VAMK

VAASAN AMMATTIKORKEAKOULU
UNIVERSITY OF APPLIED SCIENCES

Tien Tran

CONSUMER BEHAVIOUR IN SUSTAINABLE

FASHION INDUSTRY

Business Economics

2021

VAASAN AMMATTIKORKEAKOULU
UNIVERSITY OF APPLIED SCIENCES
International Business

ABSTRACT

Author	Tien Tran
Title	Consumer Behaviour in Sustainable Fashion Industry
Year	2021
Language	English
Pages	77 pages + 1 appendices
Name of Supervisor	Thomas Sabel

Sustainability in the world has gained increased popularity and has become a driving trend. The latest fashion trend is not a seasonal color or a must-have style, it is the concept of sustainable fashion and ethical clothing. The thesis studied the sustainability trend in fashion industry which has a major impact on consumer behaviour. Consequently, the aim of this research was to evaluate how the customers perceive the sustainabillity trend and find out which factors affect consumers in purchasing sustainable fashion products. The thesis focuses on the two following main questions: How do consumers perceive the fast fashion and sustainable trend? And which factors affect consumer behaviour in buying sustainable fashion? The research questions are answered using data collected from young customers in the fashion industry in Vietnam and Finland. The study used the quantitative research method to answer the research questions. Using a multilinear model, the study concluded personal factors, psychological factors, social factors, and cultural factors have a significant influence on customers' buying behaviour in the fashion industry.

Keywords: Sustainable fashion, sustainability, fashion industry, consumer behaviour

TABLE OF CONTENTS

LIST OF FIGURES AND TABLES

1   INTRODUCTION

1.1   Research background

The fashion industry is currently the second largest producer of carbon emissions in the world, after the oil industry. Fashion production is associated with a variety of negative social and environmental impacts including unfair working conditions, excessive use of hazardous chemicals and emissions to the air and water. The textile industry produces 10% of worldwide carbon emissions, according to the European Commission (2020) and 20% of all textiles end as waste while only 1% of all textiles are recycled in the world.

Clothing sales have increased in the last 20 years and fashion has not, until recently, been very sustainable. Many studies have been created about the impact of the fashion industry on climate change. The fast fashion causes pollution to the environment by increasing the large scale textile production with up to 24 seasonal collections launched each year (S   ajn, 2019). In UK alone people consume 1.5 to 2 million tons of textile, while over 1 million tons of clothing goes into landfills every year (DEFRA 2007).

In order to deal with that most companies have shifted from traditional business models toward the models that incorporate sustainability. The latest fashion trend is not a seasonal color or a must-have style, it is the concept of ethical clothing and sustainable fashion. Therefore it is likely that sustainability will shape the fashion industry even further in the future.

The fashion industry is highly dependent on consumers, thus it is critical that consumers receive sufficient knowledge about brands, production processes, marketing activities and challenges in fast fashion industry (Chan, 2020). Consumers will pay more for garments from brands that follow ethical practices, give fair wages, use organic fibers or create more durable items. As a result, in order for the fast fashion to be more responsible and affect customers purchasing behaviour, their products should be viewed from the customer perspective.

1.2   Thesis Objective, Research Questions and Limitations

The objective of the thesis is to evaluate customer purchasing intentions toward fast fashion and sustainable fashion and the factors influencing their buying decisions (Clark, 2008). The aim is also to learn about attitudes of customers toward sustainable fashion, as well as their understanding of fast fashion and its problems (Bick, Halsay, and Ekenga, 2018).

The thesis focuses on the two main following questions :

- How do consumers perceive the fast fashion and sustainable trends?
- What factors affect consumer behaviour in buying sustainable fashion?

The concerns the respondents of the survey: the range is not international enough and specific for a deeper analysis (Fletcher, 2014). The survey was shared on social media and will be only conducted among various young adult customers (below 35 years) in Vietnam and Finland. Therefore, there can be a shortage of responses from people who are less interested in buying sustainable fashion items. The result of the study might be elevant only for the Vietnamese and Fininish markets, not for the whole European market. Furthermore, the research result might not be clear enough and updated because of the existing literature being written a few years ago. The research might not cover all the variety of information due to time constraint and length limitations. The author concentrated on the information she considered to be the most applicable to the topic (Middlebrook, 2015).

1.3   Structure of the thesis

The thesis consists of 6 chapters. The thesis starts with an introduction which presents and describes the research background, the aim of the study, main research questions as well as the limitations and the structure of the thesis.

The theoretical framework will be divided into two main parts. The second chapter describes the brief history of fashion production and current situations of fashion industry in terms of fast fashion, sustainable fashion, phases of fashion production, responsibility of fashion businesses (Geiger, 2017). The third chapter disscusses about the consumer buying behaviour including factors affect their buying decision and recycled clothes, this chapter also provides the outcomes of literature review before the survey questions are fomulated.

The fourth chapter covers the research methodology, the definition of the method, the collecting of data and the design of questionaires. The survey questions can be found in Appendix 1. In the fifth part, result and data analysis chapter focuses on collecting and analysis of the findings.

The conclusion chapter presents the result of the thesis and answer the main research questions. The chapter covers the validity and reliability, limitations of the study as well as provides suggestions for future research (Gilliland, 2017).

2   FASHION INDUSTRY

The chapter covers the theories based on available books, studies and paper that are utilized in the thesis. The author defines and discusses important terms used in the formulation of research hypotheses and the development of main research questions.

2.1   Brief history of fashion production

Before the 1800s, garment were made from sheep or wool by hand to keep people warm. The Industrial Revolution in the 18th century gathered up speed the cycle of fashion, introduced ready-made clothing, new textile machines and factories that changed the entire clothing production process and have an impact on clothing we wear today (Noagi, 2010) .

Clothing was still handmade in the early 19th century, produced by women for family or custom-made for taylors and seamstreses. From 1860s to the 1880s, the ready-to-wear industry grew rapidly due to the increasing mechanization, partly from the enormous urbanization and large wage of immigrants that came to the U.S (Sean, 2015). Expansion of the ready-made clothing industry throughout the 20th century demonstrate to its importance in the economy (Wang et al., 2011) . Capital investment in garment businesses went from $541 million to $2 billion between 1899 and 1948. By 1929, clothing became the third-largest component of spending in the average household budget.

In 1960s, when young people embraced low-cost clothing in order to follow new trends and reject the sartorial tradition of previous generations that when fashion trends begen to move at the rapid speed (Paul, 2016). Fashion companies had to find methods to keep up with the rising demand for affordable clothes, leading to the opening of large textile mills around the world (Sara, 2018). Early in 1975, the clothing industry began to expand, and by the end of the 20th century, the industry had swollen up, showing high profits with the footwear industry itself worth £26 billion (Noagi, 2010).

In the late 1990s and 2000s, low-cost fashion hit its zenith, online shopping became popular and fast-fashion leaders in the industry today including H&M, Zara, Topshop and Primark dominated the high street (Kotler and Keller, 2015). These brands reproduced the looks and

design features of top fashion firms for affordable trendy clothes. Everyone now having the ability to buy on-trend clothing anytime they wanted after it walked down the runway for the first time (Sara, 2018).

When Zara first opened its doors in New York in the early 1990s, the New York Times used the phrase "fast fashion" to describe the goal of the store, claiming that it would take only 15 days for a garment to go from a designer to being sold at the stores (Schiro, 1989). In an industry that has traditionally emphasized moving faster, it is time for slowing down at least to be more aware of the purchases (Chan, 2020).

2.2   Fast fashion

2.2.1   What is the fast fashion

The concept of fast fashion is widely considered as a new concept which has completely changed the way consumers purchases (Claudio, 2007). From the consumer perspective, fast fashion is cheap, trendy, and disposable clothing that their wardrobes can be updated regularly with latest designs at the affordable prices (Bick, Halsay, and Ekenga, 2018). From business perspective, fast fashion is described as producing large amounts of clothing in a short period of time at the low production costs to maximize profit.

The growth of the multi-trillion-dollar apparel industry was driven by "fast fashion", which produces clothing rapidly and cheaply with a low price-tag. Instead of launching four collections a year, fast fashion brands produce new trends that mirror catwalk looks on the sales floor as frequently as several times each week (Chan, 2020). The aim of doing this was to encourage people to buy garments more frequently since the products they bought would become out of trend after one week. This also makes the clothing more unique as they are only available in stores for a limited time, due to new trends being introduced every week. People now can dress like their favourite influencers and celebrities.

For fashion industry, "fast" refers to more than just speed; it is an economic tool used to enhance production and profit (Fletcher, 2010). Fast fashion brands create clothing on trend and not design them to last. Therefore, they less focus on the construction or the quality of the materials, the usages of cheap fabrics on garment allows the products to have very

low-price points for consumers of all income level (Claudio, 2007)l. There is rapid turnover, leaving customers with little regrets for their purchases and the disposal of these products (Joy et al, 2012).

Furthermore, the typical individual can now publicly describe their life in outfits because of social media. People can be scrutinized by their choices, wearing the same clothes again became taboo through visual platforms. According to a survey commissioned by the London sustainability business Hubbub in 2017, 41% of 18-25-year-olds feel pressured to dress differently every time they go out. Another 2019 survey commissioned by the Barnado's charity indicated that British consumers would spend up to 2.7 billion pounds on summer clothing that will only be used once (Geiger, 2017).

A shopper today might get a basic dress from Forever 21 for under $12. The price of that piece of clothing, including the costs of labour, materials and supply chain logistics is cheap, but it is unlikely made to last. In December 2019, the New York Times posted a report on Fashion Nova, a glamorous online shop, indicating that manufacturers producing Fashion Nova clothing were being investigated by the US Labor Department for underpaying workers and owing millions in wages.

That revelation is not unexpected, given that the company launches hundreds of designs each week at extremely low prices. Fashion Nova and the entire fast fashion system were criticized and condemned online, but that did not appear to cause any significant shockwaves. Celebrities, influencers and other high-profile "Nova ambassadors"- who assisted with the campaign, continue to support it and consumers still purchase products from the brand.

> If Fashion Nova is cancelled, then y'all should cancel all other fast fashion retailers because most of them use sweatshop labour or just underpay their employees in general. There is almost no escaping capitalism. (Cornbread December 21, 2019)

The current fast fashion industry has many problems, such as unfair labour practices, usage of child labour and huge amounts of waste. However, consumers are becoming highly aware of these issues in the industry and began to demand greater responsibility from fashion businesses (Hasanspahic, 2016). As a result, many fast fashion companies are gradually changing their processes by providing collections manufactured from environmentally

friendly materials.

2.2.2 Environmental impact of fast fashion

The pandemic brought fast fashion to a standstill. People want to dress up again since the world has opened and people are socializing and going places (Fletcher, 2014). However, after having a confined and simpler lifestyle during COVID, this is a good time to consider the impact of how we dress. Fashion, particularly fast fashion has enormous environmental impacts on the planet, both in terms of production and disposal.

It included the use of natural recourses like water and land, the use of hazardous chemicals in the raw material production phase, the use of massive quantities of energy and effluents in the processing phase, emissions from transportation and a huge amount of waste products. (The Textile Institute, 2015, p. 553). Textile production begins with fibre production, which includes the extraction and processing of fibers, spinning, the yarn preparation. The yarn is knitted or woven into a fabric in the next stage. Before cutting and sewing fabric into a finished garment, the fibric is bleached, dyed and finished. (Quantis, 2018, p. 11)

It is estimated that 20 new pieces of clothing are made per person each year, and we are purchasing 60% more fashion products than we were in 2000 but each item is only kept for half as long (Drew, 2017). Each piece of clothing is worn fewer times before it is disposed, resulting in increasing relative manufacturing emissions. Clothing can take up to 200 years to decompose and the planet is constantly getting polluted by more artificial material.

The fashion industry is one of the biggest polluters in the world, second only after oil industry. The textile production is producing 1.2 billion tonnes of CO_2 equivalent each year, account for 5% of global carbon emissions. (Ellen MacArthur, 2017). This is due to the fact that garments are produced and manufactured in different Asian countries such as China, Bangladesh and India which depend on coal-fuelled power plants, therefore increasing the carbon footprint of garments, use of cargo ships and planes to transport products.

Emissions from producing is highly depends on the materials. Since their production in the second part of the twentieth century, synthetic fibers have seen tremendous manufacturing

development. Polyester has overtaken cotton as the most popular fabric used in clothing early in the tweenty-first century (Watson, 2013). Synthetic fabrics like polyester is derived from fossil fuels like crude oil and its production releases huge amounts of greenhouses gases which contribute to global warming. The production of plastic-based fibers for textiles consumes 342 million barrels of oil each year. Microfibers are shed during the washing process by plastic-based fabrics such as polyester, nylon and acrylic. Washing clothes releases 500,000 tons of microfibers into the ocean each year, the equivalent of 50 billion plastic bottles, causing significant environmental and health effects (Ellen MacArthur, 2017). These are eaten by aquatic organisms which are consumed by fish, which are consumed by human.

In 2015, the manufacturing of polyester for textile usage produced about 706 billion kg of CO_2 and a polyester T-shirt creates emissions of 5.5 kg CO_2, compared to 2.1 kg CO_2 for a cotton T-shirt (Ellen MacArthur, 2017). It is impossible to define whether natural or synthetic materials are more ecologically beneficial because they both have environmental impacts. Polyester is energy intensive and many synthetic materials are non-renewable, but they have the benefit of being easily recyclable.

On the other hand, cotton is an extremely thirsty crop, and its production has a significant impact on land and require a large quantities of water (Joergens, 2006). One kilogram of cotton takes 3800 gallons of water to grow and it requires 2700 liters of water, which is enough for one person to drink in two and a half year, to produce one cotton shirt. As a result, there is a possibility of drought, significant stress on water basins, and conflict for resources between businesses and local community. Cotton cultivation is also responsible for 24% of insecticides and 11% of pesticides, although using just 3% of the world's arable land (Drew, 2017).

An alternative to conventional cotton is organic cotton, which is cultivated without pesticides, however organic cotton is frequently 10 to 20% more expensive than conventional cotton, and yields are often low (Johnston, 2012). Consumer and brand engagement on cotton concerns has been particularly strong in the last seven years, but this has resulted in demand

exceeds the supply. Someone may purchase an organic cotton T-shirt, use it a few times or many times, and then dispose it, which may end up in a landfill. If the T-shirt was dyed with toxic chemicals, the dyes may have leaked into the soil. It might take up to 400 years for a   T-shirt to biodegrade.

H&M has demonstrated significant improvements in the materials it obtains, renewable energy utilized in stores, and the growth of its garment recycling program through annual reports. However, the Swedish retailer is dealing with excess inventory, it was accused of burning tons of clothing in 2017 and the environmental effects of its manufacturing process (Joy et al, 2012).

Inditex, Zara's parent company announced in July 2019 that it will entirely use sustainable, organic, or recycled materials in all their products by 2025. Some people questioned the effectiveness of the plan and saw it as a greenwashing example because Zara did not guarantee to create less products or slow down its production process (Jurig, 2016).

Textile dyeing is also the second biggest polluter of water in the world, with a typical pair of jeans using around 2,000 gallons of water and only one ton of fabric might require 200 tons of fresh water to dye and finish. The textile production creates a large amount of untreated toxic wastewater which contains hazardous chemicals such as lead, mercury, and arsenic, they are significantly dangerous to aquatic and human life. Clothing factories dump their waste directly into rivers and the health of the wildlife and people who live along the banks is endangered by this toxic water. Every year 22 000 tons of hazardous waste from tanneries hit into the rivers in Bangladesh alone. Extinction Rebellion and the UN have also discovered that 3.6 billion people (almost half of the world population) are at danger of water scarcity at some time during the year.

The world needs healthy soil and trees to produce food, both absorb CO_2 and play a crucial role in preventing global warming. One problem with the fast fashion industry is that it harms soil, forest, and the entire ecosystems. Goats and sheep are overgrazed in pastures as they are kept for their wool. Overgrazed causes soil erosion, land degradation, the loss of important plant species, food scarcity and hunger (Jung and Jin, 2016). Wood-based fibers, such as rayon and viscose, contribute to widespread deforestation. Every year, thousands of

hectares of ancient and endangered rainforests are destroyed. Plantations of trees used to produce wood-based textiles have taken their place. This hurts both indigenous people and the environment.

Fast fashion has a negative influence on the health of both consumers and garment worker, in addition to the environment impact. Clothing contains hazardous chemicals such as benzothiazole, which has been linked to various types of cancer and respiratory diseases. Our skin is the biggest organ of body and absorbing all the harmful substances by wearing these bad made garments can endanger our health (Clark, 2008), (Watson, 2013). Greenpeace Detox project demonstrated 11 chemicals used in clothing manufacturing that are known to cause cancer and damage our hormones. Other research has indicated that chemicals discovered in children's pyjamas may be found in the children's urine five days after they wore the pyjamas for just one night.

The health of workers is always threatened because of the exposure to these harmful chemicals, they must deal with long hours, unfair wages, scarcity of resources and even physical abuse (Naomi, 2010). Many of us have heard about Nike sweatshops, but they are only one of many fast fashion businesses that violate human rights for the sake of fashion. Because there are few alternative options, the people who produce garments are underpaid, underfed, and pushed to their limits. There are several more concerns up and down the supply chains of large fast fashion businesses, but most of them go unnoticed in mainstream media.

Fast fashion has a lot to explain for from its environmental effect to human rights abuses. However, it does not appear to be slowing down anytime soon (Gilliland, 2017). Consumers and critics need more convincing as green buzzwords and sustainability pledges become increasingly popular, especially from fashion firms, whose business model is based on fast production (Chan, 2020).

2.3 Sustainability

In 1987, in the Brundtland Report, the United Nations (UN) defined sustainable development as "development that meets the needs of the present without compromising the ability of

future generations to meet their own needs". It emphasized the concept of sustainability is based on three pillars: economic, environmental, and social – also commonly known as profits, planet and people (Clark, 2008). These pillars are interrelated and equally significant in creating a sustainable community. The figure below show the popular way of visualizing the three pillars:
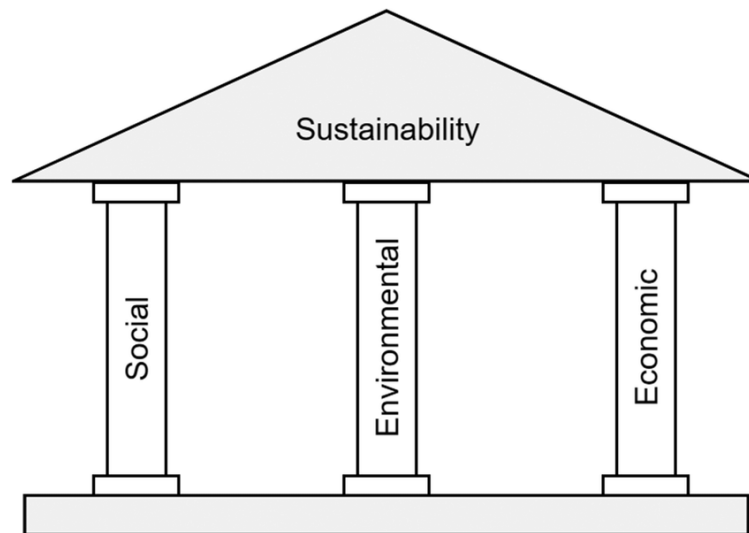
Figure 1. The three pillars of sustainability (Thwink, org 2017)

The environmental pillar receives the most attention. Environmental sustainability aims to enhance human well-being by protecting natural capital such as land, air, water, and minerals (Joergens, 2006). Environmentally sustainable initiatives and programs ensure that the requirements of the population are satisfied without risking the needs of future generations. Environmental sustainability is achieved through decreasing the impact of human activities on the environment that support the community. Environmental sustainability, as defined by Dunphy, Benveniste, Griffiths, and Sutton (2000), focuses on how businesses can produce positive economic outcomes while causing no harm to the environment in the short or long term (Wang et al., 2011). Companies are increasingly making public pledges to sustainability through investing in renewable energy, reducing waste and supporting businesses that strive toward a sustainable future.

The ability of a social system, such as a country, family, or organization, to function indefinitely at a defined degree of social well-being and harmony is referred to as social

sustainability. War, endemic poverty, widespread injustice, and a low education rate are all symptoms of a socially unsustainable system (Claudio, 2007). A sustainable business should be supported and approved by its employees, stakeholders, and the community in which it operates (Geiger, 2017). The methods for obtaining and maintaining this support vary, but it all basically comes down to being a good neighbor and community member, both locally and globally and treating employees fairly by refocusing on retention and engagement strategies.

The goal of economic sustainability is to keep capital intact. Whereas social sustainability seeks to create social equity, economic sustainability seeks to raise living standards (Bick, Halsay, and Ekenga, 2018). It refers to the efficient use of assets to maintain corporate profitability over time in the business setting. Most businesses believe they are on firm ground when it comes to the economic pillar of sustainability (Jurig, 2016). A business must be profitable in order to be sustainable.

> "Maintaining high and stable levels of economic growth is one of the key objectives of sustainable development. Abandoning economic growth is not an option. But sustainable development is more than just economic growth. The quality of growth matters as well as the quantity." (UK Government, Annual Report 2000, 2001)

2.4   Sustainable fashion

2.4.1   What is sustainable fashion

Sustainable fashion has gained in popularity and was developed as a solution for terrible environmental impact of the fashion industry. With sustainability developing as a "megatrend" (Mittelstaedt et al., 2014), the fashion world is changing dramatically, with sustainable fashion becomes more popular (Watson, 2013). Sustainable fashion initially emerged in the 1960s, when customers became concerned about environmental impact of garment manufacture and demanded that the industry improve its (Jung and Jin, 2014).

The slow fashion movement developed as a reaction to fast fashion cycles and "unsustainable" company growth. Sustainable fashion is as a part of the slow fashion movement that has emerged in recent decades and is associated with fair working conditions,

a sustainable business model (Joergens, 2006, p. 361) organic and ecologically friendly materials (Johnston, 2012) traceability and certifications (Henninger, 2015). It supports ethical behaviour, reduced fashion production, and purchasing quality clothing over quantity (Fletcher, 2010); (Ertekin and Atik, 2014)

Fashion is sexy, addictive, exclusive and very fast-moving. Furthermore, sustainability is about slowness, care, flourishing and responsibility (Paul, 2016). Slow fashion, more especially sustainable fashion, seeks to empower workers across the supply chain by utilizing upcycling, recycling, and traditional manufacturing techniques, as well as renewable and organic raw materials (Johnston, 2012). A balanced approach to fashion production that encourages long-term relationships, builds local production, and emphasizes transparency is essential to the slow fashion movement and sustainable fashion (Ertekin and Atik, 2014).

Many different types of problems affect sustainable fashion. One of them is that it is more expensive when compared to fast fashion firms (Watson, 2013). This is due to the use of long-lasting, high-quality materials, as well as domestic, local production and manufacturing. Because of these reasons, not everyone can afford it, which could be the most significant disadvantage of sustainable fashion (Chan, 2020). It is difficult for sustainable brands to compete in the same marketplaces since they cannot match the prices of fast fashion companies. Greenwashing is also a major issue in the industry since more fashion brands have been greenwashing their products. Greenwashing — brands making ambiguous, misleading, or false statements to suggest they are more eco-friendly than they are – is becoming more common as customers become more aware of their environmental footprint. Brands that are truly sustainable might easily be lost among greenwashing brands since they only show what consumers want to see.

While fast fashion continues to dominate the fashion industry, an increasing number of brands are following the sustainable fashion trend (Chan, 2020). Fashion companies are obviously contributing to more sustainable consumption patterns by changing their production, distribution, marketing practices and strategies towards greater sustainability. Some big corations participate in a recycling program (H&M group, Zara), enhance their supply chain (C&A), or offer a separate line of sustainable clothing ('conscious' line of H&M group) and focus on creating high-quality clothes with timeless design for long-lasting style

and durabilty. Some Swedish fashion businesses sell secondhand clothing or have established rental networks for clothing and accessories.

According to Anna Brisma (2019), sustainable fashion production and distribution can be identified into seven main forms as shown in the figure below

Secondhand & Vintage · On Demand & Custom Made (incl. made-to-order, tailor-made, bespoke and DIY) · Green & Clean (for all phases of a product's lifecycle) · High Quality & Timeless Design · Fair & Ethical (incl. traditional production, artisan crafts and animal rights) · Repair, Redesign & Upcycle · Rent, Lease & Swap

7 1 2 3 4 5 6

© Green Strategy, www.greenstrategy.se
By Dr. Anna Brismar 2019
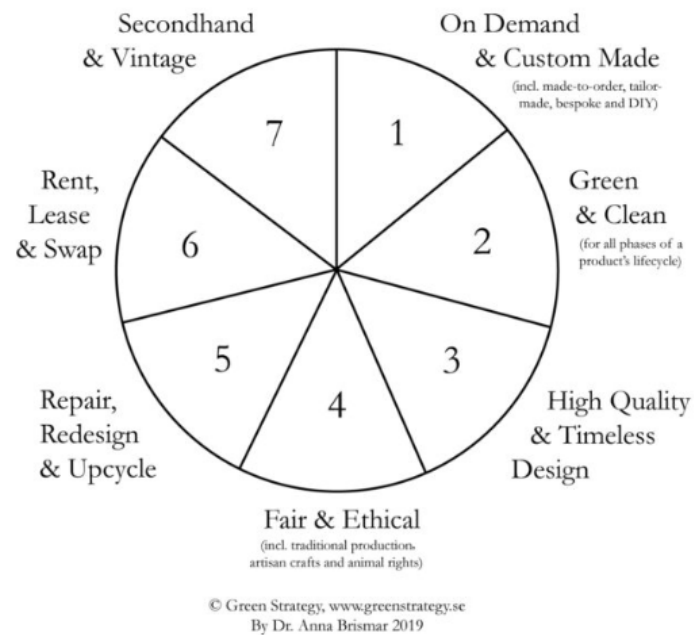
Figure 2. Seven forms of sustainable fashion (Brisma, 2019)

As a result, the figure shows seven forms of sustainable fashion from both the consumer and producer perspectives. Although garments and other fashion products should ideally be created and consumed in the manner stated above, this is not currently the case. What we should aim for is for each individual to try to find his or her own form(s) of more sustainable fashion (Fletcher, 2014). Because we all have different needs and preferences, not all forms are suitable for everyone. Purchasing new garments that are produced in an environmentally and socially/ethically responsible manner is something we should all strive for, even if it may come at a somewhat higher cost.

2.4.2   Environmental impact of sustainable fashion

As businesses are encouraged to consider sustainable production, sustainable clothing can also be environmentally sustainable (Jung and Jin, 2016). The design process for slow fashion is more complicated than the design process for fast fashion. Clothing is more extensively examined for quality, and the style is certain to be appropriate and long-lasting (Fletcher, 2008). Sustainable fashion has a lower environmental impact since consumers are encouraged to purchase less and dispose less, resulting in less clothing waste than the fast fashion business.

Because decisions made at the design stage influence 80 to 90 percent of the sustainability of a clothing item, new techniques can eliminate waste from the beginning. A finished garment may require up to 20 samples and the use of 3D virtual sampling can reduce the need for real materials. 3D printing may be used to figure out details digitally before manufacturing, avoiding trial and error, and it lowers waste since it can create custom-fit clothes on demand. The Fabricant, a digital fashion business, says that replacing physical clothes with digital samples throughout the design and development stage may cut carbon footprint of the brand by 30%.

The manufacturing of clothes produced from recycled materials, such as recycled polyester (Hasanspahic, 2016) or from durable fabrics (Kozlowski et al., 2016)such as organic and low-chemical cotton, hemp, and lyocell, their benefits include the use of less pesticides and water throughout the production process (Fletcher, 2008). Biodegradable fibres, such as wool and materials produced from corn starch, are also durable fabrics. Their benefit may be that the industry is less heavily dependent on oil (Fletcher, 2008). Another benefit is to shorten the supply chain and localism is encouraged in sustainable fashion. A shorter supply chain benefits the environment since less transportation is required between countries (Jung and Jin, 2016) a more localized and smaller supply chain reduces the need for goods to be shipped around the world, reducing the carbon footprint of slow fashion items (Clark, 2008).

Another practice for sustainability in fashion is to slow down the production and consumption cycles (Hasanspahic, 2016) (Jung and Jin, 2016). When the production cycle is slowed, workers may work on each clothing item for longer periods of time, resulting in higher quality. Consumers are encouraged to think about the clothes they buy when the consumption cycle

is slowed down. Consumers are encouraged to buy fewer, higher-quality products, this not only indicates the quality of the materials, but also how much the item is trend-focused. As a result, those garments may be worn for extended periods of time (Jung and Jin, 2016) resulted in a decline in the ease of throwing away clothing items (Hasanspahic, 2016).

Nike and Adidas have both taken significant steps forward. Adidas has built a greener supply chain and tackled specific concerns such as dyeing and minimizing plastic bags, whilst Nike has focused on reducing waste and lowering its impact (Middlebrook, 2015). H&M have taken steps toward more sustainable purchasing, primarily through promoting collaboration across their supply chains to minimize waste, improve resource productivity, and optimize material consumption. It has also taken steps to improve local labour standards by engaging with suppliers from emerging economies (Wang et al., 2011).

2.5   Fashion Production

The industrial nature of clothing production has a long-term influence on our environment. In the last 15 years, the volume of clothing produced has almost doubled. 150 billion items of clothing were produced in 2015. Every year, 85 percent, or 3.8 billion pounds, of clothing purchased in the United States is thrown in landfills. That is about 70 pounds per person every year (Bick, Halsay, and Ekenga, 2018). Fashion and textile manufacturing involves one of the most complex industrial chains in the industry. The process from raw textile fibre to final product requires energy, water, and other resources, as well as labour, resulting in a high-impact industry (Fletcher, 2014). The current production processes in the fashion industry, particularly in lower-middle income countries, are harmful to our environment and society. Sustainable practices must be used to prevent climate change and minimize socio-economic inequities.

2.5.1   Materials

Fast fashion uses materials and textiles that are harmful to the environment, it depends on cheap, natural, or synthetic fibers. Polyester and cotton account for more than 80% of global fiber manufacturing, and both have major sustainability concerns. Chemicals are used at every stage of the garment production process, whether it begins "on the land" or

incorporates manmade fabrics. Some are used throughout the dyeing and fabric production process, while others are utilized to offer materials door-, stain-, water-, and wrinkle-resistant features (Grossman, 2015).

Most of the clothing sold in the United States (90%) is produced of cotton or (Bick, Halsay, and Ekenga, 2018). In fashion industry, cotton is known as the natural fiber and cotton cultivation needs huge amounts of water and pesticides result in diminished soil fertility, biodiversity loss, water pollution, and significant health issues due to pesticide exposure . Polyester is made from petroleum oil, volatile organic chemicals, particulate matter, and acid gases, all of which leak toxins into the atmosphere (Claudio, 2007). Synthetic fibers polyester, nylon, and acrylic are more durable and require less water and land to produce, but they are energy-intensive and rely on oil as a feedstock. They are also non-biodegradable and create micro-fibres of plastic while usage. Because of the huge energy consumption during manufacturing process, synthetics have a significantly greater environmental footprint than natural fibers (DEFRA, 2010).

Many sustainable materials are currently being used to change the global fashion sector. These fabrics and textiles are being developed with cutting-edge technology that removes the need of pesticides in clothing industry, minimizing total water waste, eliminating toxic dyes, and processing chemicals, while also up-cycling discarded materials (Johnston, 2012).

Hemp is one of the most sustainable natural textiles available, and it's gaining popularity for good reason (Chan, 2020). Hemp is a durable fabric and a dense plant that requires less water land than cotton and no pesticides or herbicides to grow. They grow quickly, enhance soil structure, although spinning requires a lot of energy.

Linen is another natural plant-based material that will biodegrade after using, making it a more environmentally friendly alternative (Fletcher, 2014). Linen is created from the entire flax plant and is frequently mixed with cotton to produce a completely biodegradable and soft material. Linen is regarded one of the most eco-friendly fabrics used today in the production of clothes and bedding since it does not require the use of pesticides and can be produced utilizing the complete flax plant (Gilliland, 2017). Hemp and flax are more environmentally friendly than cotton, especially when grown organically (Ellen MacArthur, 2017)

TENCEL is a cellulosic fibre which is one of the most innovative fibres being developed today which is made from eucalyptus tree and does not require any hazardous pesticides or insecticides to grow. Furthermore, the TENCEL yarn production process is fuelled by 100 percent renewable energy and consumes 80 percent less water. TENCEL is a superior material than polyester, cotton, and viscose. It is a soft and durable fibre that can be washed at a low temperature (Ellen MacArthur, 2017).

Cotton is one of the most used fabrics in fashion products. However, conventionally farmed cotton has a large carbon footprint with large number of harmful pesticides and requires a massive amount of land and water (Paul, 2016). That is why it is important to choose organic cotton. Organic cotton is grown according to organic agriculture standards that the use of genetically modified organisms and harmful chemicals is prohibited; therefore, it sustains the health of ecosystems, soil quality, and public health. Organic cotton has the potential to become the future trend, but customers must demand it. Currently, organic cotton accounts for less than 1% of worldwide cotton consumption.

2.5.2 Working condition

Tens of millions of workers worldwide, particularly young women, are employed by the global garment industry. For a long time, the textile industry has abused labour rights such as low wages, long working hours, poor working conditions, child labour, discrimination or lack of job security and health standards. The workers who produce the clothes are a crucial part of sustainable fashion production, sustainability is not only protecting the planet, but also the human on it.

Production of clothing items is outsourced to lower-middle income nations such as China and Bangladesh to make them cheap to all consumers (Naomi, 2010). These countries have less regulations and legislation governing labour conditions and compensation. Current minimum salaries in the fashion industry in several Asian nations, as well as in Eastern Europe and Turkey, are significantly below what is called a living wage. In Bangladesh, it is believed that the minimum salary only covers 60% of the expenditures of living in a slum (Fashion Revolution 2015, 10). Chinese workers make between 12-18 cents per hour for their work

while the average minimum wage in the United States is $7.25 per hour.

Workers are frequently required to work 10 to 14 hours a day plus forced overtime, seven days a week, can result in injuries that go untreated, and they are unable to keep up with output due to pain. During peak season, workers may be forced to work 18 hours a day until 2 or 3 a.m. to fulfil the huge orders and meet the brand deadline (Naomi, 2010). Overtime is not always paid, and workers would be punished or fired if they refuse to work overtime.

Workers usually work in unstable buildings with no ventilation, breathing in harmful chemicals and fiber dust or blasting sand. Some factories lack emergency exits or lock the doors and windows to prevent theft, resulting in many deaths when there is a factory fire. For example, consider the Ali Enterprises fire in Pakistan in 2012, which killed 254 people and seriously injured over 55 more while workers stayed trapped in the building.

Factories are being built at a low cost in structures that are not designed to house heavy machines, resulting in building collapses and worker deaths. The Rana Plaza collapse in 2013, which killed 1134 garment workers in Dhaka, Bangladesh, exposed to the world the terrible working conditions of the fashion industry. Rana Plaza supplied major fast clothes retailers such as Mango and Primark (Clean Clothes Campaign, 2020) (Jung and Jin, 2014). That is when consumers began to question fast fashion and wonder what the real cost of a $5 t-shirt was. Since the accident of Rana Plaza – clothing companies have promised to provide safer lab and working conditions for supply chain employees.

There are around 168 million children are forced to work throughout the world. Child labour is especially common in the fashion industry since it needs low-skilled labour. Nations reply on it; for example, child labour generated an estimated 20% of India GDP between 1997 and 2007. In south India, girls are overworked and live-in terrible conditions that qualify as slavery.

2.6   Business resposibility

Sustainability and environmental responsibility have already been fashion industry trends in recent years. Companies are nearly required not only economic but also social and environmental responsibilities for all stakeholders. Companies are ready to publish their CSR statements with customers to demonstrate their concern for the environment and garment

workers. CSR has become a particularly global trend in developed countries such as the EU, USA, Japan, Canada, Australia...Consumers care about the quality, pricing of items and services and how the enterprise produces those products. They want to know clearly that the products they plan to purchase are eco-friendly, beneficial for public health and the workers who make these products are treated fairly and humanely (Clark, 2008).

Knowing that a business is committed to responsible and ethical business practices encourages more consumers to purchase products from that company (Kanniainen, 2016) According to a 2015 Global CSR Study, 90 percent of customers would boycott a business if it utilized unethical business practices, and 91 percent of global consumers want corporations to operate ethically in order to address a wide variety of social and environmental concerns (Gilliland, 2017). This trend has directly impacted and increased pressure on businesses, requiring businesses who want to survive and develop to change their perception and re-evaluate the impacts from its own production and business activities.

Fashion businesses have become highly engaged in publicizing their corporate social responsibility activities via various media platforms. Adidas is a famous fashion company that is passionate about its CSR campaigns. Currently, Adidas has partnered with other companies and non-profit organizations to minimize its overall impact. Adidas is extremely proud of their cooperation with Parley for the Oceans (Watson, 2013). Adidas partnered with Parley to develop a wide range of items made from recycled plastics from the ocean. The most amazing new product was a shoes made completely from recycled plastic. This collaboration was well promoted, resulting in creating a good brand image, the public relations efforts to promote their CSR have become successful.

While CSR is essential, communication professionals play an important role in advertising and sharing all information about it. In the digital era, companies have the power to demonstrate a wide range of stakeholders precisely what they are doing and positive impacts of their work. This transparency is what customers expect from businesses they are concerned. In the field of sustainable fashion, transparency to customers and all other stakeholders is important. As a result of customer demand, many businesses have become more transparent about the origins of their products, the production process, carbon footprints, and suppliers, etc.

Transparency in the supply chain is a significant tool for improving rights of workers and reinforces.

Transparency on social media is a great approach for companies to publish news and amplify all messages, it is an incredibly strong and effective tool for promoting CSR (Claudio, 2007). Sustainable fashion is a hot topic as well as a common CSR tactic. Currently, businesses are constantly marketing this through a variety of media platforms to reach as many people as possible. It is not only effective for companies to explain how they are ethical and socially responsible; it also builds a good brand image and helps create connections with all customers and stakeholders (Geiger, 2017).

H&M has made their supply chain highly transparent. They have published all their suppliers, materials, labour conditions, and sustainability, among other things (H&M Group 2020). Although this is a very great action, it is not the major step in making the industry more sustainable and ethical (Bick, Halsay, and Ekenga, 2018). The most essential step is to produce less and create a supply chain that is as sustainable as possible. Simply producing, purchasing, and consuming less is the most effective approach to reduce environmental impact.

3 CONSUMER BUYING BEHAVIOUR

3.1 Sustainable buying behaviour

Understanding consumer needs is a challenging task for any business, numerous researchers have utilized various definitions to describe consumer behavior. Belch (2004) defined consumer behaviour "the process and activities people engage in when searching for, selecting, purchasing, using, evaluating, and disposing of products and services so as to satisfy their needs and desires". As a result, the consumer buying process explains the journey a customer goes through before purchasing products and is described through five stages: recognition, information search, evaluation of alternatives, purchase decision and post purchase behaviour (Figure 3).

Problem Recognition

Information Search

Evaluation of alternatives

Purchase Decision

Postpurchase Behavior
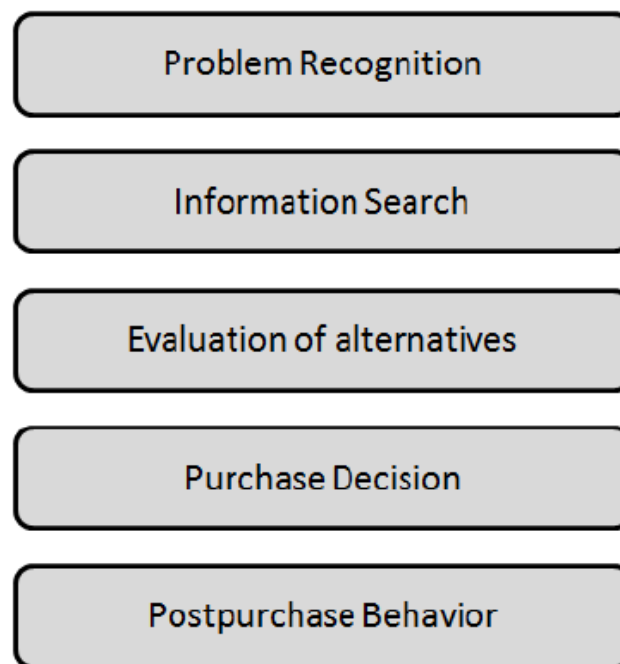
Figure 3. The five stages model in consumer behaviour (Kotler 2012)

The figure above shows the stages that a consumer goes through, starting with recognizing the need for a product and ending with post-purchase behaviour. The first step of buying process is problem recognition which begins when the consumer identifies or recognizes a need or problem initiated by internal or external stimuli. The second step is referred as the information search, in which consumers gather actual information to make the right

purchasing decision and know more about competing brands. T he third element of the buying process is evaluation of alternatives, where the consumers utilize the product information and selection criteria to evaluate each brand and simplify the decision-making process. The purchase decision stage shows the consumers usually purchase the preferred product. Attitude of others and unexpected situational factors may disrupt between buying intention and buying decision (Munthiu, 2009, p. 30). In the post purchase behaviour stage, the consumer evaluates the level of satisfaction of purchasing the good and expectation. Therefore, the product satisfaction can lead to the repetitive purchases (Munthiu, 2009).

Consumers usually do not undertake all the steps of the buying process before purchasing goods or services (Kotler and Keller, 2015). Some of these stages may be skipped or reversed by consumers. These stages may differ between first time customers and repetitive or regular customers. In addition, the duration of each stage may be considerably reduced in the online environment. The figure below shows the stages of consumer decision making process. Consumers, however, do not pass through all the stages of the decision process to purchase products or services (Ellen MacArthur, 2017). For example, things that are purchased every day or on a regular basis rarely stages of the process before a decision is finally made (Middlebrook, 2015).

Fast fashion consumers may not necessarily pass through all the stages of the decision process because of the nature of the purchase (Ellen MacArthur, 2017). It is extremely likely that they skip stages two and three and move straight to the purchase stage (Gilliland, 2017) because fast fashion products are purchased on a regular basis and majority of those are sold at the stores are the same. For example, a consumer may recognise a need of buying more clothes because of various reasons such as wanting to be up to date with latest fashion, because he/she wants to wear those clothes at an event and sometimes purchase is made due to impulse and in some circumstances because it is cheap (Clark, 2008).

According to Kate Nightingale, founder of the fashion consulting company Style Psychology, research indicates that consumers are unlikely to change their shopping habits due to environmental concerns: "We don't have much of a choice in being environmentally friendly in our purchases. We are almost conditioned by the fashion industry to keep buying and

buying new things every season."

For this reason, sustainable consumer behaviour aims to protect both the environment and society. To get a comprehensive view of sustainable buying behaviour, (Geiger, 2017) defined it as a behaviour that satisfies needs in different areas of consumers' lives through selecting, purchasing, using and disposing of products and services to achieve sustainability goals such as not damaging the ecological and socio-economic well-being of all humanity, improving quality of life and resource efficiency, reducing waste and risks to human health. It has recently attracted the attention of businesses because of its significant influence on the environment and human well-being. Consumers may consider purchasing a sustainable alternative while making a decision to purchase new garments at stages 3 and 4.

In terms of consumer purchasing decisions for sustainable fashion products, a recent survey found that nearly seventy percent of respondents considered sustainability to be an important factor when shopping for clothes, and half were willing to pay more for a product made from sustainable or recycled materials. According to Kostadinova (2016), sustainable consumer behaviour is extensively described by the theories of Reasoned Action (1980) and Planned Behaviour (1988) (Wang et al., 2011) (Paul, 2016) and it is regarded as predictors of intention to buy eco-friendly items. The value of knowing consumer purchasing behaviour is important. According to Kotler and Keller (2015), the ways consumers buy their products and services could be extremely significant for both manufacturers and service providers since it gives them a competitive advantage over their competitors in different ways.

3.2   Factors that affect buying behaviour

There are four important factors affect consumer purchasing behaviour: cultural, personal, social and pshychological factors (Kotler and Keller, 2015)
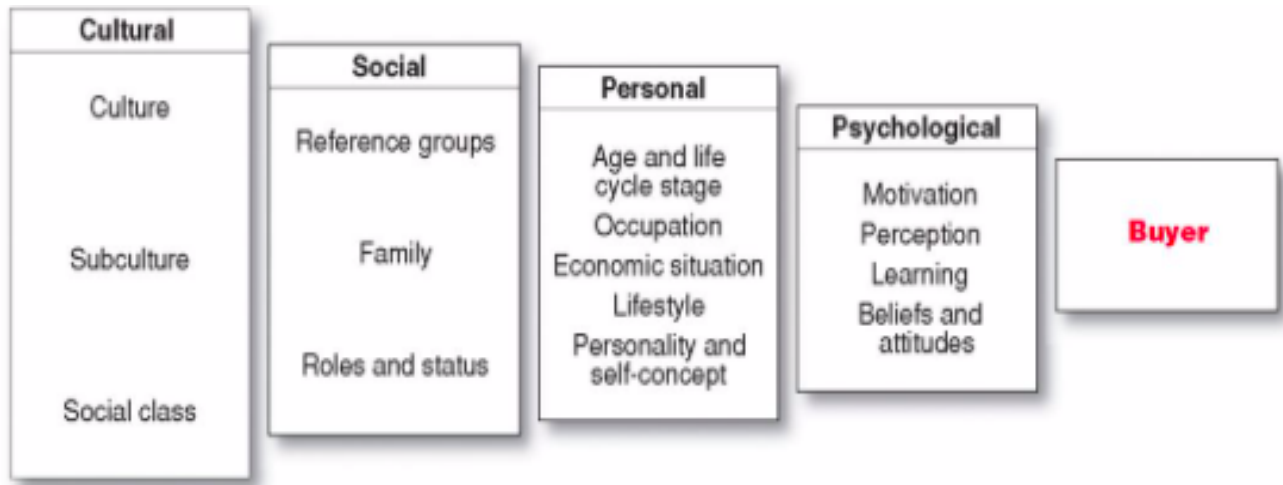
Figure 4. Factors influencing consumer buying behaviour (iitmaverick ,2012)

3.2.1 Cultural factors

Cultural influences have the greatest and most significant impact on consumer behaviour and are divided into three subfactors: culture, subculture, and social class (Paul, 2016).

Culture is the most basic determinant of a person's need, desires, and behaviour. It consists of personal values, preferences, perceptions, wants and behaviours from family or other relevant institutions. Every group or community has their own culture, and cultural influences on purchasing behaviour might differ substantially between countries. It is critical for businesses to understand these cultural factors to adjust their products and marketing strategies. Otherwise, failure to adapt to these differences can lead to embarrassing mistakes and unsuccessful marketing.

Each culture has smaller subcultures or groups of individuals that share value systems based on shared life experiences and situations. Subcultures include religions, nationalities, racial groups, and geographic regions. Brands should consider subcultures when segmenting their market to adjust products to suit the subculture's preferences. Mature consumers, which refers to the aging population, are one example of a subculture. Mature customers are becoming an interesting market, as those aged 50 to 75 years old are estimated to account for 40% of adult consumers in 2015.

Almost every society has some form of social class structure, social classes are generally permanent and organized divisions within society whose members share similar values, interests, and behaviour. Social class is defined by a combination of occupation, income, education, wealth, and other characteristics, rather than by one, such as income. Social classes are commonly considered to be divided into lower, working, middle, and upper class. Different social classes have various purchasing habits and interests. Businesses should consider this by understanding that a client from the lower class will be more concerned with pricing, meanwhile a customer from the upper class would be more concerned with product quality, features, innovation, or social benefit.

3.2.2 Social factors

Consumer buying behaviour is also influenced by social factors such as the reference groups, family and social roles and status. These factors have special abilities, knowledge, personalities, or other features that can have a social impact on others. The most significant social factor is family.

A reference group is a group that two or more people who interact to achieve individual or shared goals. Reference groups mostly consist of family members, friends, neighbours or celebrities and these groups will influence individual's behaviour, lifestyle, interests and purchasing habits (Gilliland, 2017). It has been found that all members of the reference group have similar buying habits and have a strong influence on each other on brand and product choices. Individuals are more likely to listen to suggestions from trusted friends than salesmen. Many marketers attempt to find the most powerful reference groups in their target markets, such as celebrities or sports stars, because many people would purchase a product if someone, they like in the media is involved with it.

Family members can have a major impact on purchasing behaviour. The family is the most significant consumer purchasing organization in society, and it has been widely researched. A family forms a socialization environment, shapes an individual's personality, develops values, attitudes, and perceptions, and is possibly the most influential factor in an individual's life

(Naomi, 2010). Marketers are concerned in the roles and influences of the husband, wife, and children in the purchase of various products and services. Husband-wife engagement varies greatly depending on the product type and stage of the purchasing process. Such changes show that marketers who traditionally mainly sold to women or men are currently courting the other sex. For example, with research indicating that women now account for over half of all hardware retail purchases, home improvement shops.

A position in a group, family, club, organization, or online community can be referred to as its social status or role. A role is composed of the activities that people are expected to do based on the people around them. Social status is the general respect given to it by community, and every social role has a status. Consumer behaviour and buying decisions will be influenced by these roles and statuses. A brand might market their products as reflecting a significant social role or status. Marketers should attempt to identify the individual's position and role long before the products are endorsed. (Kotler & Keller, 2015).

3.2.3   Personal factors

Personal characteristics have a direct influence on consumer behaviour decisions. These differ depending on the consumer's attitudes, beliefs, and experiences. The research of these factors assists researchers in explaining why different people react differently even when they are in the same situations and seem to have had the same experiences. These personal characteristics can be age, income, occupation, and lifestyle (Mooji, 2004).

People tend to change different products and services in the different life cycle stages over their lifetimes. This is especially obvious when they buy food, clothing, or participate in any recreational activity. Age strongly influences on consumer behaviour, for example, a 20-year-old girl does not purchase the same clothing as a 70-year-old lady. It has been observed that young people spend more money on fashion than the elderly. It is because the younger generation wants to identify themselves to their peers, they socialize more, and they want to be fashionable (Mantilla, 2018). This indicates that marketers should target their markets based on their life-cycle stage and adapt their products to their demands .

Income has a significant impact on individual's purchasing habits and product choices. The consumer's income influences what he or she will buy and how frequently that goods or

service will be purchased. It is why marketers pay attention to changes in personal income, savings, and interest rates. A change in an individual's financial status may cause them to switch from spending to saving, or vice versa. Most customers, particularly those between the ages of 18 and 34 who are just starting out in their careers and have a limited budget, would rather spend a little amount of money on high impact-low-cost fashion, and so fast fashion items appears to be the most popular in this age range (Garner, 2017). Someone with a high social status may freely spend their money, whilst an unemployed single mother may be extremely thrifty.

3.2.4 Pshychological factors

Various studies have investigated how various psychological factors influence the behaviour of customers in different sectors. For example, Widagdo and Ros (2021) in their study to investigate the impacts of website quality, and hedonic motivation, on the sustainable behaviour of the customers found that there is a positive connection between customer motivation and buying behaviour. According to their study, online activities offer customers an opportunity to get the quality and quantity of products. Besides, Collado et al. (2012) showed how customer's attitude programs influence their purchasing behaviour using data collected from the retailing sector (Middlebrook, 2015). Their study focused on customers' attitudes toward the quality of a brand, trust, and loyalty of the company, and customers' sustainable behaviour. The study revealed that buyers' sustainable behaviour and decision in favour of purchasing a product or service from a certain firm is directly connected to their attitude. More analyses indicated that customers' attitude is directly linked to their belief and trust in the company, and loyalty. The perception of a customer toward a certain product or company may influence his/her behaviour. According to this study, the concept of customer perception can be used to emphasize the attitudinal aspect of the buyer-seller interaction.

Additionally, Ramya (2016), found that customer learning has a significant contribution to buyers' sustainable behaviour. If buyers learn that a certain brand is of low quality, or is expensive than normal, then they are not likely to buy that brand. However, Joshi et al. (2019) found that there are no significant impacts of psychological factors on customers' sustainable behaviour. According to this study, psychological effects are a result of social and personal

factors. The study argued that low-income customers will perceive a certain brand to be so expensive and will buy a substitute or complementary brand that is somehow cheaper as per their budget. However, high-income buyers' perception of the brand is determined by their lifestyle and the luxury quality of a product.

Chopdar et al. (2018) in their research study to examine the effect of the psychological violation on mobile shopping applications in developing countries. The analysis of the data collected indicated that psychological factors have a substantial influence on service quality and online buying. Chopdar et al. argued that unlike in written contracts, a psychological contract is perceived and promised by the e-commerce website basing on previous services and experiences. The study concluded that psychological factors play a significant role in online buying behaviour. If a customer has a purchasing goal in his/her mind and the e-vendor gives a similar recommendation, there might be no direct effect on the online purchases but the recommended add-on-shopping by the e-vendor. Therefore, psychological factors directly influence the sustainable behaviour of a buyer.

According to Azam (2015), psychological factors have no significant influence on the buying behaviour of the customer. This study investigated how the psychological dimension impacts customers' e-loyalty and establishes online purchasing habits. The study also found the positive experiences and perceptions of the customers about the brand have a positive influence on e-trust and lead toward online buying. However, the study was unable to provide enough evidence to support a significant association between the psychological factors and customers' sustainable behaviour.

3.3 Recycled clothes

Experts think fast fashion does not hold the same appeal to shoppers as it once did. A 2019 McKinsey report suggests that there's greater interest in rental and second-hand clothing, and that the resale market has the potential to be bigger than fast fashion in 10 years. Items with environmentally friendly materials, of organic origin, after use, can be processed into microbial fertilizers by burning or burying. Besides, they are also recovered by some factories to be recycled into textile materials (Claudio, 2007). The fibres of man-made clothing are

non-renewable and slow to decompose. The average decomposition time of nylon fabric is 30 -40 years, artificial fabric is 50 years. These products should not be burned because it will create toxic gases that cause cancer, reduce immunity, etc.

3.4   Literature review outcomes

The literature review has analysed different research works from different sectors, regions, and times. Using the review above there exists a research gap on factors influencing the customer's sustainable behaviour. For example, there exists a research gap on whether personal factors, psychological factors, social and cultural factors significantly affect the customer's sustainable behaviour. In the contest of fast fashion, the present study aimed focused on testing the following hypotheses:

Ha0: There is no significant effect of personal factors on customer's sustainable behaviour in fast fashion brands

Ha1: There is a significant effect of personal factors on customer's sustainable behaviour in fast fashion brands

Hb0: There is no significant effect of psychological factors on customer's sustainable behaviour in fast fashion brands

Hb1: There is a significant effect of psychological factors on customer's sustainable behaviour in fast fashion brands

Hc0: There is no significant effect of social factors on customer's sustainable behaviour in fast fashion brands

Hc1: There is a significant effect of social factors on customer's sustainable behaviour in fast fashion brands

Had: There is no significant effect of cultural factors on customer's sustainable behaviour in fast fashion brands

Hd1: There is a significant effect of cultural factors on customer's sustainable behaviour in fast fashion brands

4 RESEARCH METHODOLOGY

4.1 Research design

A research design can be considered as a blueprint for data collection and analysis, as it logically and coherently aids the researcher in effectively answering research questions (Thomann et al., 2020). A good research design should ensure reliability, validity, neutrality, and generality in the study (Fellows and Liu, 2015). The present study used a descriptive research design, where a survey was used to collect information from the population of the target. According to Sie-dlecki (2020), descriptive design set the foundation and necessity of future study. It also assists the researcher in narrowing the various research problems to a few or one problem that can be easily determined. Using the data collected, the researcher intends to understand to what extent do various factors impact buying behaviour of customers in the fashion industry, and understand customers' perceptions of fast fashion and sustainable trends. This research design was used to support the use of the quantitative research method and assist the researcher in obtaining data that best describe the existence of a certain phenomenon in customer behaviour through involving customers in the fashion industry.

4.2 Research method

This study is quantitative research and uses a quantitative research method to collect and analyse the data. The quantitative method has been applied in data collection through surveying the sample of interest. This helped the researcher to gain comprehensive knowledge concerning sustainability trends and factors affecting customers' buying behaviour in the fashion industry. Quantitative methodology assisted the researcher to cover vast data from different researchers in the minimum time possible and allow her to measure the data using the Likert scale, for mathematical and statistical analysis.

4.3 Data reliability and Limitations

The researcher aimed to collect data from the customer in the fashion industry. To ensure data reliability, the study used a descriptive design, besides, a random sampling method was

used to select a sample population to be used in the study. In this case, all young customers (below 35 years) were subjected to a similar probability to participate in the study. However, the use of the young customer only in the study might have contributed to a shortage of responses from people who are less interested in buying sustainable fashion items. Therefore, the result of the study might be only relevant for Vietnam and Finland markets, not the whole European market. The study used a Cronbach Alpha to test for the reliability of the data   collected. An alpha value greater or equal to 0.75 was considered to indicated reliability, while an alpha value less than 0.75 indicates the unreliability of the data.

4.4   Data collection

The study used primary data collected from different customers in the fashion industry in Vietnam and Finland. The study used an online questionnaire to collect data. The questionnaire was administered online, and the link was sent to different customers. To avoid the cases of missing values, that would influence the quality of the study's findings, a fully answered questionnaire is automatically saved. Simple and clear questions, which were all close ended were used. The study also used few questions to motivate participants in filling the questionnaire, using short time possible.

4.5   Design of questionnaire

The study used a self-structured questionnaire that involved various questions aiming to collect data about the sustainability perception and influence of different factors on customer buying behaviour in the fashion industry. The questionnaire was designed in a way to collect quantitative information that concentrating the answers into five options: five points Likert scale. To collect information on the buying behaviour of the customers, the questionnaire uses (1 to indicate never buy, 2- rarely, 3- sometimes, 4- often, 5- always). This assisted the researcher to collect information quantitatively. Besides, the questions in the questionnaires were structured in a way to obtain quantitative data measured under a 5-point Likert scale (1- strongly disagree, 2- disagree, 3- neutral, 4- agree, and 5-strongly agree). The questionnaire was accompanied by a small introduction of the aim of the survey and the objectives that it tends to achieve. The researcher assured the participants of data confidentiality, by assuring them that the data to be collected is for academic purposes only. Besides, the respondents

were not asked to give their identity in the questionnaire for confidential purposes. A well-structured was administered through a google link. After the researcher has fully answered the questionnaire, automatically get saved and the link exit, to assure that nobody can answer the questionnaire twice.

4.6   Data analysis

The study used quantitative analysis to get the meaning of the data collected. Using the IBM SPSS, the study conducted descriptive analysis, and inferential analysis, correlation, and regression analysis. All the test was conducted at 95% confidence interval (0.05 level of significant). All the findings of the study were represented in tables and figures. The model used can be stated as:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 5 X_4 + \epsilon_i$$

Where;

- Y represents customer buying behavior in the fashion industry
- X1 = Personal factor, X2= Psychological factors, X3= Social factors, and X4 = Cultural factors
- β_0 is the constant term, β_1, β_2, β_3, β_4 are coefficients of the linear model for Personal factor, psychological factors, social factors, and cultural factors respectively.
- ϵ_i is the error term

5 RESULTS AND DATA ANALYSIS

5.1 Introduction

This section entails the results of data analysis which are represented in analysis tables and figures. Researcher used tables and figures for easy representation of the findings and interpretation of the results. The chapter begins by providing the demographic details of the participants involved in filling the questionnaires, which include their sex, age, and education level, and occupation. The second part provides the descriptive analysis which aims at providing an overview of the data collected. Lastly, the inferential analysis including correlation and regression analysis, which intend to test for the association between the variables.

5.2 Reliability test

Cronbach's Alpha	N of Items
.867	24

Table 1. Reliability Statistics

The study used Cronbach's Alpha to test for the reliability of the data collected from the sample of interest. A Cronbach's Alpha value greater than 0.75 was acceptable, which indicates the internal consistency of the data. The Reliability statistics recorded Cronbach's Alpha value of 0.867 > 0.75, therefore the data collected is reliable/the data collected shows internal consistency of items in the questionnaires. Reliable information indicates that the material used to collect it (questionnaire) was also reliable and is likely to give reliable knowledge to address research questions and hypotheses.

5.3 Demographic Profile
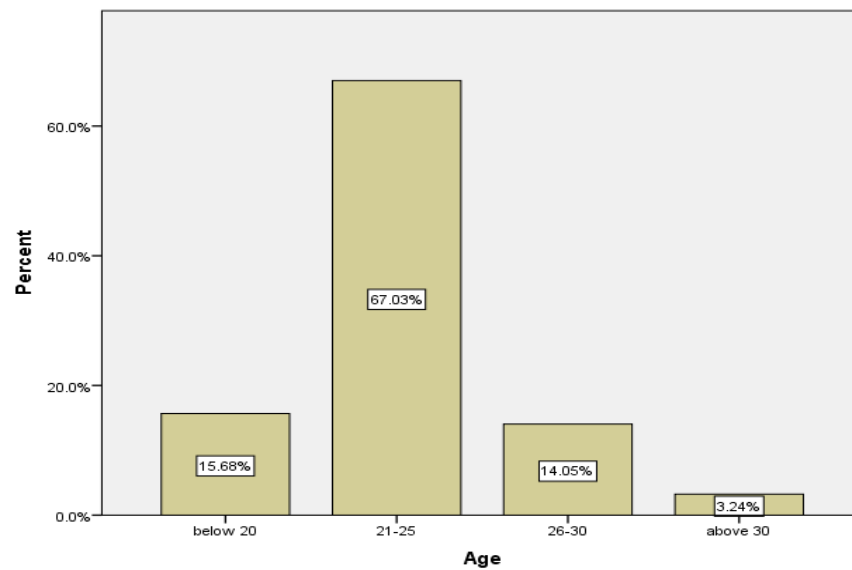
Figure 5. Age of the respondents

The figure above shows that the highest number of participants in this survey were between 21 and 25 years (67.03%). The study also covered individuals below 20 years (15.68%), between 26 and 30 years 14.05%, and above 30 years (3.24%). Individuals especially those below 35 years (young adults) occupy the highest portion of the population in the fashion industry.
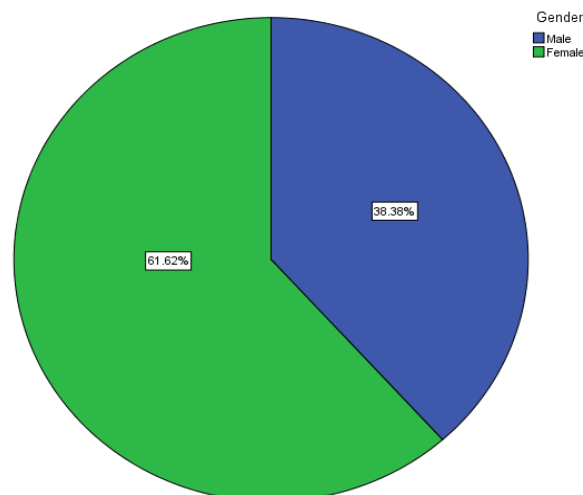
Figure 6. Sex of the respondents

The graph shows that most of the participants in this study were female with 61.62% of the total sample, while male respondents were 38.36%.
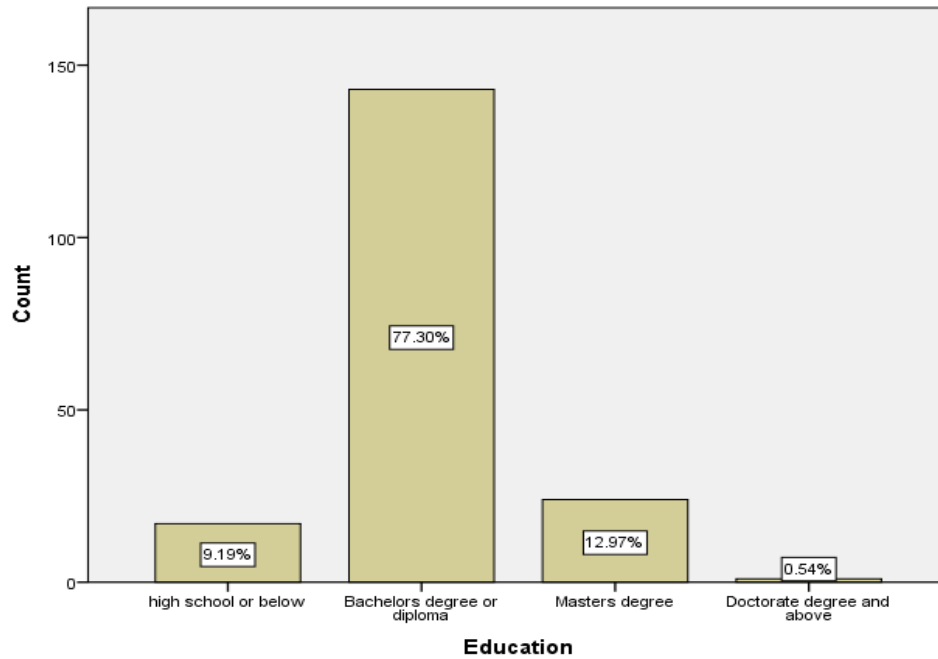
Figure 7. Education level

Different participants with different education qualifications were involved in this study. However, the highest number of participants had a bachelor's degree and diploma certificate (77.30%). Besides, this involved continuing students in different universities and colleges. A very small number of respondents were high school and below leavers (9. 19), holders of master's degree (12.97%), and with a doctorate degree and above (0.54%).
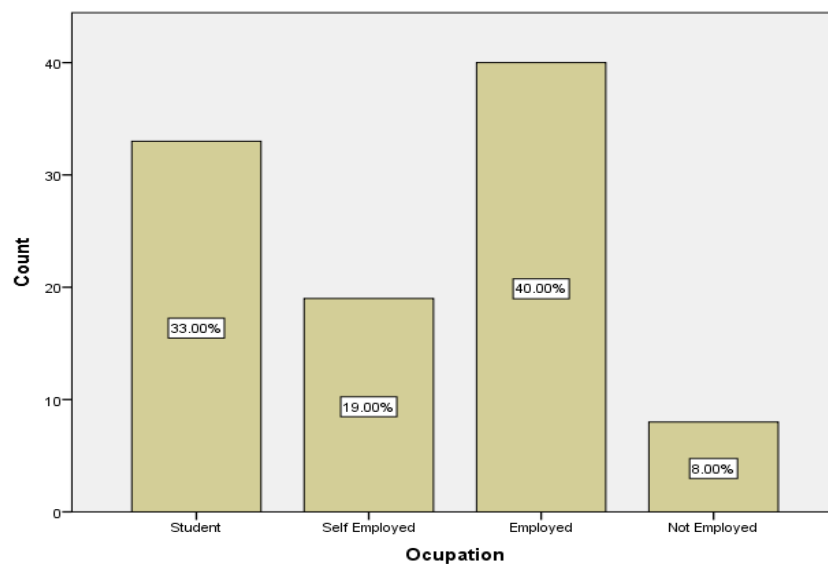
Figure 8. Participant's occupation

The study divided the participants into different occupations, where the data revealed that 33.00% were students, 19.00% were self-employed, 40.00% were employed, while 8.00% were unemployed.

5.4   Descriptive Statistics

The descriptive analysis involved the measure of central tendency and the measure of spread. The measure of central tendency involves a descriptive summary of a dataset using a single value that reflects the distribution centre of the data. According to Manikandan (2011) the central tendency is a branch of descriptive statistics, which is one of the most quintessential concepts in statistics. the measure of central tendency used included meaning, mode, and median. On the other hand, descriptive statistics involved the measure of spread, which describes the similarity and variance between the set of observed data (Bickel and Lehmann, 2012) the measures of spread involved included standard deviation, Skewness, and Kurtosis.

5.4.1   Personal factors

Personal factors that the study was concerned with include, respondent's age and life cycle stages, level of income, Lifestyle, and personality, and self-concept. The descriptive statistics indicated the results as below.

		age and life cycle stage	Occupation	level of income	Lifestyle	personality and self-concept
N	Valid	185	185	185	185	185
	Missing	0	0	0	0	0
Mean		3.4649	3.2108	3.4919	3.4919	3.7892
Median		4.0000	3.0000	4.0000	4.0000	4.0000
Mode		4.00	3.00	5.00	5.00	4.00
Std. Deviation		1.04263	1.29962	1.46004	1.46004	.88704

Skewness	-.560	-.113	-.370	-.370	-.470
Std. Error of Skewness	.179	.179	.179	.179	.179
Kurtosis	.005	-1.070	-1.323	-1.323	.031
Std. Error of Kurtosis	.355	.355	.355	.355	.355
Minimum	1.00	1.00	1.00	1.00	1.00
Maximum	5.00	5.00	5.00	5.00	5.00

Table 2. Personal factors statistics

Descriptive statistics recorded mean and median values of all personal variables greater than 2.5, which is a mid-point of the scale used to measure the data (5-Points Likert scale). This shows that the participants in this study accepted that personal factors; age and life cycle stages, level of income, Lifestyle, and personality, and self-concept influenced their behavior in buying sustainable fashion. The highest number of participants agreed that their age and life cycle stages, and personality and self-concept influence their behavior in buying sustainable fashion. Besides, they strongly agreed that lifestyle and their level of income influence their behavior in buying sustainable fashion. Personal factors had a range of 5 (minimum = 1, and maximum= 5). Negative skewness values indicated that the data is skewed left, while positive values indicated that the data is skewed right. Positive Kurtosis indicates that the median value is greater than the mean value; more participants argued more positively than the median value.

5.4.2 Psychological factors

The study was also focused on studying the influence of participants' psychological factors on their behavior in buying sustainable fashion. Variables used to represent the psychological factors included customer's motive, perception about the product, learning of product's price, and beliefs and attitude.

	motivation	perception	learning	

				Beliefs and attitude
N Valid	185	185	185	185
Missing	0	0	0	0
Mean	3.8595	3.8324	3.7676	4.3081
Median	4.0000	4.0000	4.0000	5.0000
Mode	5.00	4.00	4.00	5.00
Std. Deviation	1.27336	1.12241	1.14447	.90721
Skewness	-.867	-.783	-.809	-1.180
Std. Error of Skewness	.179	.179	.179	.179
Kurtosis	-.283	-.196	.064	.654
Std. Error of Kurtosis	.355	.355	.355	.355
Minimum	1.00	1.00	1.00	1.00
Maximum	5.00	5.00	5.00	5.00

Table 3. Psychological factors

Descriptive statistics recorded mean and median values of all psychological factors' variables greater than 3.0. This indicates a high level of participants' acceptance that psychological factors; motive, perception about the product, learning of product's price and beliefs and attitude

influenced their behavior in buying sustainable fashion. The mode values indicated that a high number of participants strongly agreed that their motive, and beliefs, and attitude toward the product influence their behavior in buying sustainable fashion. Besides, agreed that

perception about the product and learning of product's price influence their behavior in buying sustainable fashion. Negative skewness values indicated that the data is skewed left. Positive Kurtosis indicates that the median value is greater than the mean value; more participants argued more positively than the median value.

5.4.3 Social factors

Social factors involved impacts of reference groups, family members, and roles and status of a person on buying sustainable fashion's behaviour.

	Reference groups	Family	roles and status
N Valid	185	185	185
Missing	0	0	0
Mean	3.6270	3.9622	3.8973
Median	4.0000	4.0000	4.0000
Mode	4.00	5.00	4.00
Std. Deviation	1.20521	1.01814	.99741
Skewness	-.623	-.611	-.689
Std. Error of Skewness	.179	.179	.179
Minimum	1.00	1.00	1.00
Maximum	5.00	5.00	5.00

Table 4. Social factors

Descriptive statistics recorded mean and median values of all social factors' variables; reference groups, family members, and roles and status of a person greater than 3.0. This indicates a high level of participants' acceptance that these social factors; motive, highly influenced their behavior in buying sustainable fashion. The mode values indicated that most

participants agreed that reference groups and roles and status of a person influence their behavior in buying sustainable fashion. Besides, they strongly agreed that family members affect their behavior in buying sustainable fashion. Negative skewness values indicated that the data is skewed left.

5.4.4 **Cultural factors**

The study also focused on investigating various social factors affecting people's behavior in buying sustainable fashion. The research studied the influence of customers' culture, subculture, and social culture on their behaviour in buying sustainable fashion.

		Culture	Subculture	Social class
N	Valid	185	185	185
	Missing	0	0	0
Mean		4.1405	4.1297	4.1946
Median		4.0000	4.0000	4.0000
Mode		5.00	5.00	5.00
Std. Deviation		.92180	1.00781	.85017
Skewness		-.831	-.811	-.653
Std. Error of Skewness		.179	.179	.179
Kurtosis		.154	-.451	-.617
Std. Error of Kurtosis		.355	.355	.355
Minimum		1.00	1.00	2.00
Maximum		5.00	5.00	5.00

Table 5. Cultural factors

Descriptive statistics recorded the mean value of all cultural factors' variables greater than 4.0, indicating a significant number of participants agreed that social factors; customer's culture, subculture, and social culture affected their behaviour in buying sustainable fashion. All mode values were 5.0, which indicated that a high number of participants strongly agreed cultural factors influence their behavior in buying sustainable fashion. Negative skewness values indicated that the data is skewed left, while positive Kurtosis indicates that the median value is greater than the mean value; and vice versa.

5.4.5   **Consumers perceive the fast fashion and sustainable trend**

Assessing the customer's perception of fast fashion and sustainable tend was one of the specific research objectives. The study used the data on buying behaviour of the customers in the fashion sector to indicate sustainability. The results were as in the table below.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	1	.5	.5	.5
	rarely	17	9.2	9.2	9.7
	sometimes	74	40.0	40.0	49.7
	often	75	40.5	40.5	90.3
	always	18	9.7	9.7	100.0
	Total	185	100.0	100.0	

Table 6. Customers sustainable behaviour

Out of a sample of 185 customers used in this study, the analysis indicated that there is only one customer indicated that s/he never buy from the fast fashion sector (0.5%). 17/185 (9.2%) said that they rarely buy from this sector, 74/185 (40.0%) said that they sometimes buy from the fast fashion sector, 75/185 (40.5%) indicated they often buy from the fast fashion sector, while 18/185 (9.7%) indicated they always buy from the fast fashion sector.

5.5 Analysis of Missing and Outrange Values

The missing value analysis is an essential test before conducting inferential tests. In this study a missing complete at random test was used to dragonize the randomness of the data, to identify the missing and outrange values.

| | | | Std. | Missing | | No. of Extremes | |
	N	Mean	Deviation	Count	Percent	Low	High
Buying behaviour	185	3.49730	.815104	0	.0	0	0
Per1	185	3.4649	1.04263	0	.0	0	0
Per2	185	3.2108	1.29962	0	.0	0	0
Per3	185	2.7027	1.42693	0	.0	0	0
Per4	185	4.0865	.96294	0	.0	0	0
Per5	185	3.7892	.88704	0	.0	0	0
Personal factors	185	3.3405	1.04139	0	.0	0	0
Pys1	185	3.8595	1.27336	0	.0	0	0
Psy2	185	3.8324	1.12241	0	.0	0	0

Psy3	185	3.7676	1.14447	0	.0	0	0
Psy4	185	4.3081	.90721	0	.0	0	0
Psychological factors	185	4.0486	.86779	0	.0	0	0
So1	185	3.6270	1.20521	0	.0	0	0
So2	185	3.9622	1.01814	0	.0	0	0
So3	185	3.8973	.99741	0	.0	0	0
Social factors	185	2.6054	.82815	0	.0	0	0
Cult1	185	4.1405	.92180	0	.0	0	0
Cult2	185	4.1297	1.00781	0	.0	0	0
Cult3	185	4.1946	.85017	0	.0	0	0
Cultural factors	185	4.1838	.74364	0	.0	0	0

a. number of cases outside the range (Q1 - 1.5*IQR, Q3 + 1.5*IQR).

Table 7. Univariate Statistics

From the table, there are no cases of missing data, which could have resulted in missing data errors during inferential analysis. Besides, the absence of missing data is an indicator of the likelihood that the data will provide valid information to address research aim and objectives and assist the researcher in answering the research questions without making an error. The table above also indicates that all values are within the range, an indicator that no errors were made during data entry.

5.6   Inferential statistics

Inferential statistics involved results obtained from correlation and regression analysis. The researcher used Spearman's correlation analysis to show the association between the

variables (strength and the direction of the association). While regression analysis was to test for causality relationship between the customer's sustainable behaviours and personal, social, cultural, and psychological factors.

5.6.1 **Correlation analysis**

Spearman's correlation test was used in this case as the data collected was entirely categorical. Although correlation analysis is used to test for the relationship between the variables, it is good to note that, it does not indicate the causality relationship between them. The study argued that the correlation relation with a Spearman's rho value greater than 0.5, indicates a strong relationship between the variable and vice versa is also true. Besides, the correlation relation with a positive Spearman's rho value shows a positive relationship while the negative Spearman's rho value shows a negative relationship. The results were as in the table below.

		customers sustainable behaviour	Personal factor	Psychological factors	Social factors	Cultural factor
customers sustainable behaviour	Correlation Coefficient	1.000	.437**	.496**	-.705**	.475**
	Sig. (2-tailed)	.	.000	.000	.000	.000
Personal factor	Correlation Coefficient	.437**	1.000	.191**	-.242**	.307**
	Sig. (2-tailed)	.000	.	.009	.001	.000

Spearman's rho	Psychological factors	Correlation Coefficient	.496**	.191**	1.000	-.383**	.523**
		Sig. (2-tailed)	.000	.009	.	.000	.000
	Social factors	Correlation Coefficient	-.705**	-.242**	-.383**	1.000	-.319**
		Sig. (2-tailed)	.000	.001	.000	.	.000
	Cultural factor	Correlation Coefficient	.475**	.307**	.523**	-.319**	1.000
		Sig. (2-tailed)	.000	.000	.000	.000	.

 **. Correlation is significant at the 0.01 level (2-tailed).

Table 8. Correlations

b. Listwise N = 185

The statistics in the table above recorded positive correlation coefficients for the relationship between customers' sustainable behaviour and personal factors, customers' sustainable behaviour and psychological factors, customers' sustainable behaviour, and cultural factors. Therefore, there is a positive association between the variables. However, the correlation coefficients between these associations were small (below 0.5), an indication that these relationships are weak however positive. Correlation statistics also recorded a negative correlation coefficient for the association between customers' sustainable behaviour and social factor. The correlation coefficient is greater than 0.5, indicating that customers' sustainable behaviour is strongly correlated with social factors.

5.6.2 **Multicollinearity test**

Before carrying out a regression test, a multicollinearity test is necessary to assess if the independent variables are strongly correlated to an extent that can influence the results of regression analysis. The study used Variance Inflation Factor (VIF) to test for multicollinearity. A critical value of 3.0 was used where a value less than this point indicates no multicollinearity, while the value above this point indicates there is multicollinearity and would be eliminated when conducting regression analysis.

		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	Personal factor	.888	1.126
	Psychological factors	.675	1.481
	Social factors	.810	1.234
	Cultural factor	.679	1.473

Table 9. Collinearity Statistics

The collinearity statistics recorded VIF values for all the variables less than 3.0. therefore, it can be interpreted that there is no strong correlation between the independent variables, that would influence the quality of regression results. In other words, no variable exhibits multicollinearity. Since all variables, recorded VIF within the acceptable range, they were used to carry out regression tests.

5.6.3 Regression Analysis

Regression analysis was used to test for the significance of the effect of personal, psychological, social, and cultural factors on customers' sustainable behaviour in the fast fashion sector. Unlike correlation analysis above, the regression test shows the causality relationship between the variables. The regression test was carried at a 95% confidence

interval therefore, the relationship between the variables that record a significance value less than 0.05, indicates a significant influence, and vice versa. The positive regression coefficient indicates the favourable effect on the response variable by the independent variable. In this case, predictors variables were, cultural factors, personal factors, social factors, and psychological factors, while the response variable was customer's sustainable behaviour in the fast fashion sector. The regression results were as in the tables below.

5.6.3.1   Regression summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.788[a]	.621	.612	.507554

a.   Predictors: (Constant), Cultural factor, Personal factor, Social factors, Psychological factors

Table 10. Model Summary

The regression statistics recorded an R-Square value of 0.621 attributed with an adjusted   R -Square of 0.612. An R-Square value indicates that the independent variables (cultural factors, personal factors, social factors, and psychological factors) used in this study explains the dependent variable (customer's sustainable behaviour in the fast fashion sector) by 62.1%. This means that other factors affecting customers' sustainable behaviour in the fast fashion sector account for 37.9%.

5.6.3.2   ANOVA of Regression

The ANOVA of regression test was used to assess the significance of the model uses to show the association between the response variable (customer's sustainable behaviour in the fast

fashion sector) and independent variables (cultural factors, personal factors, social factors, and psychological factors). The ANOVA used F statistics to show whether the model used is significant or not. If the F statistic value is attributed with a significance value less than 0.05, it shows that this model is significant and if the F statistic value is accompanied by a significance value greater than 0.05, it shows that the model is insignificant. The ANOVA results are as bellow.

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	75.879	4	18.970	73.637	.000
Residual	46.370	180	.258		
Total	122.249	184			

Table 11. ANOVA

The ANOVA test gave an F statistic value of 73.637 and a significance value of 0.000 < 0.05. This shows that the model is significant in showing the association between the response variable (customer's sustainable behaviour in the fast fashion sector) and independent variables (cultural factors, personal factors, social factors, and psychological factors).

5.6.3.3 Coefficients of regression analysis

Regression coefficients are used to show the strength of causality relationship independent and dependent variables. Positive coefficient values indicate a positive causal relationship between the independent variable and the dependent variable, while a negative coefficient value indicates a negative causality relationship between the independent variable and the dependent variable. Besides, the regression coefficient is accompanied by sig. values < 0.05 represents a significant causal relationship between independent variables and dependent

variables, while sig. values greater than 0.05 represent an insignificant causality relationship between independent variables and dependent variables. The results are as below.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.840	.333		8.523	.000
	Personal factor	.189	.038	.242	4.959	.000
	Psychological factors	.183	.052	.195	3.495	.001
	Social factors	-.508	.050	-.516	-10.117	.000
	Cultural factor	.145	.061	.132	2.375	.019

Table 12. Coefficients

The regression test recorded and positive coefficients for personal factors, psychological factors, and cultural factors. It indicates that these factors have a positive influence on customers' sustainable behaviour in the fast fashion sector. The results also recorded a p-value of 0.000 for personal factors, 0.001 for psychological factors, and 0.019 for cultural, factors all less than 0.05. Therefore, personal factors, psychological factors and cultural factors have a significant influence on customers' sustainable behaviour in the fast fashion sector at a 95% confidence interval. However, social factors recorded a negative coefficient and a significance value of 0.000 < 0.05. Thus, there is a significant unfavourable association between social factors and customers' sustainable behaviour in the fast fashion sector. The model can be fitted as below.

$$Y = 2.840 + 0.189X_1 + 0.183X_2 - 0.508X_3 + 0.145X_4$$

6   CONCLUSION

6.1   Introduction

This study aimed to evaluate customer purchasing intentions toward fast fashion and sustainable fashion and the factors influencing their buying decisions. This is to learn about the attitudes of customers toward sustainable fashion, as well as their understanding of fast fashion and its problems. The research was guided by two research questions; how do consumers perceive fast fashion and sustainable trends? And what factors affect consumer behavior in buying sustainable fashion? This chapter will entail answering the research questions and address the research hypotheses, provide validity and reliability of the research findings, and highlight various limitations encountered when carrying out the research. Lastly, the chapter will give recommendations as per the findings of the study.

6.2   Consumers perceive the fast fashion and sustainable trend

Customers in not only the fashion industry but also in other industries believe sustainability is essential and they continue to be more sustainable. According to (Joy et al, 2012) fast fashion allows the customer to buy cheap, new, and fashionable clothes. This business model has over the last few decades growing rapidly as it answers customers' rising demand for affordable clothes and trendy. The study showed a significant sustainability trend in the fashion industry. From the sample used in this study, a significant proportion (90.2%) said they sometimes (40.0%), often (40.5%), and always (9.7%) buy from this fashion industry, while very few participants indicated they rarely (9.2%) and never (0.5%) buy from fast fashion industry. 90.2% is greater than 66% which is that significant percent of all respondents and greater than 75% of millennial respondents who said they consider sustainability when purchasing in the fashion industry; a report by Global Markets Practice Leader, WWF international in 2015.

6.3   Factors affect consumer behavior in buying sustainable fashion

The study focused on investigating how personal, psychological, social, and cultural factors affect consumer behavior in buying sustainable fashion.

6.3.1   Personal factors

Personal factors include the age and life cycle stage, occupation, level of income, lifestyle, personality, and self-concept. The study found that personal factors have large mean values which indicate that customers agreed that these factors influence their purchasing intentions toward fast fashion and sustainable fashion. The correlation analysis indicated that there is a strong correlation between personal factors and customers' purchasing behaviours toward fast fashion and sustainable fashion. Besides, the regression analysis showed that customers buying behaviour in the fashion sector are significantly influenced by personal factors.

6.3.2   Psychological factors

The study also focused on studying the influence of psychological factors on customers buying behaviour in the fashion sector. The study was focused on customers' motivation, perception, learning, beliefs, and attitude to indicate psychological factors. The study found that all the variables used has a mean value greater than 3.0; motivation (3.8595), perception (3.8324); learning (3.7676), beliefs, and attitude (4.3081), which indicates that the participant of the current study agreed that these factors influence their buying behaviour in the fashion sector. Besides, using Spearman's rho correlation, it was revealed that psychological factors have a significant positive association with customers' behaviour. This was confirmed by regression analysis which revealed that psychological factors have a significant positive association with customer behaviour in the fashion sector.

6.3.3   Social factors

The study focused on assessing whether social factors have a meaningful impact on customers buying behaviour in the fashion sector. To indicate social factors, the collected data on respondents' feelings about how reference groups, family members, and roles and status influence their buying behaviour in the fashion sector. They found that a high number of participants indicate that social factors influence their behaviour in buying fashion products (the mean for reference groups (3.6270), family members (3.9622), and roles and status (3.8973). Similarly, the correlation test showed social factors are strongly correlated with customers buying behaviour in the fashion sector. More so, the regression findings indicated that social factors are a strong determinant of customers buying behaviour in the

fashion industry.

6.3.4 Cultural factors

The study also focused on investigating whether cultural factors have a substantial influence on customers' behaviour in the fashion industry. The study used customers' culture, subculture, and social class variables to indicates cultural factors. the study found that these variables have a significantly high mean, which indicates that participants in this study accepted that their behaviour is influenced by these factors. According to Thomas (2020), people's culture ensures that products from the fashion industry meet certain objectives and goals, through influencing the design and fabric selection. The study also found a significant association between the customer's behaviour in the fashion industry and the cultural factors.

6.4 Validity and reliability

Like this study's findings, prior researchers have found that personal factors have a significant effect on the customer's buying behaviour. The study by (Kim et al, 2018) to investigate the effects of customer's attitudes and behavioural intentions in fashion leading to marketing indicated that personal factors have a significant influence on customer's behaviour . Personal factors are associated with customers' perception of value, perceived trust, trustworthiness, and customer's buying intentions of tourism products (Amin and Islam, 2017) also documented those personal factors and intention to buy tourism products among fashion customers are significantly related. Their study used a structural equation model, in the application of the PLS technique, and documented that personal factor has a positive influence on the buying intention of a customer. Allan and Kabaday (2016), also supported the finding of this study by indicating that there is a direct connection between and customer's purchase intention and the age, occupation, level of income, lifestyle, personality, and self-concept have a moderating influence on the buyers' purchase intention. The study can therefore conclude that customer purchasing intentions toward fast fashion and sustainable fashion are significantly influenced by personal factors.

The study's findings add knowledge to the literature work on the determinants of customers buying behaviour in the fashion sector. This involves the prior studies that revealed that psychological factors are important determinants of customers buying behaviour in the fashion. According to Widagdo and Ros (2021), psychological factors; motivation has determined the decision to be made to purchase a product. According to their study, the sophistication of technology information has led to vast economic innovations especially in buying and selling of products. With the innovation customers got many opportunities of getting quality goods and services of their choice therefore, sellers need to understand customers' tastes to maintain them. besides, there is a need for the sellers and manufacturers to understand customers' attitudes and work toward maintaining positive attitudes about their products and services. Iranmanesh and Najafabadi (2018) found that maintaining a positive attitude to customers is a critical effort in the business. The study concluded that a positive attitude favourably influences their purchasing behaviour. Singh et al. (2017) also supported the findings of this study by indicating that psychological factors, which include perceived value, attitude, personality, motivation, and perception have a significant influence on customer buying behaviour. Based on the present research's findings and the support from different prior studies, the study concluded that psychological factors have a significant effect on customers buying behaviour in the fashion sector.

To validate the findings of this study, various prior researchers have identified similar results (Nasir et al., 2012); (Teik et al., 2015); and (Zeb et al., 2011) . According to Zeb et al. (2011), female customers are highly influenced by the third groups including friends and their family members in determining the type of product to buy. This study used the data collected from female customers in the fashion industry in Pakistan and used a linear model to find a significant association between social factors and female buying behaviour. Similarly, Blazques et al. (2019) in their study to examine the impacts of social commerce on browsing motivations and buying intentions in the United Kingdom fashion industry, found that social factors are crucial determinants of customer's behaviour and intention to buy from the fashion sector. Besides, a study to investigate the association between social media and buying behaviour of women customers in the Pakistan fashion industry indicated that female customers are highly and simply influenced by reference groups, family members, and friends

(Nasir et al., 2012). This study concluded that social factors are the main determinant of customer buying habits in the fashion industry. Likewise, using data collected from the fashion industry in Malaysia, (Bick, Halsay, and Ekenga, 2018) found that the fashion industry is connected to the social life of a customer. According to this study, customers must make different consultations with different people and buyers before making a final buying decision. The study found that most customers do not buy from the first buyer they approached as they try to compare different brands depending on what they hear and see. The study concluded that social factors highly influence customers' buying decisions in the fashion industry. The present study can thus conclude that social factors significantly influence the buyer's buying behaviour in the fashion industry in Vietnam and Finland.

The findings of his study are also supported by Thomas (2020) in his study to investigate cultures of sustainability in the fashion and sector. This study aimed at assessing remarkable variability in the fashion industry and how customers define and operationalize sustainability. Through an in-depth interview, the researcher was able to carry investigate how cultural and social movements interfere with work roles in the industry. The study found that different people show fundamental differences when defining and enacting sustainability. The researcher found that considering the cultural factors around fashion sustainability is likely to increase the performance of the fashion industry. Therefore, the actors in the fashion industry should demonstrate attention to customers' culture that may influence their decision when buying a product from them. (Phau and Lo, 2004) studied influence of cultures on profiling fashion innovators' internet purchase intention. The study argued that fashion innovators are chief buyers in the fashion industry at the introductory stage. Using the quantitative analysis method, the study recorded a significant influence of cultural factors on innovators' buying behaviour, which also indicated the influence on buying the product in later stages. More so, Kankanamge and Dinesha (2014) used a quantitative research approach to study the influence of culture on the behaviour of the customer in the fashion industry. Using data collected from a sample of 150 undergraduate students, the study found that cultural factors significantly affect impulse buying. Therefore, the present study can conclude that cultural factors have a significant influence on the buyer's buying behaviour in the fashion industry in Vietnam and Finland.

6.5   Limitations and recommendation

The study was faced with several challenges, the data used in this study was entirely quantitative, collected using an administered questionnaire. The use of quantitative data and avoiding qualitative data could have resulted in insufficient evidence to answer research questions. Besides, the study involved young customers, who were assumed to have the largest number in the industry in Vietnam and Finland. The study is, therefore, not international enough and specific for a deeper analysis. The study was also faced with a shortage of responses from people who are less interested in buying sustainable fashion items. The result of the study might be only relevant for Vietnam and Finland markets, not the whole European market. The study involved a sample of 185 respondents, which is considerably small. Therefore, the results of this study result might not be clear enough. Time constraints and length limitations might have limited the study from covering a variety of information to support the study.

The study recommended that the fashion industry actors should choose to take into consideration personal, cultural, social, and psychological factors that might influence the buying behaviour of their customers. The study recommended a future study involving a large sample of 185 consisting of all categories of customers to provide more information about customers' behaviour. A future study should include both qualitative and quantitative data through in-depth interviews to provide sufficient information for the study.

LIST OF REFERENCES

Al Amin, M., & Islam, M. (2017). Factors leading to Market Segmentation of fashion house business based on customer behavior: Evidence from Bangladeshi Fashion Industry. International Journal of Business and Technopreneurship, 7(3), 251-272.

Bick, R., Halsey, E., & Ekenga, C. C. (2018). The global environmental injustice of fast fashion. Environmental Health, 17(1). doi:10.1186/s12940-018-0433-

Bickel, P. J., & Lehmann, E. L. (2012). Descriptive statistics for nonparametric models IV. Spread. In Selected Works of EL Lehmann (pp. 519-526). Springer, Boston, MA.

Blazquez, M., Zhang, T., Boardman, R., & Henninger, C. E. (2019). Exploring the effects of social commerce on consumers' browsing motivations and purchase intentions in the UK fashion industry. In Social Commerce (pp. 99-115). Palgrave Macmillan, Cham.

Cassen, R., 1987. Our common future: report of the World Commission on Environment and Development. International Affairs, 64(1), pp.126-126.

Chan, E. 2020. Why Isn't Sustainable Fashion More Affordable? British Vogue https://www.vogue.co.uk/fashion/article/sustainable-fashion-affordable

Clark, H. (2008). SLOW+ FASHION—an oxymoron—or a promise for the future...? Fashion Theory: The Journal of Dress, Body & Culture, 12(4), 427- 446.

Claudio L. (2007). Waste couture: environmental impact of the clothing industry. Environmental health perspectives, 115(9), A448–A454.

Clean Clothes Campaign. 2020. Rana Plaza. Cleanclothes.org. Available at: https://cleanclothes.org/campaigns/past/rana-plaza

Drew, D. & Yehounme, G. 2017 The apparel industry's environmental impact in 6 graphics. World Resources Institute ; Available at: http://go.nature.com/2jSaZfl

Ellen MacArthur Foundation 2017. A new textiles economy: Redesigning fashion's future. URL: https://www.ellenmacarthurfoundation.org/assets/downloads/A-New-Textiles-Economy_Full-Report_Updated_1-12-17.pdf.

Ertekin, Z.O. and Atik, D. (2014), "Sustainable markets: motivating factors, barriers, and remedies for mobilization of slow fashion", Journal of Macromarketing, Vol. 35 No. 1, pp. 53-69, doi: 10.1177/0276146714535932.

European Commission 2020. For a cleaner and more competitive Europe. Circular Economy Action Plan. Available at https://ec.europa.eu/jrc/communities/en/community/city-science-initiative/document/circular-economy-action-plan-cleaner-and-more-competitive

Fashion Revolution 2015. It's Time for a Fashion Revolution. White Paper. Available at : http://www.fashionrevolution.org/wp-content/uploads/2015/11/FashRev_Whitepaper_Dec2015_screen.pdf

Fletcher, K. (2008). Sustainable fashion & textiles: design journeys. London, UK: Earthscan

Fletcher, K. (2010), "Slow fashion: an invitation for systems change", Fashion Practice: The Journal of Design, Creative Process and the Fashion, Vol. 2 No. 2, pp. 259-266, doi: 10.2752/175693810X12774625387594.

Fletcher, K. 2014. Sustainable Fashion and Textiles. Design Journeys. Routledge. New York.

Garner, L. (2017). How fast fashion has captivated the millennial market. [Online]. Available at: https://bdaily.co.uk/articles/2017/11/01/how-fast-fashion-has-captivated-the-millennial-market

Geiger, S.M., Fischer, D. & Schrader, U. (2017), "Measuring What Matters in Sustainable Consumption: An Integrative Framework for the Selection of Relevant Behaviors", Sustainable Development, Vol. 26 No. 1, pp. 18 - 33.

Gilliland, N. (2017). Four factors fuelling the growth of fast fashion retailers. [Online]. Available at: https://econsultancy.com/blog/69216-four-factors-fuelling-the-growth-of

-fast-fashion-retailers

Grossman, E., 2015. It's not just natural and synthetic fibers your clothes there are plenty chemicals. 9th July. Available at: https://www.pri.org/stories/2015-07-09/its-not-just-natural-and-synthetic-fibers-your-clothes-there-are-plenty-chemicals.

Hasanspahic, M. (2016). Sustainable Fashion-practices, strategies, and meanings. Available at: http://lup.lub.lu.se/student-papers/record/8879292

Henninger, C.E. (2015), "Traceability the new eco-label in the slow-fashion industry? – Consumer perceptions and micro-organisations responses", Sustainability, Vol. 7 No. 5, pp. 6011-6032, doi: 10.3390/su7056011

Joergens, C. (2006), "Ethical fashion: myth or future trend?", Journal of Fashion Marketing and Management, Vol. 10 No. 3, pp. 360-371, doi: 10.1108/13612020610679321

Johnston, A. (2012), "The first steps towards considerate design incorporating Cradle to Cradle principles", London College of Fashion, London, available at: http://innovatingsustainablefashion.files.wordpress.com/2012/07/cradle-to-cradle_copenhagen_final_small.pdf

Joy, A., Sherry, J. F., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast fashion, sustainability, and the ethical appeal of luxury brands. Fashion Theory: The Journal of Dress, Body & Culture, Vol. 16 No. 3, pp. 273-296.

Jung, S. and Jin, B. (2014), "A theoretical investigation of slow fashion: sustainable future of the apparel industry", International Journal of Consumer Studies, Vol. 38 No. 5, pp. 510-519, doi: 10.1111/ijcs.12127

Jung, S., & Jin, B. (2016). Sustainable development of slow fashion businesses: Customer value approach. Sustainability (Switzerland), Vol. 8 No. 6. https://doi.org/10.3390/su8060540

Kankanamge, P., & Dinesha, C. (2014). Influence of culture on consumer behavior in the fashion industry (Master's thesis, Universitet i Agder/University of Agder).

Kanniainen, V., 2016. Yritysten yhteiskuntavastuun taloustiede. Helsinki: Books on Demand.

Kim, S., Ko, E., & Kim, S. J. (2018). Fashion brand green demarketing: Effects on customer attitudes and behavior intentions. Journal of Global Fashion Marketing, Vol. 9 No. 4, pp. 364-378.

Kostadinova, E. 2016. Sustainable Consumer Behavior: Literature Overview. Economic Alternatives. issue 2. 225-229. Available at http://www.unwe.bg/uploads/Alternatives/Elena_9_ALTERNATIVI_br2_2016-en.pdf

Kotler, P, & Keller, K. L. (2015). Marketing management. Boston: Pearson. Munasinghe, M. Can sustainable consumers and producers save the planet? J. Ind. Ecol. 2010, 14, 4–6.

Kozlowski, A., Searcy, C., & Bardecki, M. (2016). Innovation for a Sustainable Fashion Industry: A Design Focused Approach Toward the Development of New Business Models (pp. 151–169). https://doi.org/10.1007/978-981-10-0245-8_5

Manikandan, S. (2011). Measures of central tendency: Median and mode. Journal of pharmacology and pharmacotherapeutics, Vol. 2, No. 3, pp. 214.

Marieke de Mooij, 2004. Consumer behaviour and culture (Chapter 5: Consumer markets and consumer buying behaviour), pages 137-160. Sage Publications, Thousand Oaks, California, United States of America.

Middlebrook, S., B. (2015). Stages of the consumer buying process. [Online]. Available at: https://toughnickel.com/starting-business/Stages-of-the-Consumer-Buying-Process

Mittelstaedt, J.D., Schultz, C.J. II, Kilbourne, W.E. and Peterson, M. (2014), "Sustainability as megatrend: two schools of macromarketing thought", Journal of Macromarketing, Vol. 34 No. 3, pp. 253-264, doi: 10.1177/0276146713520551.

Munthiu, M. 2009. The buying decision process and types of buying decision behavior. 28-30. Available at https://docplayer.net/36501193-The- buying-decision-process-and-types-of-buying-decision-behaviour.html

Naomi, E. G., 2010. History: A push for mass production. Readywear Clothing blog [blog] 17 March. Available at: <https://readywearclothing.wordpress.com/history- a-push-for-mass-production/>

Nasir, S., Vel, P., & Mateen, H. (2012). Social media and buying behaviour of women in Pakistan towards the purchase of textile garments.

Paul, J., Modi, A. & Patel, J., 2016. Predicting green product consumption using theory of planned behavior and reasoned action. Journal of Retailing and Consumer Services, Vol. 29, pp. 123-134, doi: 10.1016/j.jretconser.2015.11.006

Phau, I., & Lo, C. C. (2004). Profiling fashion innovators: A study of self concept, impulse buying and Internet purchase intent. Journal of Fashion Marketing and Management: An International Journal, Vol. 8 No. 4, pp. 399-411, doi: 10.1108/13612020410559993.

Quantis 2018. Measuring Fashion. Environmental Impact of the Global Apparel and Footwear Industries Study. URL: https://quantis-intl.com/wp-content/uploads/2018/03/measuringfashion_globalimpactstudy_full -report_quantis_cwf_2018a.pdf.

S ajn, N., 2019. Environmental impact of the textile and clothing industry., sold: The European Parliament.

Sara, I., (2018). Fashion History Lesson: The Origins of Fast Fashion . Fashionista. Available at: https://fashionista.com/2016/06/what-is-fast-fashion.

Schiro, Anne-Marie. (1989)"Two New Stores That Cruise Fashion's Fast Lane." New York Times .

Sean Martin. (2011). A Stitch in Time: The Cleveland Garment Industry. Western Reserve Historical Society

Teik, D. O. L., Seng, T. C. T., & Xin-Yi, A. P. (2015, October). To buy or to lie: Determinants of purchase intention of counterfeit fashion in Malaysia. In International Conference on Marketing and Business Development (Vol. 1, No. 1, pp. 49-56). Bucharest University of Economic Studies Publishing House.

The price of fast fashion. (2018). Nature Climate Change, Vol. 8 No. 1. https://doi.org/10.1038/s41558-017-0058-9

The Textile Institute 2015. Textiles and Fashion. Materials, Design and Technology. Woodhead Publishing Limited.

Wang, Z., Zhang, B., Yin, J. & Zhang, X., (2011). Willingness and behavior towards e-waste recycling for residents in Beijing city, China. Journal of Cleaner Production, Vol. 19 No. 9-10, pp. 977-984.

Watson, M.Z. and Yan, R.-N. (2013), "An exploratory study of the decision processes of fast versus slow fashion consumers", Journal of Fashion Marketing and Management, Vol. 17 No. 2, pp. 141-159, doi: 10.1108/JFMM-02-2011-0045.

Zeb, H., Rashid, K., & Javeed, M. B. (2011). Influence of brands on female consumer's buying behavior in Pakistan. International Journal of Trade, Economics and Finance, Vol. 2 No. 3, 225-231.

APPENDICES

Research questionnaire

This questionnaire aims at collecting information that will assist me in finalizing my academic project which is a requirement for the fulfilment of bachelor's degree. I kindly request you to answer the questions to the best of your knowledge and experience. The information provided will remain confidential and will not be used in other way except for academic purposes.

Personal information

1. What is your gender **(Tick one)**

Male ……………… Female …………………

2. How old are you? **(Tick one)**

Below 20 years ……… 21-25 years………… 26-30………. Above 30…….

3. What is your level of education? **(Tick one)**

High school and below	
College certificate	
Bachelor degree	
Master's Degree	
Doctorate Degree	
Professor	

4. What is your marital status? **(Tick one)**

Single----------- Married ------------- Divorced------------- Student ------------

5. What is your occupation? **(please tick ones)**

Students ☐   Self-employed ☐   Employed ☐   Unemployed ☐

6. How often do you purchase from fashion Industry? **(please tick ones)**

Never ☐   Rarely S☐mes   Alwa☐   Often ☐   ☐

Factor influencing Consumer Behaviour in Sustainable Fashion Industry

A. **Personal factors (please tick ones in each case)**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My buying behavior is influenced by my age?					
My buying behavior is affected by my gender?					
My level of income influences my buying behavior?					
Marital status influences my buying behavior?					
Overall to what extent do you agree that overall personal factors influence your buying behavior?					

B. **Psychological factors (please tick ones in each case)**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
My motive on a brand influence my attitude toward buying that brand					

My perception of a brand influences my buying behavior					
My beliefs on a brand influence my attitude toward buying that brand					
Learning of the brand price affect my attitude toward buying that brand					
Overall to what extent do you agree that overall psychological factors influence your buying behavior?					

C. Social factors (please tick ones in each case)

1. Reference groups influence my attitude toward buying a brand

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. My roles and status influence my buying behavior?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. Family members, and friends influence customer's attitude toward buying a brand

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. To what extent do you agree that overall social factors influence your buying behavior?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

D. Cultural factors

1. Customer's cultural beliefs influence his/her sustainable behavior?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

2. Subcultural activities and beliefs influence my buying behavior of a product and

   service

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

3. Social class determine the type and quality of a product I intend to buy

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

4. To what extent do you agree that overall cultural factors influence your buying

   behavior?

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree