

LUND UNIVERSITY School of Economics and Management

# SURVIVING IN THE ERA OF SUSTAINABILITY MARKETING

The impact of green claims on consumers' purchase intention of environmentally friendly fashion products

by

Ilse van de Haar

Louise Hesseborn

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> Supervisor: Burak Tunca Examiner: Javier Cenamor

# Abstract

Title	Surviving in the Era of Sustainability Marketing – The impact of green claims on consumers' purchase intention of environmentally friendly fashion products	
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Authors	Ilse van de Haar and Louise Hesseborn	
Supervisor	Burak Tunca	
Keywords	Green Claims, Environmental Sustainability, the 5 I's of Green Marketing, Purchase Intention, Sustainable Fashion.	
Thesis Purpose	The objective of this study is to research how vocal green companies can use green claims in online marketing advertisement text with the aim to recommend ways in which they can positively impact the purchase intention of environmentally friendly fashion products.	
Methodology	In this quantitative study, the data is analysed through correlations, after which significant differences are captured through the Fisher Z transformation, followed by a one-way ANOVA test analysing the gender effect.	
<b>Theoretical Perspective</b> The study is based upon main theories such as Green Purchase Intention, and the Theory the 5 I's of Green Mar		
Empirical Data	A web-based self-completion questionnaire has been used to obtain a total of 432 responses through convenience sampling.	
FindingsOur findings confirm that incorporating aspects of one of the (Intuitive, Innovative, Inviting and Informative) helps to po affect the purchase intention of environmentally friendly products; with the Innovative green claim having the highest of to enhance this purchase intention. The results also reveal impact of gender on the relationship between the different purchase intention of environmentally friendly fashion pro- limited, with gender only influencing the relationship of (Informative). The findings presented also show that femal have a higher purchase intention of environmentally fashion pro- compared to males for the second I (Innovative).		
Implications	This paper was able to successfully extend the theory of the 5 I's of Green Marketing to green claims, by researching ways in which vocal green fashion organisations can make most effective use of green claims in an online advertisement text. In order for managers of vocal green organisations to make a positive impact on the environment, by positively impacting the purchase intention of environmentally friendly products, it is advised to consider using one of the four green claims in an online advertisement that is most suitable to their brand.	

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Ilse van de Haar

Louise Hesseborn

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# 1 Introduction

'Environmentally friendly', 'Climate-neutral', and 'Sustainable choice' are just some examples of ambiguous terms used by organisations in 2020 to communicate about sustainable products and services. The increasing number of companies addressing sustainable practises in their communication almost makes it a 'must' to devote a considerable amount of marketing efforts to sustainability. Even though it seems sustainability is a trend that only gained traction in recent times, over the past 33 years, sustainable development has transformed from being a definition, firstly introduced by the World Commission on Environment and Development in 1987, to a dominant concept that is here to stay, both impacting and challenging business practises across different industries (Bengtsson, Alfredsson, Cohen, Lorek & Schroeder, 2018). This trend can also be observed in the concept of marketing, which, as a constantly changing discipline, transformed over time from mainly focusing on the functional values of doing business: selling products, labelled as marketing 1.0; to marketing 2.0, defined as a type of marketing in which there is a strong focus on meeting the wants and needs of the consumer; to a current form known as marketing 3.0, in which the company tries to deliver high-quality products addressing the wishes of the consumer while caring for the social and ecological environment by stimulating consumers to contribute in sustainable behaviour (Kotler, 2011). The latter can be seen as a type of sustainability marketing, which consists of a set of five different dimension characteristics, known as economic, environmental, social, ethical, and technological (Lim, 2016). Within the business environment, the concept of sustainability aims at improving the overall quality of life by managing the triple bottom line (Grant, 2007), which mainly addresses the first three factors, also referred to as people, planet and profit (Dyllick & Muff, 2016).

In parallel to corporations trying to stimulate green consumer behaviour, by offering greener alternatives, consumers also have become more environmentally conscious, therewith turned into complex and conscious human beings with increasing doubts, fears and concerns, affecting consumer behaviour (Kotler, 2011). This shift towards the conscious consumer is confirmed by a recent Deloitte report (2019) stating that consumers, especially Millennials and Generation Z, are worried about the threat of climate change. Particularly, young Nordic consumers are said to be changemakers driving the worldwide sustainability movement, acting as guiding lights for other consumer groups (Nordic council of ministers, 2019). This has increased the pressure for companies to act in a sustainable manner (Kotler, 2011). Even though there seems to be increasing awareness among consumers for sustainable products and services, it has been recognised that one of the main challenges for businesses in the future is making sustainability attractive for the consumers (White, Hardisty & Habib, 2019a). Meaning, in order to survive within the era of marketing 3.0, there is high importance for companies to understand the commercial opportunities, the consumer perspective of sustainability, and the ways in which sustainable practises can be communicated (Kotler, 2011).

One way in which companies have been communicating about their sustainable practices is through green claims, also known as environmental claims (European Commission, 2005).

These claims can be defined as a "practice of suggesting or otherwise creating the impression (in the context of commercial communication, marketing or advertising) that a product or a service, is environmentally friendly (i.e. it has a positive impact on the environment) or is less damaging to the environment than competing goods or services" (European Commission, 2005, p. 33). According to Carlson, Gove, Kangun (1993), environmental claims can be classified as either product-oriented, process-oriented, image-oriented, environmental fact-based or a combination of these. The different types of green claims can be integrated into both online and offline marketing text, such as on labels, packaging, and socials (Defra, 2011). According to Peattie (2015), there are a number of beneficial factors when using online platforms, e.g. it allows for sharing more explicit information, for more interactivity, and for more customised communication based on a consumer's search settings.

Companies operating in line with the objectives of marketing 3.0 are those both communicating to act in a sustainable way and live up to these promises, also known as 'vocal green organisations' (Delmas & Burbano, 2011). In contrast, there are corporations involved in greenwashing, with which they try to deceive consumers into believing the company is operating in a sustainably sound manner while actually being involved in unsustainable practices. (Delmas & Burbano, 2011). The increasing number of organisations involved in greenwashing practises has made it difficult to separate the 'good' from the 'bad', causing consumers to be more concerned and sceptical towards a companies' motives and sustainable practices (Neff, 2013; ABC, 2019; Deloitte, 2019). Research shows that in order for marketing operations to succeed, it is highly crucial consumers believe the claims that have been directed at them, especially when it comes to green claims (Peattie, 2015). In addition to the increasing scepticism of consumers towards claims, individuals are often misled by green claims and find the claims hard to interpret or understand (European Commission, 2005). Regalado (2019) confirmed this finding for the fashion industry by showing only 23% of the consumers believe they understand what is meant by fashion brands claiming to be sustainable.

As mentioned before, sustainability is impacting business practises across different industries. The fashion industry is after the oil industry rated as the second most polluting sector in the world (Conca, 2015, United Nations, 2015; Cotton, 2018). Contradictory to the increase of the environmentally-conscious consumer, green consumption has not transferred to the fashion industry yet, as the industry is still primarily focused on selling fast fashion to meet cosmetic wants and needs (McNeill & Moore, 2015; Roos, Sandin, Zamani, Peters & Svanström, 2016). In parallel, the fashion industry has been forced by the United Nations (2018) to take drastic action in terms of sustainability to "embrace a deeper, more systemic change" (p. 2). Even though we observe an increasing number of sustainable fashion brands launched in recent years, no systemic change has taken place yet. One factor potentially influencing the pace of this highly necessary change is the fact that companies are struggling to adopt and to communicate sustainable practices. This is due to the lack of a common definition of, and language for, sustainability in the fashion industry (European Commission, 2005; Henniger, Alevizou & Oates, 2016; Cheng, 2017; Evans & Pierson-Smith, 2017, 2018; Regalado, 2019). At the same time, consumers want companies to help them to be part of the movement and make a difference (Townsend, 2018). This is confirmed by Statista (2019), stressing that in 2018, 72% of consumers worldwide state they prefer to buy clothes from brands that are environmentally friendly. This strongly indicates the importance of vocal green fashion companies to get their voice heard in order to stimulate the purchase intention of their sustainable products.

## 1.1 Research Purpose

In general, major shifts have taken place in the area of sustainability, which is not translated into academic research yet. This is confirmed by Kemper & Ballantine (2019) stating that "the subject of sustainability marketing is being understudied" (p. 281). Within the era of marketing 3.0, corporations are pressured to understand commercial opportunities, while meeting the needs of the future and the increasingly environmentally conscious consumers, and must find effective ways to communicate this accordingly (Kotler, 2011). To date, vocal organisations have tried to use different types of green claims to communicate, both online and offline, about their sustainable products, processes, corporation, environmental impact, or a combination of these (Carlson, Gove, Kangun, 1993; Defra, 2011). Unfortunately, the high number of companies involved in greenwashing has made it difficult to separate the 'good' from the 'bad', causing consumers to be more concerned of, and sceptical towards, a company's motives and sustainable operations (European Commission, 2005; Delmas & Burbano, 2011; Neff, 2013; ABC, 2019; Deloitte, 2019). While an extensive amount of research is focused on greenwashing, including the misuse of green claims, not much literature addresses the positive side of using green claims. Simultaneously, the considerable use of green claims in practice is not reflected in academic research yet.

In parallel, research shows that consumers are often misled by green claims, and find the claims hard to interpret or understand, especially in the fashion industry where there is no common definition of, and language for, addressing sustainable fashion (European Commission, 2005; Evans & Pierson-Smith, 2017, 2018; Regalado, 2019). In this industry, there are only a few ways in which consumers can be made aware of sustainable brands, products, and services; with green claims being the main identifier. Previous research of sustainable communication, primarily focused on labels, has highlighted consumers' misunderstanding of green fashion terminology in a general manner (Brandting & Johansson, 2012). However, no substantial research has been conducted on how green claims can be used in the fashion industry in an effective manner.

Even though 72% of the consumers worldwide state they prefer to buy clothes from brands that are environmentally friendly (Townsend, 2018; Statista, 2019), green behaviour is not being transmitted to the industry in an impactful manner yet. This, in combination with the fact that the fashion industry is rated as the second most polluting sector in the world, forces the industry to change its operations tremendously (Conca, 2015, United Nations, 2015; Cotton, 2018; United Nations, 2018). The unclarity of communication surrounding sustainability in the fashion industry can be perceived as one of the main causes for the limited action taken by consumers to support this change by adopting more sustainable purchasing practises (Cheng, 2017). Thus, the lack of research on sustainability marketing with a specific focus on communication, such as green claims, to stimulate green purchase intention in the fashion industry is seen as a relevant gap to address and a valuable extension of the current literature on sustainability marketing. Furthermore, it has been highlighted that communicating sustainable fashion practices in a successful way allows fashion companies to strengthen their image and provides an opportunity to increase its competitive advantage (Henninger, Alevizou & Oates, 2016).

Based on these findings, the objective of this study is to research how vocal green companies can use green claims in online marketing advertisement text with the aim to recommend ways in which they can positively impact the purchase intention of environmentally friendly fashion products. This research problem can be translated into the following main research question:

To what extent do different types of green claims affect the purchase intention of environmentally friendly fashion products?

## 1.2 Outline of the Thesis

This thesis is separated into of six sections. In the previous chapter, the reader is introduced to the topic, in which we set the scene for the study and introduce some important terms and definitions. Followed by a section outlining the relevance of the study, which results in the presentation of the main question. The following chapter, literature and theoretical review, presents the current literature on different topics relevant to the study, such as: Green Claims, Green Purchase Intention, The 5 I's of Green Marketing, The Sustainable Theory of Planned Behaviour, and Brand Attitude. The analysis of existing literature results in the formation of the theoretical framework, which provides the reader with a summary of the hypothesis tested in this study. The third chapter presents and explains in detail the methods used for testing the hypothesis. The areas covered are the research approach, research design, sampling process, data collection method, measurement and scaling procedures, data analysis, and states the validity and reliability of the study. In the fourth chapter, the findings of the study are presented in the following subsections: sample overview, reliability of multi-item constructs, control variables, and the hypothesis testing. To deepen the understanding, an additional analysis was conducted, which is presented after the summary of results from testing the hypothesis. The fifth chapter brings the second and fourth section together by connecting the findings to past research. By doing so, the reader is presented the broader picture, in which the empirical results are discussed in more detail and further insights are presented. The last chapter incorporates the findings of the previous sections in the conclusion, in which the objective of the study is addressed by answering the main question, followed by an overview of the contributions of this study. Based on the findings, several theoretical and managerial implications are presented, as well as the limitations to the study, and suggestions for future research.

# 2 Literature and Theoretical Review

The following section presents the existing literature on different topics relevant to the study. To test what types of online advertisement claims affect the purchase intention of environmentally friendly fashion products, it has been decided to incorporate the Theory of the 5 I's of Green Marketing as aspects in the green claims (Grant, 2007). This theory will be addressed after presenting what 'others say' on the topic of Green Claims and Purchase Intention, followed by the subsections on the moderating effect of Gender, the Sustainable Theory of Planned Behaviour, and Brand Attitudes. This existing body of knowledge is applied when formatting the theoretical framework, after which a summary of the hypothesis is provided.

## 2.1 Green Claims

Green advertising is one of the most important tools for companies to communicate about their environmentally friendly products in order to stimulate green purchasing behaviour (Chan, Leung & Wong, 2006). Aforementioned, the use of green advertisement; particularly, the use of green claims, also referred to as environmental claims, which can be defined as "a statement by a seller regarding the impact of one or more of its brand attributes on the natural environment" (Scammon & Mayer, 1995, p. 33), has increased significantly over the past years, with numerous companies incorporating environmental statements in advertisements (Polonsky et al. 1997; Finisterra-do Paco & Reis, 2012). As mentioned before, the types of green claims used for stressing the impact of brand attributes on the environment varies, with green claims being categorised as either (1) product-oriented, (2) process-oriented, (3) image-oriented, (4) environmental fact-based or (5) a combined approach (Carlson, Gove & Kangun, 1993). In general, the product-oriented green claim has become the most commonly used type of environmental claims as it is more specific, easier to observe and understand, and simpler to relate to practical environmental improvements (Peattie, 2015). This type of claim can be defined as one stressing the green attributes a product contains (Carlson, Gove & Kangun, 1993). The second type of environmental claim is categorised as process-oriented, which mainly focuses on internal organisational processes that positively influence the corporation's environmental impact (Carlson, Gove & Kangun, 1993). The image-oriented claim "associates an organisation with an environmental cause or activity for which there is broad-based public support" (Carlson, Gove & Kangun, 1993, p. 31). A claim that includes facts about the environment and its conditions is referred to as an environmental fast based claim (Carlson, Gove & Kangun, 1993). The integration of these different types of environmental claims into one is referred to as a combined claim (Carlson, Gove & Kangun, 1993). This is confirmed by Hagman, Segerqvist and Wahlström (2017) stressing product-oriented green claims in green marketing to be perceived as most credible.

Literature highlights both the positive and negative aspects of using green claims. On a negative side, organisations involved in greenwashing, cause consumers to be more sceptical towards green claims (Alves, 2009; Finisterra-do Paco & Reis, 2012; Neff, 2013; Nyilasy, Gangadharbatla & Paladino, 2014; ABC, 2019; Orazi & Chan, 2018; Deloitte, 2019). This perception of being deceived, regardless of whether it is misleading or not, can already create negative feelings towards an advertisement (Newell, Goldsmith & Banzhaf, 2015). Whereas, on a positive note, research shows consumers prefer products with green claims compared to those with neutral claims, confirming the consumers' appreciation of green claims (Aagerup, Frank & Hultqvist, 2019).

The small number of papers addressing the effectiveness of green claims stress that the use of environmental claims enhances the communication effectiveness of advertisements for both high- and low-involvement services (Chan, Leung and Wong (2006), and, when incorporated in product offerings, improves consumer evaluations (Yilmaz & Alniacik, 2010). Moreover, research on green claims addressing Corporate Social Responsibility indicates that long history enhances efficiency (Vanhamme & Grobben, 2008). Meaning, the effectivity of environmental claims can be impacted by the duration of promoting sustainability practises. Research shows that the ineffective use of green claims is mostly caused by the poor use of language. In early stages of adopting green claims, regardless of the situation, companies mostly used words, such as 'green' and 'environmentally friendly', to represent the overall green claim (Finisterra-do Paco & Reis, 2012). The use of language in green claims evolved tremendously over time, up to the point that there is a lack of comprehension and understanding among consumers regarding the meaning of the claims (Evans & Pierson-Smith, 2018). As mentioned before, this is also the case in the fashion industry, in which corporations are struggling to find a common definition of sustainability as well as to find the right language for addressing sustainable fashion (European Commission, 2005; Henniger, Alevizou & Oates, 2016; Cheng, 2017; Evans & Pierson-Smith, 2017, 2018; Regalado, 2019). Other factors influencing the effectiveness of green claims are vagueness and claims being misleading (Alves, 2009; Carlson, Grove & Kangun, 1993; Orazi & Chan, 2018), with research showing that consumers are likely to not pay attention to a green claim that is perceived as being too technical and descriptive (Finisterrado Paco & Reis, 2012), and perceive claims praising and exaggerating benefits as well as brand image as deceptive (Carlson, Grove and Kangun (1993).

Although there is no success recipe for formulating green claims, the previous paragraphs have highlighted some factors to take into account. In addition, for marketing operations to succeed, Peattie (2015) stresses the importance of making consumers believe that the claim has been directed to them. This is confirmed by Aagerup et al. (2019) stating that it is important to take the type of consumer into consideration when communicating green claims, as aspects such as consumer's environmental commitment, information processing ability, and distraction, influences their perception of the claim. To amend the way of communicating to the target audience, Chan, Leung and Wong (2006) introduce two ways in which green claims can be posed: either in a direct manner, with the claim clearly addressing the environmental impact, or in a more subtle way, by more loosely associating the product or brand with positive environmental messages. Taking the previously mentioned factors into account when formulating a green claim is expected to increase the level of success in terms of influencing sustainable consumer behaviour.

## 2.2 Green Purchase Intention

Howard and Sheth (1967) introduced the Theory of Buyer Behaviour consisting of 4 components, known as (1) inputs including commercial and social stimuli, (2) the mental state in which input is processed together with hypothetical constructs, (3) exogenous variables and (4) outputs. The latter can be defined as a set of buyer response variables manifested based on both the stimuli and one's mental state. According to Howard and Sheth (1967), purchase intention is, alongside purchase behaviour, attitudes, comprehension and attention, one of the five response variables of consumers' buying behaviour, which can be defined as "the buyer's forecast of his brand choice sometime in the future" (Howard & Sheth, 1967, p.148). Another way to depict this is by stating that "purchase intentions are an individuals' conscious plan to make an effort to purchase a brand" (Spears & Singh 2004, p. 56). Thus, purchase intention is not the same as actual buying behaviour, but it is the last stage before actual purchasing takes place (Howard & Sheth, 1967). Nonetheless, research indicates that purchase intention acts as a predictor for future behaviour, as consumers with a high purchase intention are more inclined to purchase a product (Berkman & Gilson, 1978). To align with the focus of this study, green purchase intention can be defined as "the probability and willingness of a person to give preference to products having eco-friendly features over other traditional products in their purchase considerations." (Nik, 2009). Similar to the original concept of purchase intention, research has shown that green purchase intention can be a predictor of actual sustainable behaviour (Chan, 2001; Chan & Lau, 2002).

# 2.3 The 5 I's of Green Marketing

The theory of the 5 I's of Green Marketing introduced by Grant (2007), consisting of the following factors: Intuitive, Innovative, Inviting, Informed, and Integrative, is used as a foundation for formulation the green claims. These factors can be seen as strategic aspects specifically defined for green marketing, which an organisation can incorporate to increase sustainable consumer behaviour (Grant, 2007). The first I (Intuitive) evolves around the process of normalising green behaviour and thereby making it a consumer's 'second nature', one's 'common sense'. The second I (Innovative) addresses the organisations' ability to launch new products and services, thereby influencing consumers' lifestyles. The third I (Integrative), is defined by Grant (2007) as "combining commerce, technology, social effects and ecology" (p. 51). The fourth I (Inviting) is concerned with involving the consumer in the green lifestyle in a positive, fun and pleasant way, rather than posing sustainability as something unpleasant and boring (Grant, 2007). The fifth I (Informed), referred to as Informative, involves education and participation whereby it is suggested to increase the knowledge among consumers by using information in an effective manner (Grant, 2007). As the study is focused on one of the three elements of sustainability, referred to as environmental sustainability, it has been decided to not include the third I, as it addresses factors related to the broader concept of sustainability (Grant, 2007; Dyllick & Muff, 2016).

The remaining four I's of Green Marketing have been incorporated as aspects in the green claims with the aim to test whether they can positively impact the purchase intention of environmentally friendly fashion products. Since the theory of the 5 I's is relatively understudied, to support the previous definitions by Grant (2005), additional theoretical concepts surrounding the four I's have been introduced to capture different elements to incorporate in the green claims. By doing so, we are testing whether the more general theory on the four I's in relation to green behaviour can be extended to green claims simultaneously. The following sections will start with re-introducing the definition of each I by Grant (2007), after which the additional research supporting the theory will be introduced. Together, they result in the formulation of the hypothesis.

#### 2.3.1 Intuitive

Grant (2007) describes the first I (Intuitive), as the process of normalising green behaviour and thereby making it a consumer's 'second nature' and 'common sense'. The process of normalising green behaviour can be connected to the Theory of Social Normalisation introduced by Rettie, Barnham, and Burchell (2011 cited in Rettie, Burchell & Riley, 2012), which stresses that normalising green behaviour and de-normalising non-sustainable behaviour is a social process in which sustainable "activities and products gradually become accepted as mainstream, normal, and every day" (p. 421). In order for the repositioning of non-green behaviour to be successful, Rettie, Barnham, and Burchell (2011) stress that one must gradually change the perception of an unsustainable activity to not normal and a sustainable activity to normal. They suggest different marketing campaigns that can be used when trying to normalise green behaviour, such as using behavioural placement, storylines, and discussions to feature more sustainable alternatives; and using a simple depiction of sustainable activities as normal or vice versa.

An individuals' second nature can be defined as a habit (Testa, 2017), in which a habit refers to behaviour that has been repeated over time and therewith turned into standard and automatic demeanour (Kurz et al. 2014 in White, Habib & Hardisty, 2019b). As mentioned before, making sustainable behaviour a consumers' second nature means that behaviour gets repeated over time so it turns into an automatic response: a deeply ingrained habit. According to White, Habib and Hardisty (2019b), 'habit formation' is perceived as one of the five factors that can be used to encourage more sustainable consumer behaviours. To stimulate positive green habitual behaviour, multiple activities are presented by White, Habib and Hardisty (2019b), such as "making sustainable actions easy, and utilising prompts, incentives, and feedback" (p. 26). The first activity, making sustainable actions easy, speaks for itself and stresses that sustainable habits are more automatically formed when the eco-friendly action is easy to perform. Green actions can be made easy by making changes to the external environment or by simplifying the decision-making process in which sustainable action is set as the default. The second activity, utilising prompts, makes the consumer aware of desired sustainable behaviour and is most effective when "large, clear, easy to follow, and placed in proximity to where the behaviour will be performed" (White, Habib & Hardisty, 2019b, p. 26). The third activity, incentives, rewards customers intrinsically with incentives such as rebates, discounts, and gifts. The fourth

activity, feedback, makes the consumer aware of its behaviour and that of others. Feedback is most effective when clear and repeated over time (White, Habib & Hardisty, 2019b).

A persons' common sense refers to one's instinct (Gramsci, 1971): "the uncritical, disjointed and episodic way of perceiving and understanding the world ... which is imposed by the external environment, i.e. by one of the many social groups in which one is automatically involved" (p. 100). A simpler way to depict this is by defining common sense as the "obvious" (Tiwari, 2013, p. 16), and the "stereotypical consumer information known to all" (Tiwari, 2013, p. 17).

By incorporating Intuitive aspects into a green claim (IV), including behavioural placement, storylines, and discussions; simple depiction of sustainable activities as normal; habit; sustainable actions made easy; prompts; incentives; feedback; and common sense, we expect the purchase intention of environmentally fashion products (DV) to be positively influenced. Based on this, the following hypothesis has been formulated:

**H1:** Incorporating intuitive aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.

### 2.3.2 Innovative

Grant (2007), describes the second I (Innovative), as the organisations' ability to launch new products and services, thereby influencing consumers' lifestyles. Several studies have confirmed that newness of an innovation is something consumers are drawn to and can motivate consumers to explore (Michaut, 2004; Radford & Bloch, 2011), whereby consumer's response to innovative products can partly be viewed in light of its newness.

Research shows that the urge to improve technology as well as social behavioural patterns is driven by environmental problems (Carrillo-Hermosilla, González & Könnölä, 2009). One way of responding to this is by launching eco-innovations, which can be defined as:

the creation or implementation of new, or significantly improved, products (goods and services), processes, marketing methods, organisational structures and institutional arrangements which - with or without intent - lead to environmental improvements compared to relevant alternatives (OECD, 2009, p. 19)

The European Commission states there are four types of eco-innovations: (1) Environmental technologies, (2) Organisational innovations, (3) Product and service innovations, and (4) Green system innovation (Kemp, 2008). As this report is focused on combined green claims in online marketing text, with a main focus on the product claim, the third type of eco-innovations is addressed. This type of innovative eco-friendly products is said to potentially impact social and cultural structures by changing preferences of consumers towards more environmentally friendly products as well as reduced footprints by launching products with better performance and savings (OECD, 2012).

The ability the innovation has on influencing purchase intention (Afzali & Ahmed, 2016), and thereby change consumers' lifestyles is strongly connected to the rate of acceptance. This rate of acceptance is dependent on a number of factors, such as relative advantage; ease of communication in terms of benefits (Holak & Lehmann, 1990; Arts, Frambacha & Bijmolt, 2011; Ghauri & Cateora, 2014); and degree of risk, also known as reduced uncertainty level toward products (Ghauri & Cateora, 2014; Afzali & Ahmed, 2016).

The purchase intention of environmentally friendly fashion products (DV) is expected to be positively influenced by incorporating Innovative aspects in green claims (IV), including new/significantly improved product; influence consumer lifestyles; environmental problems; environmental improvements; preferences towards more environmentally friendly products; relative advantage; ease of communication in terms of benefits; and degree of risk. This results in the formation of the following hypothesis:

**H2:** Incorporating innovative aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.

#### 2.3.3 Inviting

The third I (Inviting), is described as the process of involving the consumer in the green lifestyle in a positive, fun and pleasant way, rather than posing sustainability as something unpleasant and boring (Grant, 2007). To put this into practice, Grant (2007) suggests creating new myths and codes which are utopian, joyful and fun.

This approach can be described as tapping into the consumers' hedonic consumption motives, which is perceived as one of the main reasons why consumers consume (Hirschman & Holbrook, 1982). In contrast to utilitarian motives, in which the outcome is the result of consciousness and task-completion, hedonic motivation is explained as more subjective, personal, and more entertaining, as it derives from fun and playfulness (Babin, Darden & Griffin, 1994). Hedonic motives have been noted as positively associated with lifestyle and highly important for understanding consumers shopping behaviour (Hirschman & Holbrook, 1982; Babin, Darden & Griffin, 1994; Tang, Chen & Yuan, 2019), confirming it is value adding to look at hedonic shopping motives in creating marketing communication. Moreover, Rezvani, Jansson and Bengtsson (2018) highlight the importance of hedonic motivations when motivating consumer pro-environmental behaviour in communication. Tang, Chen and Yuan, (2019) confirm this by stressing that hedonic goals positively influence green consumer behaviour, with green consumption being increased because of perceived pleasure and happiness.

According to Hirschman and Holbrook (1982, p. 92) "hedonic consumption designates those facets of consumer behaviour that relate to the multi-sensory, fantasy, and emotive aspects of one's experience with products". The multisensory aspect of hedonic motivation is defined as experiencing multiple physical sensations involving the five senses such as tastes, sounds, scents, touch and visual images (Hirschman & Holbrook, 1982). This aspect is not applicable to this study as it involves certain physical senses that cannot be adopted in an online setting. Fantasy refers to the internal imagery and sensations one generates using imagination when

experiencing something (Hirschman & Holbrook, 1982). The third aspect emotive is explained as emotional arousal including the full range of human feelings which a consumer experiences (Hirschman and Holbrook, 1982).

In addition, White, Habib and Hardisty (2019b) highlight the importance of positive emotions when inviting the consumer into sustainable behaviour, as they found that consumers are more inclined to engage in pro-environmental practises when they can directly link a positive personal effect: joy, pride, and affinity towards nature, to that specific behaviour. Moreover, it has been found that consumers become more motivated to shop when encountering stimulation, for example, an attractive message that catches their attention (To & Sung, 2014).

By incorporating Inviting aspects (IV) in a green claim, such as: emotive, subjective, entertaining, emphasising feelings of joy, pride and affinity towards nature as well as focusing on fantasy and catching attention, we expect the purchase intention (DV) of environmentally friendly fashion product to be positively influenced. Based on this, the following hypothesis is formulated:

**H3:** Incorporating inviting aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.

#### 2.3.4 Informative

The fourth I (Informative), stresses that a consumers' lack of knowledge distorts their behaviour, whereby education and participation are needed in order to make a change towards more sustainable behaviour (Grant, 2007). Another way of depicting this is by defining it as increasing the knowledge among consumers through the use of information in an effective manner (Grant, 2007).

This informative factor can be connected to the role of cognition in determining sustainable actions, where White, Habib and Hardisty's (2019b) suggest that 'information, learning and knowledge' is one of the means of persuading consumers to engage in environmentally friendly behaviour. This can be described as "to present information that conveys information regarding desired (and undesired) behaviours and their consequences" (White, Habib & Hardisty, 2019b, p. 29). In addition, White, Habib and Hardisty (2019b) emphasise the effectiveness of presenting information on why certain behaviour is sustainable, in order to provide the initial necessary knowledge needed to make a shift in sustainable behaviour. If consumers are not provided with information about the problem, actions to solve the problem, and the potential consequences, there are low chances of them adopting sustainable behaviour (White, Habib & Hardisty, 2019). Furthermore, providing information is important as Chan, Leung and Wong (2006) argue that environmental messages, which are substantive, meaning containing more informative and concrete messages, generate positive consumer responses.

Moreover, there are four reasons for consumers' lack of understanding of information addressing sustainability. Information that is presented in a vague manner or cannot be easily verified due to being too broad or poorly defined, is often perceived as deceiving to the consumer, which results in less favourable consumer attitudes and purchase intentions (Polonsky, Carlson, Grove & Kangun, 1997; Newell, Goldsmith & Banzhaf, 2015). In addition, information overload and confusion regarding the information presented, cause a lack of understanding and knowledge on sustainability, thereby resulting in low adoption of sustainable behaviour (White, Habib and Hardisty, 2019b). On a positive note, Ottman, Stafford and Hartman (2006) found that green marketing which specifically educates the consumer on how green product benefits can translate to consumer value, as personal gains, can improve consumer acceptance of sustainable products.

The purchase intention of environmentally friendly fashion products (DV) is expected to be positively influenced by incorporating Informative aspects in green claims (IV), including: non-vague and easily verified information, information on desired behaviours and their consequences and the reason why it is sustainable, minimising the information overload and confusion as well as educating the consumer on the personal gain. This results in the formulation of the following hypothesis:

**H4:** Incorporating informative aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.

# 2.4 The Moderating Effect of Gender

In general, the green consumer is stereotyped as being more feminine (Brough, Wilkie, Ma, Isaac & Gal, 2016). This can be traced back to the different psychographic characteristics of both genders. Females are generally more concerned with self-transcendence variables, such as environmental protection, social justice (Pinto, Herter, Rossi & Borges, 2014), health and safety (Brough et al. 2016); and tend to be more altruistic (Pinto et al. 2014; Brough et al. 2016), caring, pro-social, empathic, and future-oriented (Luchs & Mooradian, 2012). In contrast, males tend to give more importance to self-enhancement variables and ego-centred goals, such as status, personal success, competition, ambition (Pinto et al. 2014), and are more concerned with protecting their masculine gender-identity (Brough et al. 2016). Research shows that these psychographic differences facilitate the 'gender effect' (Luchs & Mooradian, 2012) on environmentally sustainable behaviour (Brough et al. 2016), with females being more inclined to be eco-friendly in their attitudes and behaviour compared to males (Roberts, 1996; Straughan & Roberts, 1999; Lindeman & Verkasalo, 2005; Luchs & Mooradian, 2012; Brough et al. 2016; Hojnik, Ruzzier & Konecnik-Ruzzier, 2019). For example, women express a greater concern of the future impact of consumption on the environment (Luchs & Mooradian, 2012; Pinto et al. 2014), and are more willing to adjust their lifestyle accordingly (Pinto et al. 2014; Brough et al. 2016). Contradictory to this is the fact that men are less worried about changing their nongreen lifestyle (Brough et al. 2016), which is characterised by more wasteful habits (Pinto et al. 2014) and a greater carbon footprint (Brough et al. 2016). Previous research has also shown the strong effect of gender on sustainable purchasing behaviour. For example, females show higher levels of consciousness of eco-products compared to males (Roberts, 1996; Hojnik, Ruzzier & Konecnik-Ruzzier, 2019), and show higher levels of purchase intention for eco-friendly products (Pinto et al. 2014).

According to Firat and Venkatesh (2019), gender plays an important role in understanding consumers and their behaviour and must, therefore, take a more central role in consumption research. The fact that the green consumer is generally portrayed as feminine and males being highly concerned with preserving their masculinity; the observable differences in psychographic characteristics between both genders, with females being more concerned with self-transcendence than self-enhancement variables; and the dissimilarities between both genders in terms of sustainable (purchasing) behaviour, implying males to be less willing to change their non-environmentally-friendly lifestyle to reduce their future impact on the environment by acting more sustainably, makes us believe that it is interesting to research whether this gender effect has an impact on the correlation between the different I's and the purchase intention of environmentally friendly fashion products, as well as to confirm that females are indeed more likely to have a higher purchase intention of environmentally friendly fashion products than males. This translates to the following two hypotheses:

**H5:** The relationship between the different I's and purchase intention of environmentally friendly fashion products is not equivalent among males and females, with females showing a stronger relationship.

**H6:** Females are more likely to have a higher purchase intention of environmentally friendly fashion products compared to males.

# 2.5 The Sustainable Theory of Planned Behaviour

An important aspect to take into account when using green claims is the existing environmental consciousness of consumers (Chan, Leung & Wong, 2006). Arli, Tan, Tjiptono and Yang (2018) state there are six factors that measure this level of environmental consciousness, which helps with predicting the consumers' intention to perform green behaviour These elements are: (1) Consumer's Attitudes, (2) Subjective Norm, (3) Perceived Behavioural Control, (4) Ethical Obligation, (5) Pro-Environmental Self-Identity, and (6) Readiness to be Green. Research shows that people who score high on these elements are generally more conscious of the environment, and automatically have a higher purchase intention of green products (Ulusoy & Baretta, 2016)

As visualised in figure 1, the six elements introduced by Arli et al (2018) can be seen as an extension of the Theory of Reasoned Action (TRA) (Ajzen & Fishbein, 1980) as well as the Theory of Planned Behaviour (TPB) (Ajzen, 1985) and are referred to as the Sustainable Theory of Planned Behaviour (STPB).

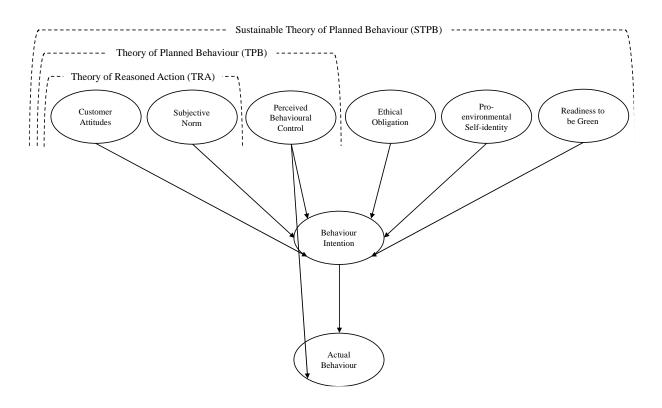


Figure 1. Relationship Between TRA, TPB, and STPB

The Theory of Reasoned Action displays behavioural intention as a predictor of actual behaviour with Consumer Attitudes and Subjective Norm as the two factors influencing behavioural intention (Ajzen & Fishbein, 1980). We see strong similarities between the Theory of Reasoned Action and the first two elements introduced in the model of Arli et al. (2018), which introduces Consumer Attitudes and Subjective Norm as two of the six predictors for green behaviour intention. One's attitude addresses "the degree to which an individual has a favourable or unfavourable evaluation of the behaviour in question" (Ajzen, 1985 cited in Arli et al. 2018, p. 391). Research has shown that in 2001, roughly one-third of the population had a positive attitude towards sustainable consumption (Reheul, Matthijs & Relaes, 2001). To date, we expect this number to have increased significantly due to the attention given to sustainability. The higher number of consumers having a positive attitude towards sustainable consumption would be favourable to this study, as research has shown that a more positive attitude is expected to impact the intention to perform a specific behaviour (Arli et al. 2018). Thus, in this case, a more positive attitude towards sustainability is expected to positively impact the purchase intention of environmentally friendly fashion products. The second item, referred to as Subjective Norm, can be defined as the perceived social pressure to behave in a way that is accepted and seen as the way in which one is ought to behave (Ajzen, 1985). Research has shown that people tend to be more sensitive to the opinions of people that are part of their inner circle (Shin & Hancer, 2016). In terms of sustainable behaviour, a consumer will try to comply with a reference group, thus be motivated to change its unsustainable behaviour automatically if the inner-circle acts more sustainably and if approved by people closest to them (Arli et al., 2018). Thus, we believe subjective norm to either have a positive or negative impact on sustainable behaviour, in which the positive can accelerate green behaviour and the negative can prevent the consumer from acting more sustainably.

Perceived behavioural control is the third element as defined by Arli et al (2018), which has later been added by Ajzen (1985) to the elements Customer Attitudes and Subjective Norm in the extended version of the model of Theory of Reasoned Action, known as the Theory of Planned Behaviour (Shaw, Shiu & Clarke, 2000). Perceived behavioural control can be defined as one's judgement regarding its ability to perform a certain behaviour, which is influenced by opportunities, resources, and power (Ajzen, 1985, 1991). As we are studying intent rather than the actual ability to buy a pair of Nudie Jeans, which we think is also influenced by income and availability, we have decided not to include this factor in the theoretical framework.

The remaining three factors (Ethical Obligation, Pro-environmental Self-identity and Readiness to be Green) introduced by Arli et al (2018) can be seen as additional variables to the Theory of Planned Behaviour, which we refer to as the Sustainable Theory of Planned Behaviour. The latter supports in getting a deeper understanding of one's consciousness of the environment, which directly impacts the purchase intention of green products. Shaw, Shiu and Clarke (2000), have brought to light the inability of the Theory of Planned Behaviour to address the 'ethical consumer', which according to them was crucial for the rise of green consumerism. Feeling obliged to act in an ethical manner (Ethical Obligation) is the fourth element of the Sustainable Theory of Planned Behaviour, in which an 'ethical consumer' can be defined as a consumer that is concerned with deep-seated problems, such as environmental problems (Shaw, Shiu & Clarke, 2000). In terms of sustainable behaviour, the ethical consumer is perceived as more sensitive towards supporting environmentally friendly behaviour (Shaw, Shiu & Clarke, 2000; Arli, Leo & Tjiptono, 2016), which, in this case, is likely to result in a higher intention to purchase green fashion products.

The fifth element Pro-environmental Self-identity is related to the way in which one prefers to define him or herself in terms of sensitivity towards the environment (Arli et al. 2018). Research shows that the Pro-environmental Self-identity act as a predictor for one's environmentally friendly behaviour (White & Hyde, 2012). Thus, an individual identifying oneself as pro-environmentally is likely to have a higher purchase intention of environmentally friendly friend

Arli et al. (2018), define the Readiness to be Green simply as a consumers' perception of their level of readiness to make changes in their current behaviour towards greener behaviour and thereby "engage in some personal sacrifices and even major changes in lifestyle" (Haller & Handler, 2008, p. 282). For this study, we expect that a higher level of readiness will result in a higher purchase intention of eco-friendly fashion products.

To conclude, as research shows the level of a consumers' environmental consciousness to impact the intention to behave in a green manner, we expect that consumers with a more than a moderate score on environmental consciousness will automatically have a higher purchase intention of environmentally friendly fashion products. We, therefore, believe it is necessary to control for the Sustainable Theory of Planned Behaviour while testing the relationship between the independent variables, the four I's, and the dependent variable, purchase intention.

# 2.6 Brand Attitude

According to Howard and Sheth (1967), one's attitude towards a brand is, after purchase intention, the third 'response variable' a buyer can portray. Meaning, one's brand attitude directly impacts the purchase intention of a specific brand, product or service (Howard & Sheth, 1967; Wu & Lo, 2009; Spears & Singh, 2004; Spears & Singh, 2012; Salehzadeh & Pool, 2016). This is confirmed by Abzari, Ghassemi & Vosta (2014), which perceive brand attitude as one of the most important determinants of purchase intention.

Influenced by comprehension, which can be defined as the knowledge one has about a specific brand, brand attitude can be defined as the buyer's assessment of a brand's potential to meet his or her wants and needs (Howard & Sheth, 1967). The possible impact of brand attitude has been further acknowledged, with several researchers stating that there are multiple factors influencing one's willingness to purchase green products over non-green products, one of those being prior knowledge, i.e. prior knowledge of a brand (Mostafa, 2006; Azizian & Suki, 2013; Huang, Yang & Wang, 2014; Johnstone & Tan, 2015; Patel & Chugan, 2015; Goh & Balaji, 2016).

Brand attitudes are strongly connected to the consumer's accumulative and situational assessment. This is confirmed by Spears and Singh (2004) claiming that a person's brand attitude is evaluative, meaning that the consumer can relate brands to its level of 'goodness' and 'badness'. Moreover, they state that attitudes can be long-lived and guide behaviour during that timeframe (Spears & Singh, 2004). In addition, Salehzadeh and Pool (2016) remind us that over time, attitudes toward brands are formed through consumers' experiences and are thereby somewhat resistant to change.

Therefore, it can be assumed that consumers with a more positive brand attitude towards a specific brand would respond to that brand in a more positive way, thereby having a more significant impact on their purchase intention. To conclude, as brand attitude directly impacts purchase intention, we believe it is important to take into account a consumer's existing attitude towards a brand, and control for it when testing purchase intention.

# 2.7 Theoretical Framework

A summary of the hypotheses can be found in figure 2, which illustrates the relationship between the independent variables the four I's (Intuitive, Innovative, Inviting, and Informative), and the dependent variable Purchase Intention of environmentally friendly fashion products, with Gender as mediating variable, while controlling for Brand Attitudes and the Sustainable Theory of Planned Behaviour.

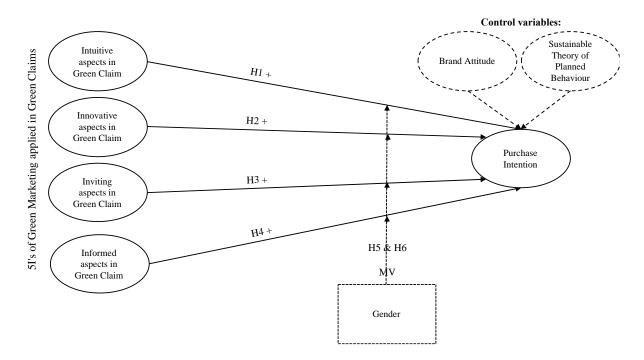


Figure 2. Theoretical Framework

**H1:** Incorporating intuitive aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.

**H2:** Incorporating innovative values in green claims positively affects the purchase intention of environmentally friendly fashion products.

**H3:** Incorporating inviting aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.

**H4:** Incorporating informative aspects green claims positively affects the purchase intention of environmentally friendly fashion products.

**H5:** The relationship between the different I's and purchase intention of environmentally friendly fashion products is not equivalent among males and females, with females showing a stronger relationship.

**H6:** Females are more likely to have a higher purchase intention of environmentally friendly fashion products compared to males.

# 3 Methodology

The following subsections present and explain in detail the methods used for testing the hypothesis. The areas covered are the research approach, research design, sampling process, data collection method, measurement and scaling procedures, data analysis, and the validity and reliability of the study.

## 3.1 Research Approach

Numerous researchers stress that the research purpose, question, objective and aim, guide the choice of research approach (Bryman & Bell, 2015; Easterby-Smith, Thorpe, Jackson & Jaspersen, 2018). For this study, a research approach that can be linked to a type of epistemology was implemented, known as positivism, in which primary data such as numbers and facts were collected to test the hypotheses (Easterby-Smith et al. 2018). The approach used is deduction, which is seen as a top-down approach where implications of former theories are tested in order to confirm or reject the existing theory (Burns & Burns, 2008). The former theories tested in this thesis are surrounding the concepts of Green Claims, Purchase Intention, the 5 I's of Green Marketing, Brand Attitude and the Sustainable Theory of Planned Behaviour. As mentioned before, due to the limited research on the 5 I's of Green Marketing, and the central role it has in this study, additional literature was presented to support the theory, resulting in a deepened and more substantial understanding.

## 3.2 Research Design

The research design "represents a structure that guides the execution of a research method and the analysis of the subsequent data" (p. 40) and depending on the design, different methods are appropriate (Bryman & Bell, 2011). For this study with a positivist nature, a conclusive research design was used, which can either be causal and descriptive (Malhotra, 2010; Easterby-Smith et al. 2018). Rather than testing the "impact of a treatment on an outcome" (Creswell, 2014, p. 156), we were interested in gathering numerical data in order to capture human knowledge, attitudes, and behaviour by using a single cross-sectional design, also known as sample survey research design (Burns & Burns, 2008; Creswell, 2014; Fink, 2003 in Sekaran & Bougie, 2016; Easterby-Smith et al. 2018). In a single cross-sectional design, data is obtained from a single sample once (Burns & Burns, 2008). In order to capture this information, one can apply three types of survey designs, known as factual, exploratory, and inferential (Easterby-Smith et al. 2018). The latter, which aims at testing the relationship between independent and dependent theoretical variables by means of a questionnaire, was applied to this study.

#### 3.2.1 Operationalisation

The following sections translate the factors, including the theoretical concepts, as introduced in the literature and theoretical review, into measurable items (Sekaran & Bougie, 2016; Bell, Bryman & Harley, 2019). The operationalisation is divided over two tables to simplify the understandability of the translation of these items to the questionnaire design (section 3.4.2). The operationalisation of the factors of the second section of the questionnaire, the control variables: Sustainable Theory of Planned Behaviour and Brand Attitude, are visualised in the first table (1).

Factor	Theoretical concept	Items	Source
STPB	Consumers attitudes	Environmental sustainability is important to me.	Arli et al. 2018
	Subjective norm	I feel pressured to act in a sustainable way as people around me act sustainably.	Arli et al. 2018
	Readiness to be green	I consider myself ready to act in a green manner.	Arli et al. 2018
	Pro-environmental self- identity	I generally consider myself environmentally sustainable when purchasing clothing.	Arli et al. 2018
	Ethical obligation	(1) I would be more likely to buy clothes from companies I know are committed to environmental sustainability.	Arli et al. 2018
		(2) I want the fashion industry to become environmentally sustainable.	
BA		Please describe your overall feelings about the brand Nudie Jeans:	Mitchell, 1986
			Berger & Mitchell, 1989
	*	Extremely dislikeable - Extremely likeable	Spears & Singh, 2004
		Negative - Positive Bad - Good	Mitchell & Olson 1981 in Dolbec & Chebat,

Table 1. Operationalisation of the Control Variables

\*. The theoretical concept is the same as the factor.

The second table (2) shows the operationalisation of the factors representing the third section and main body of the questionnaire, including the four I's and purchase intention.

Factor	Theoretical concept	Items	Source
Intuitive	Simple depiction of sustainable activities as normal	I think this advertisement text tells me what environmentally sustainable activities are seen as normal.	Rettie, Burchell & Riley, 2012
	Behavioural placement, storylines, and discussions	I think this advertisement text makes me aware of more environmentally sustainable alternatives.	Rettie, Burchell & Riley, 2012
	Habit	I think this advertisement text informs me about environmentally sustainable behaviour that can be repeated over time.	Kurz et al. 2014 in White, Habib & Hardisty, 2019b
	Sustainable actions made easy	I think this advertisement text makes it easier to engage in environmentally sustainable behaviour.	White, Habib & Hardisty, 2019b
	Prompts	I think this advertisement text reminds me of what desired environmentally sustainable behaviour is.	White, Habib & Hardisty, 2019b
	Incentive	I think this advertisement text encourages me to adopt environmentally sustainable behaviour.	White, Habib & Hardisty, 2019b
	Feedback	I think this advertisement text provides feedback about my performance of environmentally sustainable behaviour.	White, Habib & Hardisty, 2019b
	Common sense	I think this advertisement text presents stereotypical information known to all.	Tiwari, 2003
Innovative	Influence consumer lifestyles	I think this advertisement text can influence my current lifestyle.	Carrillo-Hermosilla, González & Könnölä, 2009
	Environmental problem	I think this advertisement text tells me this product could contribute to solving environmental problems.	Carrillo-Hermosilla, González & Könnölä, 2009
			Michaut, 2004
	New / significantly improved product	I think this advertisement text tells me that this product is a significantly improved product.	OECD, 2009
			Radford & Bloch, 2011
			OECD, 2012
	Environmental improvements	I think this advertisement text tells me that this product leads to environmental improvements compared to other alternatives.	OECD, 2009
	Preferences towards more environmentally friendly products	I think this advertisement text can change my preference towards more environmentally friendly products.	OECD, 2012
			Holak & Lehmann, 1990
	Relative advantage	I think this advertisement text positively influences my perception of the added value of this product.	Arts, Frambacha & Bijmolt , 2011
			Ghauri & Cateora, 2014

Table 2. Operationalisation of the Four I's and Purchase Intention

Innovative (cont.)	Ease of communication in terms of benefits	I think this advertisement text makes it possible to communicate the product benefits in an easy manner.	Ghauri & Cateora, 2014
	Degree of risk	I think this advertisement text makes me feel like it is safe to try out something new.	Ghauri & Cateora, 2014 Afzali & Ahmed, 2016
Inviting	Subjective	I think this advertisement text speaks to me on a personal level.	Babin, Darden & Griffin, 1994
	Entertaining (fun and playfulness)	I think this advertisement text is amusing.	Babin, Darden & Griffin, 1994
	Emotive	I think this advertisement text evokes emotions.	Hirschman & Holbrook, 1982
	Fantasy	I think this advertisement text stimulates my imagination.	Hirschman & Holbrook, 1982
	Positive emotions: Joy	I think this advertisement text makes me feel happy.	White, Habib & Hardisty, 2019b
	Positive emotions: Pride	I think this advertisement text makes me feel like I can be responsible for positive environmental change.	White, Habib & Hardisty, 2019b
	Positive emotions: Affinity towards nature	I think this advertisement text increases my sympathy of the environment.	White, Habib & Hardisty, 2019b
	Stimulation	I think this advertising text catches my attention.	To & Sung, 2014
Informative	Information on desired (and undesired) behaviour I think this advertisement text informs me that I a doing good by buying this product.	I think this advertisement text informs me that I am	White, Habib & Hardisty, 2019b
		Chan, Leung & Wong, 2006	
	Information on the consequences of desired (and undesired) behaviour	I think this advertisement text informs me about the positive environmental consequences of buying this product.	White, Habib & Hardisty, 2019b
	Information on why a certain behaviour is sustainable	I think this advertisement text tells me why buying this product is considered sustainable.	White, Habib & Hardisty, 2019b
	Non-vague information	I think this advertisement text is easy to understand.	Newell, Goldsmith & Banzhaf, 2015
	Easily verified	I think this advertisement text can be easily	Newell, Goldsmith & Banzhaf, 2015
	information	verified by checking existing facts.	Polonsky, Carlson, Grove & Kangun, 1997
	Information overload	I think this advertisement text does not provide me unnecessary additional information.	White, Habib & Hardisty, 2019b

Informative (cont.)	Confusion	I think this advertisement text is not confusing to me.	White, Habib & Hardisty, 2019b
	Education	I think this advertisement text educates me that an environmentally sustainable product can become a personal gain.	Ottman, Stafford & Hartman, 2006
Purchase Intention		Please mark your purchase interest, purchase intent, and willingness to buy this re-use denim product in the following scales:	
	*	<ul> <li>Very low purchase interest – Very high purchase interest</li> <li>Definitely not intend to – Definitely intend to</li> <li>Definitely not buy - Definitely buy</li> </ul>	Spears & Singh, 2004

\*. The theoretical concept is the same as the factor.

#### 3.2.2 Choice of Brand

In general, people find it hard to form an opinion of statements that are made by a fictional brand (J. Jansson, personal communication, 17 February 2020). We, therefore, used an existing brand for testing the different type of green claims. To align with the objective of this study, a set of requirements was defined before selecting a suitable brand. These are as follows:

- 1) The brand must have sustainability at the heart of what they do.
- 2) The brand must be vocal about their sustainable practices.
- 3) Since the study is controlling for brand attitudes, the brand must be Swedish to increase the chance of the target population being aware of the brand.
- 4) The brand must sell sustainable non-niche products available to both sexes.
- 5) The brand must target an audience similar to that defined for this study.
- 6) The brand must have an online presence to ensure the simulation is as closely related to real-life.

Based on this set of criteria the brand 'Nudie Jeans' was selected. Nudie Jeans is a Swedish brand founded in 2001 and is highly recognised for its efforts to make the industry more environmentally and socially sustainable (Nudie Jeans, 2020a). Next to operating in a sustainable manner, Nudie Jeans is vocal about what they do and how they do it, both in-store as online, and is thereby perceived as a 'vocal green company'.

In addition to researching what the brand 'says', further research was conducted to ensure the brand is operating in a sustainably sound manner. A third-party website, known as 'Good on You' grades fashion brands based on their ethical and sustainable performances. On this website, Nudie Jeans is said to have "good policies to ensure payment of a living wage for its workers and uses eco-friendly materials" (Good on You, 2019) and is thereby rated as 'good' while holding a score of 4 out of 5 for people, planet, and animals. This third-party validation indicated that the brand is a feasible candidate for the conscious consumer looking for a brand operating in a sustainable manner (Good on You, 2019).

Nudie Jeans has a passion for denim and sustainability and produces jeans as their primary product (Nudie Jeans, 2020b). The brand's main philosophy is to keep denim in use for as long as possible, as prolonging the life of the garment is more sustainable than recycling (Nudie Jeans, 2020c). As the organisation stresses re-using denim is a better option in terms of sustainability than recycling, the brand introduced its 're-using program' in which they collect old Nudie Jeans, wash, repair and re-sell them as second-hand jeans in-store and online (Nudie Jeans, 2020d, Nudie Jeans, 2020e). Re-using old denim, turning this into a new product, and selling these is the first step Nudie Jeans takes before up-cycling, which for example includes the use of pieces of the old denim in their repair shop (Nudie Jeans, 2020c). After up-cycling comes recycling, which Nudie Jeans does with their 'rebirth project, in which they make new denim with 20% post-consumer recycled Nudie Jeans (Nudie Jeans, 2020c). As this study is applying a combined claims approach with a focus on product-oriented claims (see section 3.2.3), it was decided to use the denim line from the re-use program. In order to minimise the interference between the different concepts (four I's) and purchase intention, choosing one specific product or program was perceived important.

Besides the brand selling sustainable products, the selection criteria aimed at finding a nonniche product available to both male and female. The brand was perceived as suitable to this study, as Nudie Jeans is mainly producing sustainable jeans, which can be seen as a non-niched and durable product available to both genders.

As the target audience is predefined as Swedish millennials aged between 20 and 38 (for further details see section 3.3), the aim was to find a brand which targets a similar audience. With a target audience aged between 15 and 35 years old (Samuelsson & Johansson, 2004), Nudie Jeans is targeting a similar audience as the population set for the study.

To ensure the simulation of the testing of green claims in an online marketing text could be done as similar to a real-life situation possible, a prerequisite was to find a brand with an existing online presence. As mentioned before, Nudie Jeans is vocal both offline and online, while having a strong online presence on their own website and Instagram. Since Nudie Jeans met all the pre-defined rules, it was decided to use Nudie Jeans as the vocal green brand used as the context for testing.

#### 3.2.3 Criteria for Mock-up Advertisement

To increase the relatability to a real-life situation, a mock-up advertisement was created consisting of a visual and a green claim. By using one template, therewith holding every factor constant except for the variable aimed to be measured (the four different green claims), we expected to minimise the risk of other variables, such as fonts, colours and pictures, to interfere with the results (J. Jansson, personal communication, 17 February 2020).

To ensure the mock-up was comparable to Nudie Jeans' current advertisements in terms of design (see appendix 1), a set of rules were defined:

- 1) There should be a neutral use of colour, such as white, black, grey, together with Nudie Jeans' iconic orange as the accent colour.
- 2) The font used should be non-serif, with large font size for the first part of the claim and small font size for the second part of the claim.
- 3) The advertisement should include one statement picture of a piece of clothing.

#### 3.2.4 Criteria for Claim Formulation

For this study, we decided to implement a combined green claims approach in which we focus on the product-oriented claims, and combined these with process-oriented and environmental fact-based statements to strengthen the product claims. The product-oriented claims address the brand's main philosophy, aimed at prolonging the life of a denim product. To stress this, the word 're-use', referring to the name of their initiative, was integrated repeatedly within the advertisements by using different formulations. The process-oriented claims revolve around the processes that support the product-oriented claim. Components that were used to stress this process are: 'offering free repairs, collecting and reselling denim', 'new purpose for old denim in creative ways', and 'going slow instead of fast'. The environmental fact-based statements attach factual numbers to the product-oriented claims. These will regard 'extended life of clothes in kg' and 'water saved by re-using'.

For the same reason as the design of the mock-ups: the relatability to a real-life situation as well as to align with the brands' existing advertisement style, it was decided to inspire the formulation of the green claims based on the existing use of claims by Nudie Jeans (see appendix 1). The current claims featured on Nudie Jeans' website all consist of one short and clear claim consisting of one or a number of words, such as "hey, vegans! Our beef is over" (Nudie Jeans, 2020f), "Re-use" (Nudie Jeans, 2020c), and "The Sustainable Product" (Nudie Jeans, 2020e), followed by a longer sentence claim providing more in-depth information of the shorter claim, for example, "Each denim garment produced from mid 2018 and onwards carry the new vegan back patch." (Nudie Jeans, 2020f), "Pre-loved denim. Cleaned and repaired. Reusing saves water and reduces textile waste." (Nudie Jeans, 2020c), and "When you wear a pair of dries well and long, some magic will come your way." (Nudie Jeans, 2020g). Based on these observations, it was decided to formulate two rules the green claims should align with:

- 1) The green claim should start with a short, clear, and strong claim.
- 2) The first claim should be followed by a second claim consisting of one or more sentences that give additional information on the first claim.

#### 3.2.5 Formulating the Four Green Claims

Based on the theoretical concepts defined in the operationalisation table, the claim was defined for every I. The literature presented in the green claims section of the literature and theoretical

review stressed there is no success recipe for formulating green claims. Nonetheless, research presented some factors to take into account when formulating a green claim to increase the level of success in terms of influencing sustainable consumer behaviour, i.e. the importance of making consumers believe that the claim has been directed to them (Peattie, 2015); of taking into consideration the type of consumer when formulating green claims (Aagerup et al. 2019); and of being aware of the way in which the claim is posed (Chan, Leung & Wong, 2006). The following section presents the formation of the green claims for each of the four I's while taking into account the previous factors, the pre-defined rules, and the theoretical concepts. After each claim, a short explanation of how the theoretical concepts were translated into the claim is given. The final online advertisements used for testing including the following green claims are presented in appendix 2.

For the first I (Intuitive), a common denominator for all factors is that all aim at stimulating sustainable habit formation by reminding consumers of desired sustainable behaviour before the actual unsustainable behaviour occurs. The Intuitive green claim that was tested was defined as follow:

# Why go fast, when you can go slow.

We go slow by re-using second-hand Nudie Jeans to ensure our jeans are kept in use for as long as possible. Instead of buying something new, support the slow fashion movement and limit your environment impact like many have done already by either extending the life of your old jeans and get 20% off your next purchase, or by buying one of our re-used denims online or in-store.

The eight theoretical concepts representing the Intuitive factor were integrated into the claim as follow. By stating "why go fast, when you can go slow", we normalised slow instead of fast behaviour in a simple manner, thereby incorporating the concept simple depiction. Behavioural placement storylines and discussions is incorporated as the claim made the consumer aware of more environmentally sustainable alternatives by stressing the fact instead of buying something new, consumers can support the slow fashion movement by either extending the life of an old pair of jeans or by buying a re-used denim. Furthermore, this claim addressed the concept habit, by conveying that sustainable behaviour which can be repeated over time would be to change from going fast to going slow. The claim tapped into sustainable actions made easy as it gave the consumer one very simple and easy option of acting sustainably, available to all Swedish Millennials. Prompts were incorporated as the claim reminded of what desired sustainable behaviour is by stressing that many have already supported the slow fashion movement and thereby reduced their impact on the environment. In addition, by giving consumer's 20% off their next purchase when handing in their old jeans, the claim incorporated the concept of incentives. Moreover, the claim provided feedback about a consumer's performance of environmentally sustainable behaviour by referring to limiting his or her environmental impact and saying that "many have already done it". The last theoretical concept, common sense, was incorporated as the claim presents information known to all, such as indirectly stressing that it is more environmentally friendly to go slow instead of fast. It was also 'obvious' that buying something completely new is worse than buying a re-used product.

The second I (Innovative), focuses on the ability to launch new products which lead to environmental improvements compared to relevant alternatives, also known as eco-innovations, that stimulate more sustainable consumers' lifestyles. This resulted in the formulation of the following green claim:

# Finding new ways to reduce, with our project 're-use'.

We are continuously working on finding new purposes for pre-owned denim in creative ways to decrease our environmental impact. We therefore introduced the re-use range, in which we transform worn jeans into new by washing and repairing them with care. With this we can keep the denim in use for as long as possible and letting one customer's denim become your favourite pair!

The eight theoretical concepts representing the Innovative factor were integrated into the claim as follow. The theoretical concept influence consumer lifestyles was incorporated in this claim through emphasising how one's denim can become a new customer's favourite pair, thereby being part of the circular movement. This claim stressed this product contributes to solving an environmental problem by stressing that Nudie Jeans is working on finding new purposes for pre-owned denim in creative ways to decrease our environmental impact. Moreover, the claim conveyed that this product is a new and significantly improved product as it includes words such as 'new ways', 'new purposes', 'introduced', and 'transform into new'. In addition, the claim communicated that the product leads to environmental improvements compared to other alternatives by highlighting that. instead of continuously producing new, one can re-use denim to reduce, expecting to decrease the environmental impact. The preferences towards more environmentally friendly products was incorporated as the claim can change someone's preference towards more environmentally friendly products by showing that someone else's pre-owned denim can become your favourite pair. With this, the consumer was made aware that he or she can do good to the environment and still find a suitable pair. Moreover, the claim could positively influence someone's perception of the added value of this product, *relative* advantage, as it showed one can both positively impact the environment and find a new favourite pair. The ease of communication in terms of benefits was incorporated by presenting a practical example that could easily be passed on through word of mouth, ensuring the product benefits to be communicated in an easy manner. Lastly, this claim conveyed the theoretical concept *degree of risk*, i.e. making somebody feel as if it is safe to try out something new, by being open about the re-use process in which worn jeans are transformed into new by washing and repairing them with care.

For the third I (Inviting) the green claim had to correspond to the aspect of connecting with the consumer on a personal level, tapping into positive emotions in order to intrigue them into making sustainable choices, as these are common denominators found in research. Taking all these aspects into consideration, the following claim was formulated:

# Not all heroes wear capes, they wear Nudie Jeans.

Our customers are the real heroes, and together we have the power to make our planet a better place. As we believe 'throwaway' and 'jeans' are two words that do not belong together, we offer free repairs, collect and resell your worn and torn pre-loved denim. Become a hero too by joining our re-use movement and get 20% off your next purchase.

The eight theoretical concepts representing the Inviting factor have been integrated into the claim as follow. Firstly, the theoretical concept subjective was incorporated as this claim speaks to the receiver on a personal level by telling consumers they have the power to make a difference and by asking them to "join our re-use movement". The claim was entertaining by associating sustainability to fun and playfulness with the use of the statement "Not all heroes wear capes, they wear Nudie Jeans", thereby using more playful words when addressing a serious issue. Furthermore, this claim evoked *emotions* by emphasising strong words and phrases like hero, power, saving the planet and pre-loved. The theoretical concept fantasy was addressed in the claim, in which one's imagination was stimulated by depicting a scenario and using storytelling as a way of writing, allowing the consumers to visualise themselves as a hero saving the planet. Furthermore, this claim was incorporating *positive emotions*, such as (1) *joy*, (2) *pride* and (3) affinity towards nature. Rather than addressing environmental problems and consequences of non-green behaviour, the claim approached the improvement of the environment in a positive way, thereby making the consumer feel happy. By using the term 'hero', which is perceived as someone who, by a personal effort, makes difference to the society as a whole, the claim made the consumer feel they can be responsible for positive environmental change. Using the phrasing "making the planet a better place", indicated that the planet is in need of help, which was expected to increase one's sympathy towards the environment. The last theoretical concept stimulation was addressed as the claim catches the attention of the reader with the larger statement "Not all heroes wear capes, they wear Nudie Jeans", which was perceived as rather bold and dramatic. In addition, the claim offered consumers 20% off, which was expected to support in catching the attention of the reader.

For the fourth I (Informative), the green claim had to focus on increasing the sustainability knowledge of the consumer in a way that is simple, ensuring that the consumer understands and learns and can act accordingly. By incorporating this, the green claim was formulated as follow:

# The fashion industry is dirty, but we can make it better.

Did you know that prolonging the life of a garment is even more sustainable than recycling? At Nudie Jeans, we collect, repair and resell denim jeans with our re-use program. In 2018, we extended the life of 44.000 kg of clothes and thereby saved 386.000 tons of water. Reduce your environmental footprint and get the balance right for yourself and the future of the planet.

The eight theoretical concepts representing the Informative factor have been integrated into the claim as follow. Firstly, information on desired behaviours was incorporated by informing the consumer that he or she is doing good by buying this product by stating that "the fashion industry is dirty, but we can make it better", and by posing the question "Did you know that prolonging the life of a garment is even more sustainable than recycling?". The claim addressed the theoretical concept of information on the consequences of desired behaviours, by stressing both the positive consequences of sustainable behaviour, e.g. "we extended the life of 44.000 kg of clothes and thereby saved 386.000 tons of water", as well as the negative by saying that "the fashion industry is dirty". In addition, information on why a certain behaviour is sustainable was integrated by stressing the result of buying from this re-use denim line, i.e. reducing the environmental footprint and getting the balance right for the individual and the planet. The theoretical concept of non-vague information was incorporated by the use of basic language, avoiding ambiguous words and focusing on short sentences. Furthermore, the claim included *easily verified information* by showing numbers and figures from the brand's website and sustainability report. As the claim only presented two key numbers from the sustainability report and used short explanations addressing the re-use initiative, we believed the claim does not provide unnecessary additional information, thereby limited the information overload. Moreover, by being straight to the point and using basic language when explaining the direct effect of purchasing, this claim was expected to not cause any confusion. The last theoretical concept, education, was incorporated in the claim by stating how purchasing these jeans can become a personal gain through addressing the consumer value in the last sentence "Reduce your environmental footprint and get the balance right for yourself and the future of the planet".

## 3.3 Sampling Process

According to Sekaran & Bougie (2016), the sampling process consists of a set of different steps: (1) defining the target population, (2) determining the sampling design, and (3) determining the sample size. These steps will be addressed in the following section.

#### 3.3.1 Target Population

Malhotra (2010) suggests defining the target population by addressing four factors: element, sampling unit, extent, and time. When conducting a web-based self-completion questionnaire, Malhotra (2010) stresses that both the element and sampling refer to the respondent. Therefore, the target population for this study was defined as follow: Millennials, aged between 20 and 38, who holds a Swedish Nationality during a timeframe of the survey (14th to 23rd of April 2020). As the study uses gender as a mediating variable, based on the theory saying that gender plays an important role in understanding consumers and consumption (Firat & Venkatesh, 2019), both male and female millennials were targeted.

There were several reasons for selecting this target population. Aforementioned, marketing 3.0 views consumers as complex and conscious humans with increasing doubts, fears, and concerns (Kotler, 2011); especially millennials being worried about climate change (Deloitte, 2019).

Over the past decade, numerous authors have stressed the strong focus of millennials on changing the "social, cultural, environmental, economic, and political practises worldwide" (Pasricha & Kadolph, 2009). This is highlighted by BCG & Barkley, 2013) stressing that a generational characteristic among Millennials is their openness to change. Especially young Nordic consumers are said to be changemakers and in the forefront of a worldwide sustainability movement, acting as guiding lights for other consumer groups, and match the target group for many companies focused on sustainability (Nordic council of ministers, 2019). Considering the objective of this study, based on these characteristics, Swedish millennials were perceived as an interesting and suitable target population as they are being curious and open towards the future of sustainability.

#### 3.3.2 Sampling Design

Research shows that conducting probability sampling when using a web-based questionnaire tends to be quite challenging (Bell, Bryman & Harley, 2019). The main reason for this is the fact that this data collection instrument relies on the access to the internet (Easterby-Smith et al. 2018; Bell, Bryman & Harley, 2019). In general, individuals on the internet tend to be younger, which automatically causes the sampling method to be unable to give every sample element a chance of being included (Burns & Burns, 2008; Bryman & Cramer, 2011). In addition, existing market research often applies non-probability sampling methods (Burns & Burns, 2008; Bryman & Cramer, 2011). Based on these findings, it was decided to use a sophisticated form of convenience sampling, also referred to as opportunity sampling, which is an often-used form of non-probability sampling in which subjects are chosen based on accessibility (Bryman & Bell, 2011).

Whilst some researchers consider this design as flawed due to potential researcher's bias and low representation of a sample (Malhotra, 2010; Bryman & Bell, 2011), other researchers highlight that convenience sampling can be representative as long as the sampling design is aligned with the purpose of the study (Easterby-Smith et al. 2018). The fact that the internet generally reaches a younger audience is seen as favourable since this research aims at reaching Swedish millennials aged between 20 and 38. Furthermore, positive aspects of this sampling design suitable to this study are the accessibility and the cooperative nature of the sampling units, as well as the low cost, and the time-efficiency (Malhotra, 2010). Furthermore, the chosen target population consists of approximately 2,5 million people (SCB, 2019) (appendix 3), resulting in the choice of sample instead of census to represent the characteristics of the population (Malhotra, 2010). Taking this into consideration, together with the notion that there is almost no possibility to access the entire population, convenience sampling was perceived as a suitable sampling design to this study.

#### 3.3.3 Sample Size

A valid rule to go by when deciding on the sample size is the central limit theorem, which stresses that "when the sample has at least 30 members, the distribution of all sample means of the same sizes samples closely approaches a normal distribution without regard to the

distribution of the population from which the sample is drawn" (Burns & Burns, 2008, p. 188). In addition to this theory, there are other aspects that support in setting the minimum sample required for a study, such as the type of study and the research field. As presented by Marañon (2020), a typical sample size for a test-marketing study ranges between 300 and 500 with a minimum of 200 respondents. By combing these insights, the minimum number of respondents to be collected was set at 240, with both genders equally represented in each randomly allocated advertisement. In parallel, the preferred number of respondents to be collected was set at 400 responses, which ensured the threshold of 240 respondents was met while collecting more respondents to strengthen the findings, and generated a buffer in case of any missing responses, respondents not aligning with the target audience or unserious answers.

## 3.4 Data Collection

The following subsections introduce the instrument used for the data collection, presents and explains the design and distribution of the questionnaire, and elaborates on the conducted pretest.

#### 3.4.1 Data Collection Instrument

For this study, it was decided to use a web-based self-completion questionnaire as the instrument for collecting data (Easterby-Smith et al. 2018). There are several advantages of using this instrument, as it allows for interactivity, for providing explanations, for personalising questions, for eliminating topics based on previous responses, and for capturing more specific and detailed information (Easterby-Smith et al. 2018). In addition, using a web-based self-completion questionnaire allowed to simulate an online setting comparable to real life. The software used to create the questionnaire is Qualtrics, which is a professional online survey software offering an extensive number of features, such as the important randomisation of cases and questions. Moreover, the program aligns with the standards of data privacy by anonymising respondents, securely storing answers in their cloud, and deleting the answers at the end of the agreement.

#### 3.4.2 Questionnaire Design

As suggested by Easterby-Smith et al. (2018), the questionnaire consists of three parts in which similar questions are grouped together for a better flow and understanding, with each of these groups collecting data on different topics. A visualisation of the final questionnaire design including all questions can be found in appendix 4. The first section of the questionnaire consisted of an introduction aimed at gathering necessary basic demographic information on the sample such as nationality, age, gender, educational level, and occupation (Bell, Bryman & Harley, 2019). The second section included statements regarding the respondents' approach towards sustainability; attitudes towards green claims; and brand attitude towards Nudie Jeans. These statements support in controlling for the Sustainable Theory of Planned Behaviour and

Brand Attitude, which are said to directly impact the Purchase Intention of a green brand, product or service (Howard & Sheth, 1967; Wu & Lo, 2009; Spears & Singh, 2012; Arli et al. 2018). When formulating statements in the questionnaire, the five principles of designing structured questions as presented by Easterby-Smith et al. (2018) were taken into account, suggesting to avoid slang, avoid negative phrasing, avoid leading questions, use simple expressions, and only incorporate one idea in each statement. The third section can be considered as the main part, in which one of the four different claims was randomly allocated to a respondent by Qualtrics. In this section, the respondent was asked to answer multiple statements specifically defined for that I based on the theoretical concepts, after which the purchase intention was measured. In order for a consumer to easily relate to the statements being tested, 'I think' was used at the start of every sentence. Moreover, to increase the understandability of the statements, it was decided to use the words 'advertisement text' instead of 'claim'.

In parallel, the questionnaire was designed in a way that minimised the chances of errors. To eliminate the non-response error, respondents were forced to respond to all questions. To ensure the respondents aligned with the target audience, questions regarding age and nationality were asked at the start of the survey. Respondents were automatically directed to the end of the survey in case they did not meet the criteria set for the study and were deleted accordingly. To ensure only respondents with an existing attitude were asked about the brand Nudie Jeans, the follow-up questions were automatically amended based on previous answers.

#### 3.4.3 Questionnaire Distribution

To reach the defined target population (Swedish millennials aged between 20 and 38 years old), the web-based self-completion questionnaire was distributed via different online channels, such as internet forums and social media. To reduce the risk of non-Swedish individuals responding to the survey, the distribution text was written in Swedish on all channels.

The first channel the questionnaire was distributed on was Reddit (2020a), on a page specifically created for Swedish people, named 'r/Sweden'. At the time of the survey distribution, the page had a total of 287K male and female members. In addition, the survey was shared on a second page on Reddit (2020b), known as 'r/SampleSize', which consisted of a more diverse set of people with a total of 132K participants. This page allowed for sharing surveys and polls for research studies with the aim to obtain responses. In parallel, the survey was shared on two different Swedish Facebook groups devoted to fashion. The first group was named 'SäkerStil', which can be translated to 'Confident Style', and had 35K female members (Facebook, 2020a). The second group 'Märkeskläder & lite till' (Facebook, 2020b), which translates to 'Branded Clothes and Other', was, with a total of 8K male and female members, a bit smaller compared to the previous Facebook group. In addition to the non-personal online channels, the questionnaire was shared with the researcher's professional network on LinkedIn as well as on their Facebook timelines. By carefully distributing the questionnaire on several channels, we expected to broaden the audience and thereby decreasing the main risks of using opportunity sampling, i.e. gathering unreliable information (Burns & Burns, 2008).

#### 3.4.4 Pre-testing of Questionnaire

Malhotra (2010) states that pre-testing a questionnaire is essential and an easy way of eliminating potential problems and bugs. Research shows that pre-testing is done most effectively and efficiently by conducting personal interviews in smaller test settings (Malhotra, 2010). For this study, we pre-tested the questionnaire by running a small trial with 14 people to provide feedback on our questionnaire. In order to conduct the pre-testing in a structured way, we used a set of established questions created by Grimm (2010) aimed at minimising the errors associated with a survey. This list of questions used can be found in appendix 5.

## 3.5 Measurement and Scaling Procedures

There are several scaling techniques that can be used in research, whereby non-comparative scaling is the most widely used technique in marketing research (Malhotra, 2010). In non-comparative scales, items are not rated against each other, instead, each item is scaled independently of the other items (Malhotra, 2010). Overall, this study used two types of 7-point non-comparative scales whose properties have been widely used by previous research.

The first type was a 7-point Likert scale, where 1 corresponds to strongly disagree and 7 to strongly agree (figure 3), was selected for testing how strongly subjects agree or disagree with statements regarding the four I's and the Sustainable Theory of Planned Behaviour statements, (Sekaran & Bougie, 2016). According to Sekaran and Bougie (2016), "whether a Likert scale is an ordinal or interval scale is of much debate, however, Likert scales are generally treated as interval scales" (p. 216). Contradictory to this is the view of Burns & Burns (2008), stating that most market research variables that are being tested are of an ordinal level of measurement. For this study, we decided to perceive a Likert scale as an interval level of measurement, which allowed for comparison the between the different objects, indicated the relative position of the object, and identified and classified the objects (Sekaran & Bougie, 2016, Marañon, 2020).

Strongly disagree	Disagree	Somewhat disagree	Neither agree no disagree	<sup>r</sup> Somewhat agree	Agree	Strongly agree
1	2	3	4	5	6	7

#### Figure 3. Likert Scale (Sekaran & Bougie, 2016)

The second type was a semantic differential scale, which was used for measuring brand attitude and purchase intention. To measure Brand Attitude, three different 7-point semantic differential scales were used. These were: 1 = extremely dislikeable, to 7 = extremely likable; 1 = bad, to 7 = good; and 1 = negative, to 7 = positive. The widely acknowledged use of these scales in literature, together with their excellent alpha scores around .90 confirming the high level of internal validity of the different measures, made us decide to use these scales (Mitchell & Olson 1981 in Dolbec & Chebat, 2013; Mitchell, 1986; Berger & Mitchell, 1989; Spears & Singh, 2004). To measure Purchase Intention, it was decided to use the highly acknowledged 7-point semantic differential scale introduced by Spears & Singh (2004). According to these authors, Purchase Intention can be measured by using the following five scales: 1 = definitely do not intend to buy, to 7 = definitely intend to buy; 1 = very low purchase interest, to 7 = high purchase interest; 1 = definitely not buy, to 7 = definitely buy it; 1 = never, to 7 = definitely; and 1 = probably not buy, to 7 = probably buy it. For this study, it was decided to use the first three scales, as we believed the fourth and fifth scale were less suitable to the study. The reason for this was because we felt the fourth scale (1 = never, to 7 = definitely) needed more clarification or more explanation for the respondent to understand, and we found the fifth scale (1 = probably not buy, to 7 = probably buy it) to be sensitive to the respondent's definition of 'probably'.

## 3.6 Data Analysis

Research states that in order to answer the research question, the collected data must be analysed in a structured manner (Sekaran & Bougie, 2016). The first subsection presents the actions taken for preparing the data for analysis. The consecutive sections explain in detail the statistical tests conducted for answering the hypothesis and the additional analysis, including descriptive statistics, correlational analysis, and the analysis of mean variances.

#### 3.6.1 Data Preparation

The Qualtrics program used for data collection, allowed for a direct import into SPSS, limiting the risk of human errors (Bell, Bryman & Harley 2019). After automatic importing, the data was checked for extreme outliers and errors, such as non-response errors (Malhotra, 2010), non-alignment with the target audience, and unserious answers, and manually adjusted when necessary (Bell, Bryman & Harley 2019). Some additional examples of manual adjustments made to the dataset are the transformation of wrongly coded scales, i.e. from 12 to 19 to the 7-point Likert scale to align with the design of the study, and the renaming of factors to improve the understandability of the different items.

To measure and analyse the effect of incorporating one of the four aspects in green claims on the purchase intention of environmentally friendly fashion products, additional factors were computed for through combining different theoretical concepts into one factor with the sum of averages. The sum of averages is especially suitable when multiple theoretical concepts together represent a factor, and this factor needs to be compared with another factor (A. Marañon, personal communication, 23 April 2020). The first factors that were computed for were the four I's, in which the averages of the eight theoretical frameworks were summed, resulting in an individual mean score for each of the four factors. These were labelled as IndivMean Factor 1 (Intuitive), factor 2 (Innovative), factor 3 (Inviting), and factor 4 (Informative). The second factor that we computed for was the Purchase Intention (PI) of the four I's, in which the average of the three semantic scales on purchase intention were summed for each I. These factors are labelled as the IndivMean scores for PI (Intuitive), PI (Innovative), PI (Inviting), and PI (Informative). The same process was applied when computing for the two controlling variables. The factor covariate Brand Attitude (BA) was created by averaging and adding the three semantic differential scales on brand attitude, labelled as IndivMean BA. The second controlling variable, the Sustainable Theory of Planned Behaviour (STPB), was computed for by averaging and summing the six items into one factor, labelled as the IndivMean STPB. Furthermore, since one theoretical concept consisted of two elements, the averages of these elements were summed into one theoretical framework, labelled as IndivMean Ethical Obligation.

#### 3.6.2 Descriptive Statistics

Sekaran and Bougie (2016) stress that all data analysis generally starts with generating an overview of the outcomes. To get a deeper understanding of the final sample of the study and to ensure the target audience was well-represented with the current set of respondents, we started by displaying basic descriptive statistics, such as gender, age, occupation, and degree, and computed for frequency diagrams to get an understanding of the central tendencies by looking at normal distribution, means and standard deviations (Burns & Burns, 2008). Before continuing with the analysis, to ensure the respondents were equally distributed over the four I's, the basic descriptive statistics were computed for each I. To get familiar with the general attitudes of these respondents towards green claims, the means of different statements around the topic of green claims were presented. Before analysing the relationships between the four I's and purchase intention, analysis of the control variables was conducted to get familiar with the average mean scores of the respondents in terms of their existing brand awareness and their current environmentally consciousness. The latter was measured by testing the five different theoretical concepts of the Sustainable Theory of Planned Behaviour.

#### 3.6.3 Analysis of Correlations

As defined in the theoretical framework, the focus of this study is to find out to what extent the different ways of posing green claims (IV) affect the purchase intention (DV) of environmentally friendly fashion products, with Gender as mediating variable, while controlling for Brand Attitudes and the Sustainable Theory of Planned Behaviour (STPB). A method frequently used in marketing research when testing "the degree of correspondence between variables" (p. 342) is a correlation analysis (Burns & Burns, 2008).

After getting familiar with the descriptive statistics presenting the respondents' existing brand awareness as well as their current environmentally consciousness, and before testing the main hypothesis, the correlations between the control variables (Brand Attitude and STPB) and the Purchase Intention of the four I's were computed for, with the aim to find out whether research on Brand Attitude and Sustainable Theory of Planned Behaviour, stressing these covariates to have a direct impact on the purchase intention of environmentally friendly products, could be confirmed. Though existing literature does not relate Brand Attitude to the Sustainable Theory of Planned Behaviour, to be consistent in ways of testing the relationships, both the zero-order and the partial correlations were presented. Meaning, when testing the correlation between Brand Attitude and the Purchase Intention of the four I's, the results were both presented with and without controlling for the Sustainable Theory of Planned Behaviour, and vice versa.

To test hypothesis 1 to 4, the data was analysed in five steps. To detect patterns within the data, visual summaries of the correlations in the form of scatterplots were obtained, which are perceived as appropriate visualisation diagrams for correlation analysis (Bell, Bryman & Harley, 2019). Followed by testing the significance of the relationships between the IV's and the DV by conducting a correlation analysis to determine if the population correlation is significantly different from zero, meaning "any difference or relationship that exists between population is not due to chance" (Burns & Burns, 2008, p. 230), indicating there is a significant relationship between the two variables, also referred to as the alternative hypothesis. This was examined by looking at the significance, with an associated probability level of .05 for rejecting the null hypothesis, and accepting the alternative hypothesis, as this is the most commonly used cut-off level for statistical hypothesis testing (Burns & Burns, 2008). To show the impact of the controlling variables on the relationships, both the zero-order correlations, also referred to as bivariate, and the partial correlations were displayed. The conclusions of this study were drawn based on the outcome of the partial correlations in which we control for both Brand Attitude and the Sustainable Theory of Planned behaviour. Within correlation analysis, variables can be positively, negatively, or randomly correlated (Burns & Burns, 2008). After examining the significance of the relationships, the direction of the correlations, as well as the strengths of the correlations, were inspected by looking at the effect size (figure 4). This was considered necessary as "the significance level does not tell us how large an effect of an IV had on the DV" (Burns & Burns, 2008, p. 253). For the bivariate correlations, SPSS displays the Pearson correlation, whereas for the partial correlation a regular correlation is displayed. To simplify the interpretation, the translations of numbers into words, the coefficients were labelled as visualised in figure 4.

0.90 - 1.00	Very high correlation	Very strong relationship
0.70 - 0.90	High correlation	Substantial relationship
0.40 - 0.70	Moderate correlation	Moderate relationship
0.20 - 0.40	Low correlation	Weak relationship
0.00 - 0.20	Slight correlation	Relationship so small as to be random

#### Figure 4. Interpreting Correlation Size (Burns & Burns, 2008)

After examining the significance as well as the strength and direction of the relationships, the four claims were ranked based on the strengths of the correlation coefficients to visualise the strongest to the weakest partial relationship between the independent variable the four I's and the dependent variable Purchase Intention while controlling for Brand Attitude and STPB. Lastly, to test whether these ranked partial correlations were significantly different, the test on the equality of partial correlations of two independent groups based on the Fisher Z transformation was used (Levy & Narula, 1978). This test converts the coefficient values into z scores to ensure that partial correlations, of two independent groups of the same variables, but of different sample sizes or other differentiating characteristics, can be compared (Levy & Narula, 1978). As this test is not featured in SPSS, the Fisher Z transformation was computed

for in a Microsoft Excel file which was designed based on the article of Levy and Narula (1978) (appendix 6).

In this file, we inserted the number of control variables, the sample size (df+1), and the value of the correlation coefficients for each of the two compared partial correlations, e.g. correlation coefficient of the relationship between the IV and DV for the first I (Intuitive) versus the correlation coefficient of the relationship between the IV and DV for the second I (Innovative). The test shows the results for an associated probability level of .05 and .1, with the .1 significance level being more likely due to chance (Burns & Burns, 2008). Conclusions were therefore only drawn based on the significance level of .05.

A two-step approach was used when testing hypothesis 5. Firstly, the same correlations between the four I's and Purchase Intention were computed for, with and without controlling for Brand Attitude and SPTB, while splitting the dataset into two subgroups: male and female. Secondly, to find out whether these relationships are significantly stronger for females, the Fisher Z transformation test was again conducted.

In addition, to evaluate the specific impact of the covariates on the relationships between the four I's and Purchase Intention, additional correlations were computed for. In this additional analysis, similar correlations between the independent and dependent variables were drawn, except for the difference in the control variables, in which we either solely controlled for Brand Attitude or for the Sustainable Theory of Planned Behaviour.

## 3.6.4 Analysis of Variances

To test whether females are more likely to have a higher purchase intention of environmentally friendly fashion products compared to males (hypothesis 6), the means were firstly presented in a descriptive manner, after which an analysis of variance (ANOVA) test was conducted. An ANOVA test determines whether the mean difference between two treatment groups is due to a systematic effect or solely due to chance (Burns, & Burns, 2008). As our study samples were independent, a one-way ANOVA was considered applicable to this study (Burns & Burns, 2008). Thus, for this study, the one-way ANOVA test determined whether the mean differences of the purchase intention of environmentally friendly between males and females were significantly different. The main advantage of using the one-way ANOVA test compared to other t-tests is its level of sophistication, as it reduces the chances of statistical Type I and Type II errors of our study (Burns & Burns, 2008). These two errors are defined as the fault of rejecting a true null hypothesis or accepting a false null hypothesis (Burns & Burns, 2008). A probability level of .05 was selected, also referred to as the 95% confidence level, for determining whether the mean differences were significantly different (Burns & Burns, 2008). Before analysing the results from the ANOVA test, we ensured the assumptions of ANOVA were met, which are as follow: (1) normality, in terms of the sample distribution (2) homogeneity of variance, meaning similar variances in both groups, and (3) independence of errors, meaning that scores are independent of all the other scores.

To gain more insights on the gender differences in relation to hypothesis 5 and 6, an exploratory analysis was conducted, in which the means of the Sustainable Theory of Planned Behaviour

(STPB) at the item level divided by gender were presented, after which a one-way ANOVA test was conducted at the 95 % confidence level to display whether there were actual significant differences between the means of the two genders.

# 3.7 Validity and Reliability

To ensure this study tested what it intended to measure and was consistent when measuring, both the validity and reliability of the study were considered carefully (Bryman & Cramer, 2011; Sekaran & Bougie, 2016). The following paragraphs explain more in detail the ways in which we strengthened both validity and reliability.

#### 3.7.1 Validity

Validity is concerned with "whether or not a measure of a concept really measures that concept" (Bell, Bryman & Harley, 2019, p. 174). There are two sub-categories of validity, internal and external validity (Bryman & Bell, 2011). Internal validity is concerned with the causality of the relationship between the IV and the DV (Bryman & Bell, 2011).

To strengthen internal validity, we have taken the following steps. Firstly, the design elements in the advertisements were held constant to ensure no additional elements interfere with the relationship being tested. In addition, research stresses both Brand Attitude and the Sustainable Theory of Planned Behaviour to influence the purchase intention of sustainable products. Controlling for both was expected to result in a less interfered causal relationship. Secondly, by deleting non-response errors, non-alignment with the target audience, and unserious answers, we increased our ability to measure what we intend to measure. Thirdly, the internal validity is automatically increased as the majority of the theoretical concepts that were tested were captured from different peer-reviewed articles. Fourthly, the 'face validity' of the survey questions, referring to the degree to which the person reviewing an assessment instrument thinks the items are covering a construct (Bryman & Cramer, 2011; Bell, Bryman & Harley, 2019), was tested before conducting the survey. This was done through a pre-test, in which 10 people aligned with the target audience, were asked to what extent they believed the green claim matched the construct of the four I's: Intuitive, Innovative, Inviting and Informative. The questions asked can be found in appendix 5. By doing so, the chances of the claims to test the right aspects related to the theory of the four I's was increased.

External validity relates to the generalisability of the results beyond this study (Bryman & Bell, 2011). Malhotra (2010) argues that non-probability sampling cannot be fully representative to support generalisability. However, by carefully choosing the sample design (web-based questionnaire) and distribution model (distributing via different channels) in line with the purpose of the study, we increased the chances of reaching a representative sample. In addition, the survey respondents were obliged to fill in their age and nationality at the beginning of the survey, which are perceived as two crucial parameters for the target population. The ones not

fulfilling the criteria got directed to the end of the survey, which automatically increased our ability to reach the target population.

## 3.7.2 Reliability

According to Sekaran & Bougie (2016), reliability can be defined as "an indication of the stability and consistency with which the instrument measures the concept" (p. 223). Firstly, the theory and scales used in this study are from peer-reviewed articles, which automatically increased levels of reliability. Nonetheless, to confirm the reliability of measures, the internal consistency of measures was tested by computing for the Cronbach's Alpha coefficient (Burns & Burns, 2008; Easterby-Smith, 2018; Bryman & Cramer, 2011). Particularly, the Cronbach's Alpha coefficient tests "the degree that items are independent measures of the same concept" (Sekaran & Bougie, 2016, p. 224). The value of Cronbach's Alpha ranges between 0 and 1, whereby an acceptable level of consistency is reached when the alpha meets the threshold of  $\alpha = 0.7$  (Burns & Burns, 2008; Malhotra, 2010), and an alpha score above 0.8 is considered a highly acceptable level of homogeneity of items (Burns & Burns, 2008).

An important aspect of the Cronbach's Alpha is that it tends to inflate by the number of items added to measure the construct (Burns & Burns, 2008), whereby it was important to not incorporate too many theoretical concepts to the factors (Intuitive, Innovative, Inviting and Informative) in order to obtain a true alpha score. Since the theory of the 5 I's is relatively understudied, to support the definitions on the factors, additional theoretical concepts surrounding the four I's were introduced to capture different elements to incorporate in the green claim's formulation.

To ensure there was an existing acceptable level of consistency to proceed with the analysis of the results, as well as to confirm that the more general theory on the four I's in relation to green behaviour can be extended to green claims, the Cronbach's Alpha was computed for. Burns and Burns (2008) highlight the usefulness of Cronbach's Alpha when developing new scales or survey statements as it proves how connected the items are to a specific construct. In addition, Burns & Burns (2008) stress that items showing a low contribution to the alpha score can be deleted.

# 4 Results

The findings of the study are presented in the following subsections: sample overview, reliability of multi-item constructs, control variables, and the hypothesis testing. To deepen the understanding, an additional analysis was conducted, which is presented after the summary of results from testing the hypothesis.

## 4.1 Sample Overview

The next subsections provide the reader with insights in terms of the demographics of the final sample as well as the distribution of the respondents over the four different claims. Followed by an overview of the general attitudes of Swedish Millennials towards green claims.

#### 4.1.1 Demographics and Case Allocation

The minimum number of respondents to comply with the central limit theorem was 240 respondents (8 sample groups of 30 respondents), which should be equal in terms of gender and randomly allocated over the four different advertisements. In practice, we were able to obtain a total of 702 respondents. Of those results, 8 were removed due to the participants not meeting the selection criterion of having a Swedish nationality; 7 were removed as the respondents did not fall within the age category of 20 to 38 years old; 2 were removed as the respondents selected the option 'other' for gender, which was not in line with testing hypothesis 5 and 6. In addition, 9 respondents were removed as they showed signs of wanting to sabotage the research by solely grading the extreme answer of '1' representing 'strongly disagree' for all questionnaire items within the advertising and purchasing intention sections. Consequently, the data set consisted of 675 respondents from which 337 were male (49.9 per cent) and 338 were female (50.1 per cent) that were randomly assigned to the four different advertisements. Out of these 675 respondents, 432 respondents (64 per cent) had an existing awareness of the brand Nudie Jeans. As brand attitude is selected as a control variable, it was decided to delete the 243 respondents that did not have an existing brand attitude to ensure coherency in the raw data analysed. Table 3 visualises the final allocation of the remaining 432 respondents, showing that both males and females are allocated relatively equally over the four claims, as well as the demographics of the target audience being well-represented by the set of respondents, e.g. age, occupation, and degree. The characteristics, the size of the sample, and the relatively equal distribution of the respondents over the four I's has made us decide to continue with the analysis.

	Claim 1	Claim 2	Claim 3	Claim 4	Tot	al
Demographics	Intuitive	Innovative			(no. respondents)	(%)
Claim Allocation						
Sample Size	114	107	107	104	432	100%
Gender						
Male	53	50	48	41	192	44.4%
Female	61	57	59	63	240	55.6%
Age						
20 - 25	46	43	59	49	197	45.6%
26 - 31	56	44	31	39	170	39.4%
32 - 38	12	20	17	16	65	15.0%
Occupation*						
Full-time working	57	63	57	55	232	53.7%
Part-time working	15	13	13	11	52	12.0%
Student	53	39	40	45	177	41.0%
Looking for a job	1	4	5	1	11	2.5%
Unemployed	0	3	5	1	9	2.1%
Degree						
Doctorate degree	1	2	0	0	3	0.7%
Masters degree	29	29	21	32	111	25.7%
Bachelors degree	61	51	61	42	215	49.8%
High school graduate	23	25	24	29	101	23.4%
Elementary graduate	0	0	1	1	2	0.5%

Table 3. Overview of Demographics and Case Allocation

\*. Respondents were able to select more options

## 4.1.2 Swedish Millennials' Attitudes Towards Green Claims

The empirical results from testing the items of four different theoretical concepts surrounding consumers' attitudes towards green claims are visualised in table 4. The first item was concerned with testing whether it is easy to know which fashion brands are committed to environmental sustainability. The low mean ( $\mu$ =3.12) indicates that on average the respondents somewhat disagree with the statement that it is easy to know which fashion brands are committed to environmental sustainability. The second item displays whether the respondents pay attention to environmental sustainability statements made by fashion brands if they are presented to them. With a mean of 4.45, the results show that respondents more agree than not agree with whether they pay attention to environmental sustainability statements made by fashion brands if presented to them. The third item tests the understandability of environmental sustainability statements made by fashion brands if presented to them. The third item tests the understandability of environmental sustainability statements made by fashion brands if presented to them. The third item tests the understandability of environmental sustainability statements made by fashion brands if presented to them. The third item tests the understandability of environmental sustainability statements made by fashion brands. The results show that with a mean of 4.16, on average the respondents are quite neutral about the statement whether they understand what fashion brands mean with environmental sustainability statements. The fourth item aimed at testing whether sustainable corporations should be more vocal about their environmentally

sustainable practices. The high mean ( $\mu = 5.40$ ) indicates the respondents somewhat agree with the statement concerned with whether they would like the fashion brands that are doing good to be more vocal about their environmentally sustainable practices.

Theoretical Concept	Item	Mean	Std. Deviation
Knowledge	I find it easy to know which fashion brands are committed to environmental sustainability.	3.12	1.472
Attention	I pay attention to environmental sustainability statements made by fashion brands if they are presented to me, in for example advertisements.	4.45	1.666
Understanding	I understand what fashion brands mean with environmental sustainability statements.	4.16	1.578
Vocal	I would like fashion brands that are doing good to be more vocal about their environmentally sustainable practices.	5.40	1.379

Table 4. Overview Swedish Millennials' Attitudes Towards Green Claims

Note: The items are measured by using a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree).

## 4.2 Reliability of Multi-Item Constructs

The Cronbach's Alpha ( $\alpha$ ) was calculated to measure the degree to which the theoretical concepts are the independent measures of the factors in the two operationalisation tables (1 and 2), e.g. Sustainable Theory of Planned Behaviour (STPB), Brand Attitude (BA), Intuitive, Innovative, Inviting, Informative, and Purchase Intention (PI). The results of the Cronbach's Alpha test for the first two factors STPB and BA are presented in the first table (5), whereas the Cronbach's Alpha results for the remaining factors, the four I's and PI for each I, are presented in the second table (6). The results of the Cronbach's Alpha have been analysed by comparing them with the threshold of  $\alpha = 0.7$ , which must be met to reach an acceptable level of consistency (Burns & Burns, 2008).

Table 5. shows that the Cronbach's Alpha of STPB is  $\alpha = 0.745$ , which indicates an acceptable level supporting that the items are measuring the same construct. The Cronbach Alpha for BA  $\alpha = 0.935$  is categorised as an excellent strength of association, meaning homogeneity of theoretical concepts. Since both factors meet the Cronbach's Alpha threshold, both factors are internally reliable. Therefore, further data analysis using these control variables can be conducted.

Factor	Item	Cronbach's a
	1. Environmental sustainability is important to me.	
Sustainable Theory of Planned Behaviour	2. I feel pressured to act in a sustainable way as people around me act sustainably.	
	3. I consider myself ready to act in a green manner.	
	4. I generally consider myself environmentally sustainable when purchasing clothing.	.745
	<ol> <li>I would be more likely to buy clothes from companies I know are committed to environmental sustainability.</li> </ol>	
	6. I want the fashion industry to become environmentally sustainable.	
	Please describe your overall feelings about the brand Nudie Jeans:	
Brand Attitude	<ul> <li>Extremely dislikeable – Extremely likeable</li> <li>Negative – Positive</li> <li>Bad – Good</li> </ul>	.935

Table 5. Cronbach's Alpha Results for the Controlling Variables

Note: The STPB is measured by using a 7-point Likert scale (1 =strongly disagree; 7 =strongly agree) and the BA items are measured by using a 7-point Semantic differential scale.

The results for computing the Cronbach's Alpha for the four I's are as follows: Intuitive ( $\alpha = 0.777$ ), Innovative ( $\alpha = 0.889$ ), Inviting ( $\alpha = 0.880$ ) and Informative ( $\alpha = 0.740$ ), which are all above the threshold of  $\alpha = 0.7$ . As Purchase Intention (PI) has been measured for the four different I's, the Cronbach's Alpha has been computed for four times. Table 6 displays that the PI factor has surpassed  $\alpha > 0.9$  for all I's, which highly surpasses the threshold. Since all mentioned factors received a satisfactory  $\alpha$  score, the measures can be seen as reliable and no adjustments have to be made before proceeding with the data analysis.

Table 6. Cronbach's Alpha Results for the Four I's and Purchase Intention

Factor	Item	Cronbach's α
Factor	<ol> <li>I think this advertisement text:         <ol> <li>tells me what environmentally sustainable activities are seen as normal.</li> <li>makes me aware of more environmentally sustainable alternatives.</li> <li>informs me about environmentally sustainable behaviour that can be repeated over time.</li> </ol> </li> </ol>	Cronbach's α
Intuitive	<ol> <li>makes it easier to engage in environmentally sustainable behaviour.</li> <li>provides feedback about my performance of environmentally sustainable behaviour.</li> </ol>	.777
	6. reminds me of what desired environmentally sustainable behaviour is.	
	<ol> <li>encourages me to adopt environmentally sustainable behaviour.</li> <li>presents stereotypical information known to all.</li> </ol>	

I think this advertisement text:		
1. tells me that this product is a significantly improved product.		
2. can influence my current lifestyle.		
3. tells me this product could contribute to solving environmental problems.		
4. tells me that this product leads to environmental improvements compared to other alternatives.	.889	
5. can change my preference towards more environmentally friendly products.		
6. positively influences my perception of the added value of this product.		
7. makes it possible to communicate the product benefits in an easy manner.		
8. makes me feel like it is safe to try out something new.		
I think this advertisement text:		
1. evokes emotions.		
2. speaks to me on a personal level.		
3. is amusing.		
4. makes me feel happy.	.880	
5. makes me feel like I can be responsible for positive environmental change.		
6. increases my sympathy of the environment.		
7. stimulates my imagination.		
8. catches my attention.		
I think this advertisement text:		
1. is easy to understand.		
2. can be easily verified by checking existing facts.		
3. informs me that I am doing good by buying this product.		
4. informs me about the positive environmental consequences of buying this product.	.740	
5. tells me why buying this product is considered sustainable.		
6. does not provide me unnecessary additional information.		
7. is not confusing to me.		
8. educates me that an environmentally sustainable product can become a personal gain		
Please mark your purchase interest, purchase intent, and willingness to buy this re- use denim product in the following scales:	Intuitive .904	
use demin product in the following scales.		
<ul> <li>Very low purchase interest – Very high purchase interest</li> </ul>	Innovative .948 Inviting .946	
	<ol> <li>tells me that this product is a significantly improved product.</li> <li>can influence my current lifestyle.</li> <li>tells me this product could contribute to solving environmental problems.</li> <li>tells me that this product leads to environmental improvements compared to other alternatives.</li> <li>can change my preference towards more environmentally friendly products.</li> <li>positively influences my perception of the added value of this product.</li> <li>makes it possible to communicate the product benefits in an easy manner.</li> <li>makes me feel like it is safe to try out something new.</li> <li>think this advertisement text:         <ol> <li>evokes emotions.</li> <li>speaks to me on a personal level.</li> <li>is amusing.</li> <li>makes me feel like I can be responsible for positive environmental change.</li> <li>increases my sympathy of the environment.</li> <li>stimulates my imagination.</li> <li>catches my attention.</li> </ol> </li> <li>think this advertisement text:         <ol> <li>is easy to understand.</li> <li>can be easily verified by checking existing facts.</li> <li>informs me that I am doing good by buying this product.</li> <li>informs me about the positive environmental consequences of buying this product.</li> <li>tells me why buying this product is considered sustainable.</li> <li>does not provide me unnecessary additional information.</li> <li>is not confusing to me.</li> <li>educates me that an environmentally sustainable product can become a personal gain</li> </ol> </li> </ol>	

## 4.3 Control Variables

Both Brand Attitude and the Sustainable Theory of Planned Behaviour are treated as control variables. The results from the analysis of the control variables are presented in the following subsections.

#### 4.3.1 Brand Attitude

The empirical results from testing the brand attitudes of respondents are visualised in table 7. With  $\mu = 4.7554$ , it can be concluded that, on average, the respondents 'somewhat like', and have 'more or less a positive and good feeling' of the brand Nudie Jeans.

Table 7. Brand Attitude of Nudie Jeans

Factor	Gender	Mean	Ν	Std. Deviation
Brand Attitude	Total	4.7554	432	1.03214

Note: Brand Attitude is measured by averaging three different 7-point semantic differential scales (1= extremely dislikeable, 7 = extremely likable; 1 = bad, 7 = good; 1 = negative, 7 = positive).

Table 8 shows the relationship between the variable Brand Attitude (BA) and Purchase Intention (PI) of the four I's with and without controlling for Sustainable Theory of Planned Behaviour (STPB). The top part displays the usual bivariate correlation between BA and the PI without partialling out the STPB. The results show there is a significant positive order correlation between the BA and the PI of all the Four I's. For the first I (Intuitive), the effect of the BA on the PI is significant and positive with  $\rho = .272$ , p = .003, indicating a somewhat weak relationship. The table displays a positive correlation of  $\rho = .409$  with p < .001 for the second I (Innovative). This signifies a moderate relationship between the BA and the PI. The bivariate correlation between the BA and PI (Inviting) is significant and positive with  $\rho = .350$  and p < .001, which implies a weak to moderate relationship. For the fourth I (Informative), the relationship between the BA and PI is indicated as moderate with a positive correlation coefficient of .479 and p < .001. The lower part of the table presents the results from the partial correlation coefficients in which the STPB is held constant.

While controlling for STPB, the results show again that there is a significant positive relationship between BA and the PI of all the Four I's. The partial correlation between BA and PI while controlling for STPB for the first I (Intuitive) is positive and significant with  $\rho = .285$  and p = .002, indicating a stronger significant relationship compared to the zero-order correlation ( $\rho = .272$ , p = .003). For the second I (Innovative), the effect of the BA on the PI while partialling out STPB is significant and positive with  $\rho_{partial} = .409$  and p < .001. This result indicates a significant relationship similar to that of the zero-order one for the second I (Innovative). For the third I (Inviting), the table displays a comparable positive significant relationship between the BA and PI while holding constant for STPB compared to the zero-order order correlation with  $\rho_{partial} = .349$  and p < .001. For the fourth I (Informative), the partial

correlation between BA and PI controlled for STPB is significant and positive with  $\rho_{partial} = .461$  and p < .001. This deviates from the other I's in the sense that the relationship is weaker than the zero-order correlation ( $\rho = .479$ , p < .001) for the fourth I. To summarize, BA is significant for all zero-order and partial relationships.

Frates	Control Vertables		Purchase Intention			
Factor	Control Variables		Intuitive	Innovative	Inviting	Informative
		Correlation	.272	.409	.350	.479
	None a	Sig. (2-tailed)	.003	.001	.001	.001
Brand Attitude		df	114	107	.107	104
Tuttude		Correlation	.285	.409	.349	.461
	Controlled for STBP	Sig. (2-tailed)	.002	.001	.001	.001
		df	111	104	104	101

 Table 8. Correlation Between Brand Attitude and Purchase Intention

a. Cells contain zero-order (Pearson) correlations.

#### 4.3.2 The Sustainable Theory of Planned Behaviour

The empirical results from testing the theoretical concepts of the Sustainable Theory of Planned Behaviour (STPB) are visualised in table 9. Five different theoretical concepts have been tested by presenting the respondents six different items, also referred to as statements.

The first statement tests the attitudes of the respondents by measuring their importance given to environmental sustainability. The mean ( $\mu = 5.98$ ) indicates that on average the respondents agreed that sustainability is important to them. The second statement displays to what extent the respondents feel pressured to act in a sustainable way as people around them act sustainably. With a mean of 4.65, the respondents are leaning towards somewhat agree. Meaning, on average the respondents feel somewhat pressured to act in a sustainable way as people around them act sustainably. The third statement is focused on measuring whether respondents are ready to act in a green manner. On average, with a mean of 5.26, the respondents considered themselves a bit more than somewhat ready to act in a green manner. The fourth statement is testing the selfview regarding environmentally sustainable behaviour when purchasing fashion. The results show that with a mean of 4.11, the respondents neither agreed or disagreed with whether they considered themselves environmentally sustainable when purchasing clothing. The fifth theoretical concept, ethical obligation, is split up in two different items. The first item measures the likeliness of the respondents to buy clothes from companies they know are committed to environmental sustainability. The mean ( $\mu = 5.14$ ) indicates that, on average, the respondents would somewhat be more likely to buy clothes from companies they know are committed to environmental sustainability. The second item displays whether the respondents want the fashion industry to become environmentally sustainable. The results show ( $\mu = 6.32$ ) that on average the respondents agreed with the statement, confirming they want the fashion industry to become environmentally sustainable.

Theoretical Concept	Item	Mean	Std. Deviation
Consumer Attitudes	Environmental sustainability is important to me.	5.96	.937
Subjective Norm	I feel pressured to act in a sustainable way as people around me act sustainably	4.65	1.476
Readiness to be green	I consider myself ready to act in a green manner.	5.26	1.028
Pro-environmental Self-identity	I generally consider myself environmentally sustainable when purchasing clothing.	4.11	1.560
Ethical Obligation (1)	I would be more likely to buy clothes from companies I know are committed to environmental sustainability.	5.14	1.476
Ethical Obligation (2)	I want the fashion industry to become environmentally sustainable.	6.32	.894

Table 9. Overview of the Sustainable Theory of Planned Behaviour

Note: The items are measured by using a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree).

Table 10 presents the empirical results from testing the correlation between the Sustainable Theory of Planned Behaviour (STPB) and the Purchase Intention (PI) of the four I's, with and without controlling for Brand Attitude (BA). The findings of the zero-order correlation display a significant and positive relationship between the STPB and PI for three of the four I's, with  $\rho = .214$  and p = .022 for the relationship between STPB and PI (Intuitive);  $\rho = .361$  and p < .001 for the effect of STPB on PI (Innovative); and  $\rho = .208$ , p = .034 for the PI of the last I (Informative) and STPB. All of these Pearson correlation coefficients indicate a somewhat weak relationship. While controlling for BA, the results from the partial correlation coefficient show a significant positive relationship between two of the four I's, with  $\rho = .230$  and p = .014 for the relationship between STPB and PI (Intuitive); and  $\rho = .360$ , p < .001 for the effect of STPB on PI (Innovative). Both correlations can again be categorised as relatively weak relationships. Therefore, the overall results conclude that three out of four zero-order correlations are significant and two out of four partial correlations are significant.

Theoretical	Control			Purchase Intention			
Concept	Variables		Intuitive	Innovative	Inviting	Informative	
		Correlation	.214	.361	.150	.208	
	None a	Sig. (2-tailed)	.022	.001	.124	.034	
Sustainable Theory of		df	112	105	105	102	
Planned Behaviour		Correlation	.230	.360	.147	.151	
	Controlled for BA	Sig. (2-tailed)	.014	.001	.133	.128	
	2.1	df	111	104	104	101	

#### Table 10. Correlation Between the STPB and Purchase Intention

a. Cells contain zero-order (Pearson) correlations.

## 4.4 Hypothesis Testing

The results from testing the hypothesis are presented in the following sections. As defined in the methodology, in order to answer the first four hypotheses on the relationship between the four I's and purchase intention, the data is presented in five steps. Firstly, to detect patterns within the data, visual summaries of the correlations in the form of scatterplots are presented. Secondly, the results from the correlational analysis testing whether the relationships are significant are presented. Followed by an inspection of both the direction and the strengths of the correlations. Fourthly, the strongest to the weakest relationship is presented through ranking the four claims based on the strengths of the correlation coefficients. Lastly, the results from the Fisher Z transformation on whether these ranked partial correlations are significantly different is displayed. Followed by the results from the moderating effect of gender. The outcome from testing hypothesis 5 shows the same correlations, including a split for males and females, after which the results from the Fisher Z transformation are presented to show whether these relationships are significantly stronger for females. The results from testing hypothesis 6 firstly present the means of the purchase intention of environmentally friendly products for both males and females, followed by the results of conducting the analysis of variance.

#### 4.4.1 The Relationship between The Four I's and Purchase Intention

Before analysing the findings from testing the hypotheses, four scatterplots have been created, which can be found in appendix 7. All four plots show a positive correlation with points scattered around a straight increasing line (Burns & Burns, 2008), indicating a positive relationship between each of the four I's and Purchase Intention (PI).

The empirical results from testing the hypothesis 1 to 4 are presented in the following sections, displaying the relationships between the independent variables the four I's, referred to as Intuitive, Innovative, Inviting, and Informative, and the dependent variable PI while controlling for Sustainable Theory of Planned Behaviour (STPB) and Brand Attitude (BA).

Table 11 displays the result of the effect of the independent variable, the Intuitive claim, on the dependent variable PI with and without controlling for STPB and BA. The outcome of the bivariate correlation shows there is a significant positive order correlation between the Intuitive claim and PI with  $\rho = .480$  and p < .001, indicating a moderate relationship between the independent and dependent variable. In parallel, the results from the partial correlation coefficient in which the STPB and BA are held constant while computing for the relationship between the Intuitive claim and PI show again a significant positive correlation with  $\rho$  partial = .437 and p < .001. This result indicates a slightly weaker significant relationship between the Intuitive claim and PI compared to the zero-order correlation. To conclude, both the results from the bivariate and partial correlation can be described as follow; there is a positive moderate relationship between incorporating Intuitive aspects in green claims and the purchase intention of environmentally friendly fashion products. Therefore, hypothesis 1 is confirmed.

Claims	Control Variables		Purchase Intention
		Correlation	.480
	None a	Sig. (2-tailed)	.001
<b>.</b>		df	112
Intuitive		Correlation	.437
	Controlled for STPB & BA	Sig. (2-tailed)	.001
		df	110

Table 11. Correlation Between the Intuitive Claim and Purchase Intention

a. Cells contain zero-order (Pearson) correlations.

The results in table 12 present the effect of the independent variable Innovative claim on the dependent variable PI with and without holding STPB and BA constant. The table displays a significant positive order correlation between the Innovative claim and PI for the bivariate correlation with  $\rho = .799$  and p < .001, which indicates a substantial relationship between the independent and dependent variable. While controlling for STPB and BA, the results from the partial correlation coefficient, which tests the effect of the Innovative claim on PI, shows again a significant positive relationship with  $\rho_{\text{partial}} = .724$  and p < .001. This result indicates a weaker significant relationship between the Innovative claim and PI compared to the zero-order correlation. These results show there is a substantially positive relationship between incorporating Innovative aspects in green claims and the purchase intention of environmentally friendly fashion products, thereby confirming hypothesis 2.

Claims	Control Variables		Purchase Intention
		Correlation	.799
	None a	Sig. (2-tailed)	.001
Ŧ.		df	105
Innovative		Correlation	.724
	Controlled for STPB & BA	Sig. (2-tailed)	.001
		df	103

#### Table 12. Correlation Between the Innovative Claim and Purchase Intention

a. Cells contain zero-order (Pearson) correlations.

The effect of the independent variable Inviting claim on the dependent variable Inviting PI with and without controlling for STPB and BA is presented in table 13. The results of computing the zero-order correlation between the Inviting claim and PI, with  $\rho = .487$  and p < .001, signify a moderate relationship between the independent and dependent variable. The effect of the Inviting claim and PI while controlling for STPB and BA is positive and significant with  $\rho_{\text{partial}} = .450$  and p < .001. In line with the observations of the previous two sections, the result indicates a slightly weaker significant relationship between the Inviting claim and PI compared to the bivariate correlation. In sum, hypothesis 3 is also confirmed as both the correlation coefficients of the bivariate and partial tests show there is a positive moderate relationship between incorporating Inviting aspects in green claims and the purchase intention of environmentally friendly fashion products.

Claims	Control Variables		Purchase Intention
		Correlation	.487
	None a	Sig. (2-tailed)	001
T		df	105
Inviting		Correlation	.450
	Controlled for STPB & BA	Sig. (2-tailed)	.001
		df	103

Table 13. Correlation Between the Inviting Claim and Purchase Intention

a. Cells contain zero-order (Pearson) correlations.

Table 14 displays the relationship between the independent variable Informative claim on the dependent variable Informative PI with and without partialling out STPB and BA. The zero-order correlation computed between the Informative claim and PI with  $\rho = .538$  and p < .001 indicate a moderate relationship between the independent and dependent variable. The results from the partial correlation coefficient in which the STPB and BA are controlled for while computing for the relationship between the Informative claim and PI show again a significant positive correlation with  $\rho_{\text{partial}} = .431$  and p < .001. Compared to the bivariate correlation ( $\rho = .538$ , p < .001), the outcomes indicate a slightly weaker significant relationship between the Informative claim and PI. Based on both the bivariate and partial correlation, it can be concluded there is a positive moderate relationship between incorporating Informative aspects in green claims and the purchase intention of environmentally friendly fashion products. Consequently, hypothesis 4 is confirmed.

Claims	Control Variables		Purchase Intention
		Correlation	.538
	None a	Sig. (2-tailed)	.001
I., f.,		df	102
Informative	Controlled for STPB & BA	Correlation	.431
		Sig. (2-tailed)	.001
		df	100

Table 14. Correlation Between the Innovative Claim and Purchase Intention

a. Cells contain zero-order (Pearson) correlations.

The results from visualising the strongest to the weakest relationship between the four I's and Purchase Intention, while controlling for Brand Attitude and the Sustainable Theory of Planned Behaviour are displayed in table 15. These show that the strongest relationship is detected between the Innovative claim and PI with  $\rho_{partial} = .724$ , which is observably higher compared to the other I's. With  $\rho_{partial} = .450$ , the second strongest correlation was captured for the Inviting claim and PI. The partial correlation between the Intuitive claim and PI was, with a correlation coefficient of  $\rho = .437$ , ranked as the third strongest correlation. The effect of the Informative claim on Purchase Intention is ranked as weakest with  $\rho_{partial} = .431$ . The final ranking can be visualised in table 15.

Rank	Claim	Correlation	Sig. (2-tailed)	df
1	Innovative	.724	.001	103
2	Inviting	.450	.001	103
3	Intuitive	.437	.001	110
4	Informative	.431	.001	100

Table 15. Ranking of the Correlations on the Four I's and Purchase Intention

The outcomes of the Fisher Z transformation are visualised in table 16, which displays the test statistics, the associated p-value (1-tailed) as a result of the transformation, and the decision of significance. The test statistics for all three comparisons with the second I (Innovative) are all ranging between 6.069 and 6.403 with an associated p-value < .001, which shows that the correlation for the Innovative claim and Purchase Intention is significantly different from the other three correlations at the .05 significance level. The comparisons between the correlations of the other three I's (Intuitive, Inviting and Informative) showed no significant results with the test statistics ranging between 0.105 and 0.329 and p-values between .371 and .458, indicating they are not different from each other. The overall results from the Fisher Z transformation confirm the ranking as originally presented.

Compared	Sam	Sample 1		Sample 2		z1 – z2	Test	n voluo	
Claims	Correla tion	Sample size	Correla tion	Sample size	(Fisher)	Std dev.	statistic	p-value (1-tailed)	Decision
Innovative vs. Intuitive	0.724	104	0.437	111	0.89497	0.13977	6.40326	.001	Sig at 5 %
Innovative vs. Inviting	0.724	104	0.450	104	0.86260	0.14213	6.06894	.001	Sig at 5 %
Innovative vs. Informative	0.724	104	0.431	101	0.90975	0.14324	6.35125	.001	Sig at 5 %
Inviting vs. Informative	0.450	104	0.431	101	0.04715	0.14324	0.32918	.371	Not Sig
Inviting vs. Intuitive	0.450	104	0.437	111	0.03237	0.13977	0.23158	.408	Not Sig
Intuitive vs. Informative	0.437	111	0.431	101	0.01478	0.14089	0.10494	.458	Not Sig

Table 16. Fisher Z transformation of the Four I's

#### 4.4.2 The Moderating Effect of Gender

Table 17 presents the split in gender for each of the four correlations. For the first I (Intuitive), the correlation between the Intuitive claim and Purchase Intention (PI) is significant and positive for both genders (p = .001), with males ( $\rho_{partial} = .460$ ) having a slightly higher correlation coefficient compared to females ( $\rho_{partial} = .414$ ). The effect sizes of both genders signify moderate relationships. The results show that for the second I (Innovative), the effect of the Innovative claim on PI is positive and significant for both genders (p < .001), with females having a stronger partial correlation ( $\rho_{partial} = .749$ ) compared to males ( $\rho_{partial} = .670$ ). The correlation strength of females for the second I (Innovative) imply a substantial relationship, whereas the slightly lower correlation size for males indicates a moderate relationship. The effect of the third I, (Inviting) claim on PI is positive and significant with males showing slightly higher as well as stronger significant results ( $p_{partial} = .494$ , p < .001) compared to females ( $p_{partial}$ = .367, p = .05). These values indicate that the relationship between the Inviting claim and PI is moderate for the males and weak for the females. Contradictory to the previous results, the relationship between the fourth I (Informative) and PI is solely significant for females with p < p.001 and  $\rho_{\text{partial}} = .495$ , indicating a moderate relationship. The effect is not significant for males  $(\rho_{partial} = .274, p = .095)$ . To summarise, males have a stronger relationship between both the intuitive claim and purchase intention, and the inviting claim and purchase intention, whereas females have a stronger relationship for the other two claims: innovative and informative.

Control		Garden			Purchase	e Intention	
Variables	Claims	Gender		Intuitive	Innovative	Inviting	Informative
BA & STPB			Correlation	.460		•	
		Male	Sig. (2-tailed)	.001			
	Tardani di san		df	49			
	Intuitive		Correlation	.414			
		Female	Sig. (2-tailed)	.001			
			df	57			
			Correlation		.670		
		Male	Sig. (2-tailed)		.001		
	Innovativa		df		46	•	
	Innovative		Correlation		.749		
		Female	Sig. (2-tailed)		.001		
			df		53		

Table 17. Gender Split of Correlations Four I's and Purchase Intention

			Correlation	•		.494	
		Male	Sig. (2-tailed)			.001	
	T		df			44	
	Inviting		Correlation			.367	
		Female	Sig. (2-tailed)			.005	
			df			55	
			Correlation				.274
		Male	Sig. (2-tailed)				.091
	Informative -		df				37
			Correlation				.495
		Female	Sig. (2-tailed)				.001
			df		•		59

The results of the Fisher Z transformation test on the differences between the previously presented correlations of the two genders (Table 17) is presented in table 18. For the first I (Intuitive), the results indicate that correlation for both male (ppartial = .460, p = .001) and female ( $\rho$ partial = .414, p = .001) are not significantly different with p (1-tailed) = .287 > .05. For the second I (Innovative), the correlations of both gender, females ( $\rho$ partial = .749, p < .001) and males (ppartial = .670, p < .001), are significantly different on a 0.1 probability level. However, they are not significantly different on the chosen probability level of 0.05, with p (1tailed) = .064 > .05. The same was found for the third I (Inviting), where the results (p (1-tailed)) = .069 indicate that the correlation between males ( $\rho$ partial = .494, p < .001) and females ( $\rho$ partial = .367, p = .005) is significantly different on a probability level of 0.1 but not significantly different on the chosen probability level of 0.05, with p (1-tailed) = 0.069 > 0.05. For the last I (Informative), the table shows that the correlations between males (ppartial = .274, p = .091) and females (ppartial = .495, p < .001) are significantly different and positive with p (1-tailed) = .009 > 0.5. Based on these findings, showing only a significant gender effect at the .05 probability level on the relationship between the last I (Informative) and purchase intention, hypothesis 5 is partially rejected. Meaning, the relationship between the four I's and purchase intention of environmentally friendly fashion products is generally the same for males and females.

Compared	Sam	ple 1	Sam	ple 2	_1 _2		<b>T</b>		
Claim	$\frac{21-22}{\text{(Eichar)}}$ Std do	Std dev.	Std dev.	Test statistic	p-value (1-tailed)	Decision			
Intuitive	0.460	50	0.414	58	0.11376	0.20271	0.56123	0.287	Not Sig
Innovative	0.670	47	0.749	54	- 0.31986	0.21028	- 1.52112	0.064	Sig at 10%
Inviting	0.494	45	0.367	56	0.31277	0.21121	1.48089	0.069	Sig at 10%
Informative	0.274	38	0.495	60	- 0.52296	0.22019	2.37499	0.009	Sig at 5%

 Table 18. Fisher Z transformation of Gender

The results of computing for the means of the purchase intention of environmentally friendly products for both males and females are displayed in table 19. The results show that females hold a higher observed mean than males for all of the four I's. For the first I (Intuitive), the mean purchase intention of females (M = 4.44, sd = 1.15), is higher than of males (M = 4.36, sd = 1.31). For the second I (Innovative), the mean purchase intention of females (M = 3.64, sd = 1.61). Looking at the third I (Inviting), the mean purchase intention of females (M = 4.29, sd = 1.46) was higher than for males (M = 3.93, sd = 1.43). Lastly, when analysing the fourth I (Inviting), the mean purchase intention of females (M = 4.39, sd = 1.43). Lastly, when analysing the fourth I (Inviting), the mean purchase intention of females (M = 4.39, sd = 1.43). To summarize, the results show females to have a higher observed mean score of the purchase intention for all four I's.

Claim	Gender	Ν	Mean	Std. Deviation
	Male	53	4.36	1.309
Intuitive	Female	61	4.44	1.151
	Total	114	4.40	1.222
	Male	50	3.64	1.615
Innovative	Female	57	4.32	1.480
	Total	107	4.00	1.574
	Male	48	3.93	1.429
Inviting	Female	59	4.29	1.463
	Total	107	4.13	1.452

Table 19. Gender Split of Purchase Intention Means

	Male	41	3.98	1.344
Informative	Female	63	4.38	1.529
	Total	104	4.22	1.465

Note: Purchase Intention is measured by using a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree).

Before continuing analysing the results from conducting the ANOVA test to see whether the means between males and females are significantly different, we have checked whether the assumptions of ANOVA are met. It can be concluded the assumptions of ANOVA are met (see appendix 8), as (1) there is a bell-shaped data distribution, thus normality is not violated (2) the variance is constant across the samples, concluding homogeneity of variance and (3) there is an independence of errors because the male and female samples do not depend on each other.

Table 20 displays the outcomes of the ANOVA test, showing that for the Intuitive claim, there is no significant difference of mean purchase intention between males and females (F (1, 112) = .117, p = .733). For the Innovative claim, the mean purchase intention of males was significantly different from females (F (1, 105) = 5.189, p = .025). Looking at the Inviting claim, the mean purchase intention of males was not significantly different from females (F (1, 105) = 5.189, p = .025). Looking at the Inviting claim, the mean purchase intention of males was not significantly different from females (F (1, 105) = 1.615, p = .207). Lastly, when analysing the Informative claim, the mean purchase intention between males and females was not significantly different (F (1, 102) = 1.841, p = .178). This ANOVA test shows that we can only accept hypothesis 6 for the Innovative claim, which means that, only for this claim, males and females have a significantly different purchase intention. To summarise, hypothesis 6 can only be partially confirmed as females are overall not more likely to have a higher purchase intention of environmentally friendly fashion products than males.

Claim	Source of Variation	df	F	Sig.
	Between Groups	1	.117	.733
Intuitive	Within Groups	112		
	Total	113		
	Between Groups	1	5.189	.025
Innovative	Within Groups	105		
	Total	106		
	Between Groups	1	1.615	.207
Inviting	Within Groups	105		
	Total	106		

Table 20. One-way ANOVA on Differences in Purchase Intention Means

	Between Groups	1	1.841	.178
Informative	Within Groups	102		
	Total	103		

## 4.5 Summary of the Results

A summary of the statistical results from testing the hypothesis is displayed in a visual manner in figure 5. The lines between incorporating four of the five strategic aspects in green claims and the purchase intention of environmentally friendly fashion products are bold, displaying hypothesis 1 to 4 to be positively significant. Hypothesis 5 and 6 are proven to not be significant.

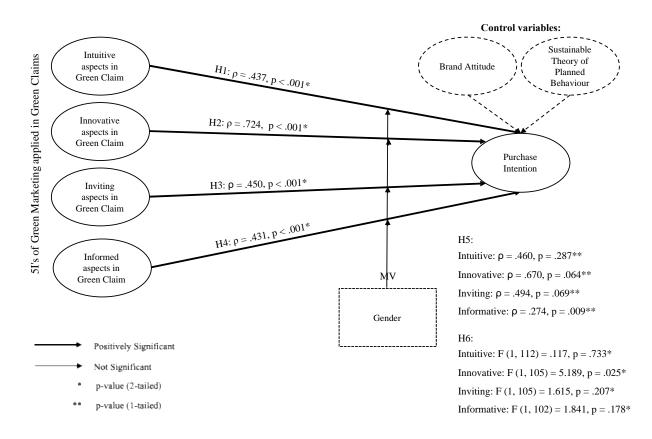


Figure 5. Theoretical Framework

Table 21 summarizes the results in figure 5 in a descriptive manner by repeating both the hypothesis and the decision on whether the hypothesis is accepted or rejected. The table reconfirms that hypothesis 1 to 4 are accepted, and hypothesis 5 and 6 are only accepted for one of the four I's, causing them to be partially rejected.

Hypothesis	Result		
H1: Incorporating intuitive aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.	Accepted		
H2: Incorporating innovative values in green claims positively affects the purchase intention of environmentally friendly fashion products.	Accepted		
H3: Incorporating inviting aspects in green claims positively affects the purchase intention of environmentally friendly fashion products.	Accepted		
H4: Incorporating informative aspects green claims positively affects the purchase intention of environmentally friendly fashion products.	Accepted		
H5: The relationship between the different I's and purchase intention of environmentally friendly fashion products is not equivalent among males and females, with females showing a stronger relationship.	Partially Rejected Rejected for Intuitive Rejected for Innovative Rejected for Inviting Accepted for Informative		
H6: Females are more likely to have a higher purchase intention of environmentally friendly fashion products compared to males.	Partially Rejected Rejected for Intuitive Accepted for Innovative Rejected for Inviting Rejected for Informative		

Table 21. Results Summary of the Hypotheses

# 4.6 Additional Analysis

To deepen the understanding surrounding the impact of the control variables and the gender effect on the Sustainable Theory of Planned Behaviour, an additional analysis was conducted. The results are presented in the following subsections.

#### 4.6.1 The Specific Impact of the Control Variables

Table 22 shows the three correlations between the four I's and Purchase Intention (PI). The first row presents the bivariate correlation in which no variable is controlled for. The second row

displays the effect of the Sustainable Theory of Planned Behaviour (STPB) on the relationship between the four I's and PI. The third row presents the partial relationship between the I and PI while controlling for Brand Attitude (BA). All four correlations show the same pattern, with the strength of the correlation decreasing when controlling for either the STPB or BA. More specifically, for the first correlation between the Intuitive claim and PI, the observed coefficient value is the highest when not controlling for any variables ( $\rho = .480$ ), decreases when partialling out BA ( $\rho_{partial} = .471$ ), with the lowest coefficient when controlling only for STPB ( $\rho_{partial} = .450$ ).

The second relationship between Innovative claim and PI, displays that the coefficient score is again highest for the bivariate relationship ( $\rho = .799$ ). Contradictory to the previous correlation, the correlation coefficient is higher when solely controlling for STPB ( $\rho_{partial} = .767$ ) compared to the coefficient when holding BA constant ( $\rho_{partial} = .762$ ).

A comparable pattern to the second correlation shows when looking at the results for the third relationship between the Inviting claim and PI, showing that the observed coefficient is highest when not controlling for any variables ( $\rho = .487$ ), while decreasing when solely holding the STPB constant ( $\rho_{partial} = .473$ ), followed by an additional decrease in the strength of the relationship when only controlling for BA ( $\rho_{partial} = .464$ ).

For the fourth and last relationship between the Informative claim and PI, the observed coefficient value is again highest when not controlling for any variables ( $\rho = .538$ ), then showing a lower coefficient value when only partialling out the STPB ( $\rho_{partial} = .526$ ), with the coefficient score being the lowest when controlling for BA ( $\rho_{partial} = .437$ ). In summary, the relationships hold the highest coefficient values when computing for the zero-order correlations, thus without controlling for either BA and STPB, and the lowest coefficient values when partialling out either BA and STPB, depending on which claim is addressed.

Claims			Purchase Intention					
	Control Variables	Intuitive	Innovative	Inviting	Informative			
		Correlation	.480					
	None a	Sig. (2-tailed)	.001					
		df	112					
(1) Intuitive	Controlled for STPB	Correlation	.450					
		Sig. (2-tailed)	.001					
		df	111					
	Controlled for BA	Correlation	.471					
		Sig. (2-tailed)	.001					
		df	111					

Table 22. Overview of Specific Impact of the Controlling Variables

		Correlation		.799		
	None a	Sig. (2-tailed)		.001		
		df		105		
		Correlation		.767		
(2) Innovative	Controlled for	Sig. (2-tailed)		.001		
	STPB	df		104		
		Correlation		.762		
	Controlled for BA	Sig. (2-tailed)		.001		
		df		104		
		Correlation	•	104	.487	•
	None			•	.487	•
	None a	Sig. (2-tailed)	·	·		•
		df	•	•	105	
	Controlled for STPB	Correlation			.473	•
(3) Inviting		Sig. (2-tailed)			.001	
		df			104	
	Controlled for BA	Correlation			.464	
		Sig. (2-tailed)			.001	
		df			104	
	None a	Correlation				.538
		Sig. (2-tailed)				.001
(4) Informative		df				102
	Controlled for STPB	Correlation				.526
		Sig. (2-tailed)				.001
		df				101
	Controlled for BA	Correlation				.437
		Sig. (2-tailed)				.001

a. Cells contain zero-order (Pearson) correlations.

#### 4.6.2 Gender Differences of Sustainable Theory of Planned Behaviour

The results from testing the differences in gender means of the theoretical concept Sustainable Theory of Planned Behaviour (STPB) at the item level are visualised in table 23, showing that females hold a higher observed mean than males for all statements except for the statement "*I generally consider myself environmentally sustainable when purchasing clothing*" relating to the theoretical concept of *Pro-environmental Self-identity*.

Theoretical Concepts	Item	Gender	Ν	Mean	Std. Deviation
Consumer Attitudes	Environmental sustainability is important to . me.	Male	192	5.77	1.014
		Female	240	6.11	.841
		Total	432	5.96	.937
	I consider myself ready to act in a green	Male	192	4.33	1.586
Subjective Norm	manner.	Female	240	4.90	1.330
		Total	432	4.65	1.476
Readiness to be green	I consider myself ready to act in a green manner.	Male	192	5.20	.974
		Female	240	5.31	1.070
		Total	432	5.26	1.028
Pro- environmental self-identity	I generally consider myself environmentally sustainable when purchasing clothing.	Male	192	4.20	1.632
		Female	240	4.03	1.500
		Total	432	4.11	1.560
Ethical Obligation	I would be more likely to buy clothes from companies I know are committed to environmental sustainability.	Male	192	5.45	1.149
		Female	240	5.96	.904
	I want the fashion industry to become environmentally sustainable.	Total	432	5.73	1.050

Table 23. Gender Split of the STPB

Note: STPB Items are measured by using a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree).

Before analysing the outcomes of the ANOVA test on whether there are actual significant differences in the means of the two genders of the theoretical concept Sustainable Theory of Planned Behaviour (STPB) at the item level, the assumptions of ANOVA were checked and confirmed. The results visualized in appendix 9 show that (1) the data is normally distributed, implying normality is not violated (2) the data shows homogeneity of variance and (3) the sample data comes from different gender groups, thus independent of each other.

Table 24 shows that the effect of gender on purchase intention for the statement "Environmental sustainability is important to me" relating to the theoretical concept Consumer Attitudes was significant (F (1, 430) = 14.73, p < .001), therefore indicating that the means for females are significantly higher than males. The same was found for the statement "I feel pressured to act in a sustainable way as people around me act sustainable" belonging to the theoretical concept Subjective Norm, where the effect of gender was significant (F (1, 430) = 16.85, p < .001), which indicates that the means for females are significantly higher than those of males. The effect of gender on purchase intention for the statement "I consider myself ready to act in a green manner" relating to the theoretical concept Readiness to be Green was not significant (F (1, 430) = 1.21, p < .273), therefore indicating that the means for males and females are not significantly different. The same non-significant results were found for the statement "I generally consider myself environmentally sustainable when purchasing clothing" linked to the theoretical concept of *Pro-Environmental Self-Identity* (F (1, 430) = 1.12, p < .276), therefore indicating that the means of males and females did not differ significantly. Lastly, there was a significant gender difference for the theoretical concept *Ethical Obligation* (F (1, 430) = 26.93, p < .001) consisting of the statements "I would be more likely to buy clothes from companies I know are committed to environmental sustainability" and "I want the fashion industry to become environmentally sustainable". In summary, females possess a significantly higher mean for the theoretical concepts making up the factor of Theory of Planned Behaviour, with an exception of two theoretical concepts: Readiness to be Green and Pro-environmental Self*identity*.

Theoretical Concepts	Item	Source of Variation		F	Sig.
Consumer Attitudes	Environmental sustainability is important to me.	Between Groups	1	14.733	.001
		Within Groups	430		
		Total	431		
Subjective Norm	I consider myself ready to act in a green manner.	Between Groups	1	16.852	.001
		Within Groups	430		
		Total	431		

Table 24. One-way ANOVA on Differences in STPB Means

Readiness to be green	I consider myself ready to act in a green manner.	Between Groups	1	1.207	.273
		Within Groups	430		
		Total	431		
	I generally consider myself environmentally sustainable when purchasing clothing.	Between Groups	1	1.118	.276
Pro- environmental self-identity		Within Groups	430		
son identity		Total	431		
Ethical Obligation	I would be more likely to buy clothes from companies I know are committed to environmental sustainability. I want the fashion industry to become environmentally sustainable.	Between Groups	1	26.930	.001
		Within Groups	430		
		Total	431		

# 5 Discussion

The following section connects the findings to past research with the intention to present the reader the broader picture, in which the empirical results are discussed in more detail and further insights are presented. The discussion is split up in three main sections. Firstly, the effect of the four I's on purchase intention is discussed. Followed by deepening the understanding of the moderating effect of gender on purchase intention. Lastly, the impact of the control variables is discussed in more detail.

# 5.1 The Effect of the Four I's on Purchase Intention

### 5.1.1 Theoretical Representation of the Factors

Before being able to confirm whether incorporating four of the strategic aspects of the marketing theory of the five I's as introduced by Grant (2007) in green claims has a positive effect on the purchase intention of environmentally friendly fashion products, it was necessary to prove that the theoretical concepts represent the specific constructs.

As defined by Grant (2007), the Intuitive factor evolves around the normalisation of green behaviour, which, over time, turns into one's second nature and common sense. To stimulate green behaviour in general, multiple authors outlined different theoretical concepts and aspects relevant to address when trying to speak to someone's intuition. These include behavioural placement, storylines, and discussions, and simple depiction of sustainable activities as normal (Rettie, Barnham & Burchell, 2011); habit (Kurz et al. 2014 in White, Habib & Hardisty, 2019b); sustainable actions made easy, prompts, incentives, feedback (White, Habib & Hardisty, 2019b); and common sense (Tiwari, 2013). The findings prove that the theoretical concepts are connected to the specific construct: The Intuitive claim. Thus, besides the relevance of these theoretical concepts when stimulating green behaviour in general, they are also perceived as effective when formulating an Intuitive claim.

The Innovative factor is described by Grant (2007) as an organisations' ability to launch new products and services and therewith influencing consumers' lifestyles. Research shows that the urge to launch an innovation is often driven by environmental problems (Carrillo-Hermosilla, González & Könnölä, 2009). One way of responding to this is by launching eco-innovations, which can be defined as a significantly improved product (OECD, 2009; OECD, 2012), that contributes to solving environmental problems (Carrillo-Hermosilla, González & Könnölä, 2009); leads to environmental improvements compared to other alternatives (OECD, 2009); and has the potential to change consumers' preference towards more environmentally friendly products (OECD, 2012). The ability of such an innovation to change consumers' lifestyles is

strongly connected to the rate of acceptance (Afzali & Ahmed, 2016), which depends on factors such as relative advantage; ease of communication in terms of benefits (Holak & Lehmann, 1990; Arts, Frambacha & Bijmolt, 2011; Ghauri & Cateora, 2014); and degree of risk (Ghauri & Cateora, 2014; Afzali & Ahmed, 2016). The results for the second factor, consisting of these more general theoretical concepts on the literature on innovations, indicate that these concepts strongly represent the specific construct. Meaning, these concepts are applicable when formulating an Innovative claim.

According to Grant (2007), the concept of Inviting stands for companies creating new myths and codes which are utopian, joyful and fun rather than posing it as something unpleasant but necessary, thereby inviting the consumer into the green lifestyle in a positive, fun and pleasant way. Comparable to the findings of the previous factor, the results on the Inviting factor confirm that the theoretical concepts, introduced by the different authors surrounding the more general topic 'inviting', are highly applicable when formulating a green claim consisting of Inviting aspects. Thus, in order to strongly represent the Inviting factor in a green claim, there is a need for incorporating the following aspects. One should focus on a variety of human emotions (Hirschman & Holbrook, 1982); focusing on subjectivity, thus speaking to the consumer on a personal level, communicating in an entertaining way (Babin, Darden & Griffin, 1994); incorporate three specific positive emotions: joy, pride, and affinity towards nature (White, Habib & Hardisty, 2019b); foster fantasy imagination (Hirschman & Holbrook, 1982); and stimulation the consumer with a message that is instantly attractive (To & Sung, 2014).

In order to make a change in green consumer behaviour, Grant (2007) stresses that consumer knowledge must be increased through the use of education and participation. Multiple theoretical concepts relating to the fourth I, Informative, have been introduced by different authors to stimulate the adoption of environmentally friendly behaviour in general, such as the necessity of non-vague and easily verified information (Polonsky et al. 1997; Newell, Goldsmith & Banzhaf, 2015); providing information on desired and undesired behaviour (Chan, Leung & Wong, 2006; White, Habib & Hardisty, 2019b); information on the consequences of desired and undesired behaviour, information why certain behaviour is sustainable; reduce information overload and confusion (White, Habib & Hardisty, 2019b); and educate the consumer about the personal gain (Ottman, Stafford & Hartman, 2006). The findings imply that the theoretical concepts surrounding the more general topic of 'informative' with the aim to stimulate green behaviour in general, are also applicable when formulating an Informative claim.

#### 5.1.2 The Relationship Between the Four I's and Purchase Intention

The results from testing whether incorporating four of the strategic aspects of the marketing theory of the 5 I's as introduced by Grant (2007) in green claims has a positive effect on the purchase intention of environmentally friendly fashion products, show a significant and positive relationship for all four green claims (Intuitive, Innovative, Inviting and Informative). It can thereby be confirmed that the theory of the four I's, in which Grant (2007) advises corporations to address one of the aspects in their marketing operations in order to stimulate sustainable consumer behaviour, is also relevant when formulating different types of green claims to

positively affect the purchase intention of environmentally friendly fashion products; specifically when incorporating aspects of one of the four I's (Intuitive, Innovative, Inviting and Informative).

When it comes to the strength of the relationships between the four I's and purchase intention, there is an observable difference between the findings for the second I (Innovative), and the remaining three I's (Intuitive, Inviting, and Informative). With the results indicating the relationship for the Innovative claim to be the only correlation that is significantly different from the other three I's. Particularly, the Innovative claim displays a higher, substantial, effect on purchase intention of environmentally friendly fashion products, compared to the other three I's, having a comparable moderate effect on the purchase intention.

A possible explanation for this substantial relationship for the Innovative claim is the target population characteristics. As defined for this study Millennials, especially young Nordic consumers (Nordic council of ministers, 2019), are generally perceived as more concerned with climate change (Deloitte, 2019), and are invested with changing the "social, cultural, environmental, economic, and political practises worldwide" (Pasricha & Kadolph, 2009). Furthermore, research conducted by BCG and Barkley (2013) shows that Millennials, "are 2.5 times more likely to be an early adopter of technology than older generations." (p. 13). Based on this finding, we believe Millennials are generally more open to try out, and are more interested in, new products. Based on this, together with literature confirming that newness of an innovation is something consumers are drawn to and can motivate consumers to explore (Michaut, 2004; Radford & Bloch, 2011), we believe that a green claim addressing Innovative aspects can have the potential to speak more to the characteristics as well as the general interest of the target audience: Swedish Millennials. Consequently, this may have had a positive impact on the relationship between the Innovative claim and the purchase intention of environmentally friendly fashion products.

As defined by Grant (2007), the Inviting factor is concerned with involving the consumer in a green lifestyle in a positive, fun and pleasant way, which can be related to a consumers' hedonic consumption motives (Hirschman & Holbrook, 1982). In contrast, utilitarian motives are perceived as those more concerned with the outcome as a result of consciousness and taskcompletion (Babin, Darden & Griffin, 1994). Whereas most consumers prefer advertisements to entertain, to speak to them on a personal level, and to generate positive feelings, others may prefer more focus on task-related values. As research stresses hedonic motives are perceived as the main reasons why consumers consume, as well as specifically motivating sustainable behaviour (Hirschman & Holbrook, 1982; Rezvani, Jansson & Bengtsson, 2018; Tang, Chen & Yuan, 2019) we have addressed hedonic motives, and consequently put more focus on the hedonic shopper. We believe this may have an impact on the strength of the relationship, as the wants and needs of the utilitarian consumer have been addressed to a relatively low extent. In parallel, some consumers might feel more intrigued by advertisements that generate awareness and the urge to take action by highlighting the negative influence of humans to nature, for example, the WWF advertisement that was broadcasted at the beginning of 2020 (WWF, 2020). Since we use the Inviting claim to give the consumer a feeling of empowerment to make a change in a positive, fun, and pleasant way, we are aware that the claim can make less of an impact on consumers that are more intrigued by claims that address more 'sad' emotions by stressing how bad it is to not act sustainably. This can potentially cause the relationship between the Inviting claim and the purchase intention of environmentally friendly fashion products to be moderate and less strong compared to the Innovative claim.

Moreover, research shows that in order for behaviour to become part of an individual's intuition, the behaviour needs to be changed in a gradual manner and repeated over a longer period of time (Rettie, Barnham & Burchell, 2011; Kurz et al. 2014 in White, Habib & Hardisty, 2019b). We believe that showing the Intuitive claim only once to a consumer, could be a possible explanation for the moderate effect of incorporating Intuitive aspects in a green claim on purchase intention. We, therefore, think this relationship can be strengthened by repeating a comparable claim to consumers over a longer period of time, thereby successfully normalising the purchase of environmentally friendly fashion products (Rettie, Barnham & Burchell, 2011); turning the purchase of environmentally friendly fashion products into the standard and automatic demeanour (Kurz et al. 2014 in White, Habib & Hardisty, 2019b); and repositioning the purchase of environmentally friendly fashion products as the obvious (Tiwari, 2013).

Our findings on the attitudes of Swedish Millennials' attitudes towards green claims show similar outcomes to the research on green claims stressing that consumers become more sceptical towards, often feel misled by, and have a hard time understanding and interpreting green claims (European Commission, 2005). The risk of consumers feeling deceived or confused (White, Habib and Hardisty, 2019b) might be an answer to the weaker relationship between the Informative claim and the purchase intention of environmentally friendly fashion products. Furthermore, Grant (2007) states that the lack of knowledge distorts consumers' behaviour, whereby education and participation are needed in order to make a change. In contrast, information overload is perceived as another reason for the lack of consumer' understanding and knowledge of sustainability, which is said to cause a low adoption of sustainable behaviour (White, Habib and Hardisty, 2019b). Thus, there is a thin line between incorporating the right amount of information in order to educate consumers to reduce the lack of knowledge with the aim to stimulate the purchase intention of environmentally friendly fashion products, and overloading consumers with too much information, which is said to reduce the adoption of such green behaviour. This can be a possible explanation for the moderate effect of the Informative claim on the purchase intention of environmentally friendly fashion products.

Even though the findings are limited to Swedish Millennials, we believe this study can be extended to a broader audience, since other young western consumers display relatively similar behaviour when it comes to sustainability, i.e. being concerned with the future impact on the environment. We, therefore, consider our findings, stressing that incorporating aspects of one of the four I's, referred to as Intuitive, Innovative, Inviting and Informative, to also be effective in positively influencing the purchase intention of environmentally friendly fashion products among Millennials residing in the western world. Furthermore, rather than conducting this study specifically on the brand Nudie Jeans, we have used this vocal green brand to increase the target audience' relatability to the claim. Since the impact of the existing brand attitude of the respondents is partialled out when testing the relationships between the four I's and purchase intention of environmentally friendly fashion products, we believe our findings can be generalisable to other vocal green companies. Particularly, we believe that by incorporating either Intuitive, Innovative, Inviting or Informative aspects in green claims, vocal green

organisations operating in another segment, or selling products within other categories, can influence the purchase intention of environmentally friendly products.

# 5.2 Moderating Effect of Gender on Purchase Intention

Research shows that in general, the green consumer is stereotyped as being more feminine, which can be traced back to the different psychographic characteristics of both genders (Brough, Wilkie, Ma, Isaac & Gal, 2016). Research on gender and sustainability is consistent in stressing that gender influences purchase intention. In terms of gender differences in purchase intention of sustainable products, researchers state there is a substantial 'gender effect' on sustainable purchasing behaviour, with females showing both higher levels of consciousness of eco-products and purchase intention of environmentally-friendly products compared to males (Roberts, 1996; Pinto et al. 2014; Hojnik, Ruzzier & Konecnik-Ruzzier, 2019). In line with the literature, the means for purchase intention were higher among females compared to males for all four claims (Intuitive, Innovative, Inviting and Informative). However, when examining whether they were significantly different from males, females only had a higher purchase intention for the green claim incorporating Innovative aspects. Thus, contradictory to the literature emphasising females to have a higher purchase intention of environmentally friendly products compared to males, this study shows females to only have a higher purchase intention for one of the four cases; implying that by incorporating innovative aspects in a green claim, an organisation has the possibility to stimulate females' purchase intention to a greater extent compared to males. The findings of the studies conducted by Blake and Hanson (2005) and Nählinder (2010) on the different approaches of gender to innovation stressing females to be more focused on social goals and thereby focus more on local needs. Since the innovative claim addresses local needs to achieve environmental ends, we believe this to be a possible explanation for why females have a higher purchase intention of environmentally friendly fashion products when incorporating innovative aspects in a green claim. In parallel, we believe females are more trend-sensitive when purchasing fashion. By incorporating innovative aspects in a green claim, females might want to be progressive, which consequently results in a higher purchase intention of environmentally friendly fashion products.

In contrast to the misalignment between the literature on the 'gender effect' on green purchase intention and the main findings in this study, the additional analysis, in fact, shows females to generally score higher on the items of the Sustainable Theory of Planned Behaviour (STPB) compared to males, except for one of the statements, i.e. *Pro-environmental Self-identity*. According to Arli et al. (2018), the six elements of the STPB support in measuring the consumers' level of environmental consciousness, which support in predicting the consumers' intention to perform green behaviour. It is, therefore, reasonable to think that the higher average scores for females on the STPB would automatically translate to a significantly different, and higher, purchase intention for all of the I's. This discrepancy can be understood by examining whether the average scores on the STPB of females are significantly higher than males, showing that for only three out of five theoretical concepts: *Consumer Attitudes, Subjective Norm* and *Ethical Obligation* the scores were significantly different between males and females. This shows that the overall environmental consciousness of females is often not significantly

different compared to that of males, which reflects the limited impact of gender on the purchase intention of environmentally friendly fashion products. A possible explanation for the lower purchase intention could be that females are not significantly different to males in terms of the statement "*I generally consider myself ready to act in a sustainable behaviour*" belonging to the theoretical concept of *Readiness to be Green* and "*I generally consider myself environmentally sustainable when purchasing clothing*" belonging to *Pro-environmental Self-identity*. If females do not consider themselves as ready to act sustainably as males, it can definitely impact the overall results of intent to adopt green behaviour. At the same time, if they also do not feel like they are sustainable when they purchase clothes, then this has the potential to hinder them from purchasing clothes at all. Therefore, the results of this study indicate that the STPB theory is not always applicable when trying to predict actual consumer intention to perform green behaviour.

The assumption that gender would also impact the correlation between the green claim and the respondents' purchase intention, was not entirely supported by the findings. It became apparent that the research on the 'gender effect' on purchase intention and sustainable behaviour cannot be directly translated to understanding the relationship between different ways of posing green claims and purchase intention. The gender effect was only found for one of the I's, the relationship between the Informative claim and purchase intention, which was mainly due to males expressing a surprisingly low correlation compared to females. A possible explanation for this could be the differences in information processing of males and females, in which males are not as selective in terms of processing information (Darley & Smith, 1995). This has an unfavourable impact on their response objective claims (Darley & Smith, 1995), which are claims having comparable to informative claims in terms of characteristics.

Moreover, the 'gender effect' was not repeated for the correlations of three remaining I's, implying that gender only impacts the relationships between green claims and purchase intention to a limited extent. This can partially be understood in light of the lack of research on gender differences in regards to green claims and purchase intention. The findings also highlight the complexity of the 'gender effect', confirming our interest in testing gender as a moderating variable.

According to Firat and Venkatesh (2019), gender plays an important role in understanding consumer behaviour. To conclude, the mixed results from testing the gender effect on the relationship between the four I's and Purchase Intention, confirm the fact that is some relevance in studying the impact of gender when understanding consumer behaviour.

# 5.3 The Impact of the Control Variables

In the following subsections, the two control variables brand attitude and STPB are discussed by connecting the results to theory. The interpretations made both reinforces and contradicts the theory, whereby this discussion provides valuable insights.

### 5.3.1 Brand Attitude

Numerous researchers emphasise that brand attitude directly impacts the purchase intention of a green brand, product or service (Howard & Sheth, 1967; Wu & Lo, 2009; Spears & Singh, 2012; Arli et al. 2018). In addition, prior knowledge in terms of knowledge about the brand was said to influence the willingness to purchase green products (Mostafa, 2006; Azizian & Suki, 2013; Huang, Yang & Wang, 2014; Johnstone & Tan, 2015; Patel & Chugan, 2015; Goh & Balaji, 2016). In line with the theory on brand attitude, our results confirm that brand attitude impacts the relationship between the four I's and purchase intention. This was made clear as the relationship between brand attitude and purchase intention was consistently significant for all I's, when solely looking at the effect that brand attitude had, whether analysing the correlation with or without the interference of STPB. In addition, we were able to observe that the relationships between each of the four I's and purchase intention all decreased in strength when controlling for brand attitude. With this study running specific tests solely on brand attitude, we can confirm that brand attitude was impactful on its own, thus should be removed from the relationship between the four I's and purchase intention. This implies that the correlations shown in this study display non-interfered thus relatively clear relationships between the I's and purchase intention.

Moreover, brand attitude was explained as the consumer's judgement of the brand's potential to meet wants and needs (Howard & Sheth, 1967). By not letting brand attitude interfere the main analysis, we are confident to underpin that claims formulated based on the Four I's of Green Marketing influence purchase intention, having the ability to impact the wants and needs of the consumer. With these findings reinforcing previous literature, brand attitude can be seen as important to studies on the topic of green claims.

### 5.3.2 The Sustainable Theory of Planned Behaviour

According to Arli et al. (2018), there are six factors that measure the level of consumers' environmental consciousness, also referred to as sustainable behaviour, based on which predictions of the consumers' intention to perform green behaviour can be made (Arli et al. 2018). These elements are: Consumer's Attitudes, Subjective Norm, Perceived Behavioural Control, Ethical Obligation, Pro-Environmental Self-Identity, and Readiness to be Green. The findings prove that these elements are connected to the specific construct: The Sustainable Theory of Planned Behaviour.

Whereas researchers (Howard & Sheth, 1967; Wu & Lo, 2009; Spears & Singh, 2012; Ulusoy & Baretta, 2016; Arli et al. 2018) argued for a strong relationship between the variables, the findings from testing the relationship between the Sustainable Theory of Planned Behaviour and the Purchase Intention for the four I's of environmentally friendly fashion products are slightly contradicting. The results display a surprisingly weak effect of the Sustainable Theory of Planned Behaviour on the Purchase Intention of three of the four I's (Intuitive, Innovative, and Informative). Furthermore, no significant relationship is displayed between one of the I's (Inviting) and purchase intention. Thus, contradictory to the literature indicating a strong relationship between a consumers' general environmental consciousness and the purchase

intention of a green brand, product, or service (Howard & Sheth, 1967; Wu & Lo, 2009; Spears & Singh, 2012; Arli et al. 2018), the findings for this study focused on a sustainable brand, Nudie Jeans, show a relatively weak relationship between the Sustainable Theory of Planned Behaviour and the purchase intention of three of the four I's (Intuitive, Innovative, and Informative). These findings indicate that the Sustainable Theory of Planned Behaviour is not always applicable when predicting the consumers' intention to perform green behaviour.

Literature indicates that people who score high on these elements are generally more conscious of the environment, and automatically have a higher purchase intention of a green brand, product or service (Howard & Sheth, 1967; Wu & Lo, 2009; Spears & Singh, 2012; Ulusoy & Baretta, 2016; Arli et al. 2018). The findings show that, on average, the Swedish Millennials scored relatively high on the six factors. For example, they showed that environmental sustainability is of significant importance to them, they consider themselves somewhat ready to act in a green manner, and they want the fashion industry to become more environmentally sustainable.

The results of computing for the additional correlations to evaluate the impact of the Sustainable Theory of Planned Behaviour on the relationships between the four I's and Purchase Intention (PI) shows that, even though there is no observable relationship between the Purchase Intention and the fourth I (Informative) when controlling for the Sustainable Theory of Planned Behaviour, there is an observable difference between controlling for and not controlling for the Sustainable Theory of Planned Behaviour. The stronger relationships between all four I's and purchase intention when not controlling for the Sustainable Theory of Planned Behaviour implies there is an effect of the Sustainable Theory of Planned Behaviour. This finding confirms the literature stating that consumers that have a higher score on the Sustainable Theory of Planned Behaviour, in this case the Swedish Millennials, are generally more conscious of the environment, and automatically have a higher purchase intention of a green brand, product, or service (Howard & Sheth, 1967; Wu & Lo, 2009; Spears & Singh, 2012; Ulusoy & Baretta, 2016; Arli et al. 2018); therewith making the Sustainable Theory of Planned Behaviour a relevant variable to control for.

# 6 Conclusion

Green claims are identified as the main way in which vocal green fashion companies have been communicating about their sustainable products, processes, corporation, environmental impact, or a combination of these. The increasing number of organisations involved in greenwashing practises has made it difficult to separate the 'good' from the 'bad', causing consumers to be more concerned and sceptical towards a company's motives and sustainable practice. Even though consumers stress that sustainability is important to them and they perceive themselves ready to act in a sustainable manner, green behaviour is not being transmitted to the fashion industry in an impactful manner yet. Therewith, requiring a deepened understanding of the ways in which vocal green organisations can make the most effective use of green claims.

In the present study, we incorporate four of the five strategic aspects of the Theory of the 5 I's of Green Marketing in green claims, to suggest how vocal green companies can use green claims in an online advertisement text with the aim to recommend ways in which they can positively impact the purchase intention of environmentally friendly fashion products. Our findings provide novel insights on the extent in which incorporating the four aspects into the different types of green claims affect the purchase intention of environmentally friendly fashion products. Particularly, we confirm that incorporating aspects of one of the four I's, referred to as Intuitive, Innovative, Inviting and Informative, helps to positively affect the purchase intention of environmentally friendly fashion products; with the Innovative green claim having the highest capacity to enhance the purchase intention of environmentally friendly fashion products. The results also reveal that the impact of gender on the relationship between the different I's and purchase intention of environmentally friendly fashion products is limited, with gender only influencing the relationship between the fourth I (Informative) and the purchase intention of environmentally friendly fashion products. The findings presented also show that females are likely to only have a higher purchase intention of environmentally fashion products compared to male for the second I (Innovative).

In general, this paper contributed to the translation of major shifts that are currently taking place within the area of sustainability to academic research; particularly to the literature on sustainability marketing with an explicit focus on green claims. More specifically, this paper successfully extended the theory of the 5 I's of Green Marketing, by firstly deepen the knowledge on each of the I's and then incorporating four of the five strategic aspects in the formulation of green claims in order to positively affect the purchase intention of environmentally friendly fashion products. By doing so, the paper demonstrated that much of the previous research related to the four I's can also be applied when formulating an Intuitive, Innovative, Inviting and Informative claim. Thus, this paper both validated and extended previous research by widening the scope of the research on the four I's to green claims. Rather than extending the extensive amount of literature on greenwashing and labels in the fashion industry, this paper contributed to the literature on the positive use of green claims, by

researching ways in which vocal green fashion organisations can make most effective use of green claims in an online advertisement text.

# 6.1 Implications

Based on the findings, several salient implications on both the theoretical and managerial level are captured. These are further discussed in the following subsections.

### 6.1.1 Theoretical Implications

First and foremost, this study contributes to the literature on green claims, a yet relatively understudied field of research if compared to the immense adoption of green claims in practice. Moreover, this study acts as a pioneer in extending research on the 5 I's of Green Marketing, introduced by Grant (2007), by applying it on green claims; therewith going beyond confirming existing literature on the theory. With the highly positive results on the relation of the theoretical concepts to the factors, we have created new ways of measuring the use of green claims through incorporating the four I's of Green Marketing.

Furthermore, whilst gender has been playing an important role in sustainability research, it has not yet been examined in detail within the context of green claims. This study can be seen as the first to address the impact of gender on the relationship between green claims and purchase intention. With this thesis, we hoped to extend the literature stressing females to show higher levels of purchase intention for eco-friendly products compared to males to the area of green claims. However, with the mixed results on gender, we were unable to confirm the positive impact of females on the purchase intention of environmentally friendly fashion products.

What was evident when synthesizing existing theory on green claims was the fact that some of the research was conducted in other countries or continents, for example, China. Since our study focuses on Swedish Millennials, who are perceived to be in the forefront of the sustainability movement, we contributed to the research on green claims by both extending the research in terms of geographic location and by gaining a theoretical understanding of early adopters in terms of sustainability. In some ways, this study can be used as a stepping stone for those who wish to research more on formulating green claims as well as different ways of communicating green claims to Millennials, similar in terms of demographics and characteristics as Swedish Millennials.

Lastly, the findings of this study cannot always confirm that the Sustainable Theory of Planned Behaviour is a good predictor for the consumers' future green behaviour. Particularly, the purchase intention of environmentally friendly fashion products when presenting green claims. Thus, this thesis slightly contradicts with the existing findings on the Sustainable Theory of Planned Behaviour. However, there was an observable impact of the Sustainable Theory of Planned Behaviour on the relationships between the Four I's and Purchase Intention, making it a relevant factor to control for.

#### 6.1.2 Managerial Implications

The present research has several implications for managers of vocal green organisations. We want to start by highlighting the drastic need for a systemic change in the fashion industry, which is currently categorised as the second most polluting industry (Conca, 2015, United Nations, 2015; Cotton, 2018; United Nations, 2018). Even though our findings indicate that Swedish Millennials (1) generally stress sustainability is important to them, (2) perceive themselves as somewhat ready to act in a sustainable manner, (3) want the fashion industry to become environmentally sustainable, and (4) are somewhat more likely to buy clothes from companies they know are committed to environmental sustainability, green behaviour is not being transmitted to the fashion industry in an impactful manner yet (McNeill & Moore, 2015; Roos, Sandin, Zamani, Peters & Svanström, 2016). This is confirmed by this study as respondents are relatively neutral about whether they considered themselves environmentally sustainable when purchasing clothing. Based on these findings, we advise managers to tap into this commercial opportunity, by being aware of the consumers' strong interest in sustainable fashion, and communicate about these sustainable practises accordingly; thereby ensuring survival in the era of marketing 3.0, which is characterised by companies trying to deliver highquality products addressing the wishes of the consumer, while caring for the social and ecological environment by stimulating consumers to contribute in sustainable behaviour (Kotler, 2011).

Communicating about sustainable practises is often seen as a challenge. The unclarity in terms of communication surrounding sustainability in the fashion industry is perceived as one of the main reasons for the limited action taken by consumers to support this change by adopting more sustainable purchasing practises (Cheng, 2017). Our findings confirm this by showing that Swedish Millennials find it relatively hard to know which fashion brands are committed to environmental sustainability, which we believe can act as a barrier for consumers to act in a sustainable manner. In addition, the findings show that Swedish Millennials want fashion brands that are doing good to be more vocal about their environmentally sustainable practises. Research shows that communicating sustainable fashion practices in a successful way allows fashion companies to strengthen their image and provides an opportunity to increase their competitive advantage (Henninger, Alevizou & Oates, 2016). We, therefore, advise vocal green fashion corporations to be more vocal about their sustainable products, processes, corporations, environmental impact, or a combination of these, to increase consumers' awareness of sustainable brands, and therewith stimulate the purchase intention of environmentally friendly fashion products.

One thing we want to highlight is the fact that all four claims are proven to have a positive effect on the purchase intention of environmentally friendly fashion products, with the innovative claim having the highest capacity to enhance this purchase intention. Even though the effect of gender was limited, we also want to stress the fact that by incorporating innovative aspects in a green claim, an organisation has the possibility to stimulate females' purchase intention to a greater extent compared to males. Nonetheless, given that each vocal green brand is different, knowing that brand attitude can last for a long time (Spears & Singh, 2004), and is resistant to change (Salehzadeh & Pool, 2016), for vocal green organisations to increase the purchase intention of environmentally friendly fashion products, we advise managers to

incorporate one of the four green claims (Intuitive, Innovative, Inviting and Informative) in an online advertisement text most suitable to their brand, which speaks to both males and females, while taking into account the following definitions:

To incorporate Intuitive aspects in a green claim, managers are advised to be concerned with the normalisation of green behaviour in order to make sustainable behaviour one's second nature and common sense by addressing aspects, such as: (1) behavioural placement, storylines, and discussions, (2) simple depiction of sustainable activities as normal, (3) habit, (4) sustainable actions made easy, (5) prompts, (6) incentives, (7) feedback, and (8) common sense.

To incorporate Innovative aspects in a green claim, managers are advised to focus on influencing consumer' lifestyles by launching new products and services. When doing so, it is advised to address the following aspects when formulating a green claim: (1) new/significantly improved product, (2) influence consumer lifestyles, (3) environmental problems, (4) environmental improvements, (5) preferences towards more environmentally friendly products, (6) relative advantage, (7) ease of communication in terms of benefits; and (8) degree of risk.

To incorporate Inviting aspects in a green claim, managers are advised to involve the consumer in the green lifestyle in a positive, fun, and pleasant way, by addressing aspects such as: (1) emotive, (2) subjective, (3) entertaining, (4) emphasising feelings of joy, (5) emphasising feelings of pride, (6) emphasising affinity towards nature as well as focusing on (7) fantasy and (8) catching attention.

To incorporate Informative aspects in a green claim, managers are advised to increase consumers' knowledge in order to make a change. This can be done by incorporating the following aspects in a green claim: (1) non-vague and (2) easily verified information, (3) information on desired behaviours and (4) their consequences, (5) the reason why it is sustainable, (6) minimise the information overload and (7) confusion as well as (8) educating the consumer on the personal gain.

Since other young western consumers display relatively similar behaviour to Swedish Millennials when it comes to sustainability, and this study solely using Nudie Jeans to increase the target audience' relatability to the claim, we believe our findings can be generalisable to a broader target audience as well as to other product categories and segments. Particularly, we advise managers of vocal green organisations operating in another segment or industry, as well as other corporations concerned with sustainability, e.g. policymakers, to incorporate either Intuitive, Innovative, Inviting or Informative aspects in green claims, to stimulate green behaviour of Millennials residing in the western world. Thus, in more general terms, this research provides managers of vocal green organisations, or organisations truly concerned with sustainability, with novel insights on how they can successfully use green claims in online marketing advertisement text to positively affect green consumer' behaviour; thereby making a change towards a more sustainable future.

# 6.2 Limitations

The results of this study should be understood in light of some limitations. These limitations can be perceived as our lessons learned of conducting this study, which act as building blocks for the suggestions made in the following section: future research.

### 6.2.1 Theory Selection and Research Design

One of the limitations faced early in the study was the lack of research on the topic of the 5 I's of Green Marketing introduced by Grant (2007). However, our curiosity and the observed applicability of the theory on the topic of green claims has made us decide to continue using the theory. By doing so, we have spent an extensive number of hours on researching existing research applicable to the definitions of the four I's by Grant (2007). In general, we believe that the essence of the theory can be applied in this setting if being attentive to the meaning of each of the four I's and careful of the usage of it. In addition, by including theoretical concepts introduced by different authors to one of the factors is perceived as relatively risk-taking. By pre-testing the formulation of the claims before sending out the final web-based questionnaire and by testing the Cronbach alpha afterwards, the risk of the theoretical concepts not representing the factor was minimised. Nonetheless, we can never be sure that we interpreted the theory of the four I's flawlessly.

Another limiting aspect is that it is somewhat difficult to study actual behaviour without observational studies, whereby we measured purchase intention. Even though research says there is a strong link between purchase intention of a sustainable product and buying that product, one cannot be sure that a person's intent is going to translate to actual behaviour. Particularly, the purchase intention of clothes can be quite situational as a person might not want to buy a pair of jeans in the moment he or she was exposed to the claim.

Another possible limitation was that the study did not ask the respondents about their characteristics and individual preferences towards claims or interests related to each of the four I's. If doing so we would have been able to understand, in-depth, why certain correlations were stronger than others, by connecting the respondents' characteristics and interests with their preferred claim. However, since green claims are often more displayed towards a crowd than on an individual level, this is only limiting the study to a certain extent.

#### 6.2.2 Sampling and Data Collection

As far as convenience sampling can be generalised, we can never be sure that the sample obtained can provide a true generalisation of the population. Furthermore, despite the potential of a web-based self-completion questionnaire to simulate an online setting similar to that of real-life, it could be that consumers find it hard to relate to when presented in a survey setting compared to seeing it in an actual online advertisement. Since people did not click on the

advertisement out of interest but were presented with it, we want to highlight that the awareness did not come naturally; acting as a limitation in generalising findings to a real life situation.

### 6.2.3 Industry and Brand Selection

Much time and thought were put in to the industry and brand selection, based on a pre-defined set of rules. However, one unexpected finding when scrutinising the data was the surprisingly high number of people not having an existing awareness of the brand Nudie Jeans. As we were advised to have one dataset in which we continuously compare the same set respondents, the unawareness of the brand has caused the initial dataset to shrink from 675 to 432 respondents, which was something we did not account for. To align with the objective and aim of the study, we believe the brand used for testing should still align with the pre-defined rules set for this study. Nonetheless, we believe the decrease of the sample could have been avoided by adding a set criterion of 'must know the brand'.

### 6.2.4 Misuse of Findings

An original limitation to this study is that there is a risk of misusing findings. The focus of this research is on how vocal green companies can use green claims in online marketing advertisement text with the aim to recommend ways in which they can positively impact the purchase intention of environmentally friendly fashion products. Nonetheless, with this research being published online, we cannot ensure greenwashing organisations will not put these findings into practice, meaning misusing our findings in order to increase sales of non-environmentally friendly fashion products.

# 6.3 Future Research

The research gap addressed and the limitations of this research may inspire further researchers to conduct further analysis. The following suggestions are made to support others in future research.

Firstly, for researchers to either confirm the generalisation of this study, to extend the scope of the study, or to provide valuable additional insights, the following suggestions are made: (1) future research could test our insights in another setting. For example, by addressing another segment, or by using another brand, product, or sample of the population Swedish Millennials; (2) it could be interesting to compare the results of this study to another study with a sample of Millennials from another country, or by conducting a similar study on a different target group; and (3) it would be relevant to replicate this study while putting more focus on understanding the impact of the characteristics of the respondents on the outcome.

Secondly, to confirm the impact of brand attitude and further investigate the Sustainable Theory of Planned Behaviour, we suggest the following. Researchers can potentially compare groups with an existing brand attitude to groups that have none, to see whether awareness impacts the relationship between incorporating the aspects of the four I's in green claims and Purchase Intention. Additional research may reveal to what extent brand attitude is preventing or supporting companies in their green marketing communication. Moreover, further research can be conducted on the Sustainable Theory of Planned Behaviour as both a controlling variable and its impact on purchase intention. Because of the mixed results captured on the Sustainable Theory of Planned Behaviour, this would not only provide valuable insights on green claims but also on the entire theory. Based on the findings surrounding the Sustainable Theory of Planned Behaviour in relation to gender, researchers should investigate further into the consumers pro-environmental self-identity as well as their readiness to be green. A justification for this may be the fact that these are two of the later additions to the well-known Theory of Planned Behaviour, justifying the advice to be careful when using the additional factors.

Thirdly, the moderating role of gender on the topic of green claims is perceived as another interesting aspect to investigate further. The Fisher Z transformation test showed significant differences on correlations between gender at the 0.1 probability level, which indicates there might be a gender difference that can be either due to chance or found significant when studied in more detail. In addition, since the gender effect was evident in some other aspects of this study, for example, the means of the purchase intention and attitude towards sustainability, we suggest continuing studying the impact of gender when investigating sustainability marketing, green claims, and the purchase intention on environmentally friendly products. By doing so, rather than studying the green consumer based on its demographics, psychographic characteristics forming the male and female sustainable consumer should be acknowledged.

Fourthly, we recommend future research to look into conducting an experimental study, in which two groups are compared, one being presented an online green claim integrating one of the aspects of the four I's, and another group being presented an offline green claim addressing one of the four aspects, e.g. claims on pack, labels, or in-store advertising, to further confirm the effect of the green claim on purchase intention, as well as to notice the differences in terms of the impact of green claims in different contexts.

Fifthly, due to the previously mentioned limitation of this study to measure actual sustainable behaviour, we suggest future research to look into the possibility of conducting observational studies. More specifically, it would be interesting to conduct a practical study on a vocal green company by testing whether incorporating different aspects of the four I's has an actual impact on the purchase intention of environmentally friendly fashion products.

Sixthly, as this study confirms that incorporating one of the four strategic aspects of the 5 I's of Green Marketing in green claims translates to positive purchase intention, further research could be conducted on the possibility of combining two or more of these aspects into a green claim. Researchers would then increase their understanding of the impact of combining different aspects on the purchase intention, and could potentially find out the level of saturation. In addition, it would be of value to conduct qualitative research to deepen the understanding of the reasons for consumers to be more attracted to some claims than to others.

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# Appendix 1: Example Online Advertisement Nudie Jeans

To ensure relatability to a real-life situation as well as to align with the brands' existing advertisement style, both the formulation of the green claim and the design of the mock-up advertisements are inspired by Nudie Jeans' existing online advertisements. Some examples of these are visualized below.

# Hey, vegans! Our beef is over.

#### Vegan back patch

Each denim garment produced from mid 2018 and onwards carry the new vegan back patch. Leather's out, paper's in.

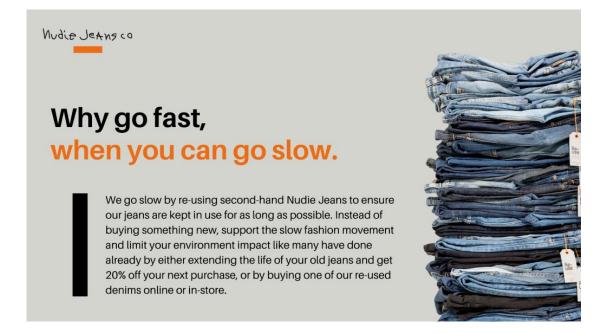




# Appendix 2: Advertisements used for Testing

The final online advertisements used for testing including the following green claims are presented below. The same advertisement design is used for testing the four different claims. Aforementioned, by using one template, therewith holding every factor constant except for the variable aimed to be measured (the green claims), the risk of other variables, such as fonts, colours and pictures, to impact the results is minimized.

### **Case 1: Intuitive**



# Case 2: Innovative



# Finding new ways to reduce, with our project 're-use'.

We are continuously working on finding new purposes for preowned denim in creative ways to decrease our environmental impact. We therefore launched the re-use range, in which we transform worn jeans into new by washing and repairing them with care. With this we can keep the denim in use for as long as possible and letting one customer's denim become your favourite pair!



### **Case 3: Inviting**

Nudie JeAnsco

# Not all heroes wear capes, they wear Nudie Jeans.

Our customers are the real heroes, and together we have the power to make our planet a better place. As we believe 'throwaway' and 'jeans' are two words that do not belong together, we offer free repairs, collect and resell your worn and torn pre-loved denim. Become a hero too by joining our re-use movement and get 20% off your next purchase.



# **Case 4: Informative**

Nudie Jeans co

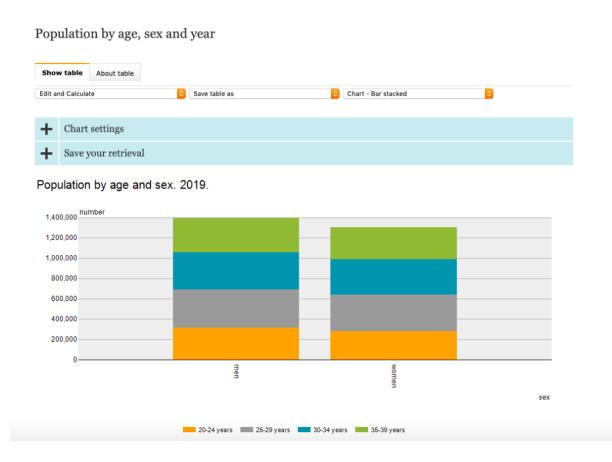
# The fashion industry is dirty, but we can make it better.

Did you know that prolonging the life of a garment is even more sustainable than recycling? At Nudie Jeans, we collect, repair and resell denim jeans with our re-use program. In 2018, we extended the life of 44.000 kg of clothes and thereby saved 386.000 tons of water. Reduce your environmental footprint and get the balance right for yourself and the future of the planet.



# Appendix 3: Millennials in Sweden

The following figure displays the number of people between 20 and 39 years old and residing in Sweden. The demographics tool on www.statistikdatabasen.scb.se was used for calculating the total population, based on which the approximation of Swedish millennials is made.



# Appendix 4: Questionnaire Design



Dear respondent,

Thank you for agreeing to take part in this survey. This survey will take approximately 5 minutes.

We are two Master students from Lund University School of Economics writing our master thesis within the area of International Marketing and Brand Management.

Please note that this study is directed towards Swedish millennials (aged between 20 and 38). In case you do not meet these criteria, we want to thank you for your interest and would kindly like to ask you to discontinue this survey.

Your responses will be completely anonymous and treated with confidentiality.

We really appreciate your input, Louise Hesseborn and Ilse van de Haar

# **Section 1: Basic Demographic Information**



Please confirm you are Swedish before continuing this questionnaire.

(Note: in case you do not meet this criterion, we want to thank you for your interest and you will be directed to the end of the survey)



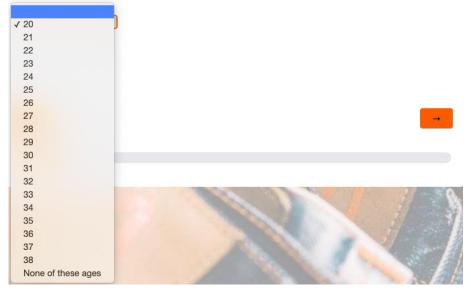


**→** 



#### What is your age?

(Note: in case you are not aged between 20 and 38, we want to thank you for your interest and you will be directed to the end of the survey)



SCHOOL OF ECONOMICS AND MANAGEMENT

#### What is your gender?

Male		
Female		
remaie		
Other		
Other		

What is your highest degree or level of school you have completed? (If currently enrolled, highest degree received)

Elementary graduate

High school graduate

Bachelors degree

Masters degree

Doctorate degree

# Section 2: Statements & Brand Attitude



←

The following section will consist of different statements. Please rate how much you agree with the following statements (1 = strongly disagree, 7 = strongly agree):

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither agree nor disagree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
Environmental sustainability is important to me.	0	0	0	0	0	0	0
l feel pressured to act in a sustainable way as people around me act sustainably	0	0	0	0	0	0	0
l consider myself ready to act in a green manner.	0	0	0	0	0	0	0
l generally consider myself environmentally sustainable when purchasing clothing.	0	0	0	0	0	0	0
I would be more likely to buy clothes from companies I know are committed to environmental sustainability.	0	0	0	0	0	0	0
I want the fashion industry to become environmentally sustainable.	0	0	0	0	0	0	0
I find it easy to know which fashion brands are committed to environmental sustainability.	0	0	0	0	0	0	0
I pay attention to environmental sustainability statements made by fashion brands if they are presented to me, in for example advertisements.	0	0	0	0	0	0	0
I understand what fashion brands mean with environmental sustainability statements.	0	0	0	0	0	0	0
I would like fashion brands that are doing good to be more vocal about their environmentally sustainable practises.	0	0	0	0	0	0	0
							_

**→** 



In the following section, you will be asked to answer some questions about the brand Nudie Jeans.

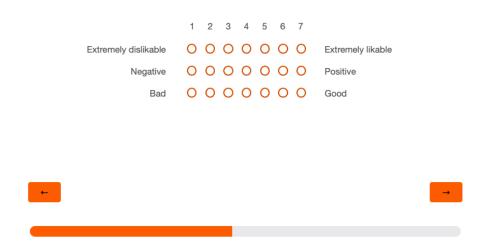
#### I have heard of the brand Nudie Jeans before.

Yes			
No			
+			-

#### Follow-up page if selected "yes" previously



Please describe your overall feelings about the brand Nudie Jeans:



### Section 3: Random Assignment of Cases



In the following section, you will see an advertisement from the brand Nudie Jeans.

You will first be presented the advertisement including a text, after which you will be asked to rate how much you agree with a set of statements.

We want to ask you to read the text in the advertisement carefully before answering the statements.

Note that it is no problem if you have never heard of this brand before, as you will still be able to answer the questions after looking at the advertisement.



#### Case 1: Intuitive



Please rate how much you agree with the following statements after reading the text in the advertisement (1 = strongly disagree, 7 = strongly agree).

Nudie JeAnsco

Why go fast, when you can go slow.

> We go slow by re-using second-hand Nudie Jeans to ensure our jeans are kept in use for as long as possible. Instead of buying something new, support the slow fashion movement and limit your environment impact like many have done already by either extending the life of your old jeans and get 20% off your next purchase, or by buying one of our re-used denims online or in-store.



### Case 1: Intuitive (continued)

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither agree nor disagree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
I think this advertisement text reminds me of what desired environmentally sustainable behaviour is.	0	0	0	0	0	0	0
I think this advertisement text makes me aware of more environmentally sustainable alternatives.	0	0	0	0	0	0	0
I think this advertisement text informs me about environmentally sustainable behaviour that can be repeated over time.	0	0	0	0	0	0	0
I think this advertisement text tells me what environmentally sustainable activities are seen as normal.	0	0	0	0	0	0	0
I think this advertisement text provides feedback about my performance of environmentally sustainable behaviour.	0	0	0	0	0	0	0
I think this advertisement text makes it easier to engage in environmentally sustainable behaviour.	0	0	0	0	0	0	0
I think this advertisement text presents stereotypical information known to all.	0	0	0	0	0	0	0
I think this advertisement text encourages me to adopt environmentally sustainable behaviour.	0	0	0	0	0	0	0

Based on the advertisement above, please mark your purchase interest, purchase intent, and willingness to buy this re-used denim product in the following scales:

	1	2	3	4	5	6	7	
Very low purchase interest	0	0	0	0	0	0	0	Very high purchase interest
Definitely not intend to	0	0	0	0	0	0	0	Definitely intend to
Definitely not buy	0	0	0	0	0	0	0	Definitely buy

#### Case 2: Innovative



Please rate how much you agree with the following statements after reading the text in the advertisement (1 = strongly disagree, 7 = strongly agree).

Nudie JEANS CO

# Finding new ways to reduce, with our project 're-use'.

We are continuously working on finding new purposes for preowned denim in creative ways to decrease our environmental impact. We therefore launched the re-use range, in which we transform worn jeans into new by washing and repairing them with care. With this we can keep the denim in use for as long as possible and letting one customer's denim become your favourite pair!



	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	A - Neither agree nor disagree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
I think this advertisement text can change my preference towards more environmentally friendly products.	0	0	0	0	0	0	0
I think this advertisement text makes me feel like it is safe to try out something new.	0	0	0	0	0	0	0
I think this advertisement text can influence my current lifestyle.	0	0	0	0	0	0	0
I think this advertisement text positively influences my perception of the added value of this product.	0	0	0	0	0	0	0
I think this advertisement text tells me that this product is a significantly improved product.	0	0	0	0	0	0	0

4 -

#### Case 2: Innovative (continued)

I think this advertisement text tells me that this product leads to environmental improvements compared to other alternatives.	0	0	0	0	0	0	0
I think this advertisement text tells me this product could contribute to solving environmental problems.	0	0	0	0	0	0	0
I think this advertisement text makes it possible to communicate the product benefits in an easy manner.	0	0	0	0	0	0	0

Based on the advertisement above, please mark your purchase interest, purchase intent, and willingness to buy this re-used denim product in the following scales:

	1	2	3	4	5	6	7	
Very low purchase interest	0	0	0	0	0	0	0	Very high purchase interest
Definitely not intend to	0	0	0	0	0	0	0	Definitely intend to
Definitely not buy	0	0	0	0	0	0	0	Definitely buy

#### Case 3: Inviting



Please rate how much you agree with the following statements after reading the text in the advertisement (1 = strongly disagree, 7 = strongly agree).

Nudie JEANS CO

# Not all heroes wear capes, they wear Nudie Jeans.

Our customers are the real heroes, and together we have the power to make our planet a better place. As we believe 'throwaway' and 'jeans' are two words that do not belong together, we offer free repairs, collect and resell your worn and torn pre-loved denim. Become a hero too by joining our re-use movement and get 20% off your next purchase.



	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither agree nor disagree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
I think this advertisement text makes me feel like I can be responsible for positive environmental change.	0	0	0	0	0	0	0
I think this advertisement text speaks to me on a personal level.	0	0	0	0	0	0	0
I think this advertisement text is amusing.	0	0	0	0	0	0	0
l think this advertisement text evokes emotions.	0	0	0	0	0	0	0
I think this advertisement text increases my sympathy of the environment.	0	0	0	0	0	0	0
I think this advertisement text stimulates my imagination.	0	0	0	0	0	0	0
I think this advertising text catches my attention.	0	0	0	0	0	0	0

#### Case 3: Inviting (continued)

happy.	l think this advertisement text makes me feel happy.	0	0	0	0	0	0	0
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Based on the advertisement above, please mark your purchase interest, purchase intent, and willingness to buy this re-used denim product in the following scales:

	1	2	3	4	5	6	7	
Very low purchase interest	0	0	0	0	0	0	0	Very high purchase interest
Definitely not intend to	0	0	0	0	0	0	0	Definitely intend to
Definitely not buy	0	0	0	0	0	0	0	Definitely buy

#### Case 4: Informative



Please rate how much you agree with the following statements after reading the text in the advertisement (1 = strongly disagree, 7 = strongly agree).

Nudie JEANS CO

# The fashion industry is dirty, but we can make it better.

Did you know that prolonging the life of a garment is even more sustainable than recycling? At Nudie Jeans, we collect, repair and resell denim jeans with our re-use program. In 2018, we extended the life of 44.000 kg of clothes and thereby saved 386.000 tons of water. Reduce your environmental footprint and get the balance right for yourself and the future of the planet.



	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	Neither agree nor disagree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
I think this advertisement text tells me why buying this product is considered sustainable.	0	0	0	0	0	0	0
I think this advertisement text is easy to understand.	0	0	0	0	0	0	0
I think this advertisement text educates me that an environmentally sustainable product can become a personal gain.	0	0	0	0	0	0	0
I think this advertisement text does not provide me unnecessary additional information.	0	0	0	0	0	0	0
I think this advertisement text informs me that I am doing good by buying this product.	0	0	0	0	0	0	0
I think this advertisement text is not confusing to me.	0	0	0	0	0	0	0

4 -

#### Case 4: Informative (continued)

I think this advertisement text can be easily verified by checking existing facts.	0	0	0	0	0	0	0
I think this advertisement text informs me about the positive environmental consequences of buying this product.	0	0	0	0	0	0	0

Based on the advertisement above, please mark your purchase interest, purchase intent, and willingness to buy this re-used denim product in the following scales:

	1	2	3	4	5	6	7	
Very low purchase interest	0	0	0	0	0	0	0	Very high purchase interest
Definitely not intend to	0	0	0	0	0	0	0	Definitely intend to
Definitely not buy	0	0	0	0	0	0	0	Definitely buy

#### **End Page**



Dear respondent,

Thank you for completing this survey, you have been of great help to us!

If you have any questions regarding our research, please do not hesitate to contact us either via e-mail or LinkedIn. Find our contact details below.

Louise Hesseborn hesseborn.louise@gmail.com LinkedIn Louise

**lise van de Haar** ilse.vandehaar@hotmail.com <u>LinkedIn Ilse</u>

# Appendix 5: Pre-testing Questionnaire and Green Claims

#### Questions for pre-testing of questionnaire

The questions asked during the pre-test of the questionnaire based on the established set of questions designed by Grimm (2010), aimed at minimising the errors associated with a survey, are as follow:

- 1. Were you able to clearly understand all questions? Or were there any difficulties with the wording or formulation of questions?
- 2. While answering the questions, did you miss any answer options?
- 3. Were you willing to answer all questions or did anything offend you personally?
- 4. Did you think the instructions were clear enough?
- 5. Did you think that any questions were already indicating a preferred answer? / was the formulation of questions biased by us?
- 6. How did you like the flow of the questionnaire, was it logical?
- 7. Did the time to conduct the questionnaire seem reasonable?
- 8. In general, what do you think about the questionnaire? Or do you have additional comments or remarks?

#### Questions for pre-testing of green claim

To improve the face validity of the survey questions, the questions asked to the group of people during the pre-test on whether the green claim matched the construct of the four I's: Intuitive, Innovative, Inviting and Informative are as follow:

- 1. Do you feel the advertisements correspond well with the following?
- Advertisement 1 (fast/slow) conveys intuitive aspects (= the process of normalizing green behaviour and thereby making it a habit, a second sense; one's unconscious decision making)
- Advertisement 2 (meet again) conveys innovative aspects (= the organizations' ability to launch new products and services, thereby influencing consumers' lifestyles)
- Advertisement 3 (heroes) conveys inviting aspects (= involving the consumer in the green lifestyle in a positive, fun and pleasant way, rather than posing sustainability as something unpleasant and boring)
- Advertisement 4 (dirty fashion) conveys informative aspects (= involves education and participation and it is suggested for companies to use information in an effective manner in order to stimulate sustainable purchasing decisions)

- 2. Do you feel like the advertisements speak to you on an equal level or do you feel like some are more than the others?
- If so, why?
- If so, do you have a suggestion to improve?

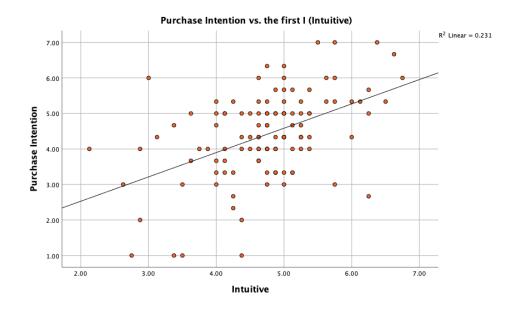
## Appendix 6: Fisher Z Transformation

The following figure shows a print screen of the original Excel file used when calculating the Fisher Z transformation.

Test for the sig	nificance of th	e difference of	two partial corre	elations (2 ind	ependent samp	oles)		
	d =	2	<= Number of con	trol variables				
Sam	ple 1	Sam	ple 2	z1 – z2	Standard	Test statistic	Associated	Decisiom
Correlation	Sample size	Correlation	Sample size	(Fisher)	deviation	restonations	p-value (1-tailed)	Decisioni
0,460	50	0,414	58	0,11376	0,20271	0,56123	0,28732	NO significant difference
0,670	47	0,749	54	-0,31986	0,21028	-1,52112	0,06412	Significant difference at 10%
0,494	45	0,367	56	0,31277	0,21121	1,48089	0,06932	Significant difference at 10%
0,274	38	0,495	60	-0,52296	0,22019	-2,37499	0,00877	Significant difference at 5%
0,724	104	0,437	111	0,89497	0,13977	6,40326	0,00000	Significant difference at 5%
0,724	104	0,450	104	0,86260	0,14213	6,06894	0,00000	Significant difference at 5%
0,724	104	0,431	101	0,90975	0,14324	6,35125	0,00000	Significant difference at 5%
0,450	104	0,431	101	0,04715	0,14324	0,32918	0,37101	NO significant difference
0,450	104	0,437	111	0,03237	0,13977	0,23158	0,40843	NO significant difference
0,437	111	0,431	101	0,01478	0,14089	0,10494	0,45821	NO significant difference

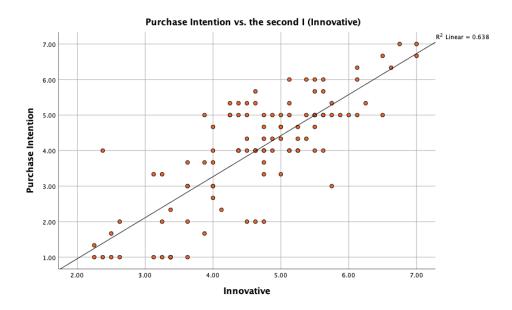
## Appendix 7: Scatterplots

Before analysing the findings from testing the hypotheses, four scatterplots have been computed for, visualizing the relationships between the four I's and Purchase Intention. All four plots show a positive correlation with points scattered around a straight increasing line (Burns & Burns, 2008), indicating a positive relationship between each of the four I's and Purchase Intention (PI).

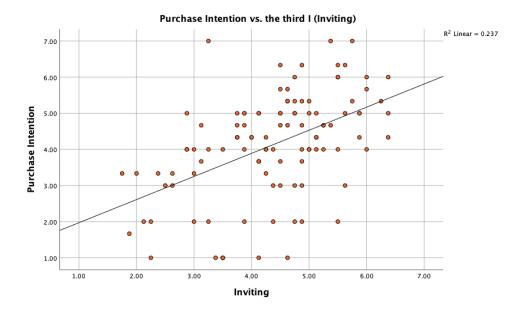


#### **Scatterplot 1: Intuitive vs. Purchase Intention**

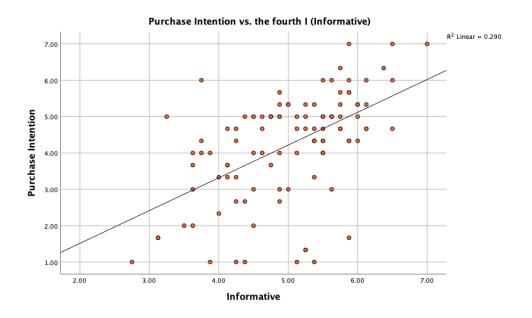
**Scatterplot 2: Innovative vs. Purchase Intention** 



#### **Scatterplot 3: Inviting vs. Purchase Intention**

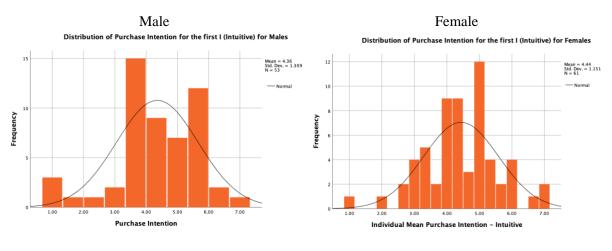


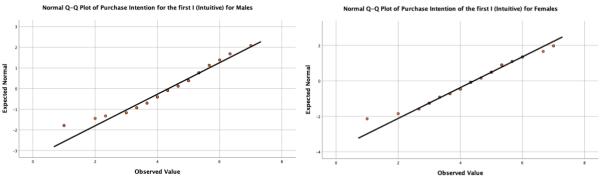
**Scatterplot 4: Informative vs. Purchase Intention** 



### Appendix 8: Pre-test ANOVA 1

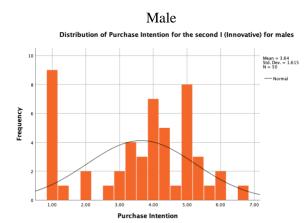
**Pre-test 1: Test of Normality for Purchase Intention (Intuitive) for both genders** 

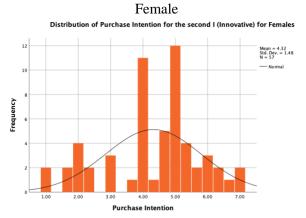


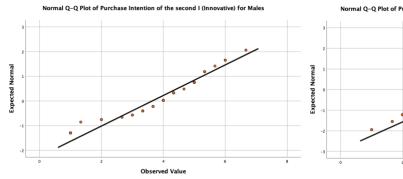


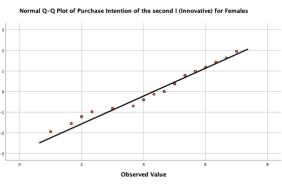
		Levene Statistic	df1	df2	Sig.
Individual Mean	Based on Mean	.524	1	112	.471
Purchase Intention – Intuitive	Based on Median	.592	1	112	.443
	Based on Median and with adjusted df	.592	1	110.210	.443
	Based on trimmed mean	.531	1	112	.468

#### **Pre-test 2: Test of Normality for Purchase Intention (Innovative) for both genders**



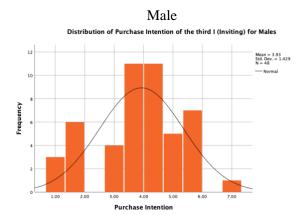


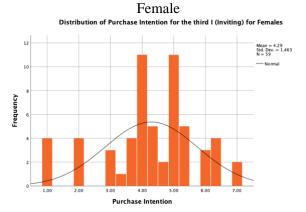


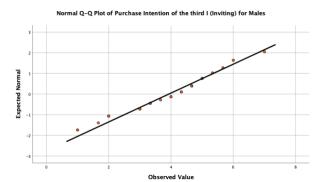


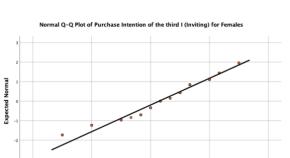
		Levene Statistic	df1	df2	Sig.
Individual Mean	Based on Mean	.656	1	105	.420
Purchase Intention - Innovative	Based on Median	.408	1	105	.524
	Based on Median and with adjusted df	.408	1	104.687	.524
	Based on trimmed mean	.679	1	105	.412

## **Pre-test 3: Test of Normality for Purchase Intention (Inviting) for both genders**





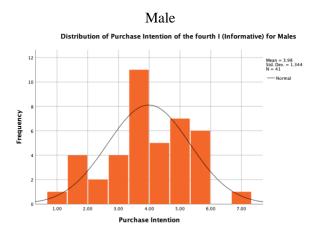


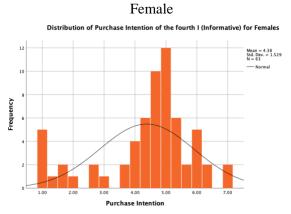


4 Observed Value

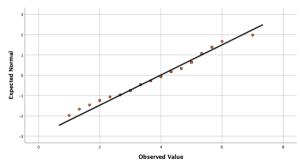
		Levene Statistic	df1	df2	Sig.
Individual Mean Purchase Intention – Inviting	Based on Mean	.059	1	105	.808
	Based on Median	.031	1	105	.860
	Based on Median and with adjusted df	.031	1	104.476	.860
	Based on trimmed mean	.055	1	105	.816

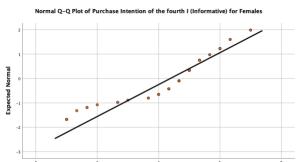
#### **Pre-test 4: Test of Normality for Purchase Intention (Informative) for both genders**





Normal Q-Q Plot of Purchase Intention of the fourth I (Informative) for Males



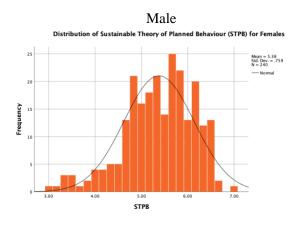


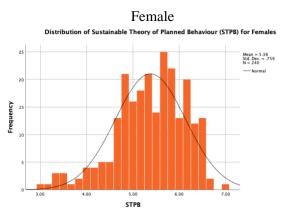
Observed Value

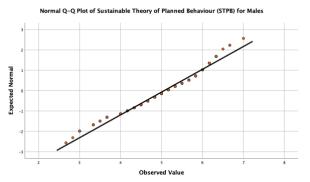
		Levene Statistic	df1	df2	Sig.
Individual Mean Purchase Intention – Informative	Based on Mean	.106	1	102	.745
	Based on Median	.000	1	102	.983
	Based on Median and with adjusted df	.000	1	93.256	.983
	Based on trimmed mean	.071	1	102	.791

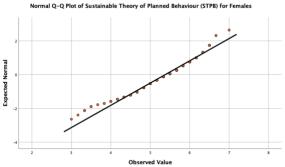
## Appendix 9: Pre-test ANOVA 2

#### Test of Normality for the Sustainable Theory of Planned Behaviour for both genders









		Levene Statistic	df1	df2	Sig.
Individual Mean Theory of Planned Behaviour (1 - 6)	Based on Mean	6.218	1	430	.013
	Based on Median	5.585	1	430	.019
	Based on Median and with adjusted df	5.585	1	423.260	.019
	Based on trimmed mean	6.080	1	430	.014