



Vaasan yliopisto  
UNIVERSITY OF VAASA

Reetta Heikkilä

**Transforming Supply Chain Management in the  
Clothing Industry: The Role of Consumer Behaviour  
in Bridging Fast Fashion and Sustainable  
Alternatives**

School of Technology and Innovation  
Master's thesis in Industrial Management  
Programme of Industrial Management

Vaasa 2026

---

**UNIVERSITY OF VAASA****School of Technology and Innovations**

**Author:** Reetta Heikkilä  
**Title of the Thesis:** Transforming Supply Chain Management in the Clothing Industry: The Role of Consumer Behaviour in Bridging Fast Fashion and Sustainable Alternatives  
**Degree:** Master of Science in Economics and Business Administration  
**Programme:** Industrial Management  
**Supervisor:** Ines Simoes de Brito Peixoto  
**Year:** 2026 **Pages:** 98

---

**ABSTRACT:**

Due to the rise of fast fashion and globalized supply chains, the clothing industry is under increasing pressure in terms of its environmental and social impacts. In addition, consumer awareness of sustainability issues has grown significantly. Despite this increased awareness, sustainable purchasing behaviour has not developed at the same pace. This study examines how consumers' attitudes toward sustainability influence clothing purchase decisions and investigates the connection between these behavioural trends and the fashion industry's supply chain management.

A quantitative approach was used in the study. Data was collected via an online survey, in which more than 120 people participated. The results were analysed using descriptive statistics and correlation analysis with Microsoft Excel.

The results show that most consumers have a positive attitude toward sustainability and expect fashion brands to operate in a sustainable way. However, when buying clothes, product quality, design, and price are generally more important than sustainability alone. There is a clear gap between people's views on sustainability and their actual behaviour, and sustainability does not directly influence consumer purchasing behaviour.

Research findings also show that consumers primarily see sustainability through the lens of the product's own durability and longevity, rather than from broader environmental or circular economy perspectives. Additionally, there is relatively low trust in companies' sustainability claims and limited interest in the available sustainability information. This creates challenges for transparency and effective sustainability communication.

From a supply chain perspective, the results suggest that sustainability efforts are more likely to influence consumer behaviour when they align with other key purchasing priorities. These include quality, affordability, and availability. Integrating sustainability into these factors can help to close the gap between consumer attitudes and behaviour and support the transition toward more sustainable practices in the clothing industry.

---

**KEYWORDS:** sustainable fashion, consumer behaviour, clothing industry, supply chain management, fast fashion, sustainability, purchasing decisions, transparency

---

**UNIVERSITY OF VAASA****School of Technology and Innovations**

**Author:** Reetta Heikkilä  
**Title of the Thesis:** Transforming Supply Chain Management in the Clothing Industry: The Role of Consumer Behaviour in Bridging Fast Fashion and Sustainable Alternatives  
**Degree:** Master of Science in Economics and Business Administration  
**Programme:** Industrial Management  
**Supervisor:** Ines Simoes de Brito Peixoto  
**Year:** 2026 **Pages:** 98

---

**ABSTRACT:**

Pikamuodin yleistymisen ja globalisoituneiden toimitusketjujen vuoksi vaateteollisuus kohtaa yhä enemmän paineita ympäristö- ja sosiaalisten vaikutusten osalta. Lisäksi kuluttajien tietoisuus vastuullisuudesta on kasvanut merkittävästi. Tästä lisääntyneestä tietoisuudesta huolimatta vastuullinen ostokäyttäytyminen ei ole kehittynyt samaa tahtia. Tämä tutkimus tarkastelee, miten kuluttajien asenteet vastuullisuutta kohtaan vaikuttavat vaatteiden ostopäätöksiin, sekä selvittää näiden käyttäytymismallien yhteyttä vaatealan toimitusketjujen hallintaan.

Tutkimuksessa käytettiin kvantitatiivista tutkimusmenetelmää. Aineisto kerättiin verkkokyselyn avulla, johon osallistui yli 120 henkilöä. Tulokset analysoitiin kuvailevien tilastomenetelmien ja korrelaatioanalyysin avulla Microsoft Excel -työkalua hyödyntäen.

Tulokset osoittavat, että suurimmalla osalla kuluttajista on myönteinen suhtautuminen vastuullisuuteen, ja he odottavat muotibrändien toimivan vastuullisesti. Vaatteita ostettaessa tuotteen laatu, design ja hinta ovat kuitenkin yleensä tärkeämpiä tekijöitä kuin vastuullisuus yksinään. Ihmisten vastuullisuusnäkemysten ja todellisen käyttäytymisen välillä on selkeä kuilu, eikä vastuullisuus suoraan vaikuta kuluttajien ostokäyttäytymiseen.

Tutkimustulokset osoittavat myös, että kuluttajat näkevät vastuullisuuden ensisijaisesti itse tuotteen kestävyuden ja pitkäikäisyyden kautta, eivätkä niinkään laajemmista ympäristö- tai kiertotalousnäkökulmista. Lisäksi yritysten väittämiin vastuullisuudesta luotetaan melko vähän, ja kiinnostus tarjolla olevaan vastuullisuustietoon on rajallista. Tämä aiheuttaa haasteita läpinäkyvyydelle ja tehokkaalle vastuullisuusviestinnälle.

Toimitusketjun näkökulmasta tulokset viittaavat siihen, että vastuullisuustoimet vaikuttavat kuluttajakäyttäytymiseen todennäköisemmin silloin, kun ne tukevat muita keskeisiä ostoprioriteetteja. Näitä ovat esimerkiksi laatu, kohtuullinen hinta ja saatavuus. Vastuullisuuden integroiminen näihin tekijöihin voi auttaa kaventamaan kuilua kuluttajien asenteiden ja käyttäytymisen välillä sekä tukea siirtymää kohti vastuullisempia toimintatapoja vaateteollisuudessa.

---

**KEYWORDS:** sustainable fashion, consumer behaviour, clothing industry, supply chain management, fast fashion, sustainability, purchasing decisions, transparency

## Contents

1	Introduction	8
1.1	Current research gap	10
1.2	Research question and objectives	11
1.3	Structure of the thesis	13
2	Literature review	15
2.1	Clothing industry	15
2.1.1	Environmental challenges in the clothing industry	16
2.1.2	Socio-economic challenges in the clothing industry	19
2.2	Fast fashion	20
2.3	Sustainability	23
2.4	Supply chains	26
2.5	Supply chain management	27
2.6	Supply chain management in fast fashion industry	29
2.7	Consumer behaviour	30
2.7.1	Consumer behaviour in the clothing industry	31
2.8	Theoretical framework	33
3	Data and methods	35
3.1	Research design	35
3.2	Survey design and structure	37
3.3	Data collection	41
3.4	Methods for data analysis	42
3.5	Limitations	43
4	Empirical results	45
4.1	Respondent background characteristics	45
4.2	General attitudes toward sustainable fashion	48
4.3	The role of sustainability in clothing purchase decisions	50
4.4	Awareness of fast fashion and its impacts	51
4.5	Perceived responsibility for sustainable consumption	54

4.6	The Influence of sustainability communication and transparency on consumer behaviour	55
4.7	Price sensitivity and sustainability preferences	56
4.8	Market barriers to sustainable clothing consumption	57
4.9	Information and transparency challenges in sustainable clothing consumption	58
4.10	Overall consumer purchase priorities and sustainability evaluation criteria	60
4.10.1	Key determinants of clothing purchase decisions	60
4.10.2	Consumer priorities in sustainability evaluation for clothing purchases	61
4.11	Correlation analysis	63
5	Analysis and explanation	65
5.1	The attitude-behaviour gap	65
5.2	Durability as the core interpretation of sustainability	67
5.3	Trust deficit and transparency paradox	69
5.4	Price sensitivity versus willingness to pay	70
5.5	Gender and age differences	71
5.6	Information channels and label complexity	72
6	Consumer-driven implications for sustainable supply chain management	74
6.1	Implications for supply chain management	74
6.1.1	Shift toward durability-oriented supply chains	75
6.1.2	Integrating transparency into supply chain systems	76
6.1.3	Addressing the affordability challenge through operational efficiency	77
6.1.4	Ethical responsibility in supply chain management	78
6.1.5	Making circularity more practical and relevant	79
6.2	Possible implications for the fashion industry	80
6.2.1	Embedding sustainability into product value and operations	81
6.2.2	Trust-building through verification, instead of marketing	82
6.2.3	Availability as an operational enabler	83
6.2.4	Reconsidering the role of delivery speed	83
7	Conclusions	85

7.1	Research summary	85
7.2	Practical recommendations	88
7.2.1	Integrating sustainability into core product value	89
7.2.2	Improving transparency and credibility	89
7.2.3	Increasing accessibility of sustainable products	90
7.2.4	Aligning supply chains with durability and efficiency	91
7.3	Limitations of the study	91
7.4	Suggestions for future research	93
	References	96

## Figures

<b>Figure 1</b> Definitions of Sustainable Development	24
<b>Figure 2</b> The Three Flows in a Supply Chain	28
<b>Figure 3</b> Theoretical framework	34
<b>Figure 4</b> Respondent background characteristics	46
<b>Figure 5</b> Comparison of clothing purchase frequency across age groups	48
<b>Figure 6</b> Sources consumers use to find information about sustainability	54
<b>Figure 7</b> Consumer perspectives on sustainability in the clothing industry	67
<b>Figure 8</b> Importance of ethical labor and consumer response to unethical practices	67
<b>Figure 9</b> Consumer trust in fashion brands' sustainability claims	70

## Abbreviations

CO<sub>2</sub> - Carbon dioxide

EPA - United States Environmental Protection Agency

ILO – International Labour Organization

JIT – Just-in-Time

TBL – Triple Bottom Line

## 1 Introduction

The clothing industry is one of the largest industries in the world and plays an important role in the global economy. At the same time, it has increasingly been recognized as an industry that creates significant environmental, social and ethical challenges. The rapid growth of clothing production and consumption has reinforced many of these issues, which has made the sustainability of the fashion industry an important topic in both public discussion and academic research.

Many of the challenges that the clothing industry is facing occur throughout the entire life cycle of clothes. Environmental impacts arise from the beginning of the production process, where the raw materials used in clothing are produced. During the manufacturing stage, concerns often relate to working conditions, labor rights and the use of chemicals in textile production. Transportation across global supply chains contributes to greenhouse gas emissions, while the use phase of clothing is often associated with unsustainable consumption patterns. Finally, the disposal and recycling of clothing products create additional environmental problems, mostly due to the increasing amount of textile waste. Because these issues occur at multiple stages of the clothing supply chain, improving sustainability in the industry requires changes across the entire system. Solutions are needed not only within policy-making and regulation, but also in how companies manage their production processes and supply chains.

Consumer behaviour and the demands it generates are also an important part of this transition. Consumers play a key role in shaping the clothing industry, since their purchasing decisions determine which products are made and how companies operate. When these decisions are considered together, they create consumer demand that puts pressure on supply chains and production systems. Through consumer choices, they can also support more sustainable methods in the industry. For example, buying fewer clothes, avoiding fast fashion, or choosing higher-quality and more responsibly produced items can help reduce the negative impacts of clothing consumption.

Over time, awareness of sustainability challenges in the clothing industry has increased. More consumers today are familiar with the environmental and ethical issues associated with fast fashion and global clothing production. Despite this growing awareness, consumer purchasing behaviour has not changed at the same speed. Fast fashion remains to be the trend that dominates the market, and demand for inexpensive, frequently changing clothing still drives production.

This situation reveals a clear inconsistency. Consumers are often aware of the negative impacts associated with the clothing industry, yet this awareness rarely leads to sustainable purchasing behaviour. Understanding the reasons behind this gap between awareness and behaviour is therefore an important phase in addressing sustainability challenges in the clothing industry. By investigating this gap, this study aims to identify the key factors that influence purchasing decisions and explore how they relate to clothing supply chains. Since consumers play a central role in shaping demand within the fashion industry, their perspectives are highly relevant when considering how supply chains could transition toward more sustainable alternatives.

Via analysing consumer attitudes, preferences, and purchasing behaviour, this research attempts to identify opportunities to improve sustainability within clothing supply chains. The target is to provide insights that help companies better understand consumer expectations and identify areas where investments or strategic changes could be made. Understanding consumer behaviour may also help explain why the transition toward more sustainable consumption has been slower than expected, even as awareness of sustainability issues has increased. Although sustainability in fashion has been widely discussed, the role of consumer behaviour in shaping supply chain decisions still requires further attention. For this reason, examining the relationship between consumer attitudes and actual purchasing behaviour is an important area of research.

## 1.1 Current research gap

Sustainability challenges in the clothing industry have received growing attention in academic research over the past years. Many studies have examined the environmental impacts of the fashion industry, particularly in relation to fast fashion, textile waste and the use of natural resources in clothing production. Researchers have also explored different strategies that companies can adopt to reduce these impacts and improve sustainability in their operations and supply chains.

At the same time, the role of consumer behaviour in this transition has received somewhat less attention. Since consumers ultimately influence demand through their purchasing decisions, their behaviour plays an important role in shaping how the clothing industry develops. If consumers continue to favour inexpensive and frequently changing clothing, it becomes more difficult for companies to move toward more sustainable production models.

Previous studies have shown that many consumers express positive attitudes toward sustainable fashion and report being concerned about the environmental and ethical impacts of clothing production. However, these attitudes do not always translate into actual purchasing behaviour. This situation is often described as the attitude-behaviour gap: consumers support sustainability in principle, but do not act on these values when actually making the purchasing decisions. Busalim et al. (2022) also highlight in their article "Consumer behaviour in sustainable fashion: A systematic literature review and future research agenda" that the relationship between consumer attitudes and behaviour within sustainable fashion still needs further investigation (Busalim et al., 2022). Although awareness of sustainability issues has increased, the reasons why consumers do not change their purchasing habits remain only partly understood.

For this reason, further research is needed to better understand how consumer attitudes, preferences and purchasing behaviour influence the transition toward more sustainable practices in the clothing industry. Examining consumer behaviour in relation to clothing

supply chains may help identify opportunities for companies to better align sustainability initiatives with consumer expectations and purchasing decisions. This study contributes to this discussion by analysing consumer behaviour related to clothing purchases and exploring how these insights could support the transition from fast fashion toward more sustainable alternatives in supply chain management.

## **1.2 Research question and objectives**

The clothing industry is currently facing growing pressure to move toward more sustainable production and consumption practices. Environmental and ethical challenges linked to fast fashion have increased public discussion around responsibility in the fashion sector. At the same time, companies are searching for ways to adjust their production and supply chain practices to respond to these expectations. In this transition, consumers play an important role. Through their purchasing decisions, consumers influence which types of products are produced and how fashion companies organise their supply chains.

Although awareness of sustainability issues in the clothing industry has increased in recent years, this awareness has not translated into changes in consumer purchasing behaviour with the same intensity. Many consumers indicate support for sustainable fashion and expect companies to operate responsibly, yet fast fashion remains widely consumed. This situation highlights the well-known gap between attitudes and behaviour. Understanding how consumer behaviour affects the development of more sustainable supply chains is therefore an important research topic.

Based on this background, the main research question of this study is: *“How do specific aspects of consumer behaviour may influence the transition of supply chain management from fast fashion to sustainable alternatives in the clothing industry?”* This research question focuses on the connection between consumer behaviour and supply chain management. In particular, the study aims to understand how consumers’

attitudes, preferences and purchasing habits may influence the decisions that fashion companies make when developing more sustainable production and supply chain practices.

To support the main research question, the study has three research objectives. The first objective is to explore the challenges faced by fashion brands in meeting consumer demands for sustainability, based on insights into consumer attitudes, preferences and purchasing behaviour. By examining how consumers perceive sustainability and what they expect from fashion brands, the study aims to identify some of the tensions that companies face when trying to balance sustainability goals with market expectations.

The second objective is to identify key consumer behaviours and examine how this information could be used in sustainable supply chain management. Through the analysis of consumer responses, the study seeks to highlight which factors influence clothing purchasing decisions and how these behavioural patterns may affect decisions related to sourcing, production planning and supply chain development. The third objective is to provide strategic recommendations for fashion brands' supply chain practices based on consumer behaviour insights. These research findings then aim to suggest practical ways for companies to better align sustainability initiatives with consumer expectations and purchasing behaviour.

In summary, these objectives aim to deepen our understanding of how consumer behaviour relates to the transition toward more sustainable supply chains in the clothing industry. By combining the results of consumer behaviour research with supply chain management perspectives, the study brings a new perspective to the discussion on how the fashion industry can transition toward more sustainable alternatives to fast fashion.

### **1.3 Structure of the thesis**

This thesis is organised into chapters that together build an understanding of how consumer behaviour relates to sustainability challenges in the clothing industry and how these insights can be connected to supply chain management. The study moves from introducing the research problem and theoretical background to presenting empirical findings and discussing the practical implications.

The thesis begins with an introductory chapter that presents the background and motivation for the study. This chapter explains the sustainability challenges faced by the clothing industry and highlights the importance of consumer behaviour in shaping industry practices. It also introduces the research gap the study seeks to address and presents the research question and objectives guiding the study.

The second chapter provides the literature review. In this chapter, the key concepts and themes related to the research topic are discussed based on existing academic literature. The chapter introduces the structure of the clothing industry and the development of fast fashion, as well as the environmental and social challenges associated with the sector. It also examines sustainability, supply chains, and consumer behaviour as separate topics before integrating them into the study's theoretical framework.

The third chapter describes the research methodology and explains how the study was conducted in practice. It outlines the research design, the structure of the survey questionnaire, and the process for collecting the data. The chapter also presents the methods used to analyse the collected data and discusses the main limitations related to the research approach.

The empirical results of the study are presented in chapter four. This chapter provides an overview of the participants' responses and highlights key aspects of consumers' attitudes and purchasing behaviour. Chapter five then focuses on analysing the results. The research findings are examined in more detail and linked to the research objectives and

theoretical framework presented earlier in the thesis. The fifth chapter discusses the attitude-behaviour gap, consumers' views on sustainability, and the role of price, transparency, and trust in clothing purchase decisions.

The sixth chapter discusses the practical implications of the study. Based on the analysis, the chapter presents possible recommendations for fashion companies and supply chain managers seeking to develop more sustainable practices. The discussion focuses on how insights from consumer behaviour can support the transition toward greater sustainable alternatives in the clothing industry.

The thesis concludes with the last chapter, which summarises the research's main findings. This chapter also reflects on the study's limitations and presents suggestions for future research on sustainable consumption and supply chain management in the fashion industry.

## 2 Literature review

The literature review of this research introduces the terminology related to the topic and explores the main themes using existing literature and research material. A wide range of sources has been used to provide the most comprehensive understanding of the topics. The topics are first treated as separate entities, and then, at the end of the literature review section, they are integrated into the theoretical framework of the study.

### 2.1 Clothing industry

In short, the clothing industry refers to an industry sector that covers the production and consumption of textiles, footwear and clothing (Papamichael et al., 2022). In turn, Papadopoulou summarizes the concept by referring to the European Commission's definition of the clothing industry as a "*range of activities from converting natural or synthetic fibers into yarns and fabrics to the production of a range of products such as high-tech synthetic yarns, bedding, industrial filters and clothing*" (Papadopoulou et al. 2022).

The clothing industry is one of the world's largest industries. According to Hileman et al., it is worth an estimated US\$2.4 trillion and employs tens of millions of people worldwide (Hileman et al., 2020). The same article concludes that around 150 billion garments were produced in 2017, but to meet the needs of the clothing industry, production is forecast to grow by 63% by 2030 (Hileman et al., 2020).

The clothing industry and its strategies have changed over the decades. Traditional system of clothing industry has required sales forecasts to be made well in advance of the sales season, leading to relatively high demand uncertainty. Large quantities of each product have been purchased to cover the estimated demand for the whole sales period. Sufficient stocks have also been included in these quantities. In this way, manufacturers have tried to avoid running out of stocks and to sell as many products as possible during the season. At the end of the season, stocks have been depleted by selling products at

reduced prices. The traditional strategy has been focused on producing standardized clothing at the lowest possible cost. (Backs et al., 2020)

Nowadays, the clothing and textiles industry has become much more dynamic: the strategy focuses on flexibility to meet consumer demand and offer more fashionable products. Due to this, demand forecasts can be made much closer to the sales season and can even be driven by real-time data from points of sale. This approach benefits from a reduction in demand uncertainty. Clothes are produced in smaller batches and sold to consumers for only a few weeks. Stocks are kept low to create an artificial sense of scarcity and exclusivity. There are no classic end-of-season sales. This strategy has grown in popularity with globalization and digitalization, both of which have accelerated the spread of trends. (Backs et al., 2020)

With globalization, companies have moved their clothing production to so-called low- and middle-income countries to minimize production costs. As a result, clothing prices are also pushed as low as possible, which in turn encourages consumers to buy more clothes (Camargo et al., 2020). As a result, the clothing and textile industries have been heavily relocated to countries such as India, Bangladesh, Sri Lanka, China and Myanmar (Khurana & Muthu, 2022).

### **2.1.1 Environmental challenges in the clothing industry**

The clothing industry is one of the most polluting field of industries in the world. (Saha et al., 2024). Environmental challenges include for example excessive water use in production, the materials and dyeing chemicals used, carbon dioxide emissions and greenhouse gas emissions (Costa et al., 2020). Naturally, emissions are not limited to the manufacturing stage of the product itself, but are present throughout the entire production process, from delivery to use and challenging end-management of textile waste (Costa et al., 2020).

From an environmental point of view, the materials used in products are one of the biggest problems facing the fast-food industry. Although there are many materials to choose from, many of them present different challenges, which makes analysis of the ideal material option very intense and general consensus challenging to find. The production of synthetic materials such as polyester, which is made from crude oil, not only consumes huge amounts of energy but also generates large amounts of emissions, ranging from various volatile organic compounds to various acid gases such as hydrogen chloride. (Claudio, 2007) In addition, a major problem in the polyester industry is the wastewater from the factories, which is contaminated with various monomers, solvents and other by-products. Consequently, it is precisely on the basis of this that the United States Environmental Protection Agency (EPA), among others, has classified a number of textile manufacturing plants as hazardous waste generators. (Claudio, 2007)

Another issue that arises as a problem in the use of synthetic materials is microplastics. With the growth of the fast-fashion industry, the textile industry is also growing, which has increased the use of plastics in production. The use of plastics in the textile industry itself is undesirable from an ecological point of view, but microplastics have also emerged as a new challenge. Microplastics are defined as fiber fragments of less than five millimeters in size that come loose from clothing during washing and other uses and can cause health problems for animals and possibly also for humans. These fiber fragments can, for example, become food for aquatic animals and have a significant adverse effect on their metabolism. In turn, the human body can be exposed to fiber fragments through inhalation, contaminated food and water and direct skin contact with textiles. The health effects of microplastics on humans are still relatively difficult to analyse due to the paucity of available research data, but there is no doubt that plastic ingestion by both animals and humans is harmful (Periyasamy and Tehrani-Bagha, 2022).

As a substitute for synthetic materials, the fast-fashion industry uses a lot of cotton. Cotton is often seen as a better alternative to synthetic materials such as polyester and viscose, but its production also poses significant environmental challenges. (Papadopoulou

et al., 2022) Despite the fact that the production of synthetic materials has increased significantly over the past decades, cotton is still the most important material produced in the textile industry. (Rashid et al., 2016) Although cotton is essentially a natural fiber, so many synthetic chemicals and fertilizers are used in its production to make production more efficient that cotton products often no longer deserve the natural fiber label.

In addition to the fertilizers and chemicals used, cotton production consumes huge amounts of water. A concrete example of this is the drying up of Lake Aral in Uzbekistan as a result of cotton production (Khurana and Muthu, 2022). However, the differences between cotton and organic cotton are noteworthy, and organic cotton can be considered a significantly better alternative to conventional cotton. (Rashid et al., 2016)

Another significant environmental issue is the final disposition of the products. Consumers themselves may often perceive fast-fashion products as only momentarily fashionable, cheap and of poor quality, so throwing a product in the trash with mixed waste at the end of its life cycle is not a difficult idea for consumers either. (Joung, 2014) Indeed, the amount of textile waste today is huge and, for example, between 2000 and 2014, the amount of textile and clothing waste in the US increased by 70% (Long & Nasiry, 2022).

Although some unused clothing ends up for reuse and recycling, a large proportion still ends up unsorted in mixed waste, inevitably ending up in landfill (Costa et al., 2020). The very construction of landfills is fundamentally problematic from an environmental point of view, as it involves the destruction of natural areas, which in turn means the destruction of habitats. When clothing ends up in landfills, it is decomposed with other waste, and the decomposition of materials produces greenhouse emissions such as methane and carbon dioxide, which are major contributors to climate change (DeVoy et al., 2021). Thus, a problematic sequence is created whereby as fast fashion increases the amount of textile waste generated, the amount of textile waste going into mixed waste also increases, thus increasing the ecological challenges posed by landfills.

### 2.1.2 Socio-economic challenges in the clothing industry

The challenges of the clothing industry are by no means limited to ecology alone, but significant problems are also related to socio-economic factors. Clothing industry also involves many ethical challenges, most of which culminate in globalization either directly or indirectly. With globalisation, companies have moved their production to low- and middle-income countries in both Asia and Africa. (Khurana and Muthu, 2022)

In these countries, production facilities are often located on the outskirts of the city, where the employees of the facilities live in slums and other low-income group housing. People working in factories often work so many hours every day that living near the factory is almost necessary, as there is no time left for commuting. In the slums that are formed in this way, the living conditions of the workers are inadequate, and in addition, there are often numerous social problems in the slums, such as the use of child labor, lack of education for children, crime against women, and drug abuse. The ethical challenges of the fast fashion industry are therefore not limited only to the work itself, but they spread considerably more widely to the socio-economic infrastructure of the country. (Khurana and Muthu, 2022)

The disadvantages of the clothing industry are reflected in the production countries throughout the infrastructure, but many human rights violations still take place inside the walls of the factories. In his article *Waste Couture: Environmental Impact of the Clothing Industry*, Claudio writes about an example company in Cambodia, where more than 2,000 young women and child laborers work every day. In this case study of the article, a concrete example of the salary of factory workers is given; the article says that a child worker works in a factory for ten hours a day and is paid one UK dollar for the work done during the day. (Claudio, 2007) According to the International Labor Organization ILO, a woman's average hourly wage in fast fashion factories is only \$0.11-\$0.35. (Khurana and Muthu, 2022)

In addition to very low wages and long working hours, women who work in factories are often victims of gender-based violence, both physical and mental. Children, on the other hand, due to their small size and physical characteristics, often find themselves in situations where they are exposed to various machines, fumes, chemicals, acids and pesticides. (Khurana and Muthu, 2022) These issues clearly violate both occupational safety and often also human rights, which is why ethical challenges are definitely a radical problem in the fast fashion industry.

The ethical challenges of the fast fashion industry therefore form a problematic global cycle that is challenging to break. To minimize production costs, fast fashion chains move production to developing countries, where workers, many of whom are women and children, work for low wages and unethical working conditions. (Backs and others, 2020) Working prevents children from going to school, which in turn prevents the socio-economic development of countries; children are unable to get an education, workers will not be paid a higher salary in the future, so the income levels of the countries keep the countries below the poverty line. (Radfar and others, 2018) So as long as there is demand for fast fashion, fast fashion production will also continue and the ecological and ethical challenges that come with it.

## **2.2 Fast fashion**

Fast fashion refers to a concept in which the clothing industry produces clothes for sale at the lowest possible cost and in the shortest possible time (Bick et al., 2018). The key to fast fashion is to respond as quickly as possible to the trends of the moment, to consumer demand and to make products available to consumers quickly. (Bick et al., 2018) Hence, fast fashion differs significantly from the traditional clothing industry cycle in that it is a seasonal cycle of products in retail: whereas in the more traditional model, clothes are produced for sale in a systematic and planned way as seasonal products, in fast fashion, the essential thing is to produce new collections that differ from seasonal orders in a continuous and flexible way to meet consumer demand directly (Barnes & Lea-

Greenwood, 2006). The aim of fast fashion is not only to meet existing demand, but also to create pressure for new products at the same time. The range of well-known fast fashion chains is updated almost every five years, as new trends are constantly emerging and therefore the pressure to acquire these trendy products is also increasing (Arnold, 2009, p. 26).

Fast fashion is characterised by a very short life span of clothing, even less than ten wears. Clothes are only worn for a short period of time, after which new trends take over the market (Parthiban et al., 2019, p. 4) Instant fashion chains imitate the trendy clothes and accessories of luxury brands, creating copies of them in a similar style, but only at a lower price (Parthiban et al., 2019, p. 4). In fast fashion, it is therefore essential to reach the largest possible number of buyers, in addition to high production volumes, and to this end, prices are kept to a minimum to ensure that as many consumers as possible can buy the product.

Low retail prices naturally imply low production costs, which often means compromising on the quality, ethics and environmental impact of the products. One of the main challenges often associated with fast fashion is the outsourcing of production to low-middle income countries, where fast fashion chains often produce in so-called sweat shops, where workers often do not have adequate working hours, working conditions, safety and pay. (Gupta V. et al., 2015) Environmental problems in the fast-fashion industry include the materials used in the products, chemicals, emissions from production and the amount of textile waste from product disposal (Niinimäki et al., 2020).

Backs et al. in Traditional versus fast fashion supply-chains in the apparel industry: an agent-based simulation approach (2020) divides the fast fashion industry into two different categories based on the products to be manufactured: basic and fashion products. Based on this division, the production of so-called basic products follows the more traditional model of the fast-fashion industry, where garments are produced in low-middle-income countries with the highest possible volume and lowest possible production costs.

Basic products include, for example, plain monochrome t-shirts, which in this case is mass production at best (Backs et al., 2020).

On the other side of the divide are the so-called fashion products, which are those products that are more in tune with the trends of the moment and imitate the products of luxury brands. The main factor in the production of these products is their rapid availability. This is also reflected in the strategic decisions relating to the production of these products; unlike the traditional fast-food industry, it may often be more profitable to move production of these products closer to the consumer and the point of sale, for example in Europe. This minimises the time spent on supply chains and makes products available to consumers as quickly as possible, according to the objectives (Backs et al., 2020).

Fast fashion has also evolved over the years and will continue to do so. An example of this is the emergence and evolution of ultra-fast fashion (Camargo et al., 2020). In ultra-fast fashion, the main features of fast fashion production, i.e., te-efficiency and supply chain optimisation, are taken to the extreme to produce clothes and accessories for retail sale more quickly. This is an example of the diversity, dynamism, and continuous evolution of fast fashion and its production (Camargo et al., 2020).

Despite the ethical and environmental challenges associated with fast fashion, its consumption is nevertheless an economically viable solution for consumers due to the minimal prices of the products. As long as the prices of clothes remain so low, there will be enough buyers, which will increase demand and thus companies will continue to import as usual (Rinaldi, 2019, p. 110). This is the way the fast-fashion industry has evolved, and solutions should be found to the problems that arise.

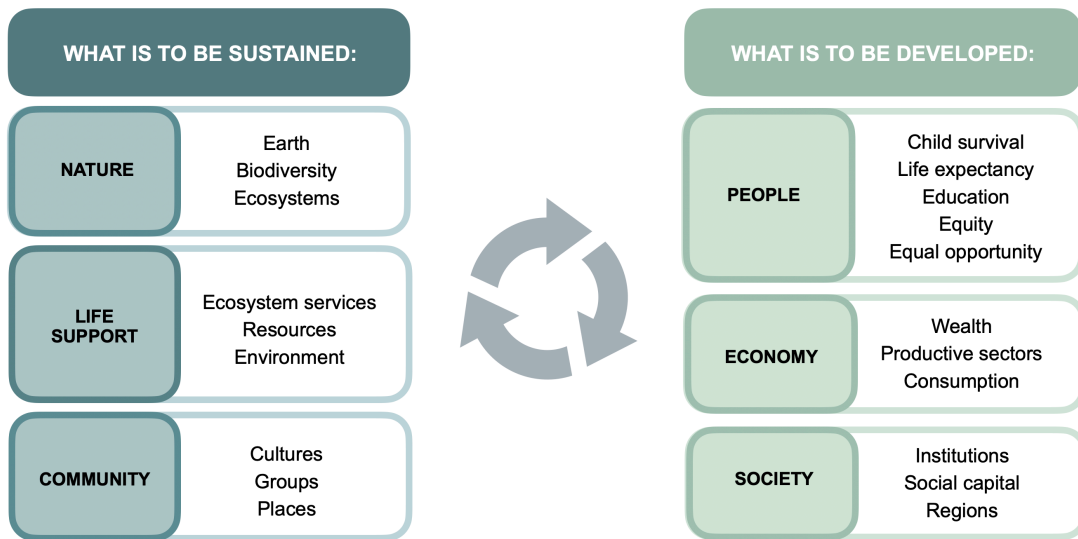
## 2.3 Sustainability

The term *sustainability* is nowadays defined in many different ways and has become an established part of the everyday language of people and companies. There are many different definitions of the term, but Thiele, for example, sums it up well in his book “Sustainability”: sustainability can be defined "as meeting current needs in a way that does not undermine future welfare" (Thiele, 2024, p. 1945). According to the book, to achieve this, it is essential to manage the scale and pace of change so that the core functions, values, and relationships of the communities that sustain us are preserved. The balance between adaptive change and conservation can be struck by pursuing ecological sustainability, economic prosperity, social justice, and cultural creativity (Thiele, 2024, p. 1945).

Sustainability as a topic is therefore not only an environmental issue, as it also includes economic and financial dimensions in addition to the ecological dimension. Under these three dimensions are the global problems of sustainability such as poverty, poor health, overpopulation, resource depletion, food and water scarcity, political instability and the destruction of the vital systems on which we all depend. (Robertson, 2021, p. 25)

Sustainability is a very broad topic, and therefore achieving sustainability requires also a wide range of concrete actions and changes. According to Thiele, implementing responsible action requires the integration and engagement of multiple intellectual disciplines and stakeholders, including people, businesses, community organizations, and governments. (Thiele, 2024, p. 1945)

As sustainability is a very multifaceted concept, so is sustainable development. To illustrate the scope of the topic, the diagram below shows the factors related to sustainable development. The chart is derived from the original chart prepared by the U.S. National Research Council, Policy Division, Board on Sustainable Development, *Our Common Journey: A Transition Toward Sustainability* (Washington, DC: National Academy Press, 1999). (Kates et al., 2005)



**Figure 1** Definitions of Sustainable Development

The chart above illustrates the key themes that sustainable development aims to maintain, as well as the essential factors that must be developed to achieve this goal (Kates et al., 2005). Nature, life support and community are the main themes that make up the field of what sustainable development seeks to sustain. Nature includes earth, biodiversity and ecosystems. Life support includes ecosystem services, resources and environment. Community includes cultures, groups and places. (Kates et al., 2005)

To successfully achieve sustainability, the diagram highlights the critical areas that require development, categorized into people, economy, and society. The people category includes child survival, life expectancy, education, equity and equal opportunity. The theme economy focuses on productive sectors and consumption. The third theme, society, covers institutions, social capital and regions. (Kates et al., 2005) While the chart and the themes it lists may seem straightforward, it is important to remember that its global scalability is very different in nature: the issues to be prioritised can vary quite significantly depending on the socio-economic situation of countries. As a result, sustainability and related actions cannot be considered as completely unique and universal.

Robertson sums up the idea of *sustainable development* and how it is formed from the three dimensions: ecological sustainability, economic opportunity, and social inclusion. (Robertson, 2021, p. 26) These three elements, environment, economics and equity, are the cornerstones of sustainability (Robertson, 2021, p. 26).

John Elkington in turn has developed a sustainability theory known as the “triple bottom line,” in which corporate responsibility is divided into three key areas: profit (financial responsibility), people (social responsibility), and planet (environmental responsibility). These three perspectives form a comprehensive framework for evaluating a company’s success, as they take into account not only financial performance but also the company’s impact on people and the environment. The central idea of the model is that a company should strive for balance among these three areas rather than focusing solely on financial profit. This approach can be considered a useful and still relevant perspective when evaluating companies’ sustainability initiatives and their long-term durability. (Alhaddi, 2015)

It can therefore be concluded that numerous theories of corporate responsibility have been developed. Based on these theories, an increasing number of companies have begun to develop their own corporate responsibility and sustainability practices. The goal of these efforts is to support sustainable development and reduce the harmful impacts of production and business operations on the environment and society. Companies are striving to take economic, social, and environmental perspectives into account more broadly in their operations, reflecting the growing importance of responsibility in today’s business world. This trend indicates that responsibility has become a central part of companies’ strategic operations and long-term success. (Costa et al., 2020)

## 2.4 Supply chains

Supply chains consist of all the linked processes and activities that create value for the products that ultimately reach the consumer. (Mentzer et al., 2001) These supply chain processes and activities may include manufacturers and suppliers, material handling, product design, and transportation of finished products (Camargo et al., 2020). Other building blocks of the supply chain may include retailers and their product development, operations, finance, and marketing (Chopra, 2019, p. 15). So, we are talking about a very wide range of functions and, depending on the size of the company, even more people working as part of these supply chains.

Supply chain processes can often be distributed across a number of different organisations, with a single organisation performing a particular process of developing a product and then passing the product or part of it on to the next organisation to be performed. These activities, which form the sub-product into the final product that reaches the consumer, result in a series of different processes. This series of processes is called a supply chain. (Mentzer et al., 2001)

The effective implementation of supply chains requires successful coordination and information flow between different functions (Ka-Leung et al., 2017). Supply chains form a unique, personalised and complex system. "As a term, "supply chain" can easily give the impression that activities take place in a systematic chronological order, but many supply chains operate in a more network-like manner, i.e. several processes and activities in a supply chain are performed simultaneously or overlapping (Chopra, 2019, p. 16). Therefore, supply chain planning and coordination should be an integral part of companies' strategies so that they can continuously improve their practices and processes and thus keep up with, or even ahead of, their competitors (Helmold et al., 2022).

In everyday language when talking about supply chains, the focus is easily on production, transportation or resale, for example (Chopra, 2019, p. 17). However, the main objective of the supply chain should always be to maximise the net benefit to the consumer, which

is why the consumer should also be considered as an important part of supply chains (Chopra, 2019, p. 16). Consumers are therefore an extremely important part of supply chains, and it can very much be said that consumer focus is the most crucial factor of all: the companies that succeed in creating the most value for the consumer will make the consumer buy their product or service and not a competitor's. Particularly in highly competitive business sectors, this is a very crucial issue in the pursuit of competitive advantage.

Supply chains, their effective planning and strategic management undoubtedly play an important role in commercial as well as in the sustainable success of companies (Werner, 2020). Since supply chain management involves so many different functions, supply chains also have a lot of potential from the perspective of fostering business sustainability: by identifying the key pain points to sustainability, companies can focus their resources in supply chains on addressing specifically these challenges.

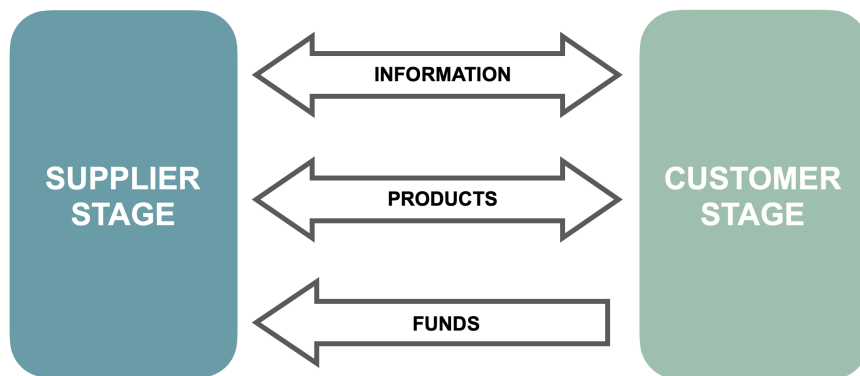
## **2.5 Supply chain management**

Supply chain management is the systematic planning of supply chain processes to improve supply chain efficiency, optimise resource utilisation and increase the value of the end product to the customer (Helmold et al., 2022, pp. 13-35). Werner summarises in his paper on supply chain management how supply chain management can be seen as a process in itself. This process, supply chain management, consists of controlling, planning, developing, implementing and streamlining activities to optimise the flow of people, money and information throughout the value chain (Werner, 2020).

Supply chains can be thought of as consisting of the flow of three things: information, products and funds (Chopra, 2019, p. 17). Supply chain management aims to maximise customer value and achieve the most cost-effective balance between these three elements (Chopra, 2019, p. 17).

Supply chain management is a multi-dimensional concept that encompasses these supply chain processes and their integration, but also supply chain innovation, optimisation, visibility, flexibility, collaboration and agility (Ka-Leung et al., 2017). It is therefore an absolutely complex and dynamic craft, with an emphasis not only on the present but also on continuous improvement.

The basic objective of supply chain design is to meet the customer's needs in the most cost-effective possible way. A good starting point for supply chain planning is Chopra's diagram of the basic principle of supply chains. The diagram does not show all the possible elements or components of a supply chain, but the idea behind supply chain management. (Chopra, 2019, p. 17)



**Figure 2** The Three Flows in a Supply Chain

Chopra's diagram illustrates how various flows move through the supply chain and connect its different participants, such as suppliers, manufacturers, distributors, retailers, and customers. The diagram shows three key flows: material flow, information flow, and cash flow. Materials typically move from suppliers toward customers, while information flows in both directions and helps, for example, with demand forecasting and operational planning. Cash flow, on the other hand, moves in the opposite direction from customers back toward suppliers.

The idea behind the diagram is to highlight that the functionality of the supply chain does not depend solely on the movement of goods, but on how well all these flows work together. The core idea of Chopra's model is that the supply chain is a whole in which all parts influence one another. When this system is managed well, the company can meet customer needs efficiently and at the lowest possible cost.

## **2.6 Supply chain management in fast fashion industry**

Despite of the dynamic nature of the fast fashion industry and its different nature compared to traditional production, supply chains are subject to the same general rules and principles as supply chains in general. However, supply chains in the short-run industry often require more modification than usual, depending, on the product being produced (Jahed et al., 2022). Whatever the product, in general, supply chains in the fast fashion industry are guided by the same main features; the time spent on design, production and, above all, the warehouse in shop should be optimised and minimised (Jahed et al., 2022). These decisions, in turn, are guided at a general level by the strategic choices of the production organisation.

The general cornerstone of the business strategy of the fast fashion industry is to satisfy consumer demand as quickly as possible: thus, the time involved in the production process and in the delivery of the products should be minimised (Barnes & Lea-Greenwood, 2006). This leads to one of the most important factors in fast fashion production planning: the strategy is always based on the idea of buyer orientation, where products are produced specifically to meet consumer demand (Jahed et al., 2022).

Another important characteristic that is emphasised in fast fashion supply chains is the flexibility of supply chains (Ka-Leung et al., 2017). Supply chain flexibility can be defined as the ability of a firm to respond quickly to changes in demand, and this is particularly important in the fast-fashion industry where market conditions and customers' needs are constantly changing (Kumar Sharma & Bhat, 2014). The fierce competition in the fast-

fashion industry requires organisations in the sector to continuously improve the flexibility of their supply chains, as it enables organisations to prepare for potential disruptions and challenges (Ka-Leung et al., 2017). Supply chain resilience thus has a direct positive impact on the overall resilience of supply chains and is thus a major factor in the success of supply chains in the fast-food industry (Ka-Leung et al., 2017).

Overall, it can be concluded that effective supply chain management is a key weapon for success in the fast-food industry. Previous research on supply chain management has drawn on the following supply chain concepts, among others: just-in-time (JIT), agile supply chains, quick response and demand chains (Barnes & Lea-Greenwood, 2010). Whatever the type of supply chain, the ability to respond to trends and demand and to continuously improve supply chain response times is essential for supply chain performance in the fast-moving goods industry (Barnes & Lea-Greenwood, 2010).

## **2.7 Consumer behaviour**

Consumer behaviour is a very complex and diverse field of study (Smyczek, 2012). Hardesty summarizes the concept of consumer behaviour by referring to an earlier work by Hoyer and MacInnis as follows: *“consumer behavior can be defined as the set of decisions made by consumers regarding the acquisition, consumption, and disposal of goods, services, time, and ideas”* (Hardesty et al. 2009).

According to Karnreungsiri and Praditsuwan (2017), factors that influence consumer purchasing behaviour include for example social, situational, psychological, and corporate marketing factors. Social factors refer to reference groups, such as colleagues, family members, relatives, and friends, with whom individuals compare themselves. Situational factors in turn relate to, for example, the time and place where purchasing decisions are made. Psychological factors, on the other hand, include the motivation, perceptions, learning, beliefs, and attitudes that guide consumer decision-making. Marketing factors,

on the other hand, cover the marketing campaigns, marketing strategies, and marketing mix of brands. (Karnreungsiri & Praditsuwan, 2017)

Especially nowadays in more globalized world, consumer behaviour research has gained completely new levels and factors to consider (Smyczek, 2012). Despite the complexity of the topic, understanding it at some level is an extremely important factor in companies' strategic choices and marketing (Smyczek, 2012). If a company works with consumers, the primary goal is to sell something to them and to do it better than companies competing in the same industry (Levy and Weitz 2007). Therefore, identifying the factors that drive customer buying behaviour and purchasing decisions plays a very important role in getting the consumer to buy the company's product and gain a competitive advantage (Levy and Weitz 2007).

### **2.7.1 Consumer behaviour in the clothing industry**

The clothing and textile industry is one of the most dynamic and socially influenced industries, and therefore the analysis of purchasing behaviour does not work completely unambiguously. (Gam, 2011). Furthermore, it is undeniable that there are as many different consumption behaviour patterns as there are people, and it is therefore necessary to make generalizations and speak about this topic in general terms.

People's awareness and standards of sustainability have generally increased in all sectors. Due to the increased level of information, consumer needs and expectations are constantly growing (Papadopoulou et al., 2021). Grazzini and the others argue in their article that more and more consumers are aware of the challenges facing the clothing industry, and people are aware how the constant buying of clothes according to trends only adds to the production of clothing. According to this article, more and more consumers understand the problems of the fast-fashion industry in particular and are highly skeptical about fast-fashion brands and their activities. (Grazzini et al., 2021)

Consumers expect companies and their stakeholders to demonstrate a stronger commitment to sustainability: companies are expected to do business in a sustainable way and to be able to demonstrate their environmental and ethical behaviour (Ashby et al., 2012, p. 497) In addition to the increasing expectation of responsible and sustainable product features, companies are also generally expected to provide more transparency and concrete results to prove their sustainability credentials (Grazzini et al., 2021).

In addition to consumers, also policymakers and are increasingly demanding transparency and traceable industry reporting metrics from clothing companies. In practice, this means that companies are expected to provide more detailed information on, for example, their supply chains, the origin of their materials, and the environmental and social impacts of their operations. (Hileman et al., 2020)

However, the increased level of knowledge and concerns related to the clothing industry is not an unambiguous trend in consumer behaviour. While we are living the era of sustainability and ethics as global megatrends, the sustainability of companies and their production do not guarantee the success for a product (Grazzini et al., 2021). Still, especially young people use clothing as a form of self-expression and thus purchase decisions with clothes are generally more frequent and impulsive (Liu, 2022). In such cases, considerations of sustainability are often secondary to the purchasing decision.

Young people easily feel the need to fit in, and clothing companies are well aware of this. Their opinions are often easier to influence, and companies make conscious and strategic marketing choices to create the impression that a product is a "must-have". If a company succeeds in creating a trend for its product among young people, sales are guaranteed. So, the burden on companies to change attitudes is huge, but as it is a business, of course they are trying to attract buyers and maximize sales. (Liu, 2022)

Due to the complexity of the clothing industry, there is no single, completely correct way to shape people's consumption habits, when it comes to clothing industry (Kozłowski et

al., 2015). What is clear, is that responsibility in the transition to sustainability lies with a number of different actors: global decision-makers, national decision-makers, clothing and textile companies, retailers and, above all, consumers.

## **2.8 Theoretical framework**

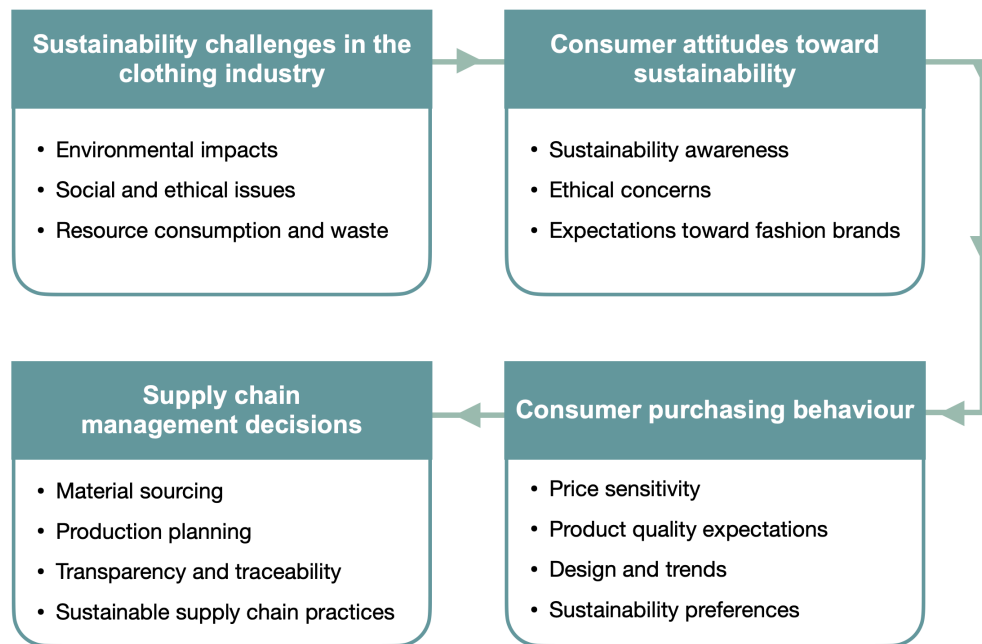
The theoretical framework of this study draws on literature from sustainability research, supply chain management, and consumer behaviour. These perspectives together provide a basis for understanding how consumer behaviour may influence the transition of fashion supply chains from fast fashion models toward more sustainable alternatives.

The clothing industry operates with complex global supply chains involving numerous different actors and production stages. These supply chains have significant environmental and social impacts, such as high consumption of natural resources, greenhouse gas emissions, and concerns related to working conditions. In addition to that, fashion companies operate in very competitive markets where production decisions depend largely on consumer demand. For this reason, consumer purchasing behaviour plays a key role in how the clothing industry's supply chains develop and how companies plan their production strategies.

Sustainability is often discussed through Elkington's theory of the Triple Bottom Line (TBL). This theory emphasises the need to simultaneously consider environmental, social, and economic aspects of business activities in business development. When thinking about these aspects in the clothing industry from an environmental perspective, the clothing industry meets challenges related to material production, energy use, emissions, and textile waste. The social dimension in turn focuses on issues such as labour rights, working conditions, and fair wages within global supply chains. The economic dimension concerns companies' financial capabilities and production cost structures. In conclusion, fashion companies should balance these three dimensions when developing more sustainable supply chain practices.

Previous research on sustainable fashion has shown that many consumers express positive attitudes toward it and express concern about the environmental and ethical impacts of the clothing industry. However, these attitudes do not always translate into actual purchasing behaviour. This situation is commonly described as the attitude–behaviour gap in sustainable consumption. As a result of that, fashion companies may face difficulties aligning sustainability into actual consumer purchasing patterns. Based on these things, consumer behaviour becomes a key factor because purchasing decisions guide market demand and this also creates a framework for this study.

Based on these theoretical perspectives, this study assumes that consumers' attitudes, preferences, and purchasing behaviour influence on how fashion companies modify their supply chain strategies. Purchasing decisions can be influenced by factors such as price sensitivity, expectations regarding product quality, sustainability awareness, and trust in brand communication. These behavioural patterns can also influence companies' motivation to invest in more sustainable production methods and supply chain practices. All the issues described together form the framework for the study.



**Figure 3** Theoretical framework

### **3 Data and methods**

This chapter explains how the study was carried out and how the data were used to answer the research question. It outlines the study's overall structure, survey design, data collection process, and analysis methods. To enable evaluation of the reliability and validity of the results, the aim is to present the research process transparently.

The purpose of this study is to understand how consumers' attitudes and behaviour toward sustainability in their decision-making in clothing purchases. The other aspect is then to evaluate how these findings can be integrated into supply chain management and production planning. Because the topic involves researching consumer opinions and decision-making, a quantitative research approach was chosen for the study. This approach allows data collection from a larger sample. Then the responses can be used for statistical analysis, which supports objective and comparable results.

The chapter begins with an explanation of the research design and then continues to detailed description of the survey's structure and distribution. It also outlines how respondents were informed about anonymity and confidentiality. Finally, the analytical methods are presented, focusing on descriptive statistics and correlation analysis in Microsoft Excel. These methods enabled the identification of key factors in consumer purchasing behaviour and the investigation of how sustainability-related attitudes are linked to actual buying decisions. The results of these analyses are presented and discussed in the following chapter.

#### **3.1 Research design**

This study aims to directly link data collected from consumers to production and supply chain management. The main objective is to identify, based on consumer responses, the most significant factors that influence purchasing decisions and, consequently, supply chain planning and management. The study focuses on methods for analysing the

collected data to support planning and decision-making in supply chain management. Therefore, the study seeks to answer the question: *Which consumer-related factors have the greatest impact on supply chain planning and production decisions?*

Since the research focuses specifically on consumer purchasing decisions, it was necessary to collect data directly from consumers. The research was conducted as a quantitative survey, as this method allows for a large sample size and provides an objective basis for analysing the results. The minimum amount for the sample was set at 100 respondents ( $n = 100$ ) to get the results that could be considered as reliable and generally applicable. Achieving enough respondents has been a key prerequisite for the study's reliability.

Participation in the survey was completely anonymous, and all responses were treated with strict confidentiality. This was clearly stated to participants at the beginning of the questionnaire. No personal information was collected, except for basic demographic information such as gender and age. In addition, respondents were asked to indicate their current status: student, both studying and working, employed, or unemployed. These background variables provided a better understanding of the respondent group and enabled meaningful comparisons across segments. However, no responses could be traced back to individual participants, ensuring full anonymity throughout the study.

The data was collected using a Microsoft Forms survey. The survey was designed to be clear and user-friendly to make responding as easy as possible. Most of the questions were presented on a Likert scale (1–5), which enabled numerical processing and comparison of the responses. In addition, there were a few questions where respondents were asked to rank the options in order of importance. The aim was to deepen the understanding of consumers' preferences between different factors.

At the beginning of the survey, the importance of honest and truthful answers was emphasised to the respondents. This is particularly important because respondents may be

inclined to give socially acceptable answers rather than their true opinions. Emphasizing honesty was intended to ensure the authenticity of the data and thus the reliability of the research results.

The collected data is numerical in nature, which allows it to be processed using statistical methods. This supports the objectivity of the study and reduces the risk of interpretation, which could be significant in the case of open-ended responses, for example. The data was analysed using Microsoft Excel's Analysis ToolPak add-in, which provided the necessary tools for statistical analysis. This enabled the identification of key factors influencing consumer behaviour and an assessment of their significance from the perspectives of supply chain management and production planning.

### **3.2 Survey design and structure**

The survey consists of a total of 33 questions. The survey consists mainly of questions measured on a Likert scale, but it also includes three ranking questions where respondents are asked to prioritise their answers. The survey was divided into three main sections: (1) Consumer Awareness and Values; (2) Purchasing Behaviour and Influencing Factors; and (3) Supply Chain Trust, Transparency, and Solutions. Basic demographic information was also collected at the beginning of the survey to support segmentation and comparative analysis.

The first three questions capture the respondents' background information. The answers were selected from predefined answer options, so participants did not need to write their responses manually. The available answer options for each question are presented below.

#### **Background Information**

1. *What is your age?*

*Answer options: Under 18 / 18-24 / 25-34 / 35-44 / 45-54 / 55-64 / 65 or older.*

2. *What is your gender?*

*Answer options: Woman / Man / Non-binary / Prefer not to say*

3. *I'm currently?*

*Answer options: Student / Student and employed / Employed / Unemployed*

The first part of the survey that was related to the topic itself focused on examining respondents' environmental awareness, ethical values, and behavioural intentions related to sustainable consumption. The aim of this section was to assess the extent to which consumers understand and value sustainability, and how these attitudes influence their purchasing decisions.

#### **Part 1: Consumer Awareness and Values**

4. *How interested are you in sustainability within the clothing industry?*

5. *How important is sustainability to you when purchasing clothing?*

6. *How familiar are you with the term "fast fashion" and the challenges it presents?*

7. *I feel personally responsible for making environmentally conscious clothing choices.*

8. *I believe that sustainability should be a top priority for fashion brands.*

9. *I support brands that implement circular economy practices (e.g., recycling programs, second-hand sales, upcycling).*

10. *I think government policies and regulations should enforce sustainable practices in the fashion industry.*

The second part of the study focused on identifying those key factors that actually influence consumers' purchasing decisions. It examined factors such as price, current trends, delivery speed, product availability, and sustainability. The main objective of this section was to understand which of these factors has the strongest impact on actual buying behaviour and to explore possible conflicts between consumers' stated choices and their real purchasing actions.

## **Part 2: Purchasing Behaviour and Influencing Factors**

11. *How often do you buy new clothes?*
12. *Do you research a brand's sustainability practices before making a purchase?*
13. *How important is having clear information about where and how a product is made (supply chain transparency) in your purchasing decisions?*
14. *How likely are you to pay more for sustainably produced clothing?*
15. *I prefer buying from sustainable brands even if the price is higher.*
16. *How much does the fast delivery of the product influence your purchase decision?*
17. *How much does the lack of affordable sustainable options discourage you from buying sustainably?*
18. *Current fashion trends influence my purchasing decisions.*
19. *I am influenced by marketing campaigns that highlight sustainability initiatives.*
20. *Arrange the following factors in order of importance when making a clothing purchase decision.*
  - *Easy availability of the product (location, stock)*
  - *Price of the product*
  - *Quality of the product*
  - *Product design / appearance*
  - *Brand reputation*
  - *Product sustainability / ecological impact*

The third part of the survey focused on measuring consumer trust and the demand for clearer, more reliable product information. It also explored which changes or improvements could help consumers make more sustainable purchasing decisions. The main purpose of this section was to understand how factors such as trust, transparency, and concrete improvements in supply chain practices could lower barriers and encourage more sustainable consumer behaviour.

**Part 3: Supply Chain Trust, Transparency, and Solutions**

21. *I believe that fashion brands provide enough information about their sustainability efforts.*
22. *I trust the sustainability claims of fashion brands.*
23. *The lack of clear and standardized sustainability labels makes it difficult to choose sustainable clothing.*
24. *I would stop purchasing from a brand if I discovered unethical supply chain practices.*
25. *How important is ethical labor (fair wages, safe working conditions) in your clothing purchase decisions?*
26. *How important is it for fashion companies to clearly and transparently communicate their sustainability efforts?*
27. *How much do you feel fashion brands should prioritize reducing environmental impact in their supply chains?*
28. *How much would better information on a product's journey from production to sale influence you to choose sustainable fashion over fast fashion?*
29. *How much would greater availability of sustainable clothing in retail stores influence your purchasing habits?*
30. *How likely would you be to support a brand that offers services to extend product lifespan (e.g., repair services, resale)?*
31. *The sustainability information provided by brands help you make more sustainable clothing purchases.*
32. *Think about your personal priorities when buying clothes: arrange the following factors in order of importance for evaluating sustainability when purchasing clothing.*
  - *Material sustainability (e.g., use of organic or recycled fabrics)*
  - *Production practices (e.g., fair labor conditions, ethical supply chains)*
  - *Environmental impact (e.g., use of water, carbon footprint, pollution)*
  - *Brand reputation (e.g., trust, transparency, commitment to sustainability)*

- *Product quality (e.g., product lifetime, repairability)*
  - *End-of-life options (e.g., recyclability, circular economy initiatives)*
33. *Where do you look for sustainability information when purchasing clothes?*
- *Product labels or tags (information provided on clothing items)*
  - *Social media or influencers (posts and recommendations about sustainable fashion)*
  - *Consumer reviews (feedback and experiences from other shoppers)*
  - *Brand websites or product pages (sustainability information provided directly by brands)*
  - *Sustainability-focused apps (applications that evaluate or provide information about brands' sustainability)*
  - *Third-party certifications or ratings (e.g., Fair Trade or independent sustainability reviews)*

### **3.3 Data collection**

Before distributing the survey and collecting responses, it was important to ensure that everything was working properly and to check the functionality of the survey. To this end, two people responded to the survey as a test to estimate the time required to complete the survey and to check the clarity of the questions. Based on this demo, everything seemed to work well, and the estimated time was ten minutes. The time required to complete the survey was stated at the beginning of the survey so that respondents would know how much time to set aside for it.

The target group of the survey consisted mainly of consumers based in Finland. Since it was shared through the researcher's personal networks, most of the respondents are likely Finnish or living in Finland. However, because the link could be shared further, some responses may also have come from people in other locations.

The survey was conducted online using the Microsoft Forms platform, which made it easy to collect responses via a shareable link. Respondents could access the survey via a direct URL link. The link was shared on my private Instagram account in the Stories section, where it was visible for 24 hours. In addition, the link was shared by word of mouth in various situations and by sending it directly to friends and acquaintances on WhatsApp. The message enclosed with the survey mentioned that the link could also be shared, so responses may have come from a wide variety of backgrounds. In addition, the link was shared by bringing a brochure to workplace, which contained a QR code that allowed people to participate in the survey.

Data collection was very efficient, and responses were gathered in a relatively short period of time. The survey was open for two weeks, but most of the responses were received early on in that time frame. Altogether, 127 respondents participated in the survey. People were very engaged in responding to the survey, and we received a lot of positive feedback from respondents about the interesting and timely nature of the topic.

### **3.4 Methods for data analysis**

The data was analyzed by using Microsoft Excel and the Analysis ToolPak add-in. The data analysis was done with two main analytical methods: descriptive statistics and correlation analysis. Descriptive statistics were used to summarize the demographic characteristics of the respondents and to describe their awareness, attitudes, and behaviours regarding sustainability issues in the clothing industry. To support the illustration of the results and highlight key trends in the data, some charts and figures was also included.

These specific analytical methods were chosen because they align well with the study's objectives. Descriptive analysis provided an overview of respondents' familiarity with sustainable fashion concepts and how they consider sustainability when buying clothes. Correlation analysis, in turn, was used to examine relationships between key variables. Identifying these correlations helped determine whether greater awareness and ethical

concerns are reflected in consumers' actual choices. This question is exactly what one of the study's main objectives is about: identifying potential gaps between sustainability intentions and actual purchasing behaviour.

### **3.5 Limitations**

Consumer behaviour can be studied from many different theoretical and methodological perspectives. In this study, the focus was intentionally limited to ensure that its scope remained clear and practical. The goal was to identify the key factors influencing consumers' clothing purchase decisions, not to compare or test competing theories of consumer behaviour. Another target was to consider the relevance of these findings for improving supply chain management and sustainable development practices. By doing so, the aim was to generate insights that could be applied directly to business environments.

There are some limitations related to the study's design and data collection methods. The study used a self-completed online survey, so the results reflect respondents' own perceptions and opinions. As with all self-reported data, there is a risk of bias here. Bias can arise, for example, if respondents present themselves as more environmentally conscious than they actually are. Also, since the data was collected at a specific point in time, the results provide only an overview of consumer attitudes in that specific moment. Therefore, results cannot describe how these attitudes may change over time.

The sample also has some other limitations. Most of the responses were collected online, which may have led to a favor for younger and more digitally active participants. This group may already have greater awareness of sustainability issues, which is why the results cannot necessarily be generalized to apply to all consumer groups or regions.

The analysis was completed using the Analysis ToolPak add-in in Microsoft Excel. Although these tools are well-suited for descriptive and correlation analysis, they do have a more limited selection of advanced statistical functions than specialized softwares.

However, they were well-suited to the objectives of this study, which primarily focused on identifying trends and correlations rather than performing too complex analyses. Therefore, the study provides useful insights into how consumers view sustainability in the clothing industry and how these perspectives may influence their purchasing behaviour. The methods and scope chosen for this study are still reasonable to achieve valid research objectives, despite these specific limitations. The collected data offers a solid foundation for exploring how consumers view sustainability and how these attitudes are reflected in their purchasing decisions.

As a technical note, artificial intelligence tools were used to support the preparation of this thesis. However, these tools were used only for supportive purposes, such as proof-reading and helping to clarify the expression. All data, texts, explanations, analyses, conclusions, and observations presented in this thesis are the author's own work.

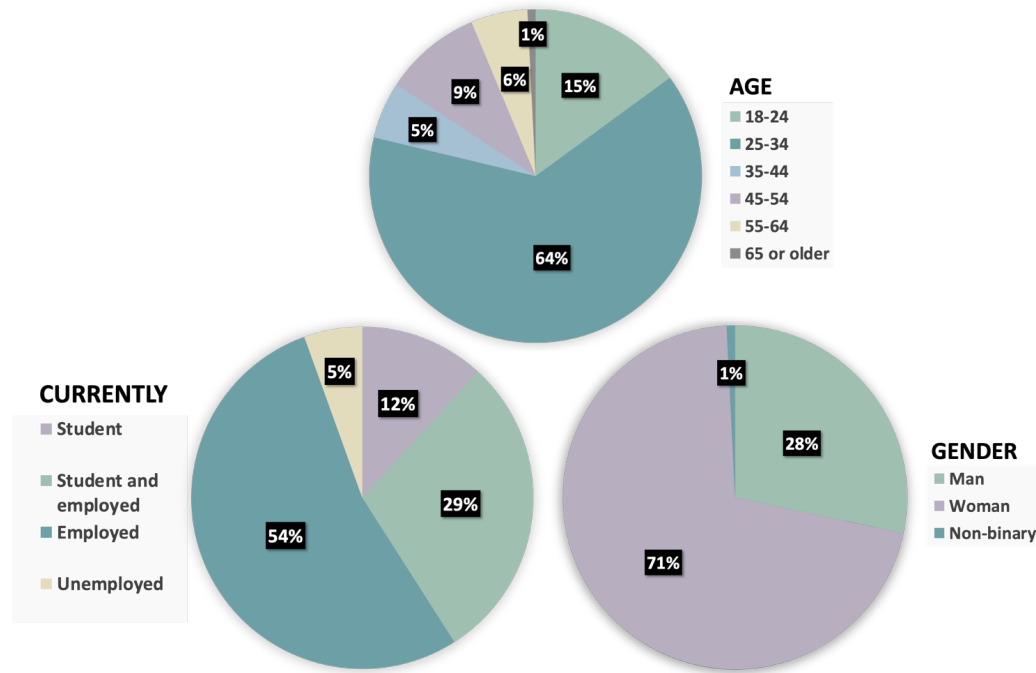
## **4 Empirical results**

This chapter presents the empirical results of the survey. The results are collected through an online survey, and the purpose of this chapter is to present the empirical findings in a clear and structured way. The results and the conclusions based on them are discussed in more detail in later chapters of the study, where the findings are analyzed in relation to the study's objectives and theoretical framework.

The chapter begins by presenting the background characteristics of the respondents to provide an overview of the sample. After this, the findings are reported according to the main themes of the survey. These include respondents' general attitudes toward sustainable fashion, their awareness of fast fashion and its impacts, and the role that sustainability plays in clothing purchasing decisions. In addition, the chapter examines issues related to supply chain transparency, trust in sustainability communication, and possible barriers that may affect sustainable consumption.

### **4.1 Respondent background characteristics**

Responses were collected from individuals representing a wide range of backgrounds, although a clear majority was observed in each background variable category. Most respondents were in the 25–34 age group, which accounted for 63.78% of all respondents. In terms of gender distribution, women formed a clear majority (70.87%). In terms of labour market status, more than half of the respondents (53.54%) reported being employed, and the second largest group consisted of working students, who accounted for 29.13%.



**Figure 4** Respondent background characteristics

In terms of the study, the frequency with which respondents reported buying clothes can be also considered significant baseline data. The survey asked respondents about how often they buy new clothes. Respondents rated their own shopping behaviour on a five-point Likert-scale, where 1 corresponded to "never" and 5 to "very often." Looking at the entire sample, a clear majority of respondents (48.82%) placed themselves in the middle of the never–very often scale. Based on the results, it can be generally concluded that respondents felt they bought new clothes relatively infrequently. However, it should be noted that perceptions of what is considered frequent or infrequent consumption are subjective, which may contribute to the variation in responses.

A clear difference was observed between the genders in terms of clothing purchase frequency. Based on the results, men reported buying new clothes less often than women on average. The majority of male respondents (47.22%) placed themselves in the middle of the Likert scale, indicating that they do not consider themselves to buy clothes particularly rarely or particularly often. In addition, 44.44% of male respondents estimated that they buy clothes rarely (scale value 2). None of the male respondents reported

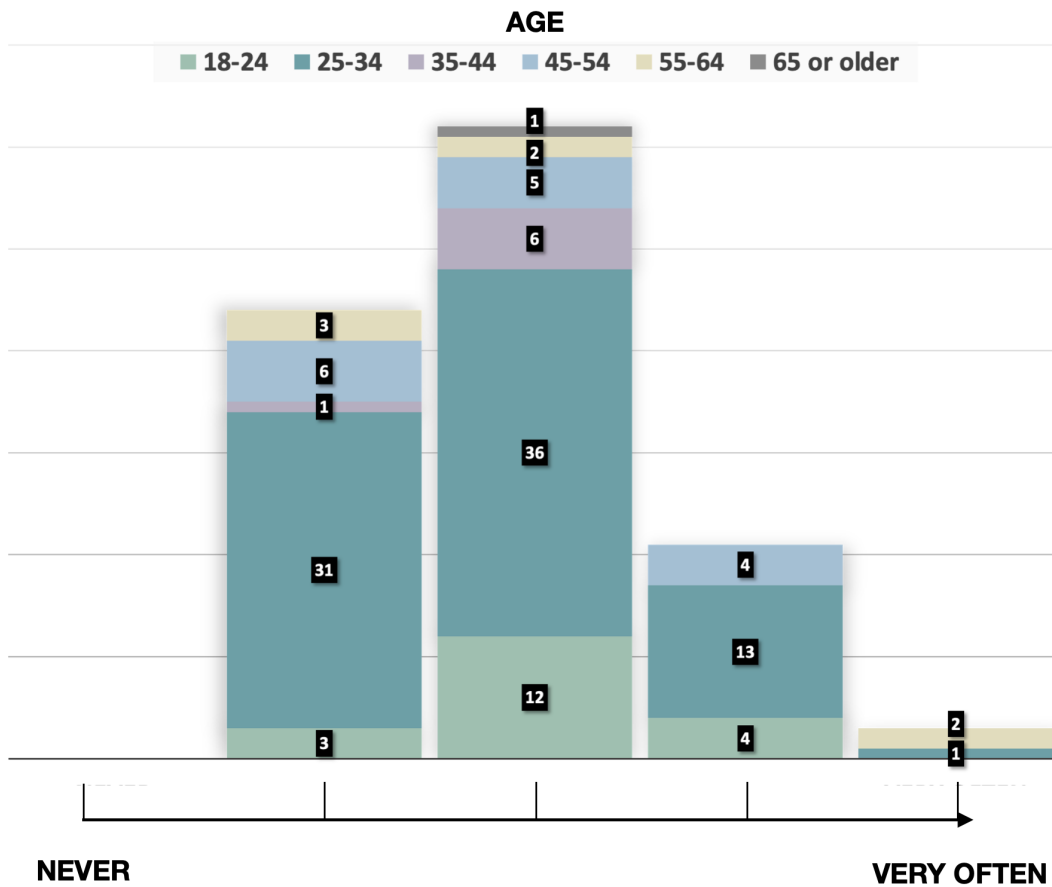
buying new clothes very often, and only 8.33% gave a value of 4 on the Likert scale, which indicates relatively frequent clothing purchases.

The responses of female respondents were more evenly distributed. Half of them (50.00%) placed themselves in the middle of the scale, and 30.00% reported buying clothes rarely (value 2). In contrast, 16.67% of female respondents estimated that they buy clothes relatively often (value 4), and 3.33% reported buying new clothes very often (value 5). The results show that women report buying clothes more frequently on average than men.

When examined by age group despite minor variations, the general trend in purchasing behaviour is quite similar across all age groups. Most of the responses were in the middle of the rating scale, which suggests that respondents do not generally consider themselves to buy new clothes particularly rarely or particularly often.

Among the youngest respondents (aged 18–34), 17.00% gave a value of 4 on the Likert scale, which can be interpreted as indicating relatively frequent clothing purchases. However, when looking at all respondents aged 18–54 as a whole, only 0.82% of the entire sample reported buying new clothes very often.

Another key finding from the age group analysis is that the responses of respondents aged 55–64 were clearly more unevenly distributed than those of other age groups. In this age group, 28.57% of respondents reported buying new clothes very often, while 42.86% placed themselves at value 2 on the Likert scale, which indicates that they buy clothes very rarely. The results show that the variation in purchasing behaviour is clearly greater in this age group compared to other age groups.



**Figure 5** Comparison of clothing purchase frequency across age groups

## 4.2 General attitudes toward sustainable fashion

Based on the responses, it can be concluded that respondents are generally interested in sustainability in the clothing industry. No respondents answered, “not interested at all” to the question “*How interested are you in sustainability within the clothing industry?*”, which indicates that there was no complete indifference to the topic in the data. Instead, 15.75% of respondents said they were extremely interested in the topic.

The majority of respondents (40.94%) placed themselves at 4 on the Likert scale, which indicates above-average interest in sustainability issues. In addition, 37.80% of respondents placed themselves in the middle of the scale (value 3), which indicates moderate

interest in the topic. Only 5.51% of respondents rated their interest as below average (value 2), indicating that a lack of interest in responsibility was clearly rare in the data.

Based on the results, the majority of respondents are more interested than average in sustainability in the clothing industry. However, when looking at the importance of sustainability in concrete clothing purchases, the variation in responses is clearly greater. When asked *"How important is sustainability to you when purchasing clothing?"*, 16.54% of respondents gave a rating below average on the Likert scale (values 1 or 2), which indicates that sustainability is not a significant factor for them when making purchasing decisions.

The majority of respondents (40.16%) placed themselves in the middle of the scale (value 3), indicating that sustainability is moderately important in purchasing decisions, but not decisive. In addition, 37.80% of respondents rated responsibility as fairly important (value 4), while only 5.51% considered responsibility to be a very important factor when purchasing clothing (value 5). The results suggest that although responsibility is of broad interest to respondents, its weight in purchasing decisions remains moderate for many respondents.

Respondents' general attitudes toward responsible fashion were also surveyed with the statement "I believe that sustainability should be a top priority for fashion brands." Based on the results, the majority of respondents responded positively to the statement. On a Likert scale, the majority of respondents (44.09%) gave a value of 4, indicating strong agreement, and the second largest proportion of respondents (35.43%) gave a value of 5, indicating complete agreement with the statement. A total of 79.52% of respondents expressed either strong or very strong agreement that responsibility should be a key priority for fashion companies.

No responses were given for the lowest value on the Likert scale (value 1), which indicates that there was no strong disagreement with the statement in the data. Instead,

4.72% of respondents reported that they somewhat disagreed (value 2). A neutral position (value 3) was chosen by 15.75% of respondents. Overall, the results show that respondents' attitudes toward the role of responsibility in the fashion industry are clearly positive, although a small proportion of respondents are more reserved in their views.

### **4.3 The role of sustainability in clothing purchase decisions**

Based on the responses, respondents consider ethical responsibility to be an important factor in the clothing industry and in related purchasing decisions. When asked, "How important is ethical labor (fair wages, safe working conditions) in your clothing purchase decisions?" a clear majority (42.52%) rated the importance of ethical labor as high, giving it a value of 4 on the Likert scale, which indicates that ethical working conditions are considered an important factor when purchasing clothing. In addition, 18.11% of respondents considered ethical responsibility to be very important (value 5).

A significant proportion of respondents (29.92%) placed themselves in the middle of the scale (value 3), indicating a neutral or moderate attitude towards the importance of ethical work in purchasing decisions. In contrast, 9.45% of respondents rated ethical work as fairly unimportant (value 2). No respondents chose the lowest value (value 1).

To supplement the previous question, respondents were asked about their attitude toward the statement "I would stop purchasing from a brand if I discovered unethical supply chain practices." Based on the results, the majority of respondents expressed their willingness to change their purchasing behaviour if unethical supply chain practices were discovered. On the Likert scale, the most responses were given to value 4 (40.94%), followed by value 5 (28.35%). A total of 69.29% of respondents either strongly or very strongly agreed with the statement, suggesting that unethical practices could lead to a boycott of the clothing brand by a significant proportion of respondents.

A neutral position (value 3) was chosen by 20.47% of respondents, indicating uncertainty or a situation-dependent attitude towards changing purchasing decisions. In contrast, 9.45% of respondents said they somewhat disagreed (value 2), and 0.79% strongly disagreed (value 1). A total of 10.24% of respondents would therefore be unlikely to change their purchasing behaviour even if unethical supply chain practices were revealed.

Based on the questions “How likely would you be to support a brand that offers services to extend product lifespan (e.g., repair services, resale)?” and “I support brands that implement circular economy practices (e.g., recycling programs, second-hand sales, upcycling).” indicate that respondents have a positive attitude toward brands that strive to extend the life cycle of their products and utilize circular economy principles as part of their business operations.

When asked, “How likely would you be to support a brand that offers services to extend product lifespan (e.g., repair services, resale)?” 91.34% of respondents gave a value of 3 or higher on the Likert scale. A value of 2 was given by 8.66% of respondents, and no one chose the lowest value (1). Similarly, in response to the statement “I support brands that implement circular economy practices (e.g., recycling programs, second-hand sales, upcycling),” 92.12% of respondents gave a value of 3 or higher. A value of 2 was chosen by 7.09% of respondents, and only 0.79% gave the lowest value (1).

#### **4.4 Awareness of fast fashion and its impacts**

The question “How familiar are you with the term 'fast fashion' and the challenges it presents?” was used to measure respondents' understanding of the concept of fast fashion and the challenges associated with it. Of all respondents, 91.34% gave a value of 4 or 5 on the Likert scale. A neutral value (3) was chosen by 7.09% of respondents, no one chose a value of 2, and the lowest value (1) was given by 1.57% of respondents. When examined by gender, 47.22% of men gave a value of 4 and 36.11% gave a value of 5. Among women, 54.44% gave the highest value (5) on the Likert scale and 40.00% gave a

value of 4. In summary, most respondents reported being very familiar with fast fashion and its challenges, with only minor differences between genders.

Respondents were asked for their opinion on the statement “I believe that fashion brands provide enough information about their sustainability efforts.” The aim of this question was to determine how many respondents felt the information provided by fashion brands about their sustainability efforts was sufficient. As many as 19.96% of respondents gave the lowest value (1) on the Likert scale, and the majority of responses were for value 2 (43.31%). This indicates that, according to the respondents, there is not enough information available. A neutral value (3) was chosen by 29.13% of respondents. A value of 4 was given by 7.87% of respondents, and no one chose the highest value on the scale (5).

However, when asked “Do you research a brand’s sustainability practices before making a purchase?”, it appears that most respondents do not actively seek information about brands’ sustainability practices before making a purchase decision. Of the respondents, 17.37% gave the lowest value of 1 (Never) on the Likert scale, and the largest proportion of responses were in the value 2 (42.52%), which indicates a fairly low level of information seeking. A neutral value of 3 was given by 24.41% of respondents, and 14.17% reported that they research responsibility practices often (value 4). Only 1.57% of respondents chose the highest value on the scale, 5 (very often).

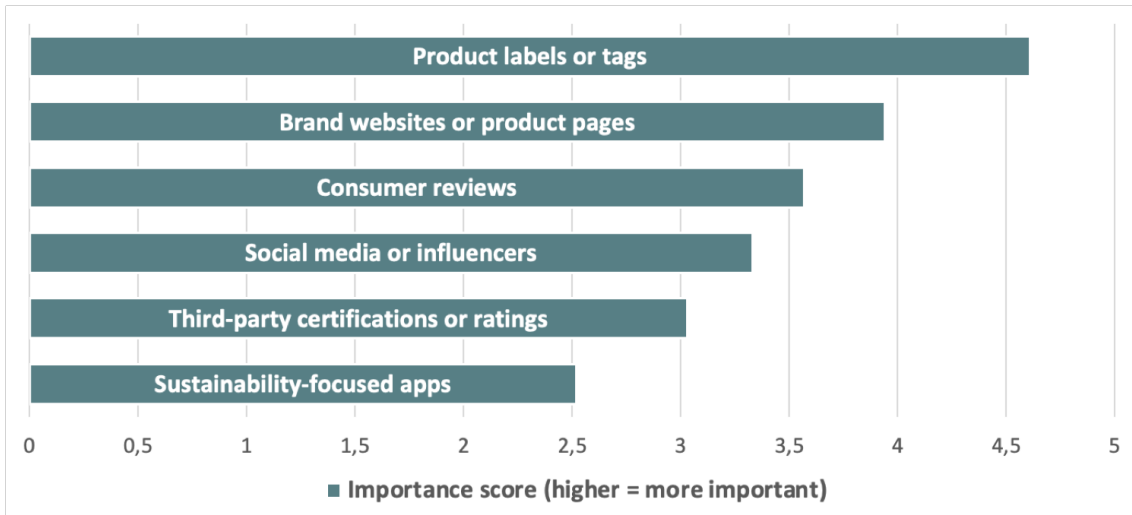
The survey also examined the sources consumers use to find information about sustainability. Respondents were asked to rank six options in order of importance according to their own priorities in response to the question “Where do you look for sustainability information when purchasing clothes?”

To analyze the responses, quantitative values were first calculated: how many respondents had ranked each source of information as the most important, second most important, and so on, down to the least important option. Based on these results, an

average ranking was calculated for each source of information. The lower the average, the closer it was to 1 and the more important that source of information was considered to be.

Based on the results, “Product labels or tags (information provided on clothing items)” was rated as the most important source of information (average rating 2.39). This means that consumers primarily seek responsibility information directly from labels and product tags attached to products. The second most important source was “Brand websites or product pages (sustainability information provided directly by brands)” (average rating 3.06). In third place were “Consumer reviews (feedback and experiences from other shoppers)” (average rating 3.43), which shows that the experiences of other consumers are also significantly utilised. Fourth on the list was “Social media or influencers (posts and recommendations about sustainable fashion)” (average rating 3.67). Fifth, and second least important, was “Third-party certifications or ratings (e.g., Fair Trade or independent sustainability reviews)” (average rating 3.97). The least important source of information was considered to be “Sustainability-focused apps (applications that evaluate or provide information about brands’ sustainability)” (average rating 4.48).

To illustrate the results, a visual chart was created in which the average values were converted. Since a value of 1 meant the most important and a value of 6 the least important, the original scale was backwards for graphical viewing. For this reason, the average rankings were reversed into “importance scores” so that a higher value would indicate greater perceived importance. The conversion does not change the order of the results but makes the chart more intuitive and easier to interpret.



**Figure 6** Sources consumers use to find information about sustainability

#### 4.5 Perceived responsibility for sustainable consumption

The survey also explored respondents' views on who they believe is responsible for ensuring sustainability in the clothing industry. Respondents were asked to what extent they agreed with the statement "I feel personally responsible for making environmentally conscious clothing choices." The majority of respondents (37.80%) rated the statement 4 on the Likert scale, indicating a fairly strong sense of personal responsibility. The second most common response (30.71%) was a neutral rating of 3 on the scale. In addition, 17.32% of respondents strongly agreed with the statement and gave it a rating of 5. However, it is worth noting that some respondents felt that their personal responsibility is smaller: 12.60% responded with a value of 2 and 1.57% with a value of 1, which indicates disagreement or strong disagreement with the statement.

The majority of respondents had a positive attitude toward the statement "I think government policies and regulations should enforce sustainable practices in the fashion industry." Almost half of the respondents (48.03%) strongly agreed with the statement and gave it the highest value of 5 on the Likert scale. The second most common response (29.92%) was a value of 4, indicating clear agreement. A neutral position (value 3) was

chosen by 18.90% of respondents. Only a small proportion of respondents had a negative attitude towards the statement: 3.15% disagreed and gave a value of 2. None of the respondents completely disagreed, as no one chose a value of 1.

To the question "How much do you feel fashion brands should prioritize reducing environmental impact in their supply chains?", the highest number of responses (42.52%) was given to the highest value on the Likert scale, 5, meaning that respondents feel this is very important. The second highest number of responses (40.16%) was given to the second highest value on the scale, 4. A neutral value of 3 was given by 14.96% of respondents. Only 2.36% of respondents considered this less important and gave a value of 2, but no respondents gave a value of 1.

#### **4.6 The Influence of sustainability communication and transparency on consumer behaviour**

The study also surveyed people's attitudes toward communicating responsibility. The question "How important is it for fashion companies to clearly and transparently communicate their sustainability efforts?" was used to map the general view on communicating responsibility. This was considered an important factor, as the majority of respondents (48.82%) answered 4 on the Likert scale. The second most common answer (30.71%) was 5, the highest value on the scale, meaning that respondents considered this to be very important. The neutral option 3 in the middle of the Likert scale was chosen by 17.32% of respondents, and only 3.15% of respondents chose the value 2. No one chose the value 1.

To elaborate on the previous question, respondents were asked: "How important is having clear information about where and how a product is made (supply chain transparency) in your purchasing decisions?". The answers to this question were fairly evenly distributed, with opinions varying between those who agreed and those who disagreed. The majority of respondents (35.43%) chose the middle value of 3 on the Likert scale,

which indicates a neutral attitude. The second most popular answer was 4 (29.92% of answers), followed by 2 (22.83% of answers). The extremes of the scale also received some support: 7.87% of respondents chose 5 (strongly agree), while 3.94% chose 1 (strongly disagree).

Respondents' general attitude toward companies' sustainability claims was mapped using the question "I trust the sustainability claims of fashion brands." The responses to this question showed a clearer trend than the previous ones: the majority of respondents (47.24%) chose a value of 2 on the Likert scale, indicating that they largely disagreed with the statement. The second most common response (27.56%) was a neutral value of 3. The next most popular response was the lowest value on the scale, 1 (16.54%), indicating a strong distrust of sustainability claims. The higher values on the scale received significantly less support: 7.09% of respondents chose value 4 and only 1.57% chose value 5.

The impact of communication was evaluated with the question, "I am influenced by marketing campaigns which highlight sustainability initiatives," and the responses showed a fairly large variation. The neutral value of three on the Likert scale was the most common response (36.22%) for this statement. The second most common response (33.07%) was the value of two, indicating that marketing campaigns are perceived to have only a minor influence on purchasing decisions. However, 21.26% of respondents chose the value of 4, indicating that campaigns emphasising responsibility have a clear impact on some respondents. The extremes of the scale received the fewest responses: 7.09% of respondents chose value 1, and 2.36% chose value 5.

#### **4.7 Price sensitivity and sustainability preferences**

The economic perspective was assessed with questions such as "How likely are you to pay more for sustainably produced clothing?" A clear majority of respondents (41.73%) agreed with the statement and gave it a value of 4 on the Likert scale. The second most

popular response was the neutral option (value 3), which was chosen by 26.77% of respondents. A strong agreement was expressed by 17.32% of respondents, who gave a value of 5. 13.39% of respondents disagreed with the statement (value 2), while 0.79% strongly disagreed, giving a value of 1.

To support the previous question, the survey also included the statement "I prefer buying from sustainable brands even if the price is higher." The responses to this question were slightly more evenly distributed than in the previous question. Once again, the most common response (37.01%) was a score of 4 on the Likert scale, indicating that the majority of respondents agreed with the statement. The neutral option (value 3) was chosen by 29.92% of respondents. The statement was disagreed with by 20.47% of respondents, who gave a value of 2. At the extremes of the scale, 11.81% of respondents strongly agreed (value 5), while 0.79% strongly disagreed (value 1).

#### **4.8 Market barriers to sustainable clothing consumption**

The influence of fast product delivery on purchase decisions was assessed with the question "How much does the fast delivery of the product influence your purchase decision?". The most common response was a value of 2, which was selected by 37.80% of respondents, indicating that for a large share of participants, fast delivery has only a limited influence on their purchasing decision. The second most frequent response was the neutral option (value 3), chosen by 22.05% of respondents. A total of 20.47% selected value 1, indicating that a considerable group does not consider fast delivery at all. Positive responses were less common, with 16.54% of respondents assigning a value of 4 and only 3.15% strongly agreeing with a value of 5.

To understand the impact of price accessibility on sustainable purchasing behaviour, respondents were asked, "How much does the lack of affordable sustainable options discourage you from buying sustainably?" The most common answer (30.71% of responses) was the neutral option, value 3 in Likert scale. The second most common value was 4,

chosen by 27.56% of respondents. This indicates a noticeable level of discouragement among many participants. Strong discouragement (value 5) was chosen by 17.32% of respondents. On the lower end of the scale, 20.47% selected value 2, and only 3.94% chose value 1. This indicates that very few participants felt no discouragement.

The study also examined if greater availability of sustainable clothing in stores would influence purchasing decisions. Participants were asked: "How much would greater availability of sustainable clothing in retail stores influence your purchasing habits?" The most common response was a value 4 (41.73% of the responses). The neutral option 3 was chosen by 30.71% of respondents. 20.47% of the responses chose the value of 5, indicating that this would have a very strong influence. Lower scores were less common: 6.30% chose a score of 2 and 0.79% chose a score of 1. This in turn suggests that very few participants felt that increased availability would have little or no impact on their purchasing behaviour.

To determine the significance of trends in consumer behaviour, the questionnaire also included the statement "Current fashion trends influence my purchasing decisions". The majority of respondents, 37.80%, selected the middle option of the scale (value 3). 27.56% indicated slight disagreement by selecting value 2. Positive responses were rarer: 22.05% gave a value of 4 and 4.72% gave a value of 5. In contrast, 7.87% of participants chose value of 1, meaning that only a small proportion felt that fashion trends had no influence at all.

#### **4.9 Information and transparency challenges in sustainable clothing consumption**

The statement "The lack of clear and consistent sustainability labels makes it difficult to choose sustainable clothing" investigates the difficulty caused by unclear and inconsistent sustainability labels. The most common response (33.86%) was a score of 4 on

the Likert scale, which means that a large proportion of respondents agreed that the lack of clear labels really makes it difficult to make environmentally friendly choices. Also a large proportion of respondents (31.50%) chose the neutral option of 3 in the Likert scale. This indicates that there is some uncertainty regarding the topic. 25.98% of respondents strongly agreed and gave a rating of 5. On the opposite side of the scale, 7.09% of respondents chose a rating of 2, and only 1.57% strongly disagreed with the statement and gave a rating of 1.

The potential influence of improved transparency regarding a product's journey from production to sale was examined through question "How much would better information on a product's journey from production to sale influence you to choose sustainable fashion over fast fashion?" A clear majority of respondents indicated that better information would positively influence their choices, as 43.31% selected a value of 4 on the Likert scale. Strong influence was reported by 24.41% of respondents, who gave a value of 5. The neutral option (value 3) was chosen by 25.20% of respondents, showing that about one quarter were uncertain about the impact. Only a small portion expressed a negative view, with 6.30% selecting value 2 and 0.79% strongly disagreeing by giving a value of 1.

Respondents were also asked "The sustainability information provided by brands help you make more sustainable clothing purchases." The most frequent response was agreement, with 35.43% of respondents selecting a value of 4 on the Likert scale. The neutral option (value 3) was also very common, receiving 33.07% of responses. This means that many respondents neither clearly trusted the information provided by brands nor rejected it. 20.47% of respondents strongly agreed, selecting a value of 5. In contrast, 10.24% disagreed with the statement by giving a value of 2, while only 0.79% strongly disagreed and gave a value of 1.

## **4.10 Overall consumer purchase priorities and sustainability evaluation criteria**

To better understand which factors are most important to consumers when buying clothes, the respondents were asked to rank a set of criteria by importance. This allows us to determine which factors play the biggest role in purchasing decisions and how consumers prioritise sustainability. By analyzing both ranking frequencies and weighted mean scores, the results present a clear comparison of the features that influence buying behaviour most strongly and the sustainability aspects that stand out to consumers.

### **4.10.1 Key determinants of clothing purchase decisions**

Respondents were asked the following question: “Arrange the following factors in order of importance when making a clothing purchase decision. (1 = Most important, 6 = Least important)”. The factors included easy availability of the product (location, stock), price of the product, quality of the product, product design / appearance, brand reputation, and product sustainability / ecological impact. Quality of the product emerged as one of the most important factors of clothing purchase decisions. Nearly one third of respondents (29.9%) ranked quality as ranking 1, and a further 41.7% placed it in ranking 2. An additional 18.9% positioned it in ranking 3 and 7.9% in ranking 4, while only 1.6% ranked it in ranking 5 and none selected ranking 6. The weighted mean ranking of 2.10 indicates that quality was overall the most important factor among those assessed.

Product design / appearance was also evaluated as highly important. More than half of the respondents (50.4%) ranked design as ranking 1. In addition, 13.4% placed it in ranking 2 and 12.6% in ranking 3. Smaller proportions assigned it to ranking 4 (9.4%), ranking 5 (8.7%), and ranking 6 (5.5%). With a weighted mean ranking of 2.29, design was the second most important factor overall, closely following product quality.

Price of the product settled in a middle position in the ranking. While 7.1% of respondents ranked price as ranking 1 and 21.3% as ranking 2, the largest shares were concentrated in ranking 3 (29.9%) and ranking 4 (28.3%). A smaller proportion selected ranking 5 (8.7%) or ranking 6 (4.7%). The weighted mean ranking of 3.24 places price as the third most important factor in clothing purchase decisions.

Product sustainability / ecological impact was generally considered less central in immediate purchase decisions. Only 2.4% of respondents ranked it as ranking 1 and 9.4% as ranking 2. A total of 17.3% placed it in ranking 3 and 20.5% in ranking 4, while 32.3% assigned it to ranking 5 and 18.1% to ranking 6. The weighted average of 4.25 points to the fact that sustainability considerations were secondary compared to quality, design, and price. A similar pattern was seen in brand reputation. Although 4.7% of respondents ranked it first and 7.1% ranked it second, a significant proportion placed it in lower priority categories. 10.2% ranked it third, 17.3% fourth, 31.5% fifth, and 29.1% sixth. The weighted mean ranking of 4.51 indicates relatively low overall importance.

Easy availability of the product (location, stock) was the least prioritized factor. Only 5.5% ranked availability as ranking 1 and 7.1% as ranking 2. A total of 11.0% placed it in ranking 3 and 16.5% in ranking 4, while 17.3% selected ranking 5 and 42.5% ranking 6. The weighted mean ranking of 4.60 confirms that availability was overall the least important factor in clothing purchase decisions.

Overall, the results indicate that when purchasing clothing, internal product characteristics, particularly quality and design, are more important than contextual or external factors, such as brand reputation, sustainability considerations, and availability.

#### **4.10.2 Consumer priorities in sustainability evaluation for clothing purchases**

Respondents were also asked the following question: "Think about your personal priorities when buying clothes: arrange the following factors in order of importance for

evaluating sustainability when purchasing clothing. (1 = Most important, 6 = Least important)”. The factors included material sustainability (e.g., use of organic or recycled materials), production practices (e.g., fair labor conditions), environmental impact (e.g., use of water, carbon emissions), brand reputation (e.g., trust, transparency, communication), product quality (e.g., product lifetime, repairability), and end-of-life options (e.g., recyclability, circular solutions).

Product quality (e.g., product lifetime, repairability) was clearly identified as the most important sustainability-related factor. Most respondents (54.3%) ranked it 1, and 21.3% ranked it 2. A further 9.4% assigned it to ranking 3 and 6.3% to ranking 4, while 6.3% selected ranking 5 and only 2.4% ranking 6. The weighted mean ranking of 1.96 indicates that durability and longevity are key factors to respondents’ understanding of sustainability. Material sustainability (e.g., use of organic or recycled materials) was the second most important factor. A total of 18.1% ranked it 1, and 34.6% ranked it 2. Additionally, 22.8% placed it in ranking 3 and 9.4% in ranking 4, while 10.2% selected ranking 5 and 4.7% ranking 6. The weighted mean ranking of 2.73 reflects the strong priority on material-related sustainability aspects.

Production practices (e.g., fair working conditions) were mainly rated in the middle of the scale. Although 12.6% of respondents gave them a value of 1 and 16.5% a value of 2, the largest shares were still for values 3 (25.2%) and 4 (26.8%). A smaller proportion chose a value of 5 (15.7%) or 6 (3.1%). This creates a weighted average of 3.26, which indicates a medium level of importance. Environmental impacts (e.g., water use, carbon dioxide emissions) showed more variation in responses. A total of 7.1% gave a value of 1 and 8.7% a value of 2. Then 20.5% gave a value of 3 and 31.5% a value of 4. In addition, 23.6% chose a value of 5 and 8.7% a value of 6. The weighted average from these was 3.82, which suggests that broader environmental impacts are indeed recognized but are not considered as important as product quality or material sustainability.

Brand reputation (e.g., trust, transparency, communication) was generally considered less important when evaluating sustainability. Although 7.1% gave it a rating of 1 and 15.0% gave it a rating of 2, still a significant proportion of respondents gave it a rating of 5 (28.3%) or 6 (18.1%). The weighted mean ranking of 3.97 then indicates fairly limited importance compared to other sustainability dimensions. End-of-life options (e.g., recyclability, circular solutions) were clearly the least important sustainability factor. Only 0.8% ranked them as ranking 1 and 3.9% as ranking 2. A total of 5.5% placed them in ranking 3 and 11.0% in ranking 4, while 15.7% selected ranking 5 and a substantial majority, 63.0%, ranked them as ranking 6. The weighted mean ranking of 5.26 was markedly higher than for any other factor, indicating that recyclability and circular end-of-life solutions currently play a limited role in respondents' sustainability priorities.

Taken together, the results show that respondents primarily interpret sustainability through product longevity and material choices. Production-related and environmental impact factors are assigned a middle level of importance, whereas end-of-life considerations are clearly not prioritised in sustainability evaluations.

#### **4.11 Correlation analysis**

In addition to descriptive statistics, correlation analysis was used to determine how various attitudes toward sustainability relate to actual purchasing behaviour. The results show that, when it comes to clothing purchases, there is a moderate positive correlation between the importance of sustainability and the willingness to pay more for sustainably produced clothing ( $r = 0.465$ ). In other words, respondents who consider sustainability important are generally also more willing to pay a higher price for sustainable products. A similar relationship is evident between the importance of sustainability and the preference for sustainable brands, even if the price is higher ( $r = 0.557$ ). This relationship is slightly stronger, suggesting that sustainability values are quite clearly reflected in consumer preferences.

However, not all relationships followed this pattern. Trust in sustainability claims and preference for sustainable brands was practically absent ( $r = 0.031$ ). This suggests that trust in brand communication does not appear to significantly influence purchasing decisions in this sample. This finding also supports previous results, in which general trust in sustainability claims was relatively low.

The analysis also revealed a positive correlation between the importance of supply chain transparency and the impact of better product information on purchasing decisions ( $r = 0.375$ ). This suggests that consumers who value transparency are more likely to be influenced by clearer and more detailed information when selecting products. Overall, the results indicate that attitudes toward sustainability are associated with more sustainable purchasing behaviour, but the associations are not particularly strong. This supports the idea of a gap between attitudes and behaviour. Although consumers who value sustainability are somewhat more likely to act in accordance with it, these attitudes do not fully translate into consistent purchasing decisions.

## **5 Analysis and explanation**

This chapter focuses on analyzing the results from the previous chapter and linking them to the study's objectives. The previous chapter mostly described the survey results and presented empirical findings, this chapter discusses their broader implications. The analysis focuses on understanding how consumers view sustainability in the clothing industry and how these views affect their purchasing behaviour.

The chapter begins by examining the well-known attitude–behaviour gap in clothing consumption. After this, the analysis focuses on how consumers see sustainability in practice, with a specific focus on product durability and longevity. The chapter also discusses the role of trust and transparency in sustainability communication, the influence of price and also other practical considerations that affect consumer decisions. On top of these things, the chapter also considers demographic differences and the ways consumers seek information about sustainability.

The main purpose of this chapter is to deepen the understanding of the factors influencing consumers' purchasing decisions in the clothing industry. In this context, this chapter also highlights key challenges that companies face in promoting more sustainable consumption.

### **5.1 The attitude-behaviour gap**

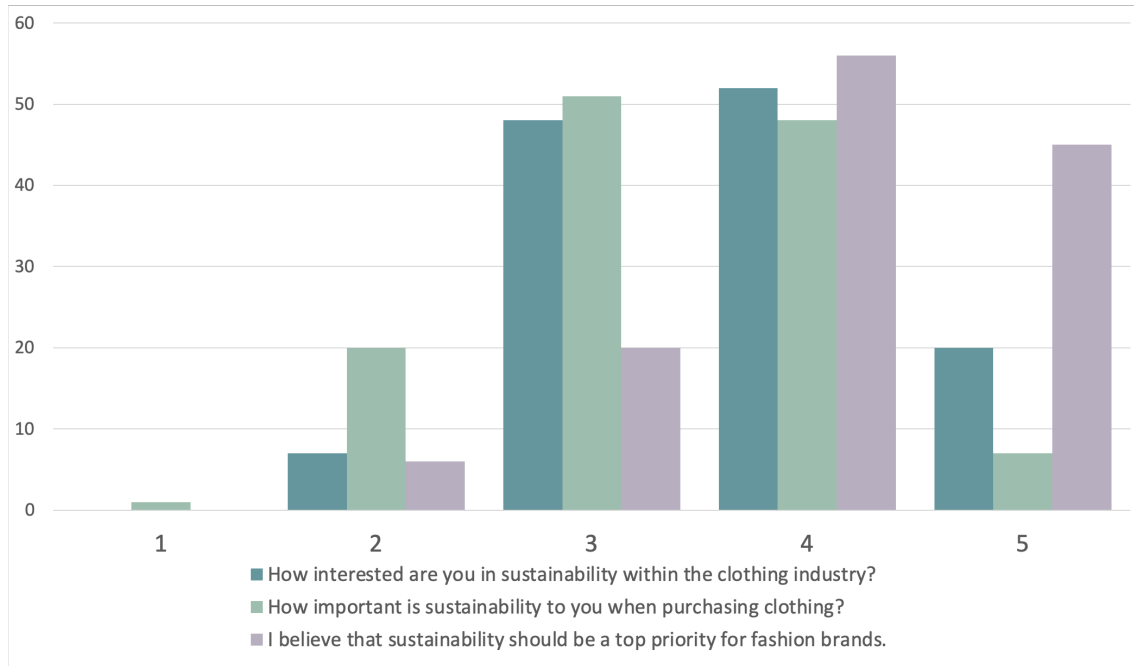
One of the most obvious findings from the results is about the conflict between stated values and actual purchasing priorities. In theory, sustainable development is widely supported by consumers. However, this support does not necessarily translate into similar behaviour. The average Likert score in the survey was over 4.1. which indicates that respondents strongly agreed that sustainability should be a top priority for fashion brands. In addition to that, the importance of minimizing the environmental impact of supply

chains was rated at around 4.2. These figures indicate that sustainability really is seen as the responsibility of the entire industry rather than a voluntary feature.

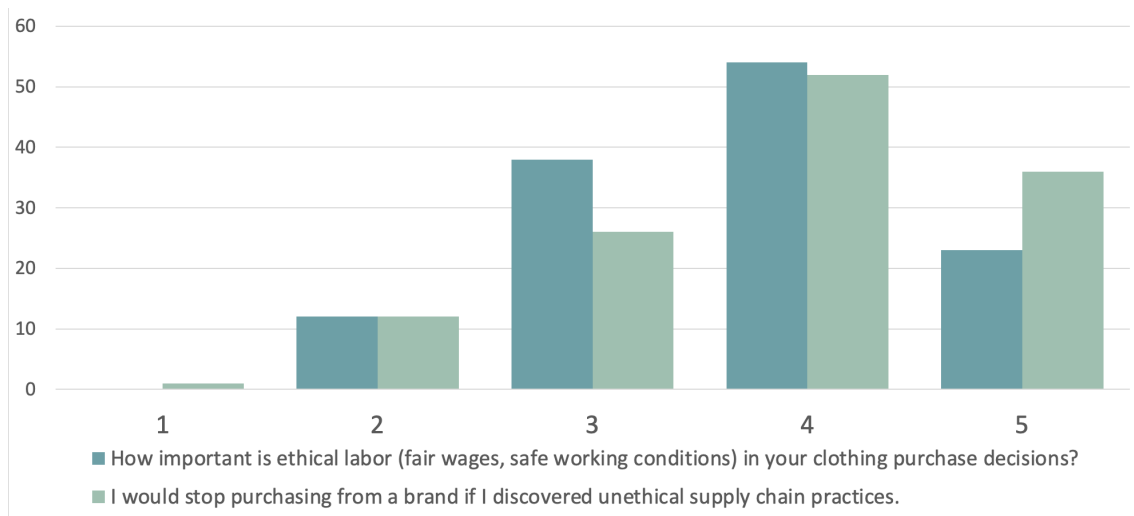
However, the importance of sustainability seems to become less relevant when decision-making shifts from general attitudes to individuals' actual purchasing decisions. When asked how important sustainability is when buying clothes, the average response is around 3.3–3.4. This means that sustainability remains a significant factor, but it is rarely critical and is just one of many competing factors.

Sustainability and environmental impact received a weighted average score of 4.25, clearly behind quality (2.10), design (2.29), and price (3.24). Consumers tend to prioritise features that are visible and can be personally experienced. For example, quality and design have a stronger impact on the overall perceived value than environmental issues. Even though respondents disagreed that brands provide enough information on sustainability (average score around 2.3–2.4), they also reported rarely researching sustainability practices themselves either. This means that transparency is expected, but active investigation of available information is also limited.

Sustainability appears to act as a general principle rather than a primary factor influencing purchasing decisions. It does shape attitudes and set expectations, but its influence becomes weaker when other factors come into play. The findings therefore suggest that the main challenge is not a lack of positive attitudes, but the difficulty of translating those attitudes into consistent everyday purchasing behaviour.



**Figure 7** Consumer perspectives on sustainability in the clothing industry



**Figure 8** Importance of ethical labor and consumer response to unethical practices

## 5.2 Durability as the core interpretation of sustainability

While sustainability is broadly supported in principle, respondents' definitions in practice are more specific. The results suggest that sustainability is understood primarily as

durability and product longevity rather than as circularity or systemic environmental impact. This is clear with the sustainability ranking question. Product quality, including life-time and repairability, clearly dominated the evaluation criteria, with a weighted mean ranking of 1.96. More than half of the respondents placed it as the most important sustainability-related factor. No other dimension came close to this level of priority. In contrast, end-of-life options such as recyclability and circular solutions received a weighted value ranking of 5.26, and 63 percent of respondents ranked them as the least important factor. The difference between these two numbers is noticeable. From the consumers' perspective it suggests that sustainability is more closely linked to the product's actual use phase instead of the post-use phase.

Material sustainability, such as the use of organic or recycled materials, ranked relatively high at 2.73, indicating that input choices matter. However, wider environmental impact indicators, including water use and carbon emissions, were positioned lower at 3.82. Production practices, including fair labour conditions, fell in between at 3.26. These results reinforce the idea that consumers lean toward tangible, directly linked sustainability features. This interpretation is consistent with the earlier finding that product quality was also the most important determinant of overall clothing purchases, with a weighted value of 2.10. Durability, therefore, seems to act as a bridge between traditional purchasing priorities and sustainability concerns. Instead of functioning as a separate ethical layer added on top of the product, sustainability becomes embedded in expectations of quality.

Material sustainability scored relatively high at 2.73, indicating that the choice of raw materials seems to actually matter. More comprehensive environmental impact factors, such as water consumption and carbon emissions, ranked lower with a score of 3.82. Production practices, including fair working conditions, ranked in between of these two with a score of 3.26. This indicates that consumers prefer concrete characteristics that are directly related to sustainability. This finding is consistent with a previous observation that product quality was also the most important factor in overall purchasing decisions

at clothing stores (with a weighted value of 2.10). So instead of sustainability acting as a separate moral layer added on top of the product, it blends into quality expectations.

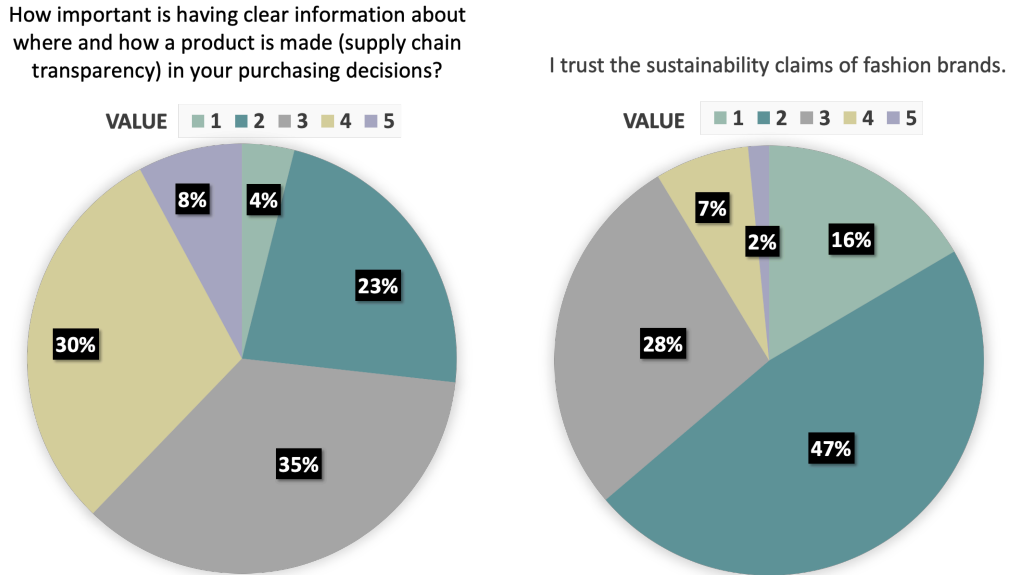
Research shows that consumers do not completely ignore broader environmental or circular economy principles. However, these factors seem more abstract and less central in the evaluation process when making a purchase decision. Sustainability thus becomes meaningful when it is directly visible and personally relevant. Sustainability is therefore not seen directly as a product feature, but rather as a perspective through which sustainable development is understood in the context of clothing consumption.

### **5.3 Trust deficit and transparency paradox**

The study reveals a clear mismatch between expectations and trust. Respondents want fashion brands to openly communicate about sustainability, but at the same time, they are sceptical about these claims. Clear communication about sustainability initiatives got an average rating of about 4.1, and expectations that brands will minimize their environmental impact across their supply chains increased to about 4.2. So, transparency itself is highly valued but trust in the sustainability claims is, however, much lower. The statement “I trust the sustainability claims of fashion brands” received an average score of 2.3, and responses leaned toward disagreement. In addition, respondents generally felt that brands do not provide enough information about sustainability. Despite this dissatisfaction, the majority reported that they rarely research brands’ sustainability practices before making a purchase decision.

This creates a paradox. Consumers expect transparency, but they do not trust the information provided. Transparency seems to be a basic requirement rather than a key factor in building trust. It is expected, but it is not automatically believed. These results thus suggest that the core problem is not a lack of communication about sustainable development, but a lack of trustworthiness. Only by increasing communication is therefore

not necessarily enough. Instead, it is more important to ensure that communication is clear and can be verified.



**Figure 9** Consumer trust in fashion brands' sustainability claims

#### 5.4 Price sensitivity versus willingness to pay

Price is one of the clearest barriers to sustainable consumption in practice. Although respondents generally indicated that they were willing to pay more for sustainably produced clothing, this willingness is limited. When asked about their willingness to pay a higher price for sustainable products, the responses were mostly positive (averages were around 3.6–3.7). A similar pattern occurred with the statement that respondents prefer sustainable brands even when prices are higher, which resulted in a slightly lower average (around 3.4–3.5). These figures indicate that sustainability is indeed seen as a clear added value.

At the same time, affordability is the factor that clearly limits consumer behaviour. The idea that the lack of affordable and sustainable options limits purchasing received an average rating of 3.3–3.4. This indicates that it is seen as a moderate but still significant

factor. In other words, support for sustainability weakens when price differences come into play, and this is even clearer when comparing the ranking results. Price received a weighted average of 3.24, placing it ahead of sustainable development, which received a score of 4.25. Despite that sustainability has an impact on attitudes, price still remains a stronger influencing factor in concrete decision-making situations. It sets the framework within which other characteristics are evaluated.

These results thus indicate that the willingness to pay more is conditional. Consumers appear to be willing to accept price increases to a certain point when sustainability is combined with quality and product looks. However, sustainability alone does not override economic considerations. Since a large proportion of the survey respondents belong to younger age groups and include working students, economic considerations understandably have a direct impact on purchasing decisions. All in all, price remains the primary factor determining clothing consumption. Sustainability can enhance a product's perceived value, but it must operate somehow within financial boundaries. For sustainable fashion to expand, improving cost competitiveness may be just as important as developing sustainability communications.

## **5.5 Gender and age differences**

The demographic differences identified in the data are relatively minor, but they provide context for understanding broader patterns. The clearest difference between demographic differences concerns the frequency of purchases. Men generally said they buy clothes less often, and their responses were mainly in the lower or middle categories of the scale. None of them said they buy clothes very often. Women were more evenly distributed across the response options, and a significant number of them reported buying clothes more often. However, it still seems that this difference appears to be related more to the intensity of consumption than to attitudes toward sustainability.

More frequent purchases naturally lead to more situations where consumers must compromise between sustainability, price, and product design. In this sense, behavioural differences between the genders can be seen as related more to purchasing habits than to conflicting values. However, sustainability awareness was high in both groups, and awareness of fast fashion and its impacts was generally very strong.

The differences between age groups were not as obvious. In most age groups, purchasing behaviour was very similar, and responses focused around a moderate level of consumption. There was somehow greater variation in the 55–64 age group, when some respondents in this group reported buying clothes very rarely, while others said they bought them quite often. Of course, the small number of respondents in this group makes it difficult to make accurate conclusions, but still the results suggest greater variation compared to younger age groups. The largest age group in the sample (18–34) perceived their shopping behaviour as reasonable but slightly more active. Since many respondents in this group were working students, financial concerns likely have a clear impact on their decision-making. This situation is in line with earlier findings, which showed that while sustainability was seen as a positive thing, but price sensitivity limited its importance.

So it can be stated, that demographic variations do not radically change the key conclusions of this study. The main themes identified earlier are the same across genders and age groups. The differences seem to be more related to purchasing frequency than to conflicting attitudes towards sustainability itself.

## **5.6 Information channels and label complexity**

According to the study, consumers know where they want sustainability information to be. At the same time, they find the current way of presenting information quite difficult. The availability and clarity of information seem to be more important than the amount of information available. When respondents were asked to evaluate information sources,

they clearly prioritized communication at the product level. Labels and tags directly attached to clothing received the highest rating, averaging 2.39. Next was brand websites (rating 3.06) and then consumer reviews (rating 3.43). These results show that sustainability information is most effective when it is directly visible and related to the product itself.

In contrast, external factors such as third-party certifications and apps focused on sustainability received lower ratings. Social media and influencers also played a comparatively small role. This indicates that even though consumers value sustainability, they are not necessarily willing to go the extra mile beyond easily accessible information. At the same time, the current labelling system appears problematic. Most respondents agreed that unclear and inconsistent sustainability labels make it difficult to choose sustainable clothing (average rating close to 3.8–3.9). In addition, many stated that better information about a product's journey from production to sale would positively influence their choices. These responses indicate that consumers are not necessarily uncaring about sustainability information but rather find it scattered or difficult to understand.

So, there is a structural problem: consumers prefer simple, product-level information, but current communication does not quite meet their expectations. If labels are unclear or complex, it becomes difficult to evaluate and compare sustainability. In such situations, consumers may fall back on more familiar selection criteria, such as price, product design or quality. In this way, the challenge is less about increasing the amount of sustainability information but more about improving its clarity and standardization. More effective communication certainly won't eliminate doubts completely, but it can make it easier to make sustainable choices in everyday shopping situations.

## **6 Consumer-driven implications for sustainable supply chain management**

This chapter analyzes the empirical results more from the sustainable supply chain management perspective. Although the study focuses on consumer purchasing behaviour, these results are also highly relevant from an industrial management perspective. Customer decisions directly influence product demand, sourcing, production, logistics, and product development. In this sense, understanding consumer behaviour is extremely useful and enables fashion companies to better integrate sustainability into customer value.

### **6.1 Implications for supply chain management**

This chapter discusses what the empirical findings mean for supply chain management and the broader fashion industry. The results suggest that although consumers expect fashion brands to operate sustainably, sustainability itself rarely becomes the main factor guiding their purchasing decisions. When consumers make choices between different alternatives, factors such as quality, design, and price tend to take priority. For this reason, the aim of this chapter is to directly address the research question by investigating how consumer behaviour influences supply chain design and operational decision-making.

The findings also indicate that consumers tend to understand sustainability in practical terms, especially through product durability and longevity, instead of more abstract environmental indicators. At the same time, scepticism toward sustainability claims and difficulties in interpreting information highlight continuing difficulties with credibility and clarity. Even though many consumers are willing to pay more for sustainable clothing, this willingness is limited by price. In addition to this finding, the greater availability of

sustainable products in retail stores appears to influence purchasing decisions more than fast delivery does.

From a supply chain management perspective, sustainable development should be integrated directly into operational processes, rather than being viewed as a completely separate strategic factor. This is also in line with previous research, which shows that supply chains are largely demand-driven systems in which customer requirements guide procurement, production, and distribution decisions (Chopra, 2019; Mentzer et al., 2001). Since consumers shape demand through their purchasing behaviour, understanding their preferences is essential for designing sustainable supply chains.

The results also show that sustainability alone is not really enough to drive purchasing decisions. Instead, it competes with other product-related factors, such as quality, design, and price. With this in mind, sustainability initiatives are more effective when they are aligned with buyers' current priorities rather than being treated as separate factor.

### **6.1.1 Shift toward durability-oriented supply chains**

Product durability plays a key role in how consumers perceive sustainability. Product longevity and repairability were rated as the most important product-related criteria for sustainable development. From the consumers' perspective, sustainable development is closely linked to clothes' ability to last longer. Therefore, supply chain decisions that improve a product's durability are not just environmental initiatives. Instead, they are also directly aligned with what consumers already value in the product itself.

From a supply chain management perspective, this means an even stronger focus on sustainability strategies. These include decisions related to used materials, manufacturing methods, and quality control. To extend a product's lifespan in product level, it can be done by using more durable fabrics, strengthening areas that are prone to wear and tear, and developing closing methods, for example buttons and zippers. As highlighted

in the literature on supply chains, product quality and reliability are key factors in customer value and depend on well-coordinated upstream processes (Chopra, 2019). Based on this, it can be stated that stricter product quality standards and supplier evaluations can help ensure product longevity rather than leaving it to coincidence.

This requires investments in higher-quality materials, improvements in production techniques, and strengthening the quality control systems. Sustainability should also be considered in the selection of suppliers. In terms of practical quality improvement activities, companies could track the number of defective products and product returns, and use this data to evaluate supplier performance. At the same time, stable supplier relationships and effective process management support more reliable supply chain operations. When sustainability, from all perspectives, is treated as an integral part of supply chain planning rather than a marketing tool, sustainable development becomes more concrete and meaningful to consumers.

### **6.1.2 Integrating transparency into supply chain systems**

The survey results reveal a clear gap between consumer expectations and trust in sustainability communications. Although transparency is considered important, trust in sustainability claims is still relatively low. Many respondents also feel that brands do not provide enough information, even though they themselves hardly ever seek out additional information. This suggests that it is not just a question of the amount of information available. Instead, the current way sustainability information is presented may not be ideally suited to everyday purchasing situations. If understanding sustainability requires extra effort, it is unlikely to influence consumers' decisions in practice.

From a supply chain perspective, this indicates that it is important to integrate transparency into operational systems rather than relying only on communication. Supply chain management depends on coordination of different actors and, specifically, on the flow of information (Ka-Leung et al., 2017). Unfortunately, this information does not always

reach consumers in a clear or usable form. Solving this requires reliable data collection, improved traceability of materials and processes, and, above all, more consistent ways of providing information at the product level. Previous studies have also highlighted the growing value of transparency in global supply chains to meet stakeholder expectations (Hileman et al., 2020).

Sustainability information should therefore be clear and directly linked to the product. Consumers should be able to quickly see and understand the most important aspects without having to do extensive research. Reliable supplier data and systematic reporting practices play a key role in this. When supply chain information is translated into simple, product-level messages, transparency becomes easier to understand and more meaningful. Trust is therefore not built by increasing the volume of communication, but by improving its clarity and consistency. Transparency is credible when it communicates realistic and verifiable supply chain practices.

### **6.1.3 Addressing the affordability challenge through operational efficiency**

The results show that consumers are certainly not unwilling to support sustainable fashion financially, but there are limits to their willingness to do so. Although many respondents expressed a willingness to pay slightly more for sustainably produced clothing, this clearly refers only to the possibility of a small price increase. If the price difference becomes too large, sustainability loses its significance.

From a supply chain management perspective, this underscores the importance of cost-effectiveness. As noted in the literature, supply chain management involves balancing costs and customer value (Chopra, 2019; Werner, 2020). This means that sustainable products must be produced in a way that keeps them reasonably affordable. Companies cannot simply assume that consumers will accept higher prices if a product is produced responsibly. Instead, they should cut the additional costs associated with sustainable production and thereby lower the product's price point. This can be achieved through

classic supply chain management improvements, including better demand forecasting, efficient production planning, and inventory management optimization. For example, reducing overproduction and waste can lower costs while supporting sustainability goals. In addition, optimizing procurement strategies and supplier networks can help reduce the costs of sustainable materials. Affordability is therefore not just a question of pricing but is strongly influenced by the structure of the supply chain.

Another important aspect concerns the product range. Sustainability should not be limited to premium collections, as these are often financially out of reach for many consumers. Including sustainable features in standard products would make it easier to make responsible choices. If durability is understood as a key factor in sustainability, investments that extend a product's lifespan can generate long-term economic benefits. A decline in product returns and complaints can improve overall profitability while supporting sustainable development goals. Therefore, affordability is closely linked to decisions made at the beginning of the supply chain and the ability to deliver sustainable products, rather than simply supplying them at higher price points.

#### **6.1.4 Ethical responsibility in supply chain management**

The results show that ethical working conditions are more important to consumers than companies might expect. A clear majority of respondents said they would reconsider or stop buying from a particular brand if unethical practices were discovered in its supply chain. Ethical issues are by that seen as factors that can directly influence how consumers perceive a brand and make their purchasing decisions.

This has clear implications for supply chain management. Ethical issues can quickly turn into reputational damage, especially when trust in sustainability promises is already quite low. If something goes wrong and becomes public, consumers may not view it as a one-time mistake, but more like a confirmation of their existing doubts. As a result, the consequences can extend beyond operational matters and affect the long-term

credibility of the entire company. From a supply chain perspective, this means that ethical responsibility cannot under any circumstances be treated as a separate issue. It must be part of daily decision-making. Monitoring of working conditions, particularly at higher-risk suppliers, should be continuous. It is also important to take sustainability into account right from the beginning and when procurement decisions are made.

Above all, companies must also be prepared to act if problems arise. In these cases, appropriate corrective actions are crucial, as weak acts are unlikely to restore trust. In many cases, it is far easier to prevent these problems than to repair the damage afterward. In this sense, ethical responsibility underscores the need to align supply chain practices with consumer demands. When sustainability is managed consistently throughout the supply chain, it reduces risks and maintains long-term credibility.

#### **6.1.5 Making circularity more practical and relevant**

The results show that consumers generally have a positive attitude toward circular economy solutions, such as repair, resale, and recycling. These ideas are supported in principle, but they do not appear to have an impact on actual purchasing decisions. When respondents evaluated sustainability factors, end-of-life solutions ranked clearly as the least important. This suggests that the circular economy still feels somewhat abstract and does not guide behaviour in practice.

One reason for this may be how consumers understand sustainability. The results show that product longevity and durability are the most important considerations. Consumers simply associate sustainability with how long a cloth lasts. In contrast, what happens after a product's time in use seems to be less relevant when making a purchase decision. This creates a challenge for supply chain management. From this perspective, circular economy systems require reverse logistics and coordination among different actors (Costa et al., 2020), but they must also be easy to use for consumers. If returning a product or organising its repair requires extra effort, many consumers will not participate. A

useful approach could therefore be to link the circular economy more closely to sustainability. For example, repair services could be viewed as ways to extend a product's lifecycle rather than as a separate sustainability feature. When circular economy solutions are simple and clearly linked to everyday use, they are more likely to become part of normal consumer behaviour.

## **6.2 Possible implications for the fashion industry**

From a broader perspective within the clothing industry, it is clear that sustainability alone doesn't determine purchasing decisions. Consumers clearly expect brands to operate in a sustainable way, but when choosing products, quality, design, and price usually have a greater influence on the final decision. These findings show how important it is to convert buyers' preferences into product development, procurement, production, and distribution.

Since supply chains in the clothing industry are driven by demand, consumer needs set the requirements that companies must be able to meet. In this sense, sustainability becomes more meaningful when it is part of the product's core features that consumers already value. Therefore, the challenge for the fashion industry is not simply to encourage to sustainable, but also to include sustainability in the structures and processes that already shapes customer value.

The results also point a real trust challenge in the apparel industry. Trust in sustainability claims is limited, which weakens the effectiveness of communication. This means that improving sustainability outcomes requires not only better communication but also greater alignment between actual supply chain practices and the information presented to consumers. Companies should therefore also find solutions to this trust issue.

### **6.2.1 Embedding sustainability into product value and operations**

The results of the ranking question clearly show that when consumers make clothing buying decisions, quality and design take the highest priority. Sustainability is taken into account in the evaluation as well, but it does not carry more weight than the clothing's appearance, how it feels, or its usability. So if the product itself does not meet expectations for quality and usability, sustainability alone is not enough to convince the customer to buy it.

From a functional perspective, this sets clear requirements for both the product itself and the design of the supply chain. Sustainably produced products must meet the same requirements regarding product features as traditional alternatives. Sustainability must simply be added as an additional feature on top of the measurable product characteristics such as material quality and longevity. This requires careful coordination in every part of the supply chain, for example in terms of material sourcing, manufacturing processes, and quality control. Investments in sustainability are therefore not just decisions made at the product level; these are things, that have an impact on customer value throughout supply chain decisions.

This means that sustainability should be linked to measurable product characteristics. When sustainability, longevity, and material quality are implemented across the entire supply chain, sustainability becomes part of the product's overall value rather than a separate feature. Instead of limiting their sustainability efforts to specific collections or marketing campaigns, companies should integrate sustainable practices into the standard processes that guide their day-to-day operations.

Integrating sustainability into business processes can also strengthen the reputation of the entire company. When sustainability is reflected in products, sustainable practices become more visible to consumers without the need for a major investment in marketing and communications. In this way, sustainability becomes part of how products are experienced, rather than just how they are promoted.

With these actions in both product value and operational processes, companies can reduce the gap between positive attitudes and actual behaviour. If sustainable products are able to meet customers' current requirements without compromising on quality or usability, consumers are much more likely to choose them in practice.

### **6.2.2 Trust-building through verification, instead of marketing**

The research findings show that consumer trust in the fashion industry is very low, and sustainability claims have only a limited impact on purchasing behaviour. Consumers have only little trust in sustainability claims, and marketing campaigns that emphasize sustainable practices. These results suggest that communication alone is not enough to convince consumers. When sustainability communications appear too polished or repeated, they may strengthen existing doubts rather than reduce them.

A major challenge lies in how information is presented. Consumers are exposed to countless messages, labels, and promises, but they understandably struggle to understand their true meaning. General statements about sustainability or environmental responsibility can seem meaningless if they are not properly explained. Over time, this lack of clarity can increase scepticism.

Trust is more likely to be built when information is consistent, and accurate across different collections and seasons. That is why fashion brands should shift their focus. Instead of prioritizing storytelling or advertising campaigns, brands should prioritize providing verified, easily comparable information. Clear product-level information on labels and product tags would provide much more credibility in the purchasing situation than abstract descriptions. If consumer trust is already shaky, simplifying and verifying the provided information would probably be more effective than launching more marketing campaigns.

### **6.2.3 Availability as an operational enabler**

Based on the research findings, availability directly influences sustainable purchasing behaviour. Many respondents reported that they would be more likely to choose sustainable clothing if it were more widely available in stores. So, while consumers value sustainability, their choices are driven more by which products are visible and easily accessible.

The question of availability is also linked to how much effort sustainable practices require. When sustainable clothing is limited to small collections or placed separately from the main selection, choosing it may require extra time and attention from the consumer. If sustainable options were integrated into the standard product range, the decision would be more natural and require less effort. Sustainability should be included in mainstream retail channels and supported by clear product information. Consistent availability across different sizes, styles, and prices would support the idea that sustainability is not exceptional but normal. In this way, wider availability would help to make sustainable consumption a realistic part of everyday decision-making.

### **6.2.4 Reconsidering the role of delivery speed**

The results show that fast delivery is not a very significant factor when buying clothes. Compared to quality, design, and price, delivery speed seems to be clearly less important to many consumers. Companies are often making huge efforts to speed up logistics, but if speed is not a key factor for consumers in their purchasing decisions, its importance may be slightly overrated. From a supply chain perspective, this suggests that continuously increasing speed does not necessarily always generate the most value.

Alternatively, resources could be allocated more effectively to areas that are more important to consumers, such as product quality, sustainability, transparency, and affordability. While delivery speed undoubtedly adds value, it does not need to be prioritized

over other factors. In addition, adopting slightly slower and more stable logistics processes could improve sustainability by reducing operational pressure.

It is still important to keep in mind, that these findings do not mean that delivery speed is totally unimportant. However, the findings show that it is not necessarily the most effective way to promote more sustainable purchasing behaviour.

.

## **7 Conclusions**

This section presents a summary of the study's key findings by highlighting and bringing together the most important points from the previous chapters. This section does not present any new information, but rather explains how the most important findings relate to the research questions and objectives. It also examines the potential implications of these results and provides guidelines for future research.

### **7.1 Research summary**

The clothing industry faces significant environmental, social, and ethical challenges throughout its global supply chain. These challenges appear at different stages of a product's lifecycle, such as in the production of raw materials, manufacturing, transportation, product use, and the final disposal of clothing. For this reason, improving sustainability in the apparel industry requires changes at all levels, including decision-making, concrete actions by companies, and consumer behaviour. Especially consumers play an important role, as their purchasing decisions directly influence what products are produced and how supply chains operate.

Previous studies have shown that people are more aware of sustainability issues in the clothing industry than before. However, this awareness has not led to major changes in people's purchasing behaviour. This difference is referred to as the attitude-behaviour gap: people say they care about sustainability, but do not always act accordingly when making purchases. The motivation behind this study was a desire to better understand this gap.

This study aimed to investigate how consumers' attitudes toward sustainability influence their clothing purchases and how these findings can be integrated into supply chain management and production planning in the fashion industry. In particular, the study focused on identifying the key factors influencing clothing purchases and understanding better

why sustainability often remains a secondary selection criteria. Consumers are aware of the issues related to this topic, but in real-life purchasing situations, the aspect of sustainability is often neglected.

To address these objectives, the study used a quantitative research approach. Data were collected through an online survey consisting of 33 questions related to sustainability awareness, purchasing behaviour, supply chain transparency and possible solutions for promoting more sustainable consumption. The responses were analyzed using descriptive statistics and correlation analysis in Microsoft Excel in order to identify general patterns in consumer attitudes and behaviour.

The results show that respondents generally have positive attitudes toward sustainability in the clothing industry. Most participants reported being interested in sustainability issues and agreed that fashion companies should prioritize environmental responsibility and ethical practices in their operations. Ethical labor conditions, circular economy initiatives and greater transparency in supply chains were also widely supported among respondents.

At the same time, the results show that sustainability is not usually the most important factor in actual clothing purchase decisions. When respondents were asked to rank the factors influencing their purchasing decisions, the most important criteria were product quality, design and then price. Sustainability and environmental impact ranked significantly lower. These findings are a clear example of the conflict between attitudes and behaviour. Although consumers support sustainability in theory, other factors still end up driving actual purchasing decisions.

Another important finding is how consumers understand sustainability in the context of clothing consumption. The results suggest that sustainability is primarily understood in terms of a product's longevity. When respondents rated factors related to sustainability, product quality and durability were ranked as the most important considerations. In

contrast, end-of-life solutions, such as recycling and circular economy practices, were considered less important. This suggests that consumers likely associate sustainability primarily with the longevity of the product itself, rather than considering its broader life-cycle impacts.

The study also found that many people do not trust fashion brands' sustainability claims. Respondents often felt that companies do not provide enough clear information about what they are doing to support sustainability. At the same time, the majority of people said they do not often research a brand's sustainability practices before making a purchase. This means that while consumers want brands to be sustainable and transparent, they do not always bother to check the information themselves.

Price also came up as a significant practical barrier to the consumption of sustainable clothing. While many respondents indicated a willingness to pay somewhat more for sustainably produced clothing, this willingness was generally moderate rather than unconditional. If sustainable alternatives are significantly more expensive than other options, consumers may still prioritize price over sustainability.

Overall, the findings suggest that consumers are not against to sustainability in the clothing industry. Instead, their purchasing behaviour appears to reflect a relatively realistic approach to this topic. Consumers can be described as generally supportive of sustainability in principle, but their decisions are strongly influenced by practical considerations such as product quality, price and availability. Many consumers also appear somewhat sceptical toward sustainability claims made by fashion brands.

Sustainability becomes more influential in purchasing decisions when it aligns with other important consumer priorities. When sustainable products also offer good quality, reasonable pricing, clear information and easy availability, consumers are more likely to choose them. In contrast, sustainability initiatives that are perceived as complex,

abstract or significantly more expensive may have a more limited impact on consumer behaviour.

In summary, the results of this study suggest that the greatest challenge in promoting sustainable clothing consumption is not a lack of positive attitudes toward sustainability. Rather, the challenge is to translate these attitudes into everyday purchasing decisions. These results suggest that consumer behaviour should be considered as an important starting point in decision-making related to supply chains and production. The results show that consumers most value product durability, affordability, availability, and clear information on sustainability. This means that sustainability becomes more meaningful when it is integrated into these characteristics. Developing more sustainable supply chains therefore requires transforming these customer needs into concrete operational decisions on procurement, quality management, production and assortment planning, and product distribution.

## **7.2 Practical recommendations**

The results of this study reveal what consumers really expect from fashion products, and these expectations should guide the design of supply chains and operations. Although sustainability is viewed as a positive factor, it rarely influences purchasing decisions on its own. Instead, consumers react more strongly when sustainability is linked to other factors they already value. These factors include, for example, product quality, affordable pricing, clear product information, and good availability.

From a supply chain perspective, this means that consumer behaviour should not only be observed, but also be used as a basis for decision-making. This means translating customer expectations into concrete choices related to product development, procurement, and supply chain processes as a whole. The recommendations of this study therefore focus on how fashion companies can better align their operations with these requirements.

### **7.2.1 Integrating sustainability into core product value**

One of the clearest findings of this study is the order of the product characteristics and how those are prioritized in clothing purchase decisions. When respondents were asked to rank the factors influencing their purchase decisions, product quality and design clearly emerged as the most important criteria. Sustainability was also an important factor, but ranked significantly lower in the comparison. This suggests that sustainable fashion should not be based only on sustainability claims and communication. Instead, sustainability should be an integral part of the product's core value.

Consumers strongly associate sustainability with a product's longevity. A piece of clothing that lasts longer and maintains its quality is often considered more sustainable than one that needs to be changed quickly. For fashion companies, this means that investments in sustainability, materials, and product construction play a key role in supporting sustainability. Improving the lifespan of clothing not only meets consumer expectations but can also reduce the environmental impacts associated with overproduction. In this way, longevity acts as a bridge between sustainable development goals and consumers' everyday priorities. When sustainability strengthens a product's functional value rather than being presented as a separate ethical attribute, consumers are more likely to see it as a natural part of the product rather than a necessary compromise.

### **7.2.2 Improving transparency and credibility**

Trust is another key theme in the results. Many survey participants were sceptical of fashion brands' sustainability claims, and many felt that companies do not communicate enough about their actions. However, the majority of respondents said that they do not often research brands' sustainability practices on their own either. This puts companies in a difficult position: consumers want transparency, but they are not willing to search for information themselves.

That is why how brands present sustainability information is extremely important. A practical solution would be to make sustainability communications more clear and simple. Instead of using only generic marketing communications and statements, companies could share more specific details about the product itself. For example, providing clear information about products' materials, certifications, or supply chains can help customers understand sustainability in purchasing situations.

Consistency is also important. When sustainability information varies widely between brands or collections, it is difficult for consumers to compare products. Standardized and transparent information would clarify the situation and build trust. Since many people are already sceptical of sustainability claims, authenticity can be key to a brand's long-term reputation.

### **7.2.3 Increasing accessibility of sustainable products**

Research findings show that improving the availability of sustainable products is also important for fostering sustainable consumption. Many respondents said they would be more likely to buy sustainable clothing if it were easier to find in regular stores. This means that sustainable options should not be limited to small niche collections or specialized product selections. When sustainable products are integrated into the main selection, they become part of the normal shopping environment. This reduces the effort for consumers and makes it easier to make smart choices in everyday situations. Therefore, visibility in stores and on e-commerce sites can play a significant role in promoting sustainable purchasing behaviour.

Affordability is another critical factor. Even though many respondents indicated some willingness to pay a higher price for sustainably produced clothing, this willingness was generally low. If the price of sustainable options is significantly higher than in traditional products, consumers are likely to prioritize price. Therefore, companies should consider integrating sustainable production methods directly into their cost structures. When the

price of sustainable alternatives is competitive, they are more likely to be accepted into mass consumption as well.

#### **7.2.4 Aligning supply chains with durability and efficiency**

From a supply chain perspective, the results show that strategies should prioritize both product sustainability and operational efficiency. Because consumers strongly associate sustainability with product longevity, supply chain decisions that promote product design solutions are especially important. These strategies can be, for example, choosing higher-quality materials and improving quality control in manufacturing. Maintaining standardized production practices can reduce errors, extend product lifespans, and improve the overall quality of clothing. Optimized supply chain management also supports environmentally friendly goals. Better demand forecasting, more detailed production planning and inventory management can reduce overproduction and waste. These improvements can also lower operating costs, allowing companies to offer sustainable products at more competitive prices.

In summary, sustainability in the clothing industry cannot be achieved through a single action. Instead, it requires coordinated improvements in product development, communication, and supply chain management. Integrating sustainability into product quality, providing clear product information, and combining this with affordability and availability are all ways to increase the potential to influence consumers' daily purchasing decisions.

### **7.3 Limitations of the study**

Although this study provides useful information on consumer attitudes and purchasing behaviour towards sustainable fashion, certain limitations must still be taken into account. Being aware of these limitations helps in the interpretation of the results and also

provides guidance for future research. One of the key limitations relates to the size and structure of the sample. The study was based on 127 respondents, which can eventually be seen as a relatively small sample size. Furthermore, the majority of responses were collected through personal contacts and social media. This means that the sample likely includes more young, digitally active people. Because younger consumers are often more familiar with sustainability issues and online fashion trends than older age groups, this may have influenced the results. While the results provide useful information about consumer attitudes, they may not apply to all consumer groups.

This is also related to a potential sampling error due to the distribution method of the survey. Since the survey link was shared through platforms such as Instagram, WhatsApp and personal contacts, the respondents may share similar social or cultural backgrounds. In addition, individuals who are already interested in sustainability topics might have been more motivated to participate in the survey. This could lead to an overrepresentation of respondents who already hold relatively positive attitudes toward sustainability.

Another limitation is related to the nature of self-reported survey data. The study relies on respondents' own assessments of their attitudes and purchasing behaviour. In practice, people do not always behave in the same way as they report in surveys. Some respondents may unintentionally overestimate how often they consider sustainability when making purchasing decisions, while others may present themselves in a more environmentally responsible way due to social desirability bias. As a result, the findings should be interpreted as reflecting perceived behaviour and attitudes rather than directly observed consumer actions.

The nature of the data also limits the conclusions that can be drawn from the study. The survey captured respondents' views at a single point in time, which means that the results represent only a snapshot of current attitudes and perceptions. Consumer awareness of sustainability issues and expectations toward fashion brands continue to evolve, and purchasing behaviour may change over time. More targeted research would be

needed to better understand how consumer attitudes and behaviours develop as sustainability becomes a more prominent topic in the fashion industry.

Finally, the analytical methods used in the study represent a methodological limitation. The analysis was conducted using descriptive statistics and correlation analysis in Microsoft Excel. These methods were appropriate for identifying general patterns and relationships in the data, but they provide a relatively limited range of statistical tools compared to more advanced analytical software. More complex statistical techniques could potentially reveal deeper insights into the relationships between variables, such as the interaction between demographic factors, attitudes and purchasing behaviour.

Despite these limitations, the study still provides valuable information on how consumers think about sustainability in the fashion industry and how these attitudes influence purchasing decisions. The results provide insight into the key priorities and challenges of sustainable fashion consumption, which can definitely be used as a starting point for further research on the topic.

#### **7.4 Suggestions for future research**

While this study offers perspectives on consumer attitudes toward sustainability in the clothing industry, it also opens up several different directions for future research. The results highlight both behavioural trends and areas where understanding is still lacking, especially in terms of how attitudes toward sustainability translate into actual purchasing decisions. One key area for future research could be the use of broader and more diverse samples. This study primarily consisted of people recruited online or through personal contacts, so the majority of respondents were young and active internet users. Future research could include more people from different age groups, income levels, and regions. A larger and more diverse sample would allow better analysis and comparison between different groups. These comparisons could reveal whether attitudes and

purchasing behaviour related to sustainable development vary across cultures or social groups.

Another direction for future research could be behavioural experiments. This research is based on self-reported survey responses, which do not necessarily always accurately reflect real purchasing behaviour. The use of experimental research methods could provide a deeper understanding of how consumers actually behave in real-world decision-making situations. For example, researchers could examine consumers' reactions to different sustainability labels, product information, and pricing in simulated shopping environments. By observing actual choices rather than self-reported attitudes, we could better understand what conditions make sustainability a key factor in clothing purchases.

Future studies could also investigate changes in consumer attitudes over time. Sustainability is a fast-evolving topic in both the fashion industry and public conversation, and consumer awareness of the issue is constantly growing. Through longitudinal research, researchers could track how consumers' views and purchasing behaviour evolve as sustainability issues become more common. Such studies could provide valuable insights whether the attitude-behaviour gap identified in this study continues to narrow or whether it remains stable, as sustainability becomes more and more integrated into mainstream fashion markets.

There is also great potential in researching new tools, which can be used to increase supply chain transparency. For example, digital product passports, blockchain-based tracking, and standardized sustainability labels are seen as ways to provide more clear and reliable information about a product's origin and its environmental impact. Future research could explore how people use or will use these tools and whether they actually have an impact on purchasing decisions. Understanding how consumers feel about and use these technologies could help companies develop sustainability practices in the future.

It can be concluded that future research can help us improve our understanding of how sustainability becomes part of daily purchasing behaviour. By combining larger samples, experimental methods, long-term research approaches, and new technological perspectives, researchers have the potential to create a more comprehensive picture of the relationship between consumer behaviour, supply chain transparency, and sustainable fashion consumption.

## References

- Alhaddi, H. (2015), "Triple bottom line and sustainability: a literature review", *Business and Management Studies*, Vol. 1 No. 2, pp. 6-10, doi: 10.11114/bms.v1i2.752.
- Ashby, A., Leat, M. and Hudson - Smith, M. (2012), "Making connections: a review of supply chain management and sustainability literature", *Supply Chain Management*, Vol. 17 No. 5, pp. 497-516. <https://doi.org.proxy.uwasa.fi/10.1108/13598541211258573>
- Backs, S., Jahnke, H., Lüpke, L., Stücken, M. & Stummer, C. (2020). Traditional versus fast fashion supply chains in the apparel industry: An agent-based simulation approach. *Annals of operations research*, 305(1-2), 487-512. <https://doi.org/10.1007/s10479-020-03703-8>
- Barnes, L. and Lea-Greenwood, G. (2006), "Fast fashioning the supply chain: shaping the research agenda", *Journal of Fashion Marketing and Management*, 10(3), 259-271. <https://doi.org/10.1108/13612020610679259>
- Barnes, L. and Lea-Greenwood, G. (2010), "Fast fashion in the retail store environment", *International Journal of Retail & Distribution Management*, 38(10), 760-772. <https://doi.org/10.1108/09590551011076533>
- Busalim, A., Fox, G., & Lynn, T. (2022). Consumer behavior in sustainable fashion: A systematic literature review and future research agenda. *International Journal of Consumer Studies*, 46(5), 1804-1828. DOI: 10.1111/ijcs.12794
- Camargo, L. R., Pereira, S. C. F. & Scarpin, M. R. S. (2020). Fast and ultra-fast fashion supply chain management: An exploratory research. *International journal of retail & distribution management*, 48(6), 537-553. <https://doi.org/10.1108/IJRDM-04-2019-0133>
- Costa, C., Azoia, N., Silva, C., & Marques, E. (2020). Textile Industry in a Changing World: Challenges of Sustainable Development. *U. Porto Journal of Engineering*, 6(2), 86-97. [https://doi.org/10.24840/2183-6493\\_006.002\\_0008](https://doi.org/10.24840/2183-6493_006.002_0008)
- Grazzini, L., Acuti, D., & Aiello, G. (2021). Solving the puzzle of sustainable fashion consumption: The role of consumers' implicit attitudes and perceived warmth.

- Journal of Cleaner Production*, 287, 125579. <https://doi.org/10.1016/j.jclepro.2020.125579>
- Hardesty, D. M., & Bearden, W. O. (2009). Consumer Behavior and Retailing. *Journal of Retailing, Suppl.Consumer Behavior and Retailing*, 85(3), 239-244. <https://doi.org/10.1016/j.jretai.2009.07.002>
- Helmold, M., Küçük Yılmaz, A., Dathe, T., & Flouris, T. G. (2022). SCRM Strategy. *Supply Chain Risk Management*, (s. 13-35). Springer, Cham. [https://doi.org/10.1007/978-3-030-90800-3\\_2](https://doi.org/10.1007/978-3-030-90800-3_2)
- Hileman, J., Kallstenius, I., Häyhä, T., Palm, C., & Cornell, S. (2020). Keystone actors do not act alone: A business ecosystem perspective on sustainability in the global clothing industry. *PLoS ONE*, 15(10), 1–17. <https://doi.org.proxy.uwasa.fi/10.1371/journal.pone.0241453>
- Jin Gam, H. (2011), "Are fashion - conscious consumers more likely to adopt eco - friendly clothing?", *Journal of Fashion Marketing and Management*, Vol. 15 No. 2, pp. 178-193. <https://doi.org/10.1108/13612021111132627>
- Karnreungsiri, I., & Praditsuwan, N. (2017). Factors influencing buying behavior and buying decision process of customers: An examination on relationship using one-way analysis of variance. *PSAKU International Journal of Interdisciplinary Research*, 6(2)
- Kates, R. W., Parris, T. M., & Leiserowitz, A. A. (2005). WHAT IS SUSTAINABLE DEVELOPMENT? *Environment*, 47(3), 8-21. Retrieved from <https://www.proquest.com/scholarly-journals/what-is-sustainable-development/docview/224017338/se-2>
- Khurana, K. and Muthu, S.S. (2022). Are low- and middle-income countries profiting from fast fashion? *Journal of Fashion Marketing and Management*, 26(2), 289-306. <https://doi.org/10.1108/JFMM-12-2020-0260>
- Kozlowski, A., Searcy, C., & Bardecki, M. (2015). Corporate sustainability reporting in the apparel industry: An analysis of indicators disclosed. *International Journal of Productivity and Performance Management*, 64(3), 377-397. <https://doi.org/10.1108/IJPPM-10-2014-0152>

- Levy, Michael and Barton A. Weitz (2007), "Retailing Management," Sixth Edition Burr Ridge, IL: McGraw-Hill/Irwin.
- Liu, M. (2022). Determining the Role of Influencers' Marketing Initiatives on Fast Fashion Industry Sustainability: The Mediating Role of Purchase Intention. *Frontiers in psychology*, 13, 940649. <https://doi.org/10.3389/fpsyg.2022.940649>
- Papadopoulou, M., Papasolomou, I. and Thrassou, A. (2022), "Exploring the level of sustainability awareness among consumers within the fast-fashion clothing industry: a dual business and consumer perspective", *Competitiveness Review*, Vol. 32 No. 3, pp. 350-375. <https://doi-org.proxy.uwasa.fi/10.1108/CR-04-2021-0061>
- Papamichael, I., Chatziparaskeva, G., Pedreno, J. N., Voukkali, I., Candel, M. B. A., & Zorpas, A. A. (2022). Building a new mind set in tomorrow fashion development through circular strategy models in the framework of waste management. *Current Opinion in Green and Sustainable Chemistry*, 36, 100638.
- Robertson, M. (2021). *Sustainability principles and practice*. <https://doi.org/10.4324/9780429346668>
- Saha, K., Dey, P. K., & Kumar, V. (2024). A comprehensive review of circular economy research in the textile and clothing industry. *Journal of Cleaner Production*, 141252. <https://doi.org/10.1016/j.jclepro.2024.141252>
- Smyczek, S. (2012). *Consumer behavior on international market*. Wydawnictwo Placet.
- Thiele, L. P. (2024). *Sustainability*. John Wiley & Sons. [https://books.google.fi/books?hl=fi&lr=&id=Nvj6EAAAQBAJ&oi=fnd&pg=PA1939&dq=%22sustainability%22&ots=mhjWZDFmTK&sig=bU6QfkLV2WtVLMKJKPV-sJnHzo&redir\\_esc=y#v=onepage&q=%22sustainability%22&f=false](https://books.google.fi/books?hl=fi&lr=&id=Nvj6EAAAQBAJ&oi=fnd&pg=PA1939&dq=%22sustainability%22&ots=mhjWZDFmTK&sig=bU6QfkLV2WtVLMKJKPV-sJnHzo&redir_esc=y#v=onepage&q=%22sustainability%22&f=false)
- Werner, H. (2020). *Supply chain management. Grundlagen, Strategien, Instrumente und controlling*. Springer Wiesbaden. <http://dx.doi.org/10.1007/978-3-663-01507-9>