## Determinants influencing consumers' purchase intention of sustainable fashion: the moderating roles of green skepticism and environmental concern

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#### **Abstract**

**Purpose** – In today's environmentally conscious society, the fashion industry is at the center of discussion because of its negative contribution to the environment. As sustainability becomes increasingly important, companies are under growing pressure to adopt sustainable practices. Despite growing environmental awareness and increased emphasis on sustainability, understanding consumer behavior in the field of sustainable fashion remains a complex issue. Therefore, this study examines factors that influence Dutch consumers' purchasing intention regarding sustainable fashion, focusing on perceived environmental knowledge and social influence. It also examines the moderating roles of green skepticism in the relationship between perceived environmental knowledge and purchase intention, and environmental concern in the relationship between social influence and purchase intention.

**Method** - This study employed a quantitative methodology, utilizing a questionnaire distributed to 230 Dutch consumers. The questionnaire was designed to measure the different concepts in this study. The collected data was analyzed using single linear regression to test the different hypotheses. Additionally, various statistical tests were conducted to ensure the reliability and validity of the measures used.

**Findings** – Perceived environmental knowledge has no direct effect on consumers' purchase intention of sustainable fashion. In addition, green skepticism has no significant moderating effect in this relationship. Social influence does have a direct effect on the purchase intention of sustainable fashion. In this relationship, environmental concern has a significant negative moderating effect, indicating that higher levels of environmental concern can weaken the impact of social influence on the intention to purchase sustainable fashion products.

**Conclusion** – This study emphasizes the complexity of consumer behavior in sustainable fashion. The findings underscore the nuanced interactions between individual perceptions and external influences in driving sustainable consumption behaviors, highlighting the need for targeted strategies to promote environmentally responsible purchasing practices effectively.

#### Keywords

Purchase intention, sustainable fashion, perceived environmental knowledge, social influence, green skepticism, environmental concern

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#### 1. Introduction

Today's society is increasingly aware of the ecological challenges facing our planet (Wamsler, 2020). In this era of environmental awareness and sustainability, the fashion industry is at the center of discussions because of its negative impact on the environment (Islam et al., 2021). The industry contributes to environmental degradation, especially within fast fashion, because of the pollution it causes and the intensive use of natural resources (Magnuson et al. 2017). As a result of the emerging importance of sustainability, companies are increasingly encouraged to integrate sustainable practices during various stages of the product life cycle to gain competitive advantage (Choi & Li, 2015; Grazzini et al., 2021). The industry is integrating these practices in several ways, including using more sustainable materials, reducing waste and launching initiatives focused on circularity (Niinimäki et al., 2020). Despite the implementation of these sustainable practices and the growing importance of sustainability, consumer behavior and their purchase intention in the context of sustainable fashion remains complex (Campos et al., 2023). Perceived environmental knowledge, which refers to an individual's knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems, plays a significant role in this context (Fryxell & Lo, 2003). As individuals become more informed about environmental issues, their knowledge influences their perceptions and attitudes toward various products and practices (Ho et al., 2020). However, the presence of green skepticism complicates this dynamic. This skepticism emerges when individuals doubt the authenticity or effectiveness of environmental claims made by companies, leading to a complex landscape of beliefs and attitudes (Goh & Balaji, 2016). Another complex aspect is that consumers are not only guided by their own opinions but are also influenced by the attitudes and behaviors of others (Ajzen, 1991). Therefore, social influence is considered an important predictor of consumers' purchase intention of sustainable fashion (Farzin et al., 2023). Environmental concern, which refers to a general attitude or value orientation toward environmental protection that reflects an individual's level of concern for the environment, plays an important role in this process (Chuah et al., 2020).

#### 1.1 Research gap

The relationship between environmental knowledge and consumer purchase intentions has been studied in several contexts, but the literature shows conflicting results. Multiple studies indicate that individuals who have greater knowledge about environmental issues are believed to have a greater ability to make sustainable decisions (Yadav & Pathak, 2016; Moslehpour et al., 2023). For example, research conducted by Wang et al. (2014) revealed a significant positive effect of

consumers' environmental knowledge on their intention to purchase eco-friendly products. However, there are also studies with conflicting results showing no significant effect (Chekima et al., 2016; Qomariah & Prabawani, 2020). This indicates that the relationship between environmental knowledge and purchase intentions is very complex and needs further investigation. In addition, there is a lack of in-depth research in the literature on how the relationship is moderated by green skepticism in the context of sustainable fashion. As more people lean towards sustainable shopping, there is a rise in skepticism about how genuine green claims really are (Panda et al., 2020). It seems that skeptical customers may question the informational value of green claims, potentially influencing how consumers absorb information and develop environmental knowledge (Goh & Balaji, 2016). To fill this gap in the current literature, this study examines the possible moderating effect of green skepticism in the relationship between perceived environmental knowledge and purchase intention of sustainable fashion.

Another gap in the literature is the lack examination about how environmental concern possibly moderates the relationship between social influence and purchase intention regarding sustainable fashion. Existing literature suggests that individuals' decisions are primarily influenced by their social environment and interactions with society (Tjokrosaputro & Cokki, 2020; Jony et al., 2021). For example, results from Farzin et al. (2023) show a significant positive relationship between social influence and the purchase intention of eco-fashion. Moreover, in the field of sustainable consumption, environmental concern play a central role in shaping individuals' intentions to make environmentally friendly purchases (Newton et al., 2015; Paul et al., 2016). According to Botetzagias et al. (2015), environmental concern does not influence eco-friendly behavior directly, but rather indirectly. Several studies suggest that people with high environmental concerns are more socially influenced compared to individuals with lower environmental concerns (Lee et al., 2014; Liang et al., 2021). For example, Liang et al. (2021) indicates that individuals with a high concern for the environment are more open to receive information from others. Thus, they are willing to accept informative social influence. Although the influence of environmental concern in the context of sustainable fashion has been studied, the dynamic of how environmental concern may moderate the relationship between social influence and the purchase intention of sustainable fashion is still unexplored. Therefore, this study will focus on filling the gap by providing insights into how these factors interact within the context of sustainable fashion decision-making.

#### 1.2 Research question

The aim of this research is to fill the identified gaps by gaining in-depth understanding of the complex factors, environmental knowledge, and social influence, in the context of sustainable fashion. Specifically, it focuses on the moderating roles of green skepticism and environmental concern, dimensions that have been relatively underexplored in the context of sustainable fashion decision-making. The main research question and sub questions developed for this purpose are follows:

"What is the effect of perceived environmental knowledge and social influence on consumers' purchase intention of sustainable fashion?"

- "To what extent does green skepticism moderate the relationship between perceived environmental knowledge and consumers' purchase intention of sustainable fashion?"
- "To what extent does environmental concern moderate the relationship between social influence and consumers' purchase intention of sustainable fashion?"

#### 1.3 Theoretical contributions

This study offers new perspectives on how perceived environmental knowledge and social influence shape Dutch consumers' purchase intention. Established theories of environmental knowledge (Yadav & Pathak, 2016) and social influence (Clark et al., 2019) are extended by focusing on consumer behavior in the context of sustainable fashion. Moreover, this study bridges a first important gap by examining the moderating role of green skepticism in the relationship between perceived environmental knowledge and purchase intention. In addition, it bridges another gap by examining the moderating role of environmental concern in the relationship between social influence and purchase intention. Both factors are becoming increasingly important in in sustainability research (Newton et al., 2015; Goh & Balaji, 2016). These moderating factors interact with existing variables, offering a more nuanced understanding of consumer motivations. By examining these dynamics, this study provides new insights into the complexities of consumer decision-making and extends existing theoretical frameworks.

#### 1.4 Practical contributions

The findings of this study offer practical insights for various stakeholders in the fashion industry. By understanding the effect of perceived environmental knowledge and social

influence on consumers' purchase intention of sustainable fashion, brand managers can develop more effective marketing strategies (Farzin et al., 2023). By gaining insight in the moderating role of green skepticism in the relationship between perceived environmental knowledge and purchase intention, brands can make authentic and credible sustainability claims, leading to higher customer engagement (Bhaduri & Copeland, 2021). Furthermore, supply chain managers can benefit from understanding the moderating role of environmental concern in the relationship between social influence and purchase intention. By integrating sustainable practices, they can not only match consumers' growing demand for sustainable fashion but also reduce the overall environmental impact of their operations (Chan & Wong, 2012). Finally, policymakers can use these findings to develop regulations that promote transparency and sustainability in the fashion industry (Tarabieh, 2021).

#### 1.5 Structure of the thesis

The thesis is structured as follows. Chapter two presents a comprehensive literature review, which explores the existing knowledge about the different concepts in this study and introduces the hypotheses. Chapter three thoroughly describes the method used, which includes a quantitative approach using an online questionnaire. Chapter four presents and analyzes the results of the online questionnaire, focusing on direct relationships and the moderating roles of green skepticism and environmental concern. Chapter five offers a comprehensive discussion of the findings, highlighting theoretical implications and practical applications. Here, suggestions will also be made for companies within the fashion industry to develop effective strategies. The final chapter also provides the limitations of the study and outlines opportunities for future research.

#### 2. Literature review

This chapter provides an overview of existing theories on the relevant concepts in this study. By understanding the broader context, it sets the foundation for a deeper investigation into sustainable fashion consumption. Based on the theory, hypotheses and a conceptual model were developed to guide the research.

#### 2.1 Sustainable fashion

Sustainability is a business objective that strives to positively contribute to the environment, society and the economy (Kim et al., 2020). So, sustainability not only refers to economic performance, but also considers ecological and social outcomes (Sheth et al., 2011). Achieving success in sustainability is becoming increasingly important for companies in the fashion industry to meet evolving consumer expectations, therefore there is a growing focus on offering sustainable fashion (De Ponte et al., 2023).

Sustainable fashion represents an alternative approach to fast fashion, which is considered an old-fashioned consumption model that has had detrimental effects on the environment, society and the economy (Campos et al., 2023). It is complicated to define sustainable fashion precisely because there is no uniform industry standard. However, there are different terms associated with this concept, including eco-friendly, organic, and fair trade (Henninger et al., 2016). Therefore, sustainable fashion can be interpreted in different ways. This includes using recycled and eco-friendly materials, second-hand fashion, fashion produced under fair conditions and vegan fashion (Campos et al., 2023). Existing literature also uses different synonyms for sustainable fashion, such as green fashion (Cervellon & Wernerfelt, 2012) and ethical fashion (Manchiraju & Sadachar, 2014), making the definition even more complex. Nevertheless, when speaking of sustainable fashion, it can be stated that a sustainable supply chain is required. This includes the development of eco-friendly materials, sustainable production, environmentally friendly distribution, and ethical consumer behavior (HO et al., 2020). According to Salem & Alanadoly (2021), sustainable fashion refers to a type of clothing that is designed and manufactured with the aim of optimizing advantages for individuals and the community while minimizing negative impacts on the environment. So, it is manufactured with consideration for its environmental impacts. Manufacturing processes for sustainable fashion might involve the utilization of biodegradable or recycled materials, like organic cotton, along with the implementation of responsible production methods (Sobuj et al., 2021). According to Farzin et al. (2023), sustainable fashion represents an environmentally friendly approach to consumption at the end of the supply chain. This requires that upstream processes in the fashion supply chain, from ethically sourcing materials to responsible production and eco-conscious distribution, prioritize environmental responsibility. This ensures that consumer needs and expectations are met while maintaining a sustainable, socially responsible, and environmentally friendly journey in the fashion industry.

#### 2.2 Purchase intention of sustainable fashion

Purchase intention is a common concept in the current literature. The increasing research on this topic has emerged from the need to better understand the decision-making process of consumers. According to Li et al. (2024), the term purchase intention refers to the prior inclination of individuals to consider a purchase before they actually proceed to purchase. It is also defined as the extent to which a consumer is willing to buy a certain product (Peña-García et al., 2020; Chetioui et al., 2020). So, it represents the degree of inclination toward actual behavior (Ajzen, 1991). Therefore, examining this intention is similar to analyzing why consumers are open to purchasing consumer goods (Campos et al., 2023).

When it comes to purchase intention of sustainable fashion, certain consumers consider social factors and environmental responsibility of a company in their purchase decisions (Marin et al., 2009). An increasing number of people are acquiring positive attitudes towards environmental issues and are therefore willing to integrate environmental information into their consumption choices (L & J, 2010). Consumers who prioritize sustainability often look for transparency in production processes, use of eco-friendly materials, and fair labor practices (Henninger et al., 2016). However, existing research shows that individuals give less importance to environmental factors when making purchasing decisions in the fashion industry compared to other factors, such as price and quality (Mandarić et al., 2022). This indicates that while there is growing environmental awareness, it does not always translate into purchase decisions within the fashion sector, highlighting the need for further exploration of how to effectively encourage sustainable consumption behaviors in this industry.

Examining the purchase intention of sustainable fashion provides insight into the factors that drive consumers to choose eco-friendly clothing and how these choices are influenced. This understanding forms the foundation for a comprehensive exploration of sustainable fashion consumption dynamics in this research.

#### 2.3 Perceived environmental knowledge

Existing research about environmentally friendly behavior has demonstrated that consumer behavior and intentions are correlated with various motivators and factors, including environmental knowledge (Chekima et al., 2016). According to Fryxell & Lo (2003), environmental knowledge is defined as an individual's "knowledge of facts, concepts, and relationships concerning the natural environment and its major ecosystems.". For example, in the context of sustainable fashion, an individual with this knowledge might be aware of the environmental impact of different fabrics, the processes involved in manufacturing, and the significance of recycling or upcycling clothing items. Haron et al. (2005) defines environmental knowledge as the degree to which a person is able to understand and assess the impact of ecosystem on society, as well as the amount of information a person has on the subject. It signifies the current understanding or the information individuals have regarding the environment, recognition of environmental challenges, emotional engagement with environmental matters, and the outcomes of human activities on the environment (Goh & Balaji, 2016). According to Mohd Suki (2013), environmental knowledge refers to individuals' understanding of the environment concerning the production process of a product, its impact on the environment, and the essential need for shared responsibility to achieve sustainable development.

#### 2.3.1 Perceived environmental knowledge and purchase intention of sustainable fashion

Several studies indicate that individuals who have greater knowledge about environmental issues are believed to have a greater ability to make sustainable decisions (Yadav & Pathak, 2016; Moslehpour et al., 2023). For example, research conducted by Wang et al. (2014) revealed a significant positive effect of consumers' environmental knowledge on their intention to purchase eco-friendly products. Vicente-Molina et al. (2013) also stated that university students' knowledge of environmental issues has a positive effect on their intention and actions towards pro-environmental behaviors. Although these studies show that environmental knowledge has a significant positive effect on the purchase intention of sustainable (fashion) products, there are also some studies that show no significant effect (Chekima et al., 2016; Qomariah & Prabawani, 2020). These conflicting results may have arisen because two different constructs of environmental knowledge were used in the studies, namely subjective and objective environmental knowledge (Fabiola & Mayangsari, 2020). Subjective knowledge refers to individuals' personal understanding or awareness of information, as perceived by themselves. It is the knowledge that people believe they possess based on their own perspectives and

experiences. Objective knowledge refers to factual and accurate information, especially in the context of details about a product (Zarei & Maleki, 2018). Although consumers use both forms of knowledge, it appears that subjective environmental knowledge is more relevant when assessing environmental behavior (Vicente-Molina et al., 2013; Goh & Balaji, 2016). Also, a study by Kim et al. (2018) shows that the influence of subjective environmental knowledge on environmental behavior appears to be stronger than that of objective knowledge. Therefore, this study focuses on subjective environmental knowledge.

Based on existing literature, it can be assumed that perceived environmental knowledge has a positive effect on the purchase intention of sustainable fashion. Therefore, the following hypothesis is proposed:

**H1:** Perceived environmental knowledge positively affects consumers' purchase intention of sustainable fashion.

#### 2.4 Social influence

According to Farzin et al. (2023), social influence related to environmental and ethical issues is an important predictor of consumer purchase intention of sustainable fashion. Social influence occurs when people adjust their thoughts, emotions, or behavior in response to being influenced by their surroundings, such as family, friends or other important people (Varshneya et al., 2017; Tewari et al., 2022). This phenomenon is evident in various observations that indicate individuals adapt their behaviors and thoughts to fit in with specific groups (Chen-Yu & Seock, 2002). According to Tjokrosaputro & Cokki (2020), social influence is related to a process in which individuals within a group share their social identity. This process influences their perceptions, knowledge, and behaviors in accordance with the group's endorsed standards. In this context, the combined identity of members within a specific group shapes a viewpoint and thought process that is deemed fitting. At its core, social influence originates from the idea of homophily, which refers to social dynamics where individuals seek connections with others by exhibiting comparable behavior (Ryan, 2001). This concept is an important factor when studying behavior as people often look for social affirmation before exploring a new product category (Thøgersen & Zhou, 2012).

#### 2.4.1 Social influence and purchase intention of sustainable fashion

Social influence is a powerful predictor of behavior, even if people are not always aware of it (Nolan et al., 2008). When individuals notice that social groups close to them, such as friends, family, and other important people, invest in sustainable clothing, they experience increased social pressure. This pressure stimulates their desire to meet expectations, which then influences their intention to purchase similar products (Tewari et al., 2022). In line with this statement, most of the studies show that social influence has a significant effect on an individual's purchase intention (Tjokrosaputro & Cokki, 2020; Ho et al., 2020; Oncioiu & Ifrim, 2022). For example, findings of the study of Su et al. (2023) show that social entities, such as family members, and peers, influence Bangladesh's young consumers to make efforts to purchase sustainable clothing. In addition, results from Farzin et al. (2023) also show a significant positive relationship between social influence and the purchase intention of ecofashion. Contradictory, there are also some studies indicating that there is no significant relationship between social influence and purchase intention of sustainable fashion. For example, the study from Varshneya et al. (2017) shows that there is no significant positive effect of social influence on the purchase intention for organic clothing among young adult Indian consumers. This contradiction shows that there is more to discover about how social influence affect consumers' purchase intention of sustainable fashion. Based on the existing literature, it can be assumed that social influence has a positive effect on purchase intentions of sustainable fashion. As such, the following hypothesis is proposed:

H2: Social influence positively affects consumers' purchase intention of sustainable fashion.

#### 2.5 Green skepticism

Increasing consumer attention for the environment is leading to an ongoing focus by companies on improving their strategies (Chen & Chang, 2012). If a company starts focusing more on sustainability and paying attention to the environment, it will become more attractive to people who value sustainable products and will therefore positively influence consumer purchase intention (Jamali & Karam, 2018). However, this leads to marketers being accused of making exaggerated environmentally friendly claims about their products (Sharma, 2021). As a result, the concept of green skepticism emerges (Cheng et al., 2020). Green skepticism is defined as "the tendency to doubt the environmental claims or environmental performance of green products." (Goh & Balaji, 2016). In other terms, skepticism is not considered as permanent disbelief towards environmental claims, because skeptical customers' reaction can vary

depending on the situation and context (do Paço & Reis, 2012). This is consistent with the definition from Mohr et al. (1998), in which skepticism is seen as being more focused on questioning green claims rather than deep-seated distrust of green products. According to Zarei & Maleki (2018), skepticism often arises when consumers feel there is a discrepancy between what producers claim and what they actually deliver. Moreover, a contradiction between advertising and marketing claims and the company's actions can also lead to skepticism among consumers.

## 2.5.1 The moderating role of green skepticism in the relationship between perceived environmental knowledge and purchase intention

Existing literature suggests that environmental knowledge has a positive effect on consumers' purchase intention of sustainable fashion (Wang et al., 2014; Yadav & Pathak, 2016). However, according to Mohr et al. (1998), skeptical customers do not value the informational aspects of green claims. Similarly, Goh & Balaji (2016) suggest that skeptical customers may question the informational usefulness of green claims. This skepticism may lead consumers to doubt the credibility of environmental information, hindering the acceptance of such information and limiting the development of their environmental knowledge. In other words, when people are more skeptical of green claims, their environmental knowledge may have a less positive impact on their intention to buy sustainable products.

The study of Akhondzadeh & Monfared (2021) indicates that green skepticism has a significant negative effect on people's environmental knowledge. This suggests that high levels of skepticism toward green claims may lead to a decreased willingness to acquire or believe knowledge about the environment. Thus, insight into how green skepticism moderates the relationship between environmental knowledge and consumers' purchase intention of sustainable fashion may be crucial to understand their green purchasing behavior.

This moderating effect of green skepticism has been studied in various contexts with mixed results. There was no significant moderating effect of green skepticism in the relationship between environmental knowledge and green purchase intention in a study conducted in Iran (Zarei & Maleki, 2018). In this study, green skepticism was not an important factor in determining purchase intention. This is contradictory to other studies, for example the study from Kim & Oh (2020), where green skepticism has a significant direct effect on purchase intention. A study of Malik & Qazi (2017) shows a negative moderating effect of green skepticism in the relationship between environmental knowledge and purchase intention. Another study examined the moderating effect of green skepticism in the relationship between

environmental attitude and green purchase behavior. Here, a significant negative moderating effect of green skepticism was discovered (Uddin et al., 2023). Given the contradictory findings and the lack of previous studies within the context of sustainable fashion, it is important to further investigate the moderating effect of green skepticism.

Based on the above discussion, it can be assumed that green skepticism can negatively moderate the relationship between environmental knowledge and purchase intention of sustainable fashion. Therefore, the following hypothesis is proposed:

**H3:** Green skepticism negatively moderates the relationship between perceived environmental knowledge and consumers' purchase intention of sustainable fashion.

#### 2.6 Environmental concern

Environmental concern is recognized as an important concept in investigating the purchase intention of sustainable products (Newton et al., 2015; Paul et al., 2016; Dutta & Hwang, 2021). This concept is defined as a general attitude or value orientation toward environmental protection that reflects an individual's level of concern for the environment (Chuah et al., 2020). According to Prakash et al. (2023), environmental concern refers to an individual's level of emotional investment in addressing environmental issues, demonstrating commitment to mitigating these problems and supporting initiatives aimed at protecting the environment. However, environmental concern is not about how a person acts, but more about how a person assesses environmental problems. It involves understanding an individual's perspective on environmental issues rather than evaluating the actions that could address these problems. Environmental concern is also not an evaluation of a person's knowledge of environmental purchase intentions implies that consumers with environmental concerns may form intentions to make environmentally friendly purchases without necessarily possessing knowledge about the environmental attributes of the available choices (Newton et al., 2015).

## 2.6.1 The moderating role of environmental concern in the relationship between social influence and purchase intention

Environmental concern is often seen as a determinant that directly influences the intention to buy environmentally friendly products. However, research findings on this topic are not always clear and consistent. According to Botetzagias et al. (2015), this is because environmental

concern does not influence environmentally friendly behavior directly, but rather indirectly. In addition, Bamberg (2003) also suggests that it is incorrect to assume that environmental concern is a direct predictor of specific behavior. He argues that only situation-specific cognitions directly determine specific behavior. So, according to these claims, environmental concern does not directly, but indirectly influences individuals' behavioral intention. Therefore, it is useful to better understand the moderating role of environmental concern in the relationship between social influence and purchase intention.

Previous literature suggests that social factors have varying influences on consumer behavior depending on different contexts (Jayaraman et al., 2017; Pristl et al., 2021). For example, Liang et al. (2021) indicates that individuals with a high concern for the environment are more open to receive information from others. Thus, they are willing to accept informative social influence. In addition, people who are concerned about the environment are more likely to follow social norms and meet the expectations of others. In better terms, people with high environmental concerns are more socially influenced compared to individuals with lower environmental concerns (Lee et al., 2014). According to Clark et al. (2019), real and sustainable change through social influence can only be achieved if individuals actively participate in environmentally friendly behavior. The study of Mishra et al. (2023) indicates that people with high environmental concerns are more engaged in how they want to be seen by their social environment. This may result in them being more socially influenced. In other words, their strong environmental concern may make them more sensitive to the norms and expectations in their social circle, which may reinforce their intention to buy sustainable products.

Looking at existing research, a study about Solar PV panels has shown a positive moderating effect of environmental concern in the relationship between social influence and the willingness to purchase (Liang et al., 2021). This suggests that when people have more environmental concerns, these concerns may strengthen their response to social influences in shaping their intention to buy a product. However, the moderating effect has not yet been studied in the context of sustainable fashion. Based on existing literature, it can be assumed that consumers' level of environmental concern affects the relationship between social influence and purchase intention. Therefore, the following hypothesis is proposed:

**H4:** Environmental concern positively moderates the relationship between social influence and consumers' purchase intention of sustainable fashion.

#### 2.7 Conceptual model

This study aims to identify the effect of perceived environmental knowledge and social influence on consumers' purchase intention of sustainable fashion. Specifically, the relationship between environmental knowledge and purchase intention considers the moderating effect of green skepticism, and the relationship between social influence and purchase intention considers the moderating effect of environmental concerns. A clear overview of the conceptual model of this study is shown in Figure 1.

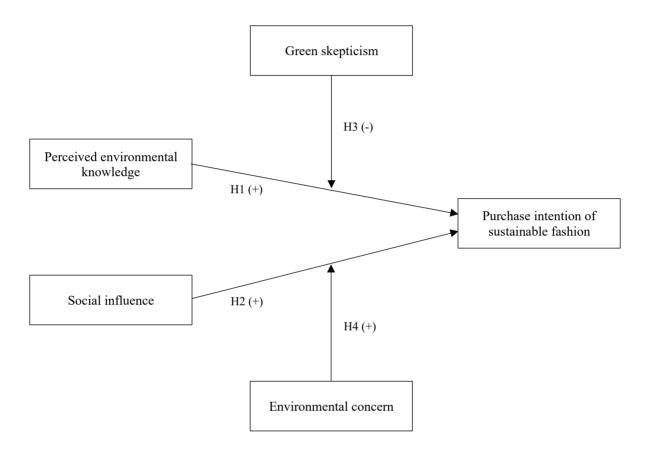


Fig. 1. Conceptual model

#### 3. Method

This chapter outlines the methodology used to achieve the research objectives. This includes the research design, data collection, the instruments used to measure the concepts central in this study, data analysis, sample demographics, and assumptions.

#### 3.1 Research design

The main purpose of this study is to investigate the influence of perceived environmental knowledge and social influence on consumers' purchase intention regarding sustainable fashion. In addition, it examines the moderating effect of green skepticism in the relationship between perceived environmental knowledge and purchase intention and the moderating effect of environmental concern in the relationship between social influence and purchase intention. To test the hypotheses, a quantitative study was conducted using an online questionnaire developed using Qualtrics (Appendix A). The research method allows for understanding consumers' perceptions and attitudes towards the different constructs and the relationships between them (Aithal & Aithal, 2020). Before the questionnaire was distributed to test the hypotheses, a pre-test was conducted to assess the effectiveness. The pre-test involved a representative group so that potential problems with the clarity, structure, and appropriateness of the measurement items could be identified and improved. This served as a valuable step in refining the questionnaire, improving its reliability, and ultimately ensuring the validity of the data collected in addressing the research objectives (Hallberg et al., 2018).

#### 3.2 Data collection

Data were collected through an online questionnaire with the aim to obtain a representative view of the perceptions and attitudes of Dutch consumers regarding the different constructs, involving different demographic groups. Respondents were approached for the questionnaire via social media platforms WhatsApp, LinkedIn, and Facebook. Due to the constraints on resources within the scope of this study, a targeted sample size of 200 was deemed appropriate. This sample size aligns with those commonly used in academic studies within the field of consumer behavior and marketing, which typically involve between 150 to 250 participants (Malhotra & Birks, 2006). This sample size is considered adequate to ensure the required statistical power needed for hypothesis testing and to provide effective answers to the research questions.

#### 3.3 Measurement items

All constructs were measured using multiple-items on a five-point Likert scale (1 = 'strongly disagree' to 5 = 'strongly agree') or seven-point Likert scale (1 = 'strongly disagree' to 7 = 'strongly agree'). Perceived environmental knowledge (IV), social influence (IV) and purchase intention of sustainable fashion (DV) were measured on a five-point Likert scale. The moderating variables, green skepticism, and environmental concern were measured on a seven-point Likert scale. The selected items were derived from established scales and previous validated literature. The specific measurement items for each concept can be found in Table 1.

For perceived environmental knowledge, items were adopted from Rausch & Kopplin (2021). These items align well with the concept of perceived environmental knowledge because they include specific behavioral aspects. They accurately measured participants' perceptions of their knowledge regarding concrete environmentally friendly actions and thus contributed to a thorough assessment of perceived environmental knowledge.

Social influence was measured using items from Penz & Drewes (2022). These items provide a solid measurement of the concept of social influence because they capture respondents' intention to purchase sustainable fashion based on approval from others, desire to emulate others and identification with others through similar sustainable fashion choices. This revealed the influence of social factors on purchasing intention and allowed the degree of socially influenced preferences to be accurately determined.

For green skepticism, items were used from Goh & Balaji (2016). These items are an effective measurement of the concept because they clearly highlight respondents' degree of skepticism toward environmental claims on packaging or in advertisements. They measured credibility and trust in such claims, with variation in responses accurately reflecting the degree of green skepticism.

Environmental concern was measured using items from Chuah et al. (2020). These items effectively measure the concept because they directly capture concern, personal impact, willingness to sacrifice and emotional involvement in environmental protection issues. Combined, they provide a holistic view of the extent to which individuals feel concerned about the environment.

The last concept, purchase intention of sustainable fashion, was measured using items from Rausch & Kopplin (2021). These items are appropriate because they give a good impression of respondents' willingness to purchase sustainable fashion. They capture different aspects of intention to purchase sustainable fashion and provide an accurate evaluation of respondents' willingness to make sustainable fashion choices.

This complete selection of items ensures the reliability and validity of measurement and provides a solid basis for exploring the relationships between all constructs in the study.

Table 1. Constructs, items, and references

Construct	Code	Item	References
Perceived	PEK1	1. I know how to behave sustainably.	(Rausch & Kopplin, 2021)
Environmental	PEK2	2. I know how I could lower the	
Knowledge		ecological harm with my behavior.	
	PEK3	3. I understand how I could reduce the	
		negative environmental consequences of	
		my behavior.	
	PEK4	4. I understand how to protect the	
		environment in the long-term.	
Social	SI1	1. When buying cloths, I generally	(Penz & Drewes, 2022)
Influence		purchase those (sustainable) fashion	
		brands that I think others will approve of.	
	SI2	2. If I want to be like someone, I often try	
		to buy the same (sustainable) fashion	
		brands that they buy.	
	SI3	3. I often identify with other people by	
		purchasing the same (sustainable) fashion	
		brands they purchase.	
	SI4	4. It is important that others like the	
		(sustainable) fashion brands I buy.	
Green	GS1	1. Most environmental claims made on	(Goh & Balaji, 2016)
Skepticism		labels or in advertising are not true.	
	GS2	2. Because environmental claims are	
		exaggerated, consumers would be better	
		off if such claims on package labels or in	
		advertising were eliminated.	
	GS3	Most environmental claims on labels or in	
		advertising are intended to mislead rather	
		than to inform consumers.	
	GS4	I do not believe in most of the	
		environmental claims made on labels or	
		in advertising.	

Environmental	EC1	1. I am concerned about the environment.	(Chuah et al., 2020)
Concern	EC2	2. The condition of the environment	
		affects the quality of my life.	
	EC3	3. I am willing to make sacrifices to	
		protect the environment.	
	EC4	4. I am emotionally involved in	
		environmental protection issues.	
Purchase	PI1	1. I consider purchasing sustainable	(Rausch & Kopplin, 2021)
Intention of		clothes.	
Sustainable	PI2	2. I intend to buy sustainable clothes	
Fashion		instead of conventional clothes in the	
		future.	
	PI3	3. I might possibly buy sustainable	
		clothes in the future.	
	PI4	4. I would consider to buy sustainable	
		clothes if I happen to see them in a(n)	
		(online) store.	

#### 3.4 Data-analysis

This research focuses on examining the relationship between perceived environmental knowledge and social influence as independent variables and purchase intention as dependent variable, with green skepticism and environmental concerns as moderators. A single linear regression analysis was applied, using the statistical computer program SPSS version 29.0.2.0, to examine the direct effects and the influence of the moderators on the relationship between the independent variables and purchase intention. This analytical approach made it possible to understand the mechanisms that determine consumers' purchase intention regarding sustainable fashion, and the role green skepticism and environmental concern play in this process.

#### 3.5 Sample demographics

Initially, 270 respondents participated in the questionnaire. However, 40 responses were deemed incomplete or unusable and therefore excluded from the analysis. Consequently, the final dataset comprised 230 valid responses, which were diverse in terms of demographic characteristics to enhance the generalizability of the findings. Within this final dataset, there were 52 male participants (22.6%) and 178 female participants (77.4%). Table 2 shows the descriptive statistics of the sample.

 Table 2. Descriptive statistics

Demographics	Frequency	%
Gender		
Male	52	22.6
Female	178	77.4
Other	0	0.0
Age		
<18	1	0.4
18-24	52	22.6
25-34	58	25.2
35-44	15	6.5
45-54	37	16.1
55-64	55	23.9
65 or older	12	5.2
Education		
High school	20	8.7
Secondary vocational education	48	20.9
Higher professional education	116	50.4
University education (bachelor)	16	7.0
University education (master)	27	11.7
PhD	1	0.4
Other	2	0.9
Net income per month		
<€1.000	40	17.4
€1.001 - €2.000	27	11.7
€2.001 - €3.000	73	31.7
€3.001 - €4.000	41	17.8
> €4.000	22	9.6
I prefer not to say	27	11.7
Total	230	100.0

#### 3.6 Assumptions

#### 3.6.1 Linearity

When performing linear regression analyses, it is essential to first check the assumption of linearity (Field, 2017). Scatterplots were used to assess this assumption. This study has two independent variables, perceived environmental knowledge, and social influence. Both independent variables are plotted against the dependent variable purchase intention (Appendix B). For both scatterplots, the data points show a clear linear relationship. This indicates that the assumption of linearity is met, suggesting that perceived environmental knowledge and social influence have a linear influence on purchase intention.

#### 3.6.2 Normality

Examining normality is another assumption that must be met before performing a regression analysis (Field, 2017). This assumption was examined using two methods, namely the histogram and the P-P plot (Appendix B). These methods make it possible to assess the distribution of residuals. The histograms for both independent variables show that the residuals are approximately normally distributed. The P-P plots for both independent variables show that most of the points are close to the line, which also suggests that the residuals are normally distributed. Based on these two graphical methods, it was concluded that the assumption of normality is met.

#### 3.6.3 Homoscedasticity

Homoscedasticity indicates that the variance of the residuals remains constant over the entire range of predicted values (Field, 2017). This assumption was checked by analyzing scatterplots, in which the standardized residuals were plotted against the standardized predicted values (Appendix B). The result of the analysis of the scatterplots for both independent variables shows that the residuals are constant over the range of predicted values, with no clear patterns or trends. This suggests that the variance of the residuals remains constant for both independent variables, indicating that the homoscedasticity assumption is met.

#### 3.6.4 Independence

Independence is another important assumption that must be checked before a regression analysis can be performed. This assumption implies that there is no correlation between the residuals, which can be checked by performing a Durbin-Watson test (Field, 2017). A Durbin-

Watson test statistic close to 2 indicates that the residuals have no correlation. A higher value than 2 indicates a negative correlation, in contrast, a lower value than 2 indicates a positive correlation. Based on the rule of thumb, values below 1 or above 3 are considered concerning (Field, 2017). The Durbin-Watson scores of 1.837 and 1.853 for the two different independent variables in this study indicate that the residuals are largely independent of each other (Table 3 and 4). Since both scores are close to 2, there is no significant indication of positive or negative correlation. This suggests that the assumption of independence is adequately met in this regression analysis.

**Table 3.** Durbin-Watson test with IV = PEK

Model	R	R square	Adjusted	Std. Error of the	Durbin-
			R Square	Estimate	Watson
1	.083	.007	.003	2.60338	1.837

a. Predictors: (Constant), PEK

b. Dependent Variable: PI

**Table 4.** Durbin Watson test with IV = SI

Model	R	R square	Adjusted	Std. Error of the	Durbin-
			R Square	Estimate	Watson
1	.175	.031	.026	2.57210	1.853

a. Predictors: (Constant), SI

b. Dependent Variable: PI

#### 3.6.5 Multicollinearity

A final assumption that must be checked is multicollinearity. This is an assumption that should be checked for models with more than one independent variable. Multicollinearity occurs when there is a strong correlation between two or more independent variables (Field, 2017). The assumption is checked using the Variance Inflation Factor (VIF). Several guidelines have been established to interpret the results. A VIF greater than 10 or a tolerance below 0.1 indicates a serious multicollinearity problem, while a mean VIF significantly higher than 1 may indicate bias in the regression; a tolerance below 0.2 may also indicate a potential problem (Field, 2017). A VIF of 1.004 for the independent variables in this study indicates minimal multicollinearity, implying that the correlation between the variables is very low (Table 5). This suggests that there is no significant problem with multicollinearity in the model which means the assumption is met.

 Table 5. Collinearity statistics

Model		Collinearity	Statistics
		Tolerance	VIF
1	(Constant)		
	PEK	.996	1.004
	SI	.996	1.004

#### 4. Results

This chapter presents the results of the study, focusing on analyzing and interpreting the collected data obtained through the conducted questionnaire. This analysis provides insight into how the variables from the conceptual model interact and influence each other by performing a regression analysis.

#### 4.1 Reliability

In empirical research, assessing reliability is essential for evaluating the consistency of a measurement instrument (Field, 2017). In this study, Cronbach's Alpha is used to assess reliability, which is a measure of the internal consistency between different items that measure the same construct. The degree of internal consistency is expressed as a value between 0 and 1, with a higher score suggesting higher consistency (Tavakol & Dennick, 2011). Table 6 shows the reliability, mean and standard deviation for each variable in this study.

**Table 6.** Descriptive statistics and reliability

Scale category	Mean	Standard	Cronbach's	Number of
		Deviation	Alpha	items
Perceived Environmental Knowledge	3.62	0.57	0.791	4
Social Influence	2.07	0.69	0.738	4
Green Skepticism	4.18	1.09	0.837	4
Environmental Concern	4.22	1.15	0.813	4
Purchase Intention	3.49	0.65	0.808	4

Overall, the Cronbach's Alpha results indicate that the scales used in this study show favorable internal consistency. Based on the rule of thumb, the scales range from 'acceptable' to 'good' (Woollins, 1992). The reliability coefficients for green skepticism (0.837) and environmental concern (0.813) are classified as 'Good'. Although the social influence scale has a slightly lower coefficient of 0.738, it is still considered 'Acceptable' for empirical research. These findings suggest that the items within each scale are well-correlated, thereby supporting the reliability of the questionnaire results and providing a robust foundation for further analyses.

#### 4.2 Collinearity analysis

A correlation analysis using Spearman's Rho was conducted to investigate the relationships between the variables in this study (Table 7). The analysis revealed several significant

relationships among these variables. Notably, environmental concern demonstrated significant positive correlations with multiple variables. Additionally, social influence showed significant correlations with environmental concern and purchase intention. In contrast, green skepticism did not show significant correlations with other variables, suggesting a more complex relationship within the model.

Table 7. Correlation

		PEK	SI	GS	EC
SI	Cor. Coefficient	.102			
	Sig. (2-tailed)	.124			
GS	Cor. Coefficient	007	.003		
	Sig. (2-tailed)	.917	.960		
EC	Cor. Coefficient	.172**	.142*	041	
	Sig. (2-tailed)	.009	.032	.532	
PI	Cor. Coefficient	.121	.149*	030	.510**
	Sig. (2-tailed)	.068	.023	.650	<.001

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

#### 4.3 Regression results

The hypotheses in this study were tested using a single linear regression model. Through this model, the relationships of both perceived environmental knowledge and social influence with purchase intention were examined. In addition, the moderating effect of green skepticism in the relationship between perceived environmental knowledge and purchase intention and the moderating effect of environmental concern in the relationship between social influence and purchase intention were examined.

#### 4.3.1 Direct effect of perceived environmental knowledge on purchase intention

The first hypothesis suggests that perceived environmental knowledge has a positive direct effect on consumers' purchase intention of sustainable fashion. To test this hypothesis, a linear regression analysis was performed. The results are interpreted at the 5% significance level ( $\alpha = 0.05$ ) (Table 8). The regression model shows a non-significant relationship between perceived environmental knowledge and purchase intention (.083, p = .210). This suggests that the level of consumers' perceived environmental knowledge does not significantly influence their

<sup>\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

intention to purchase sustainable fashion products. Additionally, the R square value of 0.007 indicates that only 0.7% of the variance in purchase intention is explained by perceived environmental knowledge, highlighting the minimal impact of this variable on the dependent variable. Based on this outcome, it can be concluded that hypothesis 1 is not supported.

Table 8. Results hypothesis 1

			Standardized		
	Unstandardized	Coefficients	Coefficients		
Model	В	Std. Error	Beta	t-value	Sig.
(Constant)	12.633	1.095		11.533	<.001
Perceived Environmental	.094	.075	.083	1.256	.210
Knowledge					

#### 4.3.2 Direct effect of social influence on purchase intention

The second hypothesis suggests that social influence has a positive direct effect on consumers' purchase intention of sustainable fashion. The R square value of 0.031 indicates that 3.0% of the variance in purchase intention is explained by social influence, indicating that social influence plays a role in the decision to buy sustainable clothing for only a small group of consumers. As shown in Table 9, the regression model shows a significant positive relationship between social influence and purchase intention (.175, p = .008). This suggests that social influence significantly influences consumers' intention to purchase sustainable fashion products. Based on this outcome, it can be concluded that hypothesis 2 is supported.

**Table 9.** Results hypothesis 2

			Standardized		
	Unstandardized	Coefficients	Coefficients		
Model	В	Std. Error	Beta	t-value	Sig.
(Constant)	12.636	.533		23.716	<.001
Social Influence	.163	.061	.175	2.682	.008

#### 4.3.3 Moderating role of green skepticism

The third hypothesis suggest that green skepticism negatively moderates the relationship between perceived environmental knowledge and consumers' purchase intention of sustainable fashion. In other words, as consumers' green skepticism increases, the positive influence of environmental knowledge on the purchase intention of sustainable fashion decreases. To test this hypothesis, a moderation analysis was performed. The combination of perceived environmental knowledge, green skepticism and their interaction predicted 1.6% of the variance in purchase intention ( $R^2 = .016$ , F(3, 226) = 1.206, p = .308), indicating a relatively small explanatory power of the model. As shown in Table 10, green skepticism has no significant negative relationship with purchase intention (-.273, p = .445). Also, the interaction term between perceived environmental knowledge and green skepticism is not statistically significant (.222, p = .597). This implies that the influence of perceived environmental knowledge on purchase intention remains consistent, regardless of the level of green skepticism exhibited by consumers. Therefore, hypothesis 3 is not supported.

**Table 10.** Results hypothesis 3

			Standardized		
	Unstandardized	Coefficients	Coefficients		
Model	В	Std. Error	Beta	t-value	Sig.
(Constant)	15.318	3.712		4.127	<.001
Perceived Environmental	032	.254	029	128	.899
Knowledge					
Green Skepticism	162	.212	273	766	.445
Perceived Environmental	.008	.014	.222	.529	.597
Knowledge x Green					
Skepticism					

#### 4.3.4 Moderating role of environmental concern

The fourth hypothesis suggest that environmental concern positively moderates the relationship between social influence and consumers' purchase intention of sustainable fashion. In other words, consumers who are more concerned about the environment are more strongly influenced by social pressure to buy sustainable fashion. The combination of social influence, environmental concern, and their interaction predicted 34.6% of the variance in purchase intention ( $R^2 = .346$ , F(3, 226) = 39.813, p < .001), indicating a relatively strong explanatory power of the model. As shown in Table 11, environmental concern has a significant positive relationship with purchase intention (1.030, p < .001). This suggests that higher levels of environmental concern are associated with higher purchase intentions for sustainable fashion. However, the interaction term between social influence and environmental concern is

statistically significant and negative (-.887, p < .001). This indicates that the positive effect of social influence on purchase intention decreases as environmental concern increases. In other words, while social influence generally encourages the purchase intention of sustainable fashion, its impact is weaker for consumers with higher environmental concern. Therefore, despite the initial hypothesis suggesting a positive moderation, the results indicate that environmental concern negatively moderates the relationship between social influence and purchase intention. Based on this outcome, it could be concluded that hypothesis 4 is not supported.

Table 11. Results hypothesis 4

			Standardized		
	Unstandardized	Coefficients	Coefficients		
Model	В	Std. Error	Beta	t-value	Sig.
(Constant)	3.432	1.486		2.309	.002
Social Influence	.696	.180	.746	3.876	<.001
Environmental Concern	.581	.086	1.030	6.778	<.001
Social Influence x	035	.010	887	-3.495	<.001
Environmental Concern					

#### 4.3.5 Overview hypotheses results

Table 12 provides a clear overview of the findings for each hypothesis.

Table 12. Overview results

Hypothesis		Findings
H1	Perceived environmental knowledge positively affects consumers'	Rejected
	purchase intention of sustainable fashion.	
H2	Social influence positively affects consumers' purchase intention of	Accepted
	sustainable fashion.	
Н3	Green skepticism negatively moderates the relationship between	Rejected
	perceived environmental knowledge and consumers' purchase	
	intention of sustainable fashion.	
H4	Environmental concern positively moderates the relationship	Rejected
	between social influence and consumers' purchase intention of	
	sustainable fashion.	

#### 5. Discussion

This chapter presents a discussion of the findings of the study and answers the main research question and sub questions. It also outlines the theoretical and practical implications, describes the study's limitations, and offers directions for future research.

#### 5.1 Discussion of findings

This section first examines the effect of perceived environmental knowledge and social influence on consumers' purchase intention of sustainable fashion. This is followed by a discussion of the moderating effect of green skepticism in the relationship between perceived environmental knowledge and purchase intention. Then the moderating effect of environmental concern in the relationship between social influence and purchase intention is discussed. The findings of this study reject hypothesis 1 that perceived environmental knowledge has a significant positive effect on consumers' purchase intention of sustainable fashion. This outcome contrasts with several existing studies on consumer behavior (Yadav & Pathak, 2016; Moslehpour et al., 2023). One reason that could explain the lack of significant influence is that other factors, such as perceived product price and quality, could play a greater role in shaping consumers' purchasing decisions regarding sustainable fashion (Qomariah & Prabawani, 2020). Furthermore, the unique nature of fashion products might also weaken the impact of perceived environmental knowledge. Consumers often prioritize style and personal expression over environmental considerations when it comes to fashion. This is highlighted by Mandarić et al. (2022), which also states that in the fashion industry, more importance is placed on factors such as price, size, style, and materials, while environmental considerations are important to only a small percentage of consumers (Farzin et al., 2023). These findings underscore the complexity of consumer behavior and suggest that increasing perceived environmental knowledge alone may not be sufficient to drive higher purchase intentions for sustainable fashion.

Besides perceived environmental knowledge being examined as a direct determinant of purchase intention, the direct effect of social influence was also investigated. The findings of this study support hypothesis 2 that social influence has a significant positive effect on consumers' purchase intention of sustainable fashion. This means that consumers are more likely to buy sustainable fashion products when they experience social influence, such as encouragement or approval from friends, family, or social networks (Ciasullo et al., 2017). The findings are consistent with previous studies about consumer behavior (Tjokrosaputro & Cokki, 2020; Ho et al., 2020; Oncioiu & Ifrim, 2022). The significant impact of social influence on purchase intention highlights the importance of social dynamics in consumer behavior. This

outcome underscores the power of social networks and peer pressure in shaping consumer choices, particularly in the context of sustainable consumption. When individuals perceive that their social circle values and endorses sustainable fashion, they are more inclined to align their purchasing behavior with these social norms to gain social approval and maintain social harmony. This phenomenon can be explained through theories such as the Theory of Planned Behavior which suggest that individuals' intentions and behaviors are significantly influenced by the expectations and behaviors of those around them (Ajzen, 1991).

Besides examining the direct effect of perceived environmental knowledge on purchase intention of sustainable fashion, the moderating role of green skepticism in this relationship was also examined. Previous studies suggest that while environmental knowledge generally enhances purchase intention of sustainable products, skeptical consumers may question the validity and relevance of environmental information provided by companies (Mohr et al., 1998; Goh & Balaji, 2016). This could potentially diminish the impact of perceived environmental knowledge on purchase intention, as skeptical attitudes may lead consumers to discount or disregard environmental claims (Obermiller et al., 2005). However, the findings of this study reject hypothesis 3 that green skepticism does negatively moderate the relationship between perceived environmental knowledge and purchase intention. So, while skepticism may influence perceptions of green marketing claims, it does not diminish the impact of perceived environmental knowledge on purchase decisions in this specific context. This unexpected result may have arisen because consumers with a high level of environmental knowledge have already made a strong commitment to sustainable practices, making them less susceptible to skepticism. Their purchase intentions may be driven more by intrinsic values and a genuine concern for the environment, rather than external marketing claims (Uddin et al., 2023). In addition, a recent study shows that even consumers with a deep knowledge of the environment cannot always recognize vague greenwashing claims (de Sio et al., 2022). This implies that green skepticism may not have a significant negative moderating effect because consumers, even those with high environmental knowledge, are still vulnerable to well-executed greenwashing. Another potential explanation is the level of trust consumers have in the brands they purchase from. If consumers trust a brand, they may be less skeptical of its environmental claims, thereby reducing the moderating influence of green skepticism. This is supported by findings that show when trust in green claims is considered, skepticism does not directly impact purchase intentions (de Sio et al., 2022).

Understanding the direct impact of social influence on purchase intention provided the basis for examining how other factors may act on this relationship. In particular, the moderating

role of environmental concern needed further investigation. Environmental concern, defined as a general attitude or value orientation towards environmental protection that reflects an individual's level of concern for the environment, could potentially enhance the effects of social influence (Liang et al., 2021). Therefore, hypothesis 4 was developed which states that environmental concern positively moderates the relationship between social influence and consumers' purchase intention of sustainable fashion. However, this hypothesis is rejected because the current study showed that the moderating effect of environmental concern in this relationship is not positive, but significantly negative. Several possible explanations can account for this unexpected finding. Firstly, individuals with high environmental concern might possess a stronger personal commitment to sustainability that makes them less susceptible to social influence (Bamberg, 2003; Simiyu & Kariuki, 2024). For these individuals, their personal values and beliefs about environmental protection could overshadow the impact of social norms and peer pressure. They might already be making sustainable choices independently, thus reducing the relative influence of social factors on their purchasing decisions. Secondly, the concept of environmental locus of control can play an important role. People with external environmental locus of control believe that a situation is beyond their control (Trivedi et al., 2015). If these consumers believe that solving environmental problems requires external intervention rather than individual action, they may feel powerless and uninvolved. This feeling of helplessness further inhibits the translation of environmental concerns into behavior, reducing the impact of social influence on their purchase intentions.

#### **5.2 Conclusion**

The aim of this study was to understand the extent to which perceived environmental knowledge and social influence determine consumers' purchase intention of sustainable fashion. This was examined by focusing on the following main research question: "What is the effect of perceived environmental knowledge and social influence on consumers' purchase intention of sustainable fashion?". The findings indicate that social influence plays a crucial role in increasing the likelihood of purchasing sustainable fashion, emphasizing the importance of social approval and recommendations from friends, family, and social networks (Tjokrosaputro & Cokki, 2020; Jony et al., 2021; Farzin et al., 2023). However, perceived environmental knowledge alone does not significantly affect purchase intentions, suggesting that merely being informed about environmental issues does not necessarily lead to higher intent to buy sustainable fashion.

Besides the aim of understanding possible direct determinants of consumers' purchase intention, another objective was to investigate a moderating effect in these relationships. For the relationship between perceived environmental knowledge and purchase intention of sustainable fashion, the aim was to investigate the moderating effect of green skepticism. This was examined by focusing on the following sub research question: "To what extent does green skepticism moderate the relationship between perceived environmental knowledge and consumers' purchase intention of sustainable fashion?". The results show that green skepticism does not significantly alter the influence of perceived environmental knowledge on purchase intentions, emphasizing that consumers' skepticism about green claims does not affect how their environmental knowledge influences their purchase decisions.

The final aim was to identify the moderating role of environmental concern in the relationship between social influence and purchase intention of sustainable fashion. This was examined by focusing on the following sub research question: "To what extent does environmental concern moderate the relationship between social influence and consumers' purchase intention of sustainable fashion?". The findings show that higher levels of environmental concern reduce the impact of social influence on purchase intention. This suggests that although social influence generally encourages sustainable fashion purchases, its effect is less prominent among consumers who are more concerned about the environment.

In conclusion, purchasing sustainable fashion is not just about the seeds of knowledge we plant in consumers' minds; it's also about the environmental and social soil in which these seeds grow. This study underscores the importance of social environments and environmental concern in cultivating sustainable consumer habits, reminding us that knowledge alone is not always enough to drive change.

#### 5.3 Theoretical implications

This study provides valuable contributions to the understanding of consumer behavior in the context of sustainable fashion. Firstly, it challenges and extends the existing conceptualization of the role of perceived environmental knowledge in consumer purchase intention. The contrary results compared to common assumptions in the literature (Yadav & Pathak, 2016; Moslehpour et al., 2023), highlight the complexity of consumer decision making in the fashion industry and suggest that other factors, such as perceived product price, quality, and style may play a more critical role (Qomariah & Prabawani, 2020; Mandarić et al., 2022). Secondly, this research contributes to the conceptualization of social influence as an important determinant of purchase intention. It highlights the importance of social dynamics and networks in shaping consumer

behavior (Ajzen, 1991). Moreover, the study delves into the previously unexplored area of the moderating effects of green skepticism and environmental concern. The investigation into the moderating role of green skepticism in the relationship between perceived environmental knowledge and purchase intention addresses a gap in the literature. Contrary to previous expectations, this study found that green skepticism does not have a significant moderating effect in this relationship. This finding challenges existing assumptions and suggests that consumers' distrust and beliefs about environmental claims may not impact their purchasing intentions as strongly as previously thought (Goh & Balaji, 2016). Furthermore, research on the moderating effect of environmental concern in the relationship between social influence and purchase intention addresses another crucial gap (Liang et al., 2021). While previous research has recognized the importance of social influence in shaping consumer purchase intentions, this study shows how personal environmental concern can change the impact of social influence.

#### 5.4 Practical implications

This study offers several practical implications for various stakeholders in the fashion industry. For brand managers, the findings emphasize the need to understand the complex factors influencing consumer behavior towards sustainable fashion. Given that perceived environmental knowledge alone does not drive purchase intention, brands should focus on other elements such as perceived product price, quality and style (Qomariah & Prabawani, 2020; Mandarić et al., 2022). Effective marketing strategies should integrate these aspects while maintaining transparency and authenticity in sustainability claims to mitigate green skepticism (Bhaduri & Copeland, 2021). Social influence also plays a critical role, suggesting that brands should leverage social networks and influencers to promote sustainable fashion products. Encouragement and approval from friends and family can significantly boost consumer interest in sustainable fashion, highlighting the power of social dynamics (Clark et al., 2019). For supply chain managers, the insights on environmental concern suggest a need to implement and communicate genuine sustainable practices throughout the supply chain. This can help reduce skepticism and align with the values of environmentally concerned consumers, who might otherwise be critical of superficial sustainability efforts (Das & Rao Posinasetti, 2015). Lastly, policymakers can use these findings to develop regulations that promote transparency and accountability in sustainability claims, thus enhancing consumer trust and supporting the overall shift towards sustainable consumption (Gardner et al., 2019).

#### 5.5 Limitations and future research

While this study provides valuable insights into consumer behavior regarding sustainable fashion, it also has some limitations that should be acknowledged. These limitations highlight areas for future research to explore. First, the sample size of 230 Dutch consumers, with a gender imbalance of 52 men and 178 women, limits the generalizability of the findings. The overrepresentation of female respondents may bias the results, as women tend to be more environmentally conscious and fashion-oriented than men (Cho et al., 2015). Future research should aim for a more balanced gender distribution to ensure that the findings are representative of the broader population. Additionally, the study's focus on Dutch consumers means that the results may not be applicable to consumers in other cultural or geographical contexts, where different environmental attitudes and fashion consumption patterns may prevail (Khan et al., 2024). Expanding the research to include diverse international samples would provide a more comprehensive understanding of the global sustainable fashion market. Another limitation is the reliance on self-reported data, which may be subject to social desirability bias. Respondents might overstate their environmental knowledge or intention to purchase sustainable fashion to align with socially acceptable norms (Bhattacharyya, 2022). Future studies could incorporate behavioral measures or longitudinal designs to capture actual purchasing behavior over time, providing a more accurate picture of consumer actions. Furthermore, this study did not consider control variables such as income level, education, or age, which could influence the relationships between environmental knowledge, social influence, and purchase intention (Dangelico et al., 2022). Incorporating these control variables in future research could yield additional insights into the complex interplay of factors driving sustainable fashion consumption. Another limitation is the broad focus on the fashion industry in general, without differentiating between segments such as slow fashion and fast fashion. Exploring how the identified relationships vary across these different segments could provide nuanced insights into how sustainability practices and consumer perceptions differ by context (Zarley Watson & Yan, 2013). This differentiation is crucial for tailoring marketing and brand management strategies effectively. Finally, this study suggests that there are other factors more important than perceived environmental knowledge in influencing consumers' purchase intention of sustainable fashion. Future research should focus on identifying and empirically testing these factors, such as perceived product price and quality, to better understand their relative importance and interactions in shaping consumer behavior (Qomariah & Prabawani, 2020).

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# Appendices Appendix A – Questionnaire

### Purchase intention of sustainable fashion

Dear participant,

Thank you for participating in my survey. My name is Famke Smelt, and I am a master's student in Business Administration at the University of Twente. I am currently working on my master thesis and your participation in this survey would help me a lot. The aim of the research is to get insight in consumers' purchase intention of sustainable fashion.

Completing the survey, which consists of 6 sections, takes about 4 minutes and is completely voluntary. Your participation is anonymous and the information you provide will be kept confidential. Your data will only be used for research purposes. After completing the thesis, all data will be destroyed.

If you have any questions/comments, please contact me at: f.l.smelt@student.utwente.nl

Thank you in advance for your participation!

Kind regards, Famke Smelt

#### Permission:

o I confirm that I have read the information above and participate in this study on a voluntary basis.

Please read the following definition of sustainable fashion carefully before proceeding to complete the survey.

Sustainable fashion encompasses practices that reduce the environmental impact of clothing and improve social conditions in the production chain. It includes the use of recycled materials, fair working conditions, second-hand clothing, and vegan fashion.

#### **Section 1**

The following questions are related to purchasing (sustainable) clothing.

Do you pay attention to sustainability when buying clothes?

- o Yes
- o No

Have you ever bought sustainable clothing?

- o Yes
- o No
- o Not that I know of

#### **Section 2**

The following statements are related to environmental behavior. Please indicate the extent to which the following statements are applicable to you. (Rausch & Kopplin, 2021)

PEK1. I know how to behave sustainably.

- Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

PEK2. I know how I could lower the ecological harm with my behavior.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

PEK3. I understand how I could reduce the negative environmental consequences of my behavior.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

PEK4. I understand how to protect the environment in the long-term.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

#### **Section 3**

The following statements are related to social influence. Please indicate the extent to which the following statements are applicable to you.

SI1. When buying clothes, I generally purchase those (sustainable) fashion brands that I think others will approve of.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

SI2. If I want to be like someone, I often try to buy the same (sustainable) fashion brands that they buy.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

SI3. I often identify with other people by purchasing the same (sustainable) fashion brands they purchase.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

SI4. It is important that others like the (sustainable) fashion brands I buy.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

#### **Section 4**

The following statements are related to your perception of environmental claims. Please indicate the extent to which the following statements are applicable to you.

GS1. Most environmental claims made on labels or in advertising are **not** true.

- o Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- o Somewhat agree
- o Agree
- Strongly agree

GS2. Because environmental claims are exaggerated, consumers would be better off if such claims on labels or in advertising were eliminated.

- Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- o Somewhat agree
- o Agree
- o Strongly agree

GS3. Most environmental claims on labels or in advertising are intended to mislead rather than to inform consumers.

- o Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- o Somewhat agree
- o Agree
- o Strongly agree

GS4. I do **not** believe in most of the environmental claims made on labels or in advertising.

- o Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- Somewhat agree
- o Agree
- o Strongly agree

#### **Section 5**

The following statements are related to your environmental concerns. Please indicate the extent to which the following statements are applicable to you.

EC1. I am concerned about the environment.

- Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- o Somewhat agree
- o Agree
- o Strongly agree

EC2. The condition of the environment affects the quality of my life.

- o Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- o Somewhat agree
- o Agree
- o Strongly agree

EC3. I am willing to make sacrifices to protect the environment.

- o Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- o Somewhat agree
- o Agree
- o Strongly agree

EC4. I am emotionally involved in environmental protection issues.

- Strongly disagree
- o Disagree
- o Somewhat disagree
- o Neutral
- o Somewhat agree
- o Agree
- o Strongly agree

#### Section 6

The following statements are related to your purchase intention. Please indicate the extent to which the following statements are applicable to you.

PI1. I consider purchasing sustainable clothes.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

PI2. I intend to buy sustainable clothes instead of conventional clothes in the future.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

PI3. I might possibly buy sustainable clothes in the future.

- Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

PI4. I would consider to buy sustainable clothes if I happen to see them in a(n) (online) store.

- o Strongly disagree
- o Disagree
- o Neutral
- o Agree
- o Strongly agree

## **Demographic questions**

What is	your	gender?	
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- o Male
- o Female
- o Other

## What is your age?

- 0 <18
- 0 18-24
- 0 25-34
- 0 35-44
- 0 45-54
- 0 55-64
- o 65 or older

## What is your nationality?

Do you live in the Netherlands?

- o Yes
- o No
- o Partly

What is the highest level of education you have completed?

- o High school
- o Secondary vocational education
- Higher professional education
- University education (bachelor)
- University education (master)
- o PhD
- o Other

What is your monthly net income?

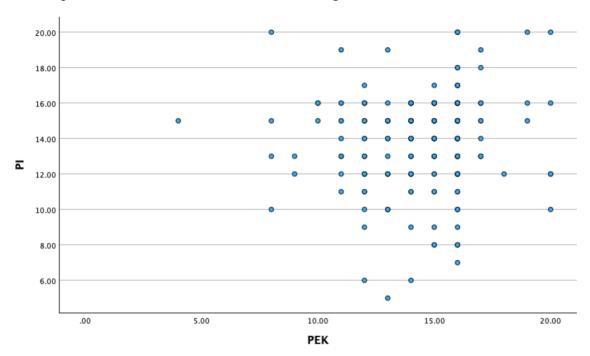
- <€1.000
- €1.001 €2.000
- €2.001 €3.000
- €3.001 €4.000
- > €4.000
- o I prefer not to say

Thank you for participating in this survey!

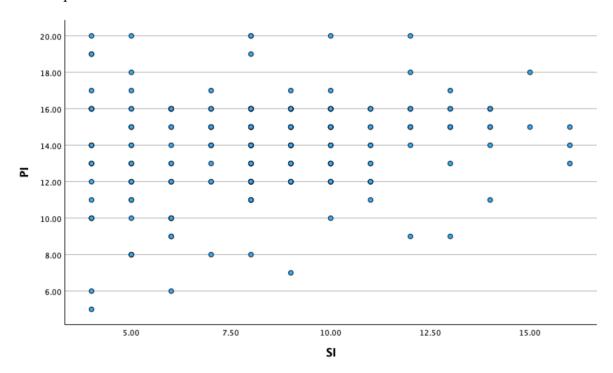
# Appendix B – Assumptions outcomes SPSS

# 1. Linearity

Scatterplot 1: Perceived Environmental Knowledge – Purchase Intention

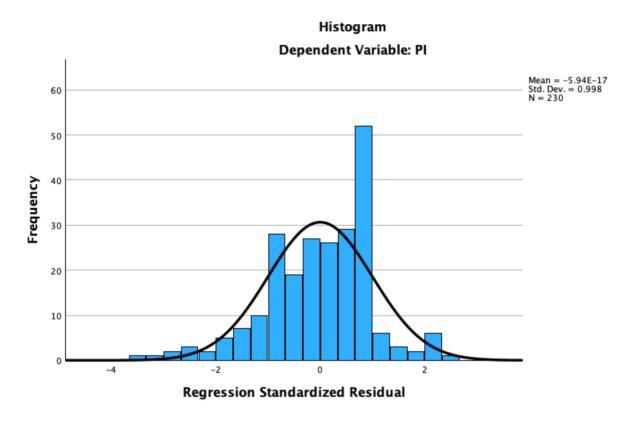


Scatterplot 2: Social Influence – Purchase Intention

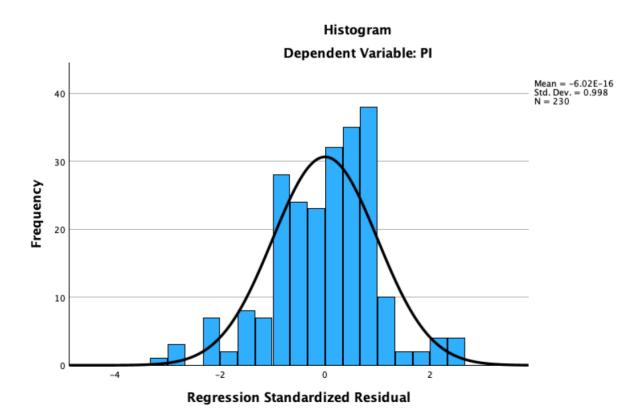


# 2. Normality

Histogram 1: Independent variable Perceived Environmental Knowledge

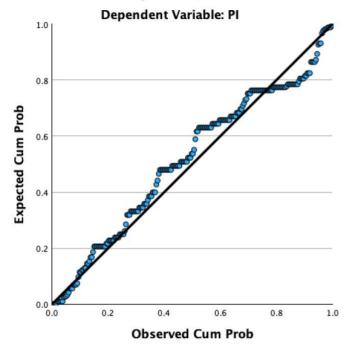


Histogram 2: Independent variable Social Influence



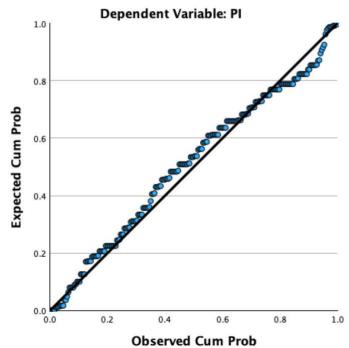
## P-P Plot 1: Independent variable Perceived Environmental Knowledge

Normal P-P Plot of Regression Standardized Residual



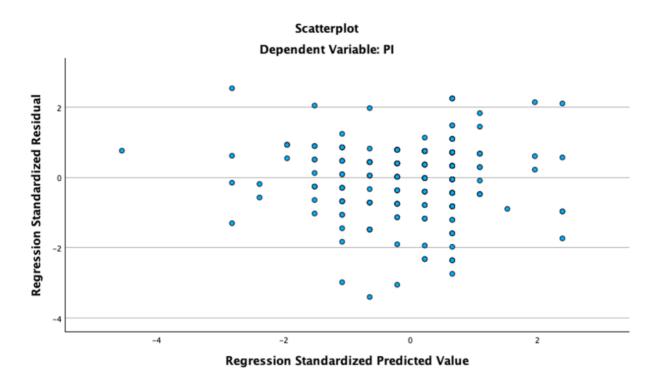
P-P Plot 2: Independent variable Social Influence

Normal P-P Plot of Regression Standardized Residual



## 3. Homoscedasticity

Scatterplot 1: Perceived Environmental Knowledge – Purchase Intention



Scatterplot 2: Social Influence – Purchase Intention

