Deraniyagala, H. (2012). Textile colour waste and sustainability. *Colour Design, Second Edition*, 653–669.
- Djelic, M. – Ainamo, A. (1999). The coevolution of new organizational forms in the fashion industry: A historical and comparative study of France, Italy and the United States. *Organization science*, Vol. 10 (5), 622–637.
- Donnelly, L. (2013). Solving the sweatshop problem: A game-theoretical analysis. Department of Political Science, Texas Christian University Fort Worth, Texas.
- eBay.com (2018). *Our history*. Available at: <https://www.ebayinc.com/our-company/our-history/> (Retrieved 5.5.2018)
- Emmelhainz, M. – Adams, R. (2006). The Apparel Industry Response to “Sweatshop” Concerns: A Review and Analysis of Codes of Conduct. *Journal of Supply Chain Management*, Vol 35 (2), 51–57.

- Ethical Fashion Forum (2017) *About EFF*. Available at: <https://the.ethicalfashionforum.com> (Retrieved 18.4.2018)
- Fashion United (2016). *Global fashion industry statistics - International apparel*. Available at: <https://fashionunited.com/global-fashion-industry-statistics> (Retrieved 7.1.2016)
- Ferraro, C. – Sands, S. – Brace-Govan, J. (2015). The role of fashionability in second-hand shopping motivations. *Journal of Retailing and Consumer Services* Vol. 32, 262–268.
- Finnish Association of Commerce (2015). *Vertaiskauppa verkossa – Marginaali-ilmiöstä ilmiöksi*. Available at: http://kauppa.fi/ajankohtaista/tiedotteet/suomalaisten_vertaisverkkokauppa_ylittaa_jo_kulutuksen_virossa_25318 (Retrieved 21.3.2018)
- Finnish Textile & Fashion (2017). *Kulutus tekstiiliin ja muotiin Suomessa*. Available at: <https://s3-eu-west-1.amazonaws.com/stjm/uploads/20170503105104/KULUTUS-tekstiiliin-ja-muotiin-Suomessa-11.9.20171.pdf> (Retrieved 28.11.2017)
- Finnish Textile & Fashion (2017). *Suomalainen haluaisi ostaa vaatekaupassa enemmän suomalaismerkkien tuotteita*. Available at: <https://www.stjm.fi/tiedotteet-kannanotot-ja-lausunnot/suomalainen-haluaisi-ostaa-vaatekaupassa-enemman-suomalaisten-merkkien-tuotteita/> (Retrieved 28.11.2017)
- Finnish Textile & Fashion (2017). *Rahankäyttö vaatteisiin ja jalkineisiin Suomessa*. Available at: <https://s3-eu-west-1.amazonaws.com/stjm/uploads/20181017102830/Rahankäyttö-vaatteisiin-ja-jalkineisiin-Suomessa-17.10.2018.pdf> (Retrieved 2.1.2019)
- Fuchs, C. – Prandelli, E. – Schreier, M. – Dahl, D.W. (2013). All that is users might not be gold: how labeling products as user designed backfires in the context of luxury fashion brands. *Journal of Marketing*, Vol. 77 (5) 75–91.
- Fung, E. (2018) The Wall Street Journal: *Mall vacancies hit six-year high as online shopping takes a toll*. Available at: <https://www.wsj.com/articles/mall-vacancy-rate-hits-six-year-high-1530588600> (Retrieved 8.9.2018)
- Giustiniano, L. – Nenni, M. – Pirolo, L. (2013). Demand Forecasting in the Fashion Industry: A Review. *International Journal of Engineering Business Management*, Vol. 5, 2–6.
- Guiot, D. – Roux, D. (2010). A second-hand shoppers' motivation scale: Antecedents, consequences, and implications for retailers. *Journal of Retailing*, Vol. 86 (4), 355–371.
- Hair, J. – Black, W. – Babin, B. – Anderson, R. (2014). *Multivariate Data Analysis* Seventh Edition. Pearson Education Limited, Harlow, UK.

- Harmaala, M. – Tiihonen, I. (2017). Keski-suomalainen: *Yhä harvempi uusi yliopisto-opiskelija on alle 20-vuotias*. Available at: <https://www.ksml.fi/kotimaa/Yhä-harvempi-uusi-yliopisto-opiskelija-on-alle-20-vuotias/967228> (Retrieved 20.8.2018)
- Henninger, C. – Alevizou, P. – Oates, C. (2016). What is sustainable fashion? *Journal of Fashion Marketing and Management: An International Journal*, Vol. 20 (4), 400–416.
- Hill, J. – Lee, H. (2015). Sustainable brand extensions of fast fashion retailers. *Journal of Fashion Marketing and Management*, Vol. 19 (2), 205–222.
- Horváth, C. – Adigüzel, F. (2017). Shopping enjoyment to the extreme: Hedonic shopping motivations and compulsive buying in developed and emerging markets. *Journal of Business Research*, Vol. 86, 300–310.
- Hvass, K. (2014). Post-retail responsibility of garments. *Journal of Fashion Marketing and Management* Vol. 18 (4), 413–430.
- Härri, A. – Moilala, O. (2014) Eetti Ry: *Vastuullisia vaatteita? Ihmisoikeudet suomalaisten vaateyritysten tuotantoketjuissa*. Available at: https://eetti.fi/wp-content/uploads/2018/01/vastuullisia_vaatteita_060614_final_korjatu.pdf (Retrieved 4.5.2018)
- Infantes, I. (2017) Business Reporter: *Men's clothing market growing twice as fast as women's, figures show*. Available at: <https://www.business-reporter.co.uk/2017/06/09/mens-clothing-market-growing-twice-fast-womens-figures-show/#gsc.tab=0> (Retrieved 3.1.2019)
- Jackson, T. B. (2004). International retail marketing. *Oxford: Elsevier Butterworth-Heinemann*.
- Joung, H. – Park-Poaps, H. (2011). Factors motivating and influencing clothing disposal behaviours. *International Journal of Consumer Studies*, Vol. 35 (5), 1–7.
- Joy, A. – Sherry Jr, J.F. – Venkatesh, A. – Wang, J. – Chan, R. (2012). Fast fashion, sustainability, and the ethical appeal of luxury brands. *Fashion Theory*, Vol. 16 (3), 273–295.
- Kestenbaum, R. (2018) Forbes: *Second hand clothes are a threat and an opportunity*. Available at: <https://www.forbes.com/sites/richardkestenbaum/2018/04/03/secondhand-clothes-are-a-threat-and-an-opportunity/#4bef14926fdd> (Retrieved 2.1.2019)
- Kesteloo, M. – Hoogenberg, M. (2013). PWC: *Footprint 2020: Offline retail in an online world*. Available at: https://www.strategyand.pwc.com/media/file/Strategyand_Footprint-2020.pdf (Retrieved 1.9.2018)
- Koikkalainen, O. (2016) Aamulehti: *Kaupun uusi ilmiö kasvaa vauhdilla - Vertaiskaupassa liikkuu jo satoja miljoonia euroja vuosittain*. Available at: <https://www.aamulehti.fi/a/23986249> (Retrieved 5.9.2018)

- Kozlowski, A. – Bardecki, M. (2012). Environmental impacts in the fashion industry: a life-cycle and stakeholder framework. *Journal of Corporate Citizenship*, Issue 45, 17–36.
- Lee, J. – Halter, H. – Johnson, K. – Ju, H. (2013). Investigating fashion disposition with young consumers. *Young Consumers*, Vol 14 (1), 67–78.
- Liang, J. – Xu, Y. (2016). Second-hand clothing consumption: A generational cohort analysis of the Chinese market. *International Journal of Consumer Studies*, Vol. 42, 120–130.
- Lim, Y. – Osman, A. – Salahuddin, S. – Romle, A. – Abdullah, S. (2016). Factors influencing online shopping behavior: the mediating role of purchase intention. *Procedia Economics and Finance*, Vol. 35, 401–410.
- Liukkonen, M. (2016). Helsingin Sanomat: *Suomalainen heittää peräti 13 kiloa tekstiilejä pois vuodessa – näin vanhat vaatteet voi hyödyntää*. Available at: <https://www.hs.fi/kotimaa/art-2000004875875.html> (Retrieved 22.3.2018)
- MacCarthy, B. L. – Jayarathne, P. G. S. A. (2012). Sustainable Collaborative Supply Networks in the International Clothing Industry: A Comparative Analysis of Two Retailers. *Production Planning & Control*, Vol. 23(4), 252–268.
- Malhotra, N. – Birks, D. (2006). *Marketing Research: An Applied Approach*, Updated 2nd European Ed., Harlow, UK: Prentice Hall.
- Maloney, C. J. (2015). The economic impact of the fashion industry. Joint Economic Committee, United States Congress.
- Manner, M. (2017). Helsingin Sanomat: *Suomalaiset ostavat ja hylkäävät vaatteita yhä enemmän – Mitä käytetyille vaatteille pitäisi tehdä, kun niitä ei enää haluta edes Afrikassa?* Available at: <https://www.hs.fi/ulkomaat/art-2000005341035.html> (Retrieved 22.3.2018)
- Manchiraju, S. – Sadachar, A. (2014) Personal values and ethical fashion consumption. *Journal of Fashion Marketing and Management*, Vol. 18 (3), 357–374.
- McKinsey & Company (2018). *State of Fashion 2018*. Available at: https://cdn.businessoffashion.com/reports/The_State_of_Fashion_2018_v2.pdf (Retrieved 1.10.2018)
- McKinsey & Company (2019). *State of Fashion 2019*. Available at: <https://www.mckinsey.com/~media/mckinsey/industries/retail/our%20insights/the%20state%20of%20fashion%202019%20a%20year%20of%20awakening/the-state-of-fashion-2019-vf.ashx> (Retrieved 3.1.2019)
- Miller, K. (2013). Hedonic customer responses to fast fashion and replicas. *Journal of Fashion Marketing and Management: An International Journal*, Vol. 17(2), 160–174.

- Morgan, L. – Birtwistle, G. (2009). An investigation of young fashion consumers' disposal habits. *International Journal of Consumer Studies*, Vol. 33 (2), 190–198.
- Navaretti, G.B., – Falzoni, A. – Turrini, A. (2001). The decision to invest in a low-wage country: Evidence from Italian textiles and clothing multinationals. *Journal of International Trade and Economic Development*, Vol. 10 (4), 451–470.
- Nordås, H. K. (2004). The global textile and clothing industry post the agreement on textiles and clothing. Discussion paper no. 5, WTO Publications.
- Norokorpi, V. (2016). Ilta-Sanomat: *Tiesitkö, että vaatteet voi kierrättää vaatekaupassa – ja ansaita itselleen alennuskuponin*. Available at: <https://www.is.fi/mystyle/art-2000001940231.html> (Retrieved 3.6.2018)
- O’Cass, A. – Frost, H. (2002). Status brands: examining the effects of non-product-related brand associations on status and conspicuous consumption. *Journal of Product and Brand Management*, Vol. 11 (2), 67–88.
- Park, S. – Lee, D. (2017). An empirical study on consumer online shopping channel choice behavior in omni-channel environment. *Telematics and Informatics* Vol. 34, 1398–1407.
- Pedersen, E. – Netter, S. (2015) Collaborative consumption: business model opportunities and barriers for fashion libraries. *Journal of Fashion Marketing and Management*, Vol. 19 (3), 258–273.
- Perry, P. (2018). Independent: *The environmental costs of fast fashion*. Available at: <https://www.independent.co.uk/life-style/fashion/environment-costs-fast-fashion-pollution-waste-sustainability-a8139386.html> (Retrieved 3.2.2019)
- Phau, I. – Teah, M. – Chuah, J. (2014). Consumer attitudes towards luxury fashion apparel made in sweatshops. *Journal of Fashion Marketing and Management*, Vol. 19 (2) 169–187.
- Pinatex (2018). *About us*. Available at: <https://www.ananas-anam.com> (Retrieved 1.6.2018)
- Postnord (2017). *Ecommerce in the Nordics 2017*. Available at: <https://www.directlink.com/wp-content/uploads/2017/03/E-commerce-in-the-Nordics-2017.pdf> (Retrieved 1.3.2018)
- Powell, B. – Skarbek, D. (2006). Sweatshops and third world living standards: are the jobs worth the sweat? *Journal of Labor Research*, 27 (2), 263–274.
- Power, D. – Hauge, A. (2006). No man’s brand – Brands, institutions, fashion and the economy. *Growth and Change*, Vol. 39, (1) 123–143.
- Prentice, R. – De Neve, G. – Mezzadri, A. – Ruwanpura, K. (2017). Health and safety in garment workers’ lives: Setting a new research agenda. *Geoforum*, 88, 157–160.

- Quartz, S. – Asp, A. (2016). *Cool: how the brain's hidden quest for cool drives our economy and shapes our world*. Farrar, Straus and Giroux.
- Remy, N. – Speelman, E. – Swartz, S. (2016). McKinsey: *Style that's sustainable: A new fast fashion formula*. Available at: <https://www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/style-thats-sustainable-a-new-fast-fashion-formula> (Retrieved 8.8.2018)
- Roivainen, I. (2017). Aamulehti: *Asiantuntija: On eettisempää polttaa vanhat vaatteet Suomessa kuin viedä ne Afrikkaan*. Available at: <https://www.aamulehti.fi/a/200258777> (Retrieved 2.5.2018)
- Rudjareet, P. (2017). Sustainable design and business models in textile and fashion industry. *Textile Science and Clothing Technology*, 109–138.
- Salmi, S. (2018). Helsingin Sanomat: *”Jos näitä ei huomioida, tämä maailma loppuu” – Soile-Maria Linnemäki päätti pelastaa planeetan pukemalla ihmiset hyvin*. Available at: <https://www.hs.fi/paivanlehti/17022018/art-2000005569754.html> (Retrieved 20.3.2018)
- Saunders, M. – Lewis, P. – Thornhill, A. (2009). *Research Methods for Business Students*. Fifth edition. Pearson Education Limited, Harlow, UK.
- Schofield, W. (2006). *Engineering Surveying*. Sixth Edition. Elsevier Ltd.
- Sebald, A. – Jacob, F. (2017). Help welcome or not: Understanding consumer shopping motivation in curated fashion retailing. *Journal of Retailing and Consumer Services*, Vol. 40, 188–203.
- Shen, B. – Jung, J. – Chow, P. – Wong, S. (2014). Co-branding in fast fashion: The impact of consumers' need for uniqueness on purchase perception. In: Choi TM. (eds) *Fashion Branding and Consumer Behaviors*. International Series on Consumer Science. Springer, New York, NY.
- Sihvonen, J. – Turunen, L. (2016). As good as new – valuing fashion brands in the online second-hand markets. *Journal of Product & Brand Management*, Vol. 25 (3), 285–295.
- Spragg, J. (2017). Articulating the fashion product life-cycle. *Journal of Fashion Marketing and Management*, Vol. 21 (4), 499–511.
- Stewart, K. (2013). An ethical analysis of the high cost of low-priced clothing. *Journal of Academic and Business Ethics*.
- Stratton, A. – Bhasin, K. (2018). Bloomberg: *New breed of shoppers races to instagram to buy vintage clothes*. Available at: <https://www.bloomberg.com/news/articles/2018-04-26/new-breed-of-shoppers-races-to-instagram-to-buy-vintage-clothes> (Retrieved 15.11.2018)
- Sull, D. – Turconi, S. (2008). Fast fashion lessons. *Business Strategy Review* Summer 2008.

- Telkki, H. (2015). Finnwatch: *Elämiseen riittävä palkka ihmisoikeutena: Laskentamalli ja suositukset*. Available at: <https://www.finnwatch.org/images/pdf/RaporttiERP.pdf> (Retrieved 5.10.2018)
- Todeschini, B. – Cortimiglia, M. – Callegaro-de-Menezes, D. – Ghezzi, A. (2017). Innovative and sustainable business models in the fashion industry: Entrepreneurial drivers, opportunities, and challenges. *Business Horizons*, Vol. 60, 759–770.
- Tokatli, N. (2007). Global sourcing: insights from the global clothing industry – the case of Zara, a fast fashion retailer. *Journal of Economic Geography*, Vol. 8, 21–38.
- Vestiairecollective.com (2018) *Our concept*. Available at: <https://www.vestiairecollective.com/concept-preowned-fashion/> (Retrieved 3.3.2018)
- Vihreät vaatteet (2016). *Ekologiset ja vihreät vaatteet Suomessa*. Available at: <http://www.vihreatvaatteet.com/ekologiset-ja-eettiset-vaatteet-suomessa/> (Retrieved 13.1.2018)
- Waddel, G. (2004). *How fashion works: Couture, ready-to-wear, and mass production*. Blackwell Science Ltd.
- Wenting, R. – Frenken, K. (2011). Firm entry and institutional lock-in: an organizational ecology analysis of the global fashion design industry. *Industrial and Corporate Change*, Vol. 20 (4).
- Yan, R. – Bae, S. Y. – Xu, H. (2015). Second-hand clothing shopping among college students: the role of psychographic characteristics. *Young Consumers*, Vol. 16 (1), 85–98.
- Zadaa.co (2018). Available at: <https://zadaa.co/fi/> (Retrieved 5.7.2018)
- Zwolinski, M. (2007). Sweatshops, choice and exploitation. *Business Ethics Quarterly*, Vol. 17 (4), 689–727.

Appendix 1

Nuorten naisten muotikulutusikäyttäytyminen

Arvoisa vastaaja,

Tämä kysely on osa markkinoinnin maisterin opinnäytetyötäni Turun Kauppakorkeakoulussa. Opinnäytetyön ohjaajana toimii KTT Ulla Hakala.

Tutkimuksen tarkoituksena on kartoittaa nuorten naisten kulutustottumuksia vaatteisiin liittyen. Kulutuksella viitataan tässä tutkimuksessa siihen, miten vaatteita ostetaan, käytetään ja miten niistä hankkiudutaan eroon.

Tutkin myös eettisen kuluttajuuden vaikutusta kulutustottumuksiin. Kyselyn loppuosa sisältää yleisiä kysymyksiä eettiseen kuluttajuuteen liittyen.

Vastaamalla kyselyyn voit osallistua Stockmannin lahjakortin (30e) arvontaan. Muista jättää yhteystietosi viimeisellä sivulla osallistuaksesi arvontaan. Kyselyyn vastaaminen on anonyymia ja luottamuksellista. Kyselyyn vastaaminen vie noin 10 minuuttia.

Terveisin,
Laura Hämmäinen
laura.hammainen@utu.fi

1. Ikä

- 18-20
- 21-23
- 24-26

2. Tiedekunta

- Kauppatieteellinen
- Humanistinen

3. Kuukausittaiset ansiot (sisältäen opintotuen ja muut kuukausittaiset tulot)

- 0-500e
- 501-1000e
- 1001-1500e
- 1501-2000e
- > 2000e

4. Kuinka paljon rahaa arvioit käyttäneesi vaatteisiin viimeisen kolmen kuukauden aikana?

- 0-100e
- 101-300e
- 301-600e
- 601-1000e
- 1000-1500e
- > 1500e

11. Vastaa väitteisiin käytettyjen vaatteiden ostamisesta.

	Kyllä	Ei
Olen ostanut käytettyjä vaatteita viimeisen kuuden kuukauden aikana.	<input type="radio"/>	<input type="radio"/>
Olen ostanut vaatteita fyysiseltä kirpputorilta viimeisen kuuden kuukauden aikana.	<input type="radio"/>	<input type="radio"/>
Olen ostanut käytettyjä vaatteita verkon vertaiskaupasta (esim Facebook-kirpputori tms.) viimeisen kuuden kuukauden aikana.	<input type="radio"/>	<input type="radio"/>
Olen käyttänyt jotakin sovellusta (esim. Zadaa) käytettyjen vaatteiden ostamiseen viimeisen kuuden kuukauden aikana.	<input type="radio"/>	<input type="radio"/>
Olen ostanut käytettyjä vaatteita joltakin kansainväliseltä verkkosivulta (esim. VestiaireCollective, eBay, Etsy jne.) viimeisen kuuden kuukauden aikana.	<input type="radio"/>	<input type="radio"/>

Seuraava kysymys sisältää väitteitä eettiseen kuluttajuuteen liittyen. Väittämät koskevat kulutusta yleisesti, eivät ainoastaan vaatekulutusta. Pyri vastaamaan yleisten kulutustottumusteesi perusteella.

13. Anna sähköpostiosoitteesi osallistuaksesi arvontaan.

Appendix 2

The Fashion Consumption of Young Women

Dear Respondent,

This survey is a part of my master's thesis at the faculty of marketing at Turku School of Economics. Ulla Hakala is the supervisor of the study. The purpose of the study is to investigate the consumer behavior of young women in the field of fashion. In this survey, consumption refers to how clothing is purchased, used and disposed of. The survey also covers a section on ethical consumerism.

By participating in this survey, you may participate in a chance of winning a gift car (30e) to Stockmann. Responding is anonymous and will last approximately ten minutes.

Kind regards,

Laura Hämmäinen

laura.hammainen@utu.fi

1. Age

- 18-20
- 21-23
- 24-26

2. Faculty

- Economic
- Humanities

3. Monthly income (including student allowance and other forms of income)

- 0-500e
- 501-1000e
- 1001-1500e
- 1501-2000e
- >2000e

7. The following statements relate to the usage of clothing. Reply on a scale of 0-5 (1=Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, 5= Strongly agree, 0= I don't know).

- | | 1 | 2 | 3 | 4 | 5 | 0 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 7.1 I try to prolong the lifetime of my clothes by taking good care of them. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.2 I repair or have someone repair my clothes to increase their longevity. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.3 I might wear certain clothes only once or twice before disposing of them. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.4 I often air out my clothes to avoid washing them too often. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 7.5 Instead of buying a new piece of clothing for an event, I often borrow from my friends. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

8. When disposing of clothing, which of the following would you describe a a motive? Reply on a scale of 0-5 (1=Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, 5= Strongly agree, 0= I don't know).

- | | 1 | 2 | 3 | 4 | 5 | 0 |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 8.1 I dispose of clothes if they're in bad condition. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.2 I dispose of clothes if they're not in fashion anymore. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.3 I dispose of clothes if the size or fit is not good. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| 8.4 I dispose of clothes when I've grown bored of them. | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

9. How have you disposed of clothing over the *last six months*?

- | | Yes | No |
|--|-----------------------|-----------------------|
| 9.1 I have disposed of clothing through regular waste disposal during the last six months. | <input type="radio"/> | <input type="radio"/> |
| 9.2 I've recycled some of my clothes during the last six months (Red Cross, UFF etc.) | <input type="radio"/> | <input type="radio"/> |
| 9.3 I've passed down my old clothes to friends or family during the last six months. | <input type="radio"/> | <input type="radio"/> |
| 9.4 I've exchanged clothes with friends during the last six months. | <input type="radio"/> | <input type="radio"/> |
| 9.5 I've sold my clothes via internet during the last six months. | <input type="radio"/> | <input type="radio"/> |
| 9.6 I've sold my clothes at a physical flea market during the last six months. | <input type="radio"/> | <input type="radio"/> |

10. The following statements relate to used clothing. Reply on a scale of 0-5 (1=Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, 5= Strongly agree, 0= I don't know).

	1	2	3	4	5	0
10.1 I have a positive attitude towards second hand clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.2 I would like to purchase second hand clothing more often.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.3 I buy a significant portion of my clothing second hand.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.4 I don't buy second hand clothes because I don't like the idea that someone has already used them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.5 I buy second hand clothes because of lower prices.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.6 I buy second hand clothes because I appreciate the uniqueness of the clothes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10.7 I buy second hand clothes because it's more sustainable than buying new clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Reply to the following statements about purchasing used clothing.

	Yes	No
11.1 I have bought second hand clothing during the last six months.	<input type="radio"/>	<input type="radio"/>
11.2 I have bought clothes at a physical flea market during the last six months.	<input type="radio"/>	<input type="radio"/>
11.3 I have bought second hand clothing at an online fleamarket (e.g. Facebook) from another consumer over the last six months.	<input type="radio"/>	<input type="radio"/>
11.4 I have used a mobile application for purchasing second hand clothing.	<input type="radio"/>	<input type="radio"/>
11.5 I have bought second hand clothing on an international website over the last six months.	<input type="radio"/>	<input type="radio"/>

The following statements relate to ethical consumerism. The statements consider consumption in general instead of a focus on clothing consumption.

12. Reply to the following statements relating to ethical consumerism.

	1	2	3	4	5	0
12.1 I choose the environmentally friendly alternative of a product, if there is one, regardless of price	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.2 I choose the environmentally friendly alternative of a product, if there is no significant price difference	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.3 I am interested in asking about the environmental consequences of a product before buying it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.4 Whenever I have the choice, I choose the less polluting product	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.5 I try to avoid environmentally harmful products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.6 I try to use less water	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.7 I try to use less energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.8 I have discussions with my family and/or friends about environmental issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.9 Discussions about environmental issues are very boring	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.10 I have never been seriously concerned about issues such as ground water and sea pollution	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.11 I don't think that I have anything to do with the destruction of animals or plants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.12 Plants and animals exist primarily to satisfy humans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.13 Environment protection is the most important problem of our time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12.14 The benefits of modern consumer products outweigh the harm caused by pollution, which results from their production and use.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please provide your contact details if you wish to participate in the raffle:

Thank you for participating in the survey.

Appendix 4

	051	052	053	054	055	056	057	061	062	063	064	065	066	067	068	069	0810	0811	071	072	073	074	075	081	082	083	084	0101	0102	0103	0104	0105	0106	0107	
Correlation	1.000	0.220	0.245	0.329	-0.147	-0.127	0.275	0.097	0.114	-0.009	-0.262	-0.131	-0.338	-0.341	-0.252	-0.323	-0.315	-0.289	-0.092	-0.107	0.176	-0.094	-0.212	0.071	0.268	-0.055	0.113	-0.173	-0.106	-0.261	-0.216	-0.056	-0.180	-0.317	
051	1.000	0.220	0.245	0.329	-0.147	-0.127	0.275	0.097	0.114	-0.009	-0.262	-0.131	-0.338	-0.341	-0.252	-0.323	-0.315	-0.289	-0.092	-0.107	0.176	-0.094	-0.212	0.071	0.268	-0.055	0.113	-0.173	-0.106	-0.261	-0.216	-0.056	-0.180	-0.317	
052	0.220	1.000	0.218	0.117	0.014	-0.132	-0.088	-0.143	-0.093	0.101	0.051	-0.064	0.022	-0.079	-0.079	-0.001	0.001	-0.093	-0.093	0.205	0.002	0.012	-0.025	0.283	0.221	1.000	0.345	-0.010	-0.002	0.002	0.006	0.043	-0.027	0.042	
053	0.245	0.218	1.000	0.886	-0.228	-0.224	1.002	-0.113	-0.058	0.071	-0.099	-0.124	-0.163	-0.157	-0.166	-0.131	-0.162	-0.093	-0.040	-0.075	0.268	0.015	-0.138	0.054	0.271	0.065	0.157	-0.143	-0.048	-0.177	-0.155	-0.056	-0.080	-0.206	
054	0.329	0.117	0.886	1.000	-0.145	-0.283	0.201	0.050	0.005	0.001	-0.126	-0.240	-0.171	-0.223	-0.198	-0.181	-0.091	-0.149	-0.140	0.337	-0.094	-0.190	0.024	0.219	-0.012	0.197	-0.139	-0.080	-0.169	-0.189	-0.094	-0.083	-0.245		
055	-0.147	0.014	-0.228	-0.145	1.000	0.320	-0.082	-0.120	-0.119	0.098	0.116	0.153	0.135	0.159	0.134	0.122	0.132	0.173	0.150	0.088	-0.194	0.177	0.098	0.007	-0.050	0.053	-0.202	0.026	-0.008	-0.021	0.021	-0.013	-0.008	0.062	
056	-0.127	-0.132	-0.224	-0.283	0.320	1.000	-0.229	-0.099	-0.052	0.177	0.224	0.550	0.320	0.298	0.302	0.296	0.402	0.290	0.290	0.274	0.274	0.171	-0.086	-0.240	0.016	-0.210	0.120	0.086	0.148	0.082	0.079	0.170	0.232		
057	0.275	0.088	0.102	0.201	-0.082	-0.229	1.000	0.396	0.263	0.255	0.451	-0.410	-0.319	-0.446	-0.237	-0.506	-0.465	-0.382	-0.113	-0.098	0.118	-0.141	-0.103	0.060	0.090	0.008	0.128	-0.059	0.001	-0.321	-0.102	0.031	-0.179	-0.180	
061	0.097	-0.143	-0.113	0.050	-0.120	-0.099	0.396	1.000	0.502	-0.402	-0.258	-0.373	-0.074	-0.145	-0.157	-0.241	-0.090	-0.075	-0.106	-0.153	-0.202	0.040	-0.149	-0.004	0.048	-0.037	-0.035	0.031	0.215	0.191	0.148	0.152	0.302	0.048	0.136
062	0.114	-0.093	-0.058	-0.005	-0.119	-0.052	0.263	0.502	1.000	-0.337	-0.157	-0.241	-0.019	-0.090	-0.075	-0.108	-0.152	-0.138	-0.065	-0.014	0.013	-0.108	0.001	-0.034	-0.032	-0.061	-0.029	0.133	0.124	0.089	0.081	0.231	0.003	0.095	
063	-0.009	0.101	0.071	0.001	0.098	0.177	-0.255	-0.402	-0.337	1.000	0.212	0.477	0.150	0.106	0.123	0.100	0.182	0.170	0.158	0.065	0.022	0.184	-0.042	0.072	0.082	0.164	0.068	-0.063	-0.032	-0.092	-0.097	-0.158	0.055	-0.020	
064	-0.262	0.051	-0.099	-0.126	0.116	0.224	-0.451	-0.258	-0.157	0.212	1.000	0.428	0.493	0.525	0.364	0.500	0.595	0.487	0.428	0.235	-0.132	0.270	0.098	-0.008	-0.079	0.039	-0.085	0.022	-0.029	0.097	0.036	-0.073	0.171	0.161	
065	-0.131	0.015	-0.124	-0.240	0.153	0.550	-0.410	-0.373	-0.241	0.477	0.428	1.000	0.402	0.360	0.323	0.364	0.386	0.356	0.414	0.235	-0.132	0.270	0.098	-0.008	-0.079	0.039	-0.085	0.022	-0.029	0.097	0.036	-0.073	0.171	0.161	
066	-0.338	-0.064	-0.163	-0.171	0.135	0.320	-0.319	-0.074	0.019	0.150	0.493	0.402	1.000	0.657	0.599	0.639	0.631	0.236	0.205	-0.172	0.181	0.274	-0.053	-0.145	0.002	-0.091	-0.337	0.322	0.383	0.331	0.172	0.426	0.494		
067	-0.341	0.022	-0.157	-0.223	0.159	0.298	-0.446	-0.145	-0.090	0.106	0.525	0.360	0.657	1.000	0.667	0.660	0.708	0.610	0.177	0.256	-0.186	0.252	0.318	-0.080	-0.141	0.010	-0.061	0.275	0.269	0.391	0.281	0.135	0.417	0.414	
068	-0.252	-0.079	-0.166	-0.198	0.134	0.331	-0.237	-0.072	-0.075	0.123	0.336	0.323	0.659	0.667	1.000	0.440	0.475	0.434	0.170	0.212	-0.219	0.169	0.206	-0.078	-0.140	-0.003	-0.163	0.305	0.292	0.296	0.325	0.128	0.320	0.443	
069	-0.323	-0.027	-0.131	-0.215	0.122	0.306	-0.506	-0.106	-0.108	0.100	0.500	0.364	0.599	0.660	0.440	1.000	0.683	0.581	0.218	0.271	-0.170	0.212	-0.123	-0.148	0.011	-0.131	0.273	0.289	0.264	0.461	0.294	0.129	0.368	0.404	
0810	-0.092	-0.069	-0.040	-0.149	0.150	0.402	-0.113	-0.090	-0.065	0.158	0.129	0.414	0.236	0.177	0.170	0.218	0.193	0.233	0.100	0.543	-0.149	0.343	0.128	0.028	-0.148	0.021	-0.129	0.147	0.094	0.119	0.055	0.065	0.160	0.170	
0811	-0.289	0.001	-0.093	-0.091	0.173	0.296	-0.382	-0.202	-0.138	0.170	0.487	0.356	0.631	0.610	0.434	0.581	0.659	0.500	0.233	0.196	-0.147	0.232	0.215	-0.101	-0.081	0.006	-0.088	0.196	0.134	0.274	0.179	0.072	0.321	0.325	
071	-0.107	-0.093	-0.075	-0.140	0.088	0.290	-0.098	-0.025	-0.014	0.065	0.127	0.235	0.205	0.256	0.212	0.271	0.248	0.196	0.543	1.000	-0.109	0.304	0.211	-0.130	-0.124	-0.015	-0.092	0.290	0.223	0.273	0.226	0.228	0.335	0.301	
072	0.176	0.205	0.268	0.337	-0.194	-0.290	0.118	0.040	0.013	0.022	-0.151	-0.132	-0.172	-0.186	-0.219	-0.170	-0.209	-0.147	-0.149	-0.109	1.000	-0.075	-0.130	0.081	0.317	0.120	0.398	-0.105	-0.056	-0.078	-0.121	0.024	-0.016	-0.141	
073	-0.094	0.002	0.015	-0.094	0.177	0.274	-0.141	-0.149	-0.108	0.184	0.211	0.270	0.181	0.252	0.169	0.212	0.199	0.232	0.343	0.304	-0.075	1.000	0.209	-0.035	0.002	0.012	-0.036	0.091	0.091	0.178	0.073	-0.003	0.177	0.144	
074	-0.094	0.002	0.015	-0.094	0.177	0.274	-0.141	-0.149	-0.108	0.184	0.211	0.270	0.181	0.252	0.169	0.212	0.199	0.232	0.343	0.304	-0.075	1.000	0.209	-0.035	0.002	0.012	-0.036	0.091	0.091	0.178	0.073	-0.003	0.177	0.144	
075	-0.212	-0.061	-0.138	-0.190	0.098	0.171	-0.103	-0.004	0.001	-0.042	0.164	0.098	0.274	0.318	0.206	0.271	0.271	0.215	0.128	0.211	-0.130	0.209	1.000	-0.077	-0.022	-0.025	0.032	0.220	0.180	0.302	0.236	0.147	0.235	0.272	
081	0.071	0.010	0.054	0.024	0.007	-0.086	0.060	0.048	-0.034	0.072	-0.118	-0.008	-0.053	-0.080	-0.078	-0.123	-0.105	-0.101	0.028	-0.130	0.081	-0.035	-0.077	1.000	0.170	0.283	0.159	-0.149	-0.047	-0.131	-0.137	-0.117	-0.220	-0.068	
082	0.268	0.166	0.271	0.219	-0.050	-0.230	0.090	-0.037	-0.032	0.082	-0.055	-0.079	-0.145	-0.141	-0.140	-0.148	-0.127	-0.081	-0.148	-0.124	0.317	0.002	-0.022	1.000	0.221	0.312	-0.222	-0.169	-0.188	-0.248	-0.100	-0.119	-0.170		
083	-0.055	-0.026	0.065	-0.012	0.053	0.008	-0.035	-0.061	0.164	0.010	0.039	0.002	0.010	-0.003	0.011	-0.007	0.006	0.021	-0.015	0.120	0.012	-0.025	0.283	0.221	1.000	0.345	-0.010	-0.002	0.002	0.006	0.043	-0.027	0.042		
084	0.113	0.058	0.157	0.197	-0.202	-0.210	0.128	0.031	-0.029	0.068	-0.112	-0.085	-0.091	-0.061	-0.163	-0.131	-0.077	-0.088	-0.129	-0.092	0.338	-0.036	0.032	0.159	0.312	0.345	1.000	-0.052	-0.039	-0.035	-0.084	0.058	0.017	-0.051	
0101	-0.173	-0.072	-0.143	-0.139	0.026	0.120	-0.059	0.215	0.133	0.063	0.174	0.022	0.337	0.275	0.305	0.273	0.289	0.196	0.147	0.290	-0.105	0.091	0.220	-0.149	-0.222	-0.010	-0.052	1.000	0.723	0.698	0.748	0.502	0.440	0.588	
0102	-0.106	-0.039	-0.048	-0.080	0.008	0.086	0.001	0.191	0.124	-0.032	0.161	-0.029	0.322	0.269	0.292	0.196	0.264	0.134	0.094	0.223	-0.056	0.091	0.180	-0.047	-0.169	-0.002	-0.039	0.723	1.000	0.454	0.652	0.488	0.445	0.631	
0103	-0.261	-0.164	-0.177	-0.169	-0.021	0.148	-0.321	0.148	0.089	-0.092	0.308	0.097	0.383	0.391	0.296	0.461	0.387	0.274	0.119	0.273	-0.078	0.178	0.302	-											