UNIVERSITY OF TURKU

ABSTRACT

Abstract

Packaging holds a number of benefits, including its ability to protect products through transportation and its ability to convey the brand and usage of the product. Although most materials used in packaging can be recycled, a great amount cannot, and the production, use, disposal and recovery of packaging not only create substantial amounts of waste, but they also consume raw materials and energy. A way to lower one's environmental impact is by preferring sustainable packaging, which is packaging that is effective, efficient, recyclable and safe. However, a number of external factors influence our likelihood to behave sustainably, including our psychological capabilities and cultural conventions. The objective of this thesis is to gather a better understanding of what the factors are that influence consumer behaviour in relation to sustainable packaging.

A quantitative approach using survey questionnaire was chosen for this thesis as it was seen as the best method for gaining insight on attitudes and the relationships between constructs. The theory of planned behaviour (TPB) in combination with the norm activation model (NAM) were used to formulate the conceptual framework of the study and the survey questions. Statistical analysis was employed to examine the responses gathered with the survey questionnaire.

The results of the study supported previous research as both the TPB and NAM constructs were found to predict intention and, perpetually, sustainable consumer behaviour, while neither the brand of the product nor the cultural background of the respondent could be found to influence either. Respondents generally had very positive attitudes towards sustainability, however, this was not visible in their behavioural preferences suggesting an attitude-behaviour gap. Respondents were also somewhat unsure of what constituted as sustainable and viewed informativity as the most important aspect of packaging. One of the key challenges for managers, markets and designers of sustainable packaging is to develop packaging designs that are not only sustainable but also accepted by consumers as different materials communicate different levels of sustainability to different people. Further, packaging should be able to evoke positive emotions in consumers while retaining its functional properties.

Key words	Sustainable packaging, consumer behaviour, theory of planned behaviour, norm activation model, brand perception

TURUN YLIOPISTO

TIIVISTELMÄ

Tiivistelmä

Pakkaamisella saavutetaan monia hyötyjä, joita ovat esimerkiksi tuotteiden säilyminen ehjänä läpi kuljetuksen ja pakkauksen kyky välittää kuluttajille tietoa tuotteesta ja sen brändistä. Vaikka useimpia pakkausmateriaaleja voidaan kierrättää, isoa osaa niistä ei voida, minkä lisäksi pakkausten valmistus, käyttö, poisheitto ja kierrätys eivät ainoastaan tuota jätettä, vaan kuluttavat myös raaka-aineita ja energiaa. Yksi tapa vähentää yksilön hiilijalanjälkeä on ympäristöystävällisen pakkaamisen suosiminen, jolla tarkoitetaan pakkaamista, joka on vaikuttavaa, tehokasta, kierrätettävää ja turvallista. Monet ulkoiset tekijät vaikuttavat kuitenkin sen todennäköisyyteen, että kuluttaja käyttäytyy ympäristöystävällisesti. Näihin tekijöihin lukeutuvat muun muassa psykologiset taustatekijät sekä kulttuurien määrittämät tavat ja tottumukset. Tämän tutkielman tarkoitus on kartoittaa kuluttajakäyttäytymiseen liittyviä tekijöitä, jotka saavat kuluttajan suosimaan ympäristöystävällistä pakkaamista.

Tämä on kvantitatiivinen tutkielma, jonka empiirinen osuus suoritettiin kyselytutkimuksen avulla. Tämä lähestymistapa valittiin siksi koska eri tekijöiden riippuvuussuhteiden tarkastelu on helpompi kvantitatiivisen empirian keinoin. Suunnitellun käyttäytymisen teoriaa (TPB) hyödynnettiin yhdessä normiaktivointimallin (NAM) kanssa teoreettisen viitekehyksen luomiseksi. Tilastollista analyysiä hyödynnettiin kyselyn vastausten tulkitsemisessa.

Tutkimuksen tulokset tukivat sekä TPB:n että NAM:n kykyä ennustaa kuluttajien aikomusta käyttäytyä ympäristöystävällisesti, kun taas tuotteen brändin tai kuluttajien kulttuurisen taustan ei voida tutkimuksen perusteella sanoa ennustavan kuluttajan ympäristöystävällistä käyttäytymistä. Vastaajilla oli yleisesti ottaen hyvin positiiviset asenteet ympäristöystävällistä pakkaamista kohtaan, mutta tämän ei voida sanoa näkyvän kuluttajien käyttäytymiseen liittyvien kysymyksien vastauksista, mikä viittaa asenne-käyttäytymiskuilun olemassaoloon. Tämän lisäksi vastaajat tuntuivat olevan epävarmoja eri pakkausvaihtoehtojen ympäristövaikutuksien arvioinnin suhteen ja esimerkiksi informatiivisuus nähtiin pakkauksen tärkeäksip elementiksi. Yrityksille tämä asettaa haasteita sen suhteen, että pakkausten ei ainoastaan tulisi olla ympäristöystävällisiä ja funktionaalisia, mutta niiden tulisi myös ottaa huomioon kuluttajien eriävät mielikuvat pakkausmateriaalien ympäristöystävällisyydestä. Lisäksi pakkausten tulisi kyetä luomaan positiivisia mielikuvia.

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THE INFLUENCE OF SUSTAINABLE PACKAGING ON BRAND PERCEPTION IN FAST-MOVING CONSUMER GOODS

Comparing perceptions of international consumers

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1   INTRODUCTION

Packaging holds a number of practical benefits, of not least relevance its ability to protect our products through transportation. Furthermore, consumers use packaging to evaluate products and brands, especially in the case of fast-moving consumer products that can be found in convenience stores. Irrelevant to the significant benefits of packaging, packaging holds little meaning to most once the product has been safely transported to its final destination, after which it is usually discarded. Although most materials used in packaging can be recycled, a great amount of packaging waste is still not recycled. (Magnier & Schoormans 2015, 53.) Also, the production, use, disposal and recovery of packaging not only create substantial amounts of waste, but they also consume raw materials and energy whilst being the cause of increasing emissions that drive climate change (Herbes et al. 2018, 203).

One way of lowering the environmental impact of packaging materials is to use *sustainable packaging*, which refers to the decreased support for materials that have a significant impact on the environment during their lifetime (Magnier & Schoormans 2015, 53; Jerzyk 2016, 708). Concern for the environment is emerging, and, for example, in 2014 96% of European citizens agreed that companies should take more initiative to limit plastic waste and extend recycling (European Commission 2014, 5). Since a growing number of consumers view unsustainable packaging as a demerit and because consumer attitudes shape packaging preferences (Herbes et al. 2018, 204), companies should make more effort to find a suitable sustainable packaging alternative for their purposes.

Packaging is also an important element of the marketing mix with a clear marketing function (Herbes et al. 2018, 204). Research shows that different elements of packaging, such as colour and shape, influence consumer perceptions of a brand (Magnier & Schoormans 2015, 53). Furthermore, sustainable consumer behaviour in itself has been explained through various consumer behaviour theories, including the *theory of planned behaviour* (TPB) and the *norm activation model* (NAM) (Park & Ha 2012, 391). However, research is inconclusive in explaining the relationship between sustainable packaging and consumer perceptions, although consumers tend to prefer sustainable packaging when there's no doubt about its sustainability and when consumers are at least a little concerned for the environment (Jerzyk 2016, 714; Magnier & Schoormans 2015, 59-61). Therefore, companies should enforce sustainable packaging as not only an environmentally-conscious initiative, but also as a way of increasing sales.

At the core of any behaviour is motivation to partake in certain behaviour. Psychological factors, in particular, influence consumer motivation, ability and opportunity to partake in certain behaviour as they influence what consumers are exposed to and what they pay attention to. These factors also have an impact on how consumers interpret and remember information. (Hoyer et al. 2018, 2, 200.) Further, personal relevance of a subject

naturally increases motivation, especially if the subject is consistent with one's self-concept (Petty & Cacioppo 1984). Therefore, sustainable consumer behaviour can be expected to be practiced by those who perceive it important and relevant to them. However, even the most informed and adamant environmentalists are posed by limitations that may restrict the extent to which they can consume sustainably (Hoyer et al. 2018, 60-61). Some (e.g. Vohs & Faber 2007) condemn that although the lack of certain resources may limit the choices of consumers, they may also been seen as drivers of consumer behaviour. Nevertheless, consumer behaviour is influenced by a variety of factors and a positive attitude and motivation to behave in a certain way does not always translate to their behaviour.

Finally, cultural conventions may be utilized to determine how particular people reflect culture on their beliefs, how decisions are made, and how they attach meaning to particular subjects (Van Gelder 2004, 45). Different cultural aspects have been found to influence decision-making despite the consensus that global cultures are continuously converging and becoming increasingly homogenous (Vrontis et al. 2009, 478). For instance, people from different cultural backgrounds may interpret packaging elements such as colour very differently and different cultural conventions can even shape our level of reciprocity, economic savviness and self-control (Addo 2013, 96-97; Mathras et al. 2016, 303). Regarding sustainable consumer behaviour, one way to analyse the likelihood of a person to take part in this type of behaviour is to study the values consumers possess, and as values are socially shared conceptions, they are a central part of cross-cultural research. (Knafo et al. 2011, 178; Sreen et al., 2018, 178.). Therefore, cross-cultural research is needed in order to understand sustainable consumer behaviour.

1.1 Sustainable packaging in fast-moving consumer goods

Sustainable packaging as a concept has been subject to dispute among researchers due to the unclear conceptualization of the concept. According to Magnier and Crié (2015, 351), several different terms have been used when referring to sustainable packaging, including the following: green packaging design, sustainable design, ecodesign, design for the environment, and environmentally conscious design. Furthermore, the term has different connotations depending on the perspective used. The Sustainable Packaging Alliance in Australia has defined sustainable packaging as packaging that meets the following four principles: effectiveness (packaging should be both cost-effective and functional for all users in the value chain), efficiency (packaging materials should be used as efficiently as possible), cyclicity (recovery through industrial or natural systems should be made possible), and safeness (materials used should be as non-polluting and non-toxic as possible). The Sustainable Packaging Coalition in the United States have a similar definition of the

term, although they add the concept of renewable energy to their definition. (Grönman et al. 2013, 188.)

Boks and Stevels (2007, 4028) make a difference between three types of approaches to sustainability, namely: governmental, scientific and consumer. Governmental sustainability relates to legal requirements such as how to recycle or discard packaging. Scientific sustainability takes a more life-cycle approach to sustainability in which packaging choices are assessed based on their lifetime environmental impact. Finally, consumer sustainability deals with the perceptions consumers have of the sustainability of certain packaging materials. Although the scientific approach usually gives the most accurate and objective measures of a certain materials sustainability, consumer perceptions without legislative intervention often determine what sells. Because of the focus on consumers and their choices in this thesis, the consumer approach to sustainability is particularly relevant to this study, although all three aspects will be covered to some extent.

Packaging in itself covers a wider array of forms and materials. A general classification of packaging divides the concept into three forms of packaging: primary, secondary and tertiary packaging. Primary packaging is the type of packaging that is in direct contact with the product, such as the milk carton that holds the liquid content of milk. Secondary packaging can consist of one or more primary packages and serves to protect the primary package(s) whilst communicating the properties of the product and helping with the identification of the product. A carbon box holding a perfume bottle serves as an example of secondary packaging. Finally, tertiary packaging contains the two aforementioned packages and it is used to facilitate the handling and transportation of the product. (Ampuero & Vila 2006, 101; Rundh 2005, 673.)

When designing a sustainable package, there are many factors that need to be considered. First and foremost, the material of the packaging must be considered. Most common materials used in packaging include glass, metal, paper and board, and plastic (APPENDIX 1 for more discussion). However, the material of packaging is not always the most important factor determining the sustainability of a package, but there are also numerous economical, technical and functional challenges along with environmental challenges that all have to be taken into consideration when considering the design of a sustainable package (Figure 1). Please see APPENDIX 2 for a more thorough figure.
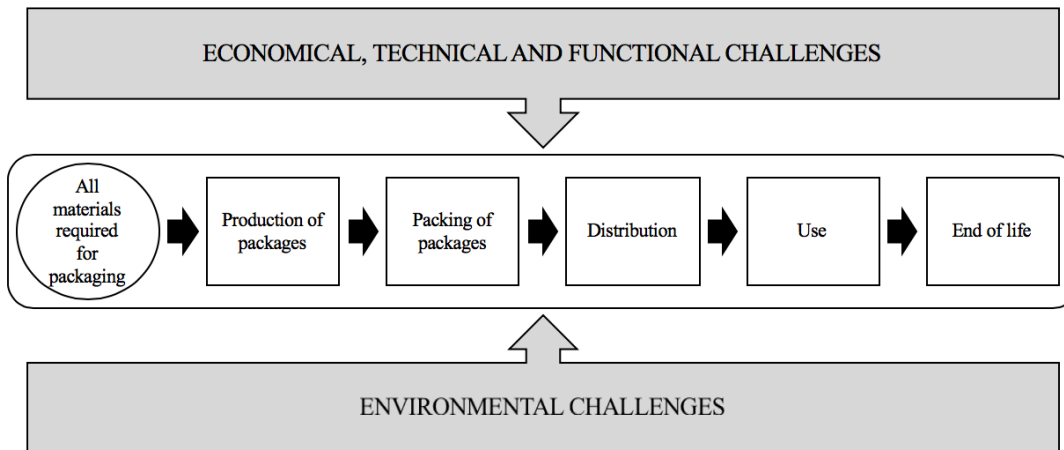
Figure 1 Challenges of packaging along the product value chain (Grönman et al. 2013, 193)

The various external factors influencing a packaging solution have to be taken into consideration when designing a sustainable package. Generally speaking, it is usually for the best if existing machinery can be used even when new packaging innovations are taken into production and if material is used in an efficient manner. During transportation and storage, space should be used as efficiently as possible, which can be enabled with the use of modular dimensional coordination and plain shapes in packaging. Transportation routes, distances, equipment and cargo can also be optimized to reduce costs, time, resources and emissions. Finally, when the package has been delivered, the possibility of reusing packaging is something that can be considered. (Grönman et al. 2013, 193.) Numerous Finnish beverages that are sold in glass bottles are recycled and cleaned thoroughly after use and refilled approximately 30 times after initial production (Pantilliset.fi, 2018).

The total environmental impact of a packaging usually has to be considered on a case-specific manner and from a life-cycle aspect (LCA). However, by reducing the use of non-renewable resources and chemicals, by taking into account the amount and type of energy used, and by diminishing the amount of pollutants and waste that get released, the environmental impact of the packaging can be minimized. (Grönman et al. 2013, 193.) Figure 2 illustrates packages that take these factors into account in their production line.

Figure 2 Examples of sustainable packaging initiatives in FMCG

The milk cartons in the top left of Figure 2 are produced by Arla Oy, the Finnish dairy company, in collaboration with Elopak and Stora Enso. Due to not having been bleached, the package has a distinctive brown colour. Additionally, the package is manufactured using purely renewable resources and it uses approximately 5% less materials than traditional milk cartons. All-in-all, the package is responsible for a carbon footprint that is 33% smaller than that of conventional milk cartons. (Arla.fi 2018.) Both the packaging on the top right and on the bottom left represent packages where the amount of non-renewable resources is minimized. Both packages include plastic, but the packaging for salmon by Saimaan Tuore not only minimizes the amount of packaging material needed but also allows the user to separate different materials, which increases its recycling potential. Furthermore, the serving size of the package is suited for a single serving, which aims to decrease food losses. (Saimaantuore.fi 2018.) The minced meat package by Atria Oyj also claims to decrease food losses due to its more compact form, but it also uses significantly less plastic than its predecessor, which means that it takes up less space during transportation and storage (Atria.fi 2018). However, the package consists mostly of black plastic, which currently still cannot be recycled in Finland due to unsophisticated optical sorting systems in recycling facilities (HSY 2020). According to Grönman et al. (2013, 194), the fact that a package incorporates unsustainable materials such as plastic in this case is more compliant with sustainability when it decreases the chances for food losses. Furthermore, lighter packages are more sustainable than heavier ones on top being more economical due to lighter cargos requiring less energy during transportation.

The final package in Figure 2 is that of Atopik, which is a brand of cosmetics brand Naviter. The package is the result of their collaboration with Sulapac, a Finnish start-up producing containers from wood composite. The reason why this package is remarkable is that sustainability is truly incorporated in each step of the product value chain (Figure 1The production process of the package is adaptable to all existing packaging processes and certain alterations are available depending on whether the contents are oil- or water-based. Furthermore, it does not include substances that could potentially harm the environment, such as microplastics. After use, the product is easily recyclable as it is entirely biodegradable. (Valtonen 2018.)

1.2   Research questions and objective of thesis

Understanding consumers is something of high importance to businesses but also to legislators who need to understand the key factors influencing market powers. For the benefit of us all and due to the differences of consumers in levels of interest towards sustainability, legislators have to put their foot in at times in order to ensure a better future for us all, and they do so by introducing regulatory and legislative policies that manipulate the way we consume shared resources. (Wiser 2000, 177-212.) Because the drivers behind consumer behaviour have a shared interest among many, the objective of this thesis is to gather a better understanding of what the factors are that influence consumer behaviour in relation to sustainable packaging. Several studies (e.g. Mancini et al. 2017, Vermeir & Verbeke 2006) have researched how packaging or the sustainability of the product itself influences consumer behaviour, but few have focused on the sustainability of the packaging itself, and even fewer have investigated the relationship between sustainable packaging and brand perception in relation to consumer behaviour. This study contributes to existing research by providing support to the interrelated nature of sustainable packaging, brand perception and consumer behaviour.

This thesis will focus on the product category of fast-moving consumer goods, which typically subjects consumers to multi-attribute choices. For this reason, simply measuring ethical or environmental values will not give a thorough understanding of consumer behaviour and, rather, this thesis will focus on more specific factors related to product choice including the influence of sustainability on brand perception and the role of culture in sustainable consumer behaviour. Several factors have been found to influence consumer behaviour in relation to our product choices (e.g. Ampuero & Vila 2006, Aslam 2006, Silayoi & Speece 2007), but few have focused on the dimension of culture in relation to sustainable consumption. (Rokka & Uusitalo 2008, 523.)

For these reasons, the research question formulated for this thesis is: How does sustainable packaging influence sustainable consumer behaviour in different cultures in the

market of fast-moving consumer goods? In line with the research question are the following subquestions formulated to support the research question:

1. How does the use of sustainable packaging influence how a brand is perceived?
2. How does one's cultural background influence their sustainable consumer behaviour?
3. How does sustainable packaging influence buying intention?

The aim of this study is to utilize existing theories whilst making certain contributions to these theories and testing whether the collected data supports these theories and assumptions. Further, the perceptions consumers have of the different materials will only be measured on a superficial level as the aim is to only investigate the relationship between perceptions and behaviour, and not between knowledge and behaviour. Moreover, these perceptions will only be limited to the packaging itself and not to the contents, as the aim is to study the influence of the packaging itself on behaviour.

1.3   Structure of the thesis

The phenomenon examined in this thesis consists of three major concepts: sustainable packaging, consumer behaviour and brand perception. In order to create a solid knowledge base for the empirical part of this thesis, the first part will focus on a literature review of the major concepts in the aforementioned order (Chapters 2 & 3). Chapter 2 will focus on the different aspects of being a sustainable consumer and how these consumers, unlike their inverse, might take note of different materials used in packaging. The underlying hypothesis here is that for the sustainability of a packaging to influence brand perception and, thereby, consumer behaviour, one must at least on some level recognize themselves as a sustainable consumer. Further, the drivers of consumer behaviour on a general level will be discussed in this chapter.

Chapter 3 will discuss the concept of brand perception. A number of different factors in a package can influence how a brand is perceived, and the aim of this chapter is to uncover what these factors are and which of them relate to sustainability. Although the objective of this thesis is to study the relationship between sustainable packaging and brand perception, the concept of consumer behaviour is relevant and apparent in this chapter as well. The reason for this is the fact that consumer behaviour can be expected to be caused or at least influenced by brand perception, and without the expectation of positive consumer behaviour, i.e. a purchase, there would be no motivation to understand the brand of a product or a company, nevertheless how it is perceived. This chain of thought is visualized in Figure 3 below.

| SUSTAINABLE PACKAGING | → | BRAND PERCEPTION | ------→ | CONSUMER BEHAVIOUR |
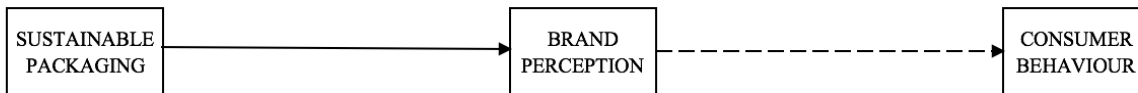
Figure 3 Relationship between consumer behaviour and sustainable packaging

Chapter 4 will focus entirely on the methodology of this thesis, starting from explaining the research approach to introducing the measures and data collection methods used. Finally, in Chapter 5 the results will be discussed. Chapter 6 aims to summarize the contents of this thesis with theoretical discussion on the results, and by considering the managerial implications and limitations of this study along with suggestions for further research.

2 SUSTAINABLE CONSUMER BEHAVIOUR

2.1 Drivers of consumer behaviour

In order to understand why consumers would be interested in consuming products in sustainable packaging, we must first understand the drivers behind consumer behaviour. In general, research on consumer behaviour involves understanding the set of decisions (what, why, when, how, where, how much and how often) that an individual or group of consumers makes over time regarding their purchase behaviour. To find an answer to these questions, one must understand the many drivers behind consumer behaviour, which include a number of internal and external factors. According to Hoyer, MacInnis and Pieters (2018), psychological factors, in particular, exert considerable influence on consumer behaviour as a consumer's motivation, ability, and opportunity to partake in certain behaviour affect their decisions and influence what that person is exposed to, what they pay attention to, and what they perceive and comprehend. These factors also affect how consumers categorize and interpret information, how they form and retrieve memories, and how they form and change attitudes. (Hoyer et al. 2018, 22.)

The consumer decision-making process begins with problem recognition, which is the perceived difference between actual and ideal states. Once a consumer notices a discrepancy between these two states, they become motivated to resolve it. The next step in this process is information search, starting with the consumer's internal search, which is the recall of information regarding the brand and its attributes, experiences, and feelings from memory. The extent of this internal search increases as motivation, ability and opportunity increase. Similarly, when the consumer needs more information or is uncertain about recalled information, they will conduct a more extensive external search when they have a higher motivation level. (Hoyer et al. 2018, 200.)

There are multiple routes to higher motivation. Petty and Cacioppo (1984) find that personal relevance of a goal or object increase motivation. Similarly, a goal or object needs to be consistent with one's self-concept for them to be motivated to make a purchase (Sirgy 1982). Hence, something with current relevance to us and that is in line with how we perceive ourselves is much more likely to attract our interest. Maslow (1943), with his seminal work, created a general theory of human motivation that emphasized the concept of needs (Figure 4). According to his theory, human needs can be grouped into five categories that carry two assumptions: 1. human needs are hierarchical and 2. human needs move onto a higher level after the lower level needs have been satisfied (Oleson 2004, 84). At the lowest level in Maslow's hierarchy of needs are physiological needs, such as food, water and shelter that are required to sustain life. Only when physiological needs are met, safety and security needs can be attended to. Then, once we have

established a secure environment for ourselves, we become aware of our social needs such as belonging, companionship and social acceptability. (Oleson 2004, 84-85.)
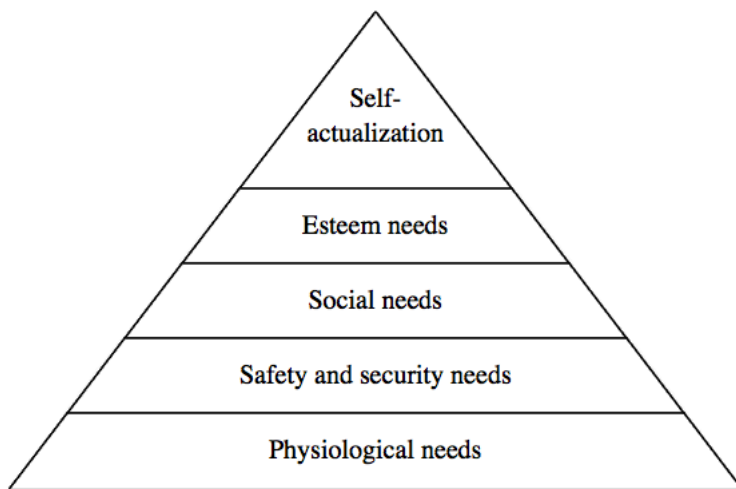
Figure 4 Maslow's hierarchy of human (Maslow 1943; Oleson 2004, 84)

Social needs, according to Maslow's theory, are followed by esteem needs. Once individuals begin to satisfy their need to belong and be loved, they generally want to be more than just a member of their group as people have a general desire to be respected and gain esteem along with status. Finally, once all the lower needs of the hierarchy have been satisfied, people become motivated to fulfil their potential by fulfilling their self-actualization needs. Also, Maslow contends that once we have met all of the other four basic needs, the needs for self-actualization is strong enough to serve as a primary motivator for all of our behaviour. (Oleson 2004, 85.)

Generally, people are motivated to hold correct attitudes and behave according to them. According to Cacioppo et al. (1986, 1032), although this is generally true, we do not always have the resources to process every persuasive argument we face, but also, individuals higher in need for cognition and verbal intelligence are more likely to carry out extensive deliberation. Need for cognition refers to "a need to understand and make reasonable the experiential world" and the attitudes of individuals high in need of cognition are found to be more predictive of behavioural intention than are the attitudes of individuals low in need for cognition (Cacioppo et al. 1986, 1033). Hence, the more important the object of deliberation, the more motivated we are to deliberate between alternatives and the less likely we are to change opinions regarding the attitude object in question. Furthermore, attitude-discrepant behaviour has been found to cause cognitive dissonance, which is a state of discomfort caused by inconsistency between attitude and behaviour, which is why people tend to realign their attitude towards that behaviour to maintain cognitive consistency (Fazio, Zanna, & Cooper 1977, 464-465).

Whereas motivation poses significant influence on consumer motivation to deliberate between alternatives and pursue with a purchase, ability limits the extent to which consumers have the necessary resources to make an outcome transpire. These resources can include, for instance, financial, cognitive, emotional or physical resources. (Hoyer et al. 2018, 60-61.) Although these resources limit the choices of consumers, they can also be seen as a driver of consumer behaviour. Vohs and Faber (2007, 537), for example, state that consumers whose resources are restricted feel stronger urges to buy, are willing to spend more, and actually do spend more money in unanticipated buying situations in comparison to consumers with limitless resources. Therefore, resources, or more so the lack off, are a major driver of consumer behaviour.

When talking about resources, people typically assign the term merely to financial resources (i.e. money), although the term actually has additional meaning. The amount of cognitive resources someone has, for example, vary depending on their knowledge about and experience of an offering. This is where less knowledgeable consumers or "novices" differ from more knowledgeable "experts" as the latter type can process information about specific attributes whereas novices process information better when it's stated in terms of more general benefits. (Hoyer et al. 2018, 61.) Further, the more effort a consumer has to apply towards cognitive processing, the less motivated they are to purchase said product (Garbarino & Edell, 1997, 156). Also, in situations where consumers are less familiar with a certain product or brand, it is hard to process, or they lack in need for cognition, consumers tend to rely on heuristics to help in their decision making. Heuristics are simple cues or rules of thumb that help rake out alternatives and can include, for instance, taste, price, brand name or extrinsic cues. (Clement 2007, 920; Hoyer et al., 2018, 61.)

The final factor affecting whether motivation results in action is consumers' opportunity to engage in a behaviour. For example, a consumer may be highly motivated to recycle but the recycling facilities in their vicinity are poor and they are short on disposable time, which is why the consumer does not have the opportunity to recycle. Three key factors result in the consumer not having the opportunity to act or make decisions: 1. lack of time, 2. distraction, and 3. the complexity, amount, repetition and control of information. Lack of time can affect the consumer's opportunity to process information, make decisions, and perform certain behaviours. For instance, Verplanken (1993, 241) states that under time pressure consumers may simply accelerate their decision-making process or they may show greater selectivity concerning the information related to the decision being made. For example, time pressure may result in giving more weight to negative information and in being more risk averse. Further, consumers generally shift to less complex decision-making strategies when under time pressure. (Hoyer et al. 2018, 63; Verplanken 1993, 241.)

Once consumers have sufficiently gathered and processed all relevant information, they can proceed towards the purchase phase. When motivation, ability and opportunity are low, consumers take part in a low-effort decision-making process that relies strongly on heuristics. Naturally, when these qualities are high, consumers take part in a high-effort decision-making process in which consumers are confronted with a variety of decisions that require attending to. For instance, the consumer will have to decide which brands to include in their consideration set, what factors are important to the choice, and whether to make the decision now or later. Inclusion in the consideration set is influenced by the prototypicality of the product (i.e. how well it resembles the market leader in a product group), brand familiarity, the goals and possible usage situations of the decision-maker, and their brand preference. (Hoyer et al. 2018, 210-227.) Naturally, these are factors that marketers need to bear in mind.

2.2   The sustainable consumer

Determining what constitutes a sustainable consumer is also essential for understanding and predicting their behaviour and the factors influencing them. According to Cowe and Williams (2001, see: Wheale & Hinton 2007, 303-304), consumers can be divided into five groups with the largest group consisting of half the population who are not sufficiently concerned about sustainability for this to influence their consumer behaviour. The second group consists of about a fifth of the population who are more pre-occupied with the concept of "value for money" than anything else, while the third group consists of young consumers who have not yet rooted in their consumption habits. The fourth group consists of about the fifth of the population who are more active, and who are ready to buy and boycott products on ethical grounds as long as the issues are obvious, and the information is readily available. The members of this group can be labelled as 'subjectivists' as they do not necessarily feel guilty about consuming unsustainably, but at least they are aware about ethical issues and sustainability. These consumers also often claim to behave sustainably, but when making their purchase decisions they defer to other factors, such as the relative price of the product. Finally, the fifth group of consumers consists of those who are passionate about sustainability and who will always prefer the most sustainable option over other alternatives.

The study of Gilg, Barr and Ford (2005, 488-489) gives results of the similar vein. They labelled the most enthusiastic group of their study as 'committed environmentalists' as they were the most likely to always compost their waste and behave sustainably otherwise by, for example, purchasing local produce. The second group consists of 'mainstream environmentalists' who practice similar activities as the first group and with the same regularity, although they were found considerably less likely to compost their waste.

Diverging from them, the third group was labelled 'occasional environmentalists' as they are more likely to either never or rarely behave sustainably. The final group, 'non-environmentalists', is the least active, with the majority of individuals never practicing or feeling inclined to practice any of the aforementioned activities.

Another aspect of sustainable consumer behaviour is introduced by Peattie (1999, 139-140), according to whom sustainable consumer behaviour is the combination of two dimensions: one's willingness to compromise and their level of confidence in the sustainability of a product. According to him, many sustainable choices include some form of compromise that can, for example, take the form of paying a green premium caused by ethical sourcing or higher production costs due to lower production quantities. Compromising can also be caused by the acceptance of inferior performance or by the necessity to go out of one's way in order to acquire a more sustainable alternative. For instance, sustainable detergents that contain less chemicals than commercial alternatives may not create the same "whiter than white" appearance. One's level of confidence includes being confident that: 1. the environmental issues involved are real problems, 2. the company's offering is more sustainable than their competitors', and 3. purchasing the product in question will make some type of a difference.
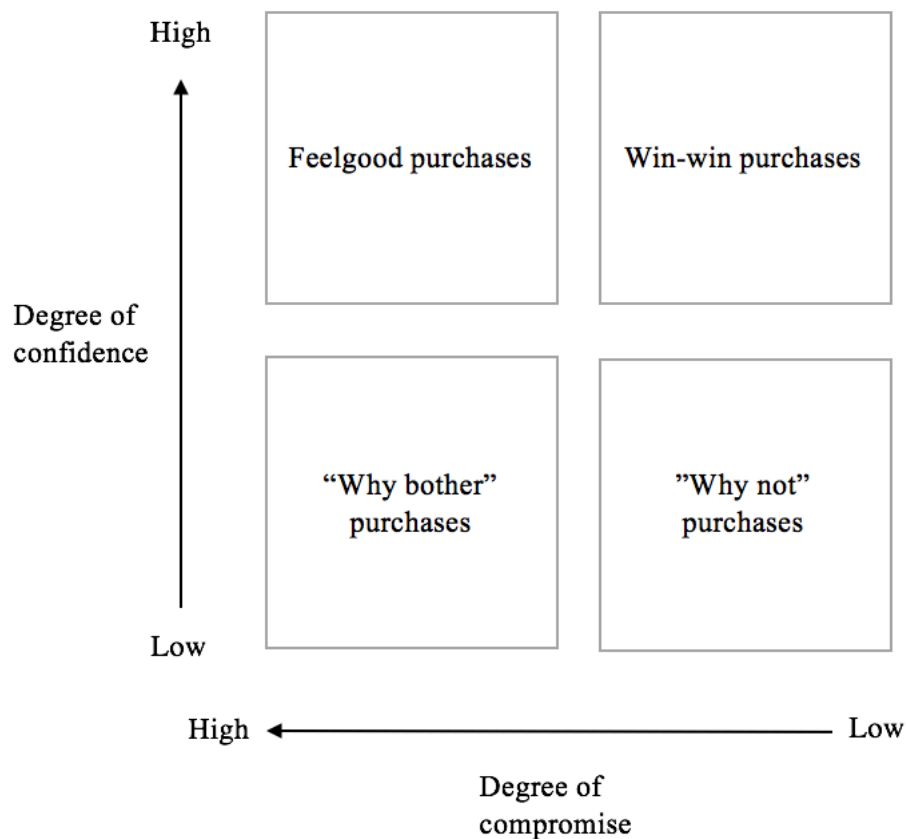
Figure 5 The sustainable purchase matrix (Peattie 1999, 141)

Figure 5 combines the two dimensions discussed above. The products that require the least degree of compromise and that are the most convincing in regard to their sustainability are of "win-win" nature, while products that are able to inflict the same level of confidence with less requirement for compromise are feelgood purchases. Companies with these types of products succeed because of their ability to evoke confidence. The products that have the least success are those where sustainability comes at the expense of considerable compromise for the consumer, and where the company is not able to evoke a high level of confidence about the sustainability of the product. (Peattie 1999, 139-142.)

However, defining sustainable consumer segments can be difficult in reality. Sustainable consumers are stereotypically older females with a high level of education and income (Gilg et al. 2005, 491; Korhonen et al. 2014, 29-31), however, merely relying on sociodemographic criteria in defining the sustainable consumer segment often leads to inconclusive and sometimes even contradictory results. An academic research stream with the aim of identifying and assessing the viability of sustainable consumer segments has been active since the 1980s, and even marketing practitioners and market research agencies have developed methods to identify and quantify these segments, however, the difficulty has always been in finding a basis for segmentation that works in practice. Further, it may not always even be beneficial to try and isolate sustainable consumers from the rest of the population as this overlooks the detail that when faced with a choice between two products that are otherwise identical except that one is more sustainable, most people would differentiate in favour of the more sustainable one. (Peattie 1999, 139-140.)

Further, if defining sustainable consumer segments can be hard, sustainability itself is hardly ever a black-and-white concept. For instance, the sustainability of a product is the sum of the purchase, use, maintenance and disposal of a product, and, therefore, merely inspecting consumer purchase patterns may be misleading to researchers. Further, environmental improvements in products and the choice of a sustainable product may be partly coincidental, with other things, such as economic or technical factors, leading to the development of a sustainable product or someone selecting a vegetarian dish over one with red meat due to health-related reasons. However, and most importantly, researchers studying sustainable consumer behaviour may achieve different answers depending on what is defined as constituting sustainable consumer behaviour, and whether sustainability is defined in general or specific terms. (Peattie 1999, 139-140.)

Because so many things influence the sustainability of our consumer behaviour, rather than observing each purchase individually, the clearest way to understand sustainable consumer behaviour is by reviewing each person's behaviour as a series of purchase decisions that may be or may not be interrelated and underpinned by a belief set (Young et al. 2010, 5). Further, it has been found that amongst the population of ethical consumers, there is a scale of importance regarding different ethical issues and at least according to

Wheale and Hinton (2007), sustainable consumer behaviour is most often determined the most important aspect of ethical consumerism, followed by animal and human rights. Therefore, the sustainability of someone's consumer behaviour depends on their consumption patterns on a larger scale and what they perceive the most important ethically.

Numerous studies have linked sustainable consumer behaviour to personal values (e.g. Vermeir & Verbeke 2006, Young et al. 2010), but personal values are irrelevant if the consumer is somehow restricted, as discussed in Chapter 2.1. Lack of purchase experience may pose the first obstacle to being a sustainable consumer, as lack of experience makes it less likely for someone to make certain observations. Further, lack of time and knowledge pose restrictions to the thoroughness of the decision-making process. Finally, the consumer must be able to access sustainable products and afford them. Although defining what constitutes as being a sustainable consumer vary, numerous theories have been formed to predict sustainable consumer behaviour, of which the most commonly used ones will be discussed next.

2.3   Common theories used to explain sustainable consumer behaviour

Interestingly, although general interest towards sustainability and sustainable consumption has increased, this has not been reflected on consumer behavioural patterns on the larger scale (Paul et al. 2016, 124; Lin & Huang 2012, 11; Vermeir & Verbeke 2006, 169). Vermeir and Verbeke (2006, 170) claim that this is because sustainable consumption is based on a decision-making process that takes the consumer's social responsibility into account in addition to individual needs and wants. Everyday consumption patterns are still heavily influenced by convenience, habit, price, hedonism and personal responses to external norms, and while consumers tend to express environmental concerns, an attitude-behaviour gap lies between behavioural intention and consumer behaviour.

Traditionally, research has explained sustainable consumer behaviour either as behaviour motivated by desirable outcomes (e.g. the theory of planned behaviour & the theory of consumption values) or as selfless behaviour (e.g. the norm activation model) (Park & Ha 2012, 391). According to Ajzen and Fishbein (1980) who came up with the theory of reasoned action (TRA) from which the theory of planned behaviour (TPB) was adapted, intentions are the single most important predictor of human behaviour due to the fact that such behaviour is discretionary and, therefore, under the control of one's intention. Furthermore, the underlying assumption behind their theories is that humans are rational beings that take advantage of all information available to them, i.e. we hardly make decisions purely "for the fun of it". The theories have strong predictive utilities, which is why they have become popular theories in behavioural research, especially in the field of

sustainable consumer behaviour. (Paul et al. 2016, 124-125; Han et al. 2010, 326; Ajzen 2006.)
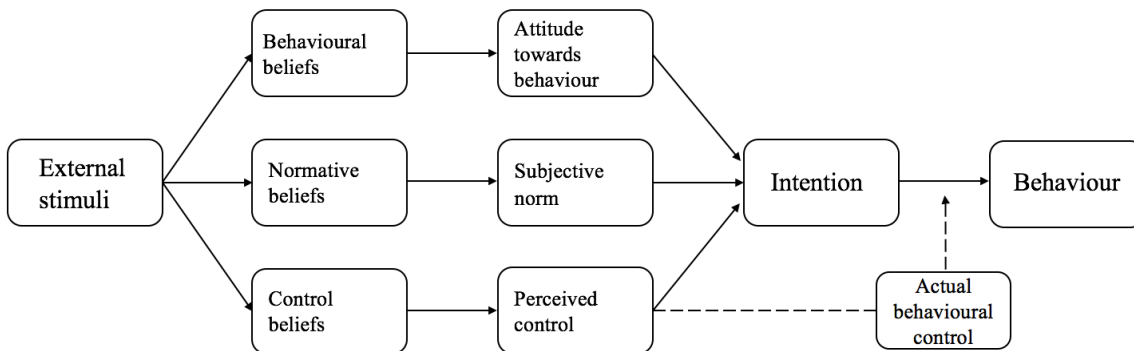
Figure 6 Theory of planned behaviour (Icek Ajzen, 2006)

Figure 6 describes the basic form of the TPB, which the extension of the TRA. The major difference between these two is that the TPB incorporates the additional dimension of perceived control as a determinant of behavioural intention. According to the theory, human behaviour is guided by three kinds of factors: behavioural, normative and control beliefs. Behavioural beliefs are the beliefs and concerns we have about the likely outcomes of our behaviour, normative beliefs are beliefs we have of the expectations of others and how we should comply to them, and control beliefs are beliefs we have about the presence of factors that may influence our ability to make decisions. These beliefs, respectively, influence our attitude towards a behaviour, our subjective norm, and our perceived control of the situation. The stronger our attitude towards a behaviour, our subjective norm and our perceived behavioural control, the stronger our intention is towards a certain behaviour. Finally, because the amount of behavioural control we have is sometimes overruled by the amount of behavioural control we actually have (e.g. due to lack of resources such as time or money), our intentions will be lower in spite of the fact that we have a positive attitude and/or subjective norm towards the intended behaviour. Intention is thus assumed to be an immediate antecedent of behaviour. In regards to sustainable consumption, we may have a good attitude towards sustainable consumption, perceive the subjective norm towards sustainable consumption as positive, yet feel as though we do not have enough information about what is sustainable or enough money to choose the sustainable option over the cheaper alternative, in which case our actual behaviour does not meet our intentions. (Ajzen 2006, 1; Han et al. 2010, 327.)

Another key theory identified by research to be of central value to sustainable consumer research study is the norm activation model (NAM) developed by Schwartz (1977). While the TPB explains the deliberate attempts of consumers to act sustainably, the NAM focuses on a person's altruistic and moral beliefs in explaining their sustainable

behaviour. As depicted by Figure 7, the NAM assumes that altruistic and moral behaviour is a function of personal norms, which are activated by two factors: awareness of consequences and ascription of responsibility. (Park & Ha 2012, 391.)
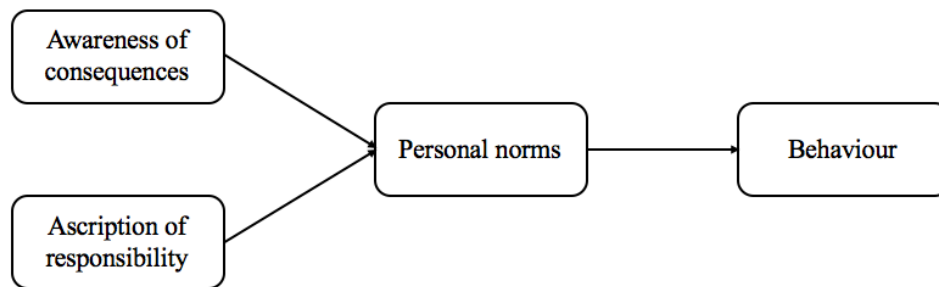
Figure 7 Norm activation model (Schwartz 1977, see: Park & Ha 2014, 281)

Lin and Huang (2012; 11-13) apply the theory of consumption values to sustainable consumer behaviour in effort to understand what factors motivate our sustainable choices. The theory describes behaviour as influenced by functional, social, emotional, conditional, and epistemic values. Functional values refer to the perceptions consumers have about sustainable products, their price, and their quality. Social values are influenced by social norms and peer opinions. Emotional values are measured by the amount of emotions consumers have towards sustainable products. Conditional values are those that measure the utility of sustainable products in specific situations. Finally, epistemic values portray consumer inclinations towards finding more about sustainable products and their environmental impacts in general.

According to the role theory, consumers hold a number of social roles that each have their own "script" that specifies how we are supposed to behave in certain social contexts. Additionally, the theory suggests that different groups of people play different roles which lead to different behavioural patterns. (Park & Ha 2012, 391). Drawing from this, we can divide consumers roughly into two groups that have their own roles: the sustainable and the unsustainable consumers. However, the classification of sustainable consumer behaviour is hardly ever this straightforward. In modern marketing literature, consumers with a favourable attitude towards sustainable consumption can be described as being sustainable, ethical or green consumers (Gilg et al., 2005; Vermeir & Verbeke, 2006), environmentally concerned (Magnier & Crié, 2015), or even as belonging to a "lifestyles of health and sustainability" (LOHAS) segment (Korhonen et al. 2014), and survey data finds these consumers to most often be young women with a high level of education (Mancini et al. 2017, 1847; Korhonen et al. 2014, 29-31). However, despite the statistical likelihood for certain demographics to define a sustainable consumer, these consumers differ in what aspect of sustainability they find most relevant, for example, whether they find recyclability, reusability or the apparent excessiveness of packaging

material used to be the most important aspect of sustainable packaging (Steenis et al. 2017, 294).

Sustainable consumers typically have a more positive initial outlook towards sustainability than average consumers, which tends to increase their likelihood for information search of the sustainability of the products they consume. Consumers with interest towards social issues, such as sustainability, are also more likely to accept confirming evidence of their existing beliefs at face value (Magnier & Schoormans 2015, 54). However, unsustainable consumers aren't necessarily against sustainability, but merely lack in understanding of what constitutes a sustainable product or where to find them (Lin & Huang 2012, 16; Vermeir & Verbeke 2006, 174-175.) In fact, studies show that a small degree of consumers have a sufficient level of awareness or comprehension of the real sustainable characteristics of products or their packaging materials because they're often poorly communicated to consumers. Sustainability is a credence attribute, which means that evaluating the sustainability of a product personally is hard and requires consumers to trust the information provided by manufacturers. Therefore, the less information available and the more complex or even contradictory this information is, the more uncertain consumers are about their choices. When insufficient or unreliable information is provided, such as in the case of so-called greenwashing, which is the practice of making something appear more sustainable than it is (Bevilacqua & Capingote, 2017), consumers may look at other people to get an indication of the best outcome. (Vermeir & Verbeke 2006, 174-175.)

Regarding sustainable packaging, research suggests that consumers strongly rely on material and structural cues in their purchase decisions, and, for example, Magnier and Crié (2015, 53-54) point out that in order for a package to influence purchase intention, it needs to be categorized as sustainable by consumers and consequently trigger a positive attitude. Furthermore, consumers can only make the right categorization when the visual elements clearly signal sustainability. However, there is still some gap in research explaining how specific packaging materials influence consumer responses (Steenis et al. 2017, 287). Steenis et al. (2017, 294) attempted to cover this gap in their research where they compared consumer judgements on packaging materials to life-cycle analysis (LCA) values, and they found that consumers don't seem to be aware of the LCA effects of packaging materials or at least that they don't seem to influence their depictions of sustainability of different materials. For instance, they found that bioplastic and glass were considered the most sustainable materials over carton, plastic and aluminium, where they were actually the least sustainable materials of the ones presented. Interestingly, a dry carton sachet and a mixed-material pouch consisting of carton and plastic were considered one of the least sustainable options, when in reality they were the best alternatives. Their findings were in line with previous research (Lindh, Olsson, & Williams, 2015; van Dam & van Trijp, 1994).

The fact that consumers are unable to make the distinction between materials and their sustainability highlights the responsibility of packaging producers and marketers to provide correct information for consumers. While developing packaging, it should be taken into account that sustainability signifies different things to different consumers, and that different materials and how they communicate sustainability may not be in line with LCA results. (Steenis et al. 2017, 295.) Furthermore, to encourage unsustainable consumers into purchasing sustainable packaging, package producers could shed light on the health benefits related to the safety of natural materials and highlight the benefit of convenience associated with this type of packaging that leads to smaller waste volumes or in some situations to the possibility of reusing packaging as drinking glasses or as plant pots (Magnier & Crié 2015, 363).

3 CULTURE'S INFLUENCE ON BRAND PERCEPTION

3.1 Packaging as a brand builder

Branding has an important role for companies in order to separate themselves from competitors (Sarkar & Singh 2005, 80). Several researchers agree that packaging has a role as a brand builder (e.g. Clement 2007; Jerzyk 2016; Salem 2018), since a well-designed and attractive package has been proven to increase sales, brand image and brand loyalty (Salem 2018, 1748-1749; Rundh 2005). Behaeghel (1991) and Peters (1994) go as far as claiming packaging to be the most important part of a brand due to it reaching almost all buyers in a category and it being present at the crucial moment when purchase decisions are made (Ampuero & Vila 2006, 102). Packaging not only helps bring attention to a product and inform of the brand, but it also helps communicate the value proposition of the product and influences our attitudes about the product and the brand (Salem 2018, 1751).

The creation of a brand and a brand image is one of the most important endeavours for marketers today. A brand should be considered a reason-based value delivery method, which is why a good brand provides a reason for a customer to buy the product either through product or psychological aspects. The concept of a brand can be seen to consist of different perspectives, including the division between visual and verbal information portrayed by the brand, perceptual characteristics, the positioning and image of the brand, and brand personality. The visual and verbal aspects of a brand refer to ways by which the brand of a product is made apparent in advertising or in the packaging of a product, and they considerably help in the identification and differentiation of a brand in relation to others. Perceptual characteristics refer to the appeal methods launched by the brand, i.e. whether the product appeals more to the customer's senses or reason. Positioning entails the unique position a brand holds in a customer's mind. According to Ampuero and Vila (2006, 101), positioning starts with a product, but it does not refer to the product as much as it does to what can be done to consumer perceptions. Brand image is the mental picture in a consumer's mind of a brand, and it can include symbolic meanings that consumers associate with the brand (Chen 2010, 308-309). Finally, brand personality is the set of human characteristics associated with a brand (Aaker 1997, 347). A brand can, for example, be personified as young, cool and extroverted, which should be portrayed in the company's advertising and which should also be consistent with target customers in order to strike emotions in these potential customers. (Sarkar & Singh 2005, 80-81.)

Understanding how consumers perceive and value a brand is important for the development of a brand. Brand equity is the appropriate measure for this as it not only reveals the sustainable valued added to the brand name in consumers' minds, but also influences

market share and the price of the product being sold (Sarkar & Singh 2005, 81-82; Chaudhuri & Holbrook 2001, 81). Major factors contributing to brand equity are: brand awareness, brand association, brand perception, and brand loyalty. Brand awareness is caused by the prominence of the brand in the eyes of consumers, who then make associations of the brand based on what they know based on advertisements and compare it to similar brands. Brand perception, which is the total impression consumers have of a brand based on their exposure to the brand, is influenced by their brand knowledge and consumption experience, which in turn influences brand loyalty through positive experiences with the quality of the brand. (Van Gelder 2004, 41-44; Sarkar & Singh 2005, 81-82.)

Packaging has been sometimes referred to as the "silent salesman" due to its presence at the most critical phase of decision-making and its way of informing consumers of the products most important benefits, which is why all of the elements of a package have to be taken into account when positioning a brand to the correct audience (Ampuero & Vila 2006, 101-102; Mcneal & Ji 2003, 402-403). Figure 8 depicts how packaging features can be seen to have an influence on purchase behaviour through three aspects of packaging: communication, functionality and environment. These packaging features are the types of cues discussed in Chapter 2.1 that consumers use to help their decision-making, especially in the case of low-effort decision-making. (Clement 2007, 920; Hoyer et al., 2018, 61.)
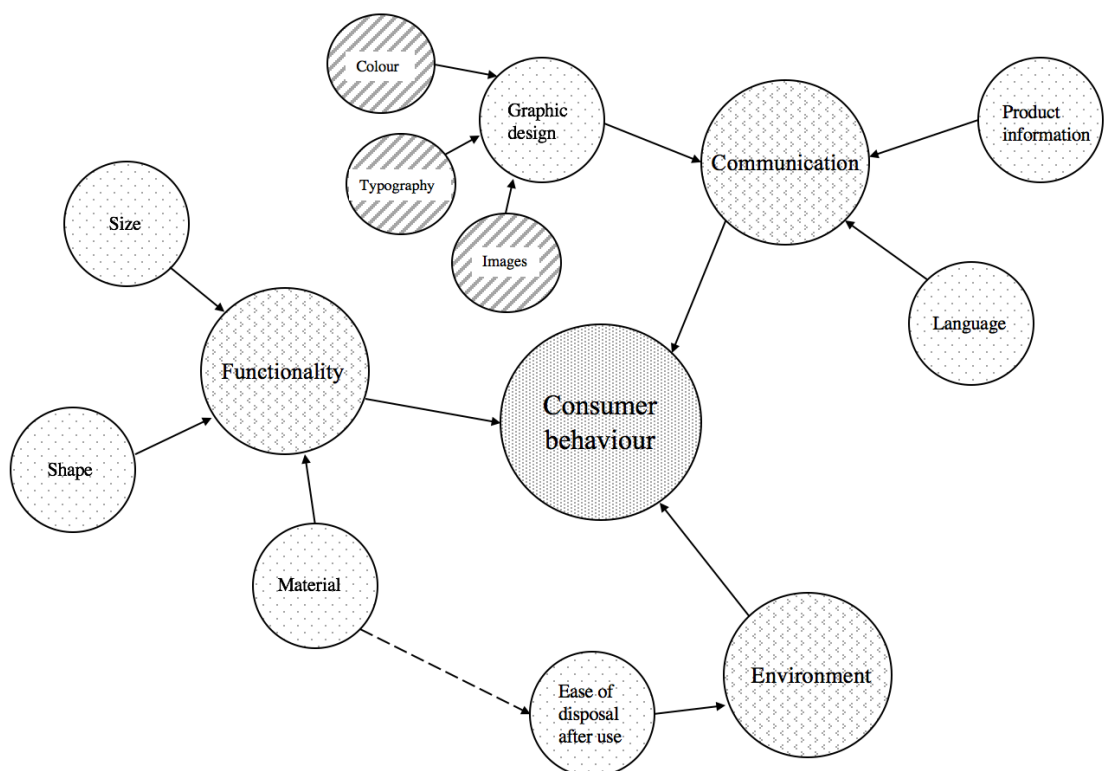
Figure 8 The influence of packaging features on consumer behaviour

The communication aspect presented in Figure 8 includes communicative features of packaging such as graphic design (incl. colour, typography, images used), product information, and the language used for this information. Functionality describes practical elements of packaging in relation to transportation, use and storage, i.e. the size, shape and material of the packaging. Finally, the environment aspect refers to the ease of disposal of packaging after use, which is greatly affected by the material used in the packaging. These aspects influence consumer behaviour by bringing attention to a brand, by helping in the identification of a brand, by communicating the benefits of the product, and by having a general impact on attitudes. (Ampuero & Vila 2006, 102; Clement 2007, 918; Salem 2018.) Visual elements of packaging, such as graphic design, size and shape relate more to the affective (emotion-driven) side of a consumer's decision-making, whereas informational elements, such as product information, relate more to the cognitive (rationale-driven) side of decisions (Silayoi & Speece 2018, 610).

Graphical aspects of packaging, such as colour, have the ability to evoke feelings and behaviour in consumers. Colours not only bring attention to a product, but they can also be used for the positioning of said product through associations that reinforce a brand's benefits or symbolism. (Underwood 2003, 65; Mutsikiwa & Marumbwa 2013, 66.) Research suggests different associations given to colours, and, for example, dark colours are often associated with a higher value proposition than lighter colours that are often used with products aimed for more price sensitive consumer. Colour associations are dependent of the product and cultural background of the consumer, but also of age and gender. (Ampuero & Vila 2006, 108-109; Grossman & Wisenblit 1999, 81-84; Fadzil et al. 2011, 762.) For example, the colour pink is often associated more with feminine than masculine products, whereas the colour green is associated with the feeling of envy in Western culture and with purity or even love in Asian cultures (Fadzil et al. 2011, 762; Aslam 2006, 19). Furthermore, in packaging food products, it is usual that the colours of the packaging take the colours of the actual product (Mutsikiwa & Marumbwa 2013, 66).

The typography and images used in a packaging help, as well, with bringing attention to a package and with evoking feelings. According to Saad and Idris (2014, 2), typography is one of the most important graphical aspects of packaging since words directly explain a message to the consumer, unlike images and other elements of packaging. Legibility and readability are critical concepts for the typography of a packaging because the reason of typography is to decrease search time for customers looking for a certain brand on a shelf, and especially the typography of the brand name is essential in attracting consumers' attention and influencing their purchase behaviour. (Mutsikiwa & Marumbwa 2013, 67.) Images on packaging help with determining the products, showing their use, making them appear attractive or desirable, and induce positive customer responses. Furthermore, images are an effective method of differentiation and positioning in packaging. (Salem 2018, 1753.) Ampuero and Vila (2006, 112) found in their study that traditional-

looking fonts, such as Times New Roman, and writing in upper case were more often associated with products of a higher profile than rounder fonts. Regarding images, the authors found that the Spanish consumers studied were more responsive to packages with pictures of the product itself.

Although most fast-moving consumer goods are low involvement products, which means that most consumers do not feel the urge to extensively search for information on the product, consumers can still find themselves overwhelmed by the amount of similar products available, in which case verbal elements of packaging, such as product information and language have an important role in the decision made (Silayoi & Speece 2004, 610; Salem 2018, 1762). Appropriate information on packaging has an impact on purchase decisions as this information both eliminates doubts and increases credibility (Salem 2018, 1754). However, product information can create confusion by transmitting either too much or misleading information. Small fonts and dense writing used by manufacturers to ensure extensive information can also lead to confusion due to poor readability. (Silayoi & Speece 2004, 612.) Furthermore, foreign languages are often responded to with more prejudice than national languages, especially if the words written in a language carry a different meaning in the native language. Although English has a global position in communication, it is often worthwhile for marketers to at least consider using local languages. (Salem 2018, 1754.)

The size, shape and material of the packaging influence the functionality of a packaging, but also the affective side of decision-making for consumers (Clement et al. 2013, 236). Especially the shape of a product has been found to have a strong impact on visual attention, and a combination with other physical features, including size and material, has an even stronger effect (Clement et al. 2013, 235). A general perception with consumers is that elongated packages are always larger than shallow packages, which is an example of how visual factors influencing the affective side of consumer decision-making can overpower the cognitive side. Furthermore, different packaging sizes have different appeals to consumers depending on the product type. Low involvement products, which numerous fast-moving consumer goods represent, are often found in larger packages that reduce total packaging costs for producers. These larger packages not only cater to the needs of larger households, but also to consumers specifically looking for good deals since the larger package size offers excellent value for money. (Silayoi & Speece 2007, 1499.)

3.2 Culture and brand perception in relation to sustainability

Brand perception is influenced by the knowledge consumers have of a brand and their consumption experience, regardless of whether contact is direct or indirect (Van Gelder 2004, 44; Foscht et al. 2008, 132). Whereas a brand can serve as a unifying factor in international marketing, many companies resort to emphasizing a standardized brand expression through the use of advertising, packaging, symbols, and other imagery. In a culturally heterogeneous global marketplace, the way brands are perceived may not be consistent with how it was intended due to cultural differences that influence the different associations assigned to a brand. (Foscht et al. 2008, 131.)

According to Van Gelder (2004, 45), there are three types of conventions (i.e. unwritten rules) that govern the way consumers perceive brands: 1. category, 2. cultural and 3. needs conventions. Category conventions are unwritten rules set to govern the way branding of products and services is done, what is acceptable in advertising, how products and services are priced, and other similar rules related to branding. Although these conventions are not necessarily judicial, being able to meet the category convention will enable global success. Cultural conventions, instead, are used to determine how particular people reflect their culture on their beliefs, how decisions are made, and how they attach meanings to certain matters. For instance, as discussed in Chapter 3.1, one's cultural background may influence the symbolism attached to certain features of a brand, such as the colour used in packaging, which may influence the way a brand is perceived, and according to Mathras et al. (2016, 303), religious values can even shape the level of reciprocity, economic savviness and self-control of consumers. Finally, needs conventions determine how needs are manifested, because although particular needs are universal, they may be satisfied in very different manners. (Addo 2013, 96-97.)

Within the field of international marketing, the discussion is never-ending regarding whether companies should standardize or adapt when marketing to international audiences, and to what extent (e.g. Theodosiou & Leonidou 2003; Vrontis et al. 2009). Supporters of standardization view markets are increasingly homogenous, whereas supporters of adaptation argue that regardless of how increasingly global the world is turning, there are still insoluble differences between countries and cultures, and even between regions in the same country (Vrontis et al. 2009, 478). However, it depends very much on the objectives of the company and the market to which they wish to expand their business whether one of the two has a better fit to the job. Furthermore, standardization and adaptation is not necessarily an all-or-nothing proposition, but rather a question of to what degree either if not both should be applied. (Theodosiou & Leonidou 2003, 142; Vrontis et al. 2009, 482). Literature supports this line of thought and, for example, Jiang and Wei (2012, 609) found that for international companies, a strategy where the creative marketing strategy is standardized and the execution is localized, is often the most adept choice.

In line with the aforementioned, Van Gelder (2004, 44) states that when a brand is introduced into a foreign culture, the brand management team must define the desired perception and must try to anticipate the situational effects influencing that perception. Furthermore, there are three broad forms of brand perception that require specialization either in the brand's domain, reputation or affinity. The brand domain can be outlined by what consumers understand the actual proposition of the brand to be, and it consists of the brand offering, the place from which the brand can be obtained and the solutions the brand offers to consumers. The success of a brand domain specialist rests on innovation and the creative use of resources. Brand reputation specialists, on the other hand, use or develop specific traits of the brand to help build the authenticity, credibility and reliability of the brand. Usually this requires the brand to have some sort of history, legacy or mythology that the brand reputation specialist can use to build up the brand and narrate this convincingly. Finally, brand affinity is where the brand needs to build a long-term relationship with its customers by performing better than competing brands. A brand's affinity is the reason consumers become interested and attracted in the brand, and it's gained through the understanding of the underlying needs, desires and values of consumers. Furthermore, some affinity specialists are able to standardize their brand across markets by using themes that are common across societies, however, most affinity specialists need local market knowledge as affinity specialists are particularly susceptible to cultural and needs conventions. (van Gelder 2004, 44-45; Addo 2013, 93.)

Although consumer cultures worldwide are moving closer to each other and there is even discussion of a "global consumer culture", especially advertising is still a carrier of cultural values, which is why companies have to keep in mind the proximity of the culture they are about to enter (Jiang & Wei 2012, 603). Usunier and Lee (2013) discuss the concept of affinity zones, which can correspond to geographical cultural affinity zones that are formed by national cultures that share similar features, or to cultural affinity classes that can exist in terms of other segmentation bases, such as age. Similarly, Hofstede (2001) classifies national cultures into six dimensions that help in categorizing countries and in discovering affinity zones where similar features in culture are prominent. However, other aspects of the marketing mix are also influenced by different cultural aspects. According to Usunier and Lee (2013), along with considering the differences in consumer behaviours, and the climate and physical environment, a number of other variables that influence the local product usage have to be taken into account, including variables such as literacy and technical knowledge. Regarding sustainable packaging, this could mean considering the different abilities of consumers to recycle, different perceptions of sustainability and sustainable consumption, and even the differences in willingness to recycle.

3.3 Culture and intention formation

As discussed in Chapter 2.2, having a concern towards the environment does not always translate into sustainable consumer behaviour. Therefore, it is important to analyse the variables that may impact one's purchase intention. In the past, factors such as age, income or gender have been used as parameters to explain consumer sustainability, but these studies have had limited value in profiling sustainable consumers. Therefore, these socio-demographic factors should be seen as moderators and not as determinants of sustainable consumer behaviour. (Sreen et al. 2018, 178.)

Liobikienė et al. (2016, 38) state that understanding the determinants of sustainable consumer behaviour can be beneficial for marketers and policy makers who want to promote more sustainable consumption habits. A central antecedent to sustainable consumer behaviour is generally agreed to be the attitudes people have towards sustainability (Sreen et al. 2018, 178). Various models have been developed to help understand attitude and purchase intentions for sustainable products, of which one is the theory of planned behaviour (TPB) that was introduced in Chapter 2.2. The theory has been widely used to predict sustainable behaviour and it has been found to have high predictability (e.g. Paul et al. 2015, Sreen et al. 2018).

Sreen et al. (2018, 178) find that one way to analyse sustainable consumer behaviour is to understand the values consumers possess. Values, which are a component of culture, can be defined as "socially shared conceptions of what is good, right, and desirable". In cross-cultural research, values are typically studied either from an individual or at nation level. At the individual level, values express broad, trans-situational motivational goals that affect the way people perceive and interpret the world. At the nation level, values reflect the responses groups develop in response to existential challenges. (Knafo et al. 2011, 178.)

Culture can be seen as an important dimension to explaining consumer behaviour, which is why it has been used to explain sustainable consumer behaviour in past studies (Sreen et al. 2018, 178). Furthermore, cultural values and practices have been found to moderate relationships between the TPB constructs (Moriano et al. 2012, 167). Cross-cultural research identifies several dimensions on which cultures can be distinguished, of which Hofstede's cultural dimensions are the best known and most applied. Furthermore, these dimensions have been extensively used to understand the purchase intention of consumers across cultures. Amongst the five dimensions (power distance, individualism/collectivism, uncertainty avoidance, masculinity/femininity and long-/short-term orientation) individualism/collectivism is the most accepted dimension for determining sustainable purchase intention in a cross-cultural context, which is why only this dimension will be under review in this study (Choi & Geistfeld, 2004; Moriano et al., 2012; Van Hooft & De Jong, 2009). People from more individualistic cultures consider themselves more

autonomous, more differentiated from others and independent from social groups when compared to people from more collectivistic cultures, which may affect the way individuals construct intentions to behave sustainably (Moriano et al. 2012, 167.)

According to the TPB, the more positive the attitude is towards a particular behaviour, the better the chance is that an individual will perform that behaviour (Sreen et al. 2018, 179). Various studies support the notion that there is a positive relationship between attitude and purchase intention (e.g. Kumar 2012, Paul et al. 2015). Furthermore, previous studies on sustainable products and related behaviour have also supported the claim that attitude and sustainable consumer behaviour have a positive relationship (e.g. Sreen et al. 2018). The cultural dimension of individualism/collectivism can be used to explain attitude formation as according to Van Hooft and De Jong (2009; 298, 310) individualists place more value on their own attitudes than on social norms. Their view is in line with Fishbein's (1980) notion that external variables such as culture may influence the relative weights that people place on the attitudinal and normative mediators of intention, but also with Ajzen's (1991) notion that the relative importance of attitude and subjective norm may vary across situations. Leonidou et al. (2010, 1323) explain that the behaviour of people who are collectivistic is usually driven by social norms and by willingness to share scarce resources with others. Further, they argue that collectivistic people are more likely to develop sustainable attitudes because they are more likely to demonstrate cooperative behaviour and give priority to the goals of the group rather than their personal goals. Additionally, they maintain that being collectivistic may indicate one's willingness to forgo personal motivations such as the inconvenience caused by recycling for those that are good for the group (e.g. keeping the environment clean).

Subjective norms, which are a key determinant of intention in the TPB, are the perceived social influences and pressure one might encounter from their social surroundings. Subjective norms are particularly evident in collectivistic societies and they are an important determinant of sustainable behaviour as they offer motivation and reinforcement to act according to the example set by others. (Sreen et al. 2018, 179-180.) Past studies (e.g. Sreen et al. 2018, Tarkiainen & Sundqvist 2005) have shown a significant relationship between attitude and subjective norms, and between subjective norms and collectivism. Research suggests that people from individualistic countries put more value on their personal attitudes whereas people from collectivistic cultures are likely to comply with others and be affected by their subjective norms (Choi & Geistfeld 2004, 825; Leonidou et al. 2010, 1337).

A central disposition of the TPB is that the behaviour at hand is something that is in the control of the individual and accordingly, a decrease in perceived behavioural control (PBC) will decrease the chances that an individual would take part in certain behaviour. Ajzen (1991) explains PBC as the "perceived ease or difficulty of performing a behaviour", which essentially covers an internal and external aspect of PBC, internal PBC

referring to the confidence someone has over their ability to perform a specific behaviour and external PBC to an individual's perception regarding their ability to overcome external limitations, such as time and money, required to perform a particular behaviour. (Sreen et al. 2018, 179). Because individuals in collectivistic societies are more willing to perform a behaviour that benefits the society at large even though that behaviour may be inconvenient for those individuals, it can be argued that consumers from collectivistic cultures are more likely to view sustainable behaviour as something that is in their control and that possible obstacles can be overcome than their individualistic counterparts. (Sreen et al. 2018, 179-180.)

Apart from the TPB, Schwartz's (1977) norm activation model (NAM) is also applied in this study. The model has been widely used to understand sustainable behaviour (e.g. Thøgersen 2000), however, the model has been less applied in cross-cultural settings as it's central focus is on personal norms which are mediated by one's awareness of consequences and ascription of responsibility (Park & Ha 2014, 281). Because personal norms reflect our personal values and our personal obligation to perform a particular behaviour rather than those of our culture, cross-cultural comparisons are difficult. However, that is not to say that there would be no relationship between culture and personal norms. Research supports the notion that personal norms would have as much of an influence on intention formation as the variables of the TPB but also that there is a reciprocal relationship between personal and subjective norms. For instance, Park and Ha (2014, 289) found that personal norms significantly influence the impact of subjective norms on intention but also that subjective norms play an essential role in the formation of intention by developing a favourable attitude towards sustainable behaviour and by enhancing the perceived ease of taking part in sustainable consumer behaviour. Bamberg et al. (2007, 201) support this notion by stating that unlike traditional definitions on social norms, the influence of said norms on the formation of personal norms seems to rely less on people's fear of social sanctions and more on their function as an easily accessible source of information. Because subjective norms are mediated by our social surroundings, which is a small-scale representation of a certain culture, an indirect correlation can be assumed between personal norms and culture, albeit this relationship is less unambiguous than that between the variables of the TPB and culture.

3.4   Conceptual framework of the study

The beliefs a person has serve as a basis for the formation of their attitudes, intentions and behaviour. According to Fishbein and Ajzen (1975, 510), some beliefs are formed on the basis of direct observation, but most beliefs involve some inference on the part of the individual, which implies that most beliefs are based on or influenced by prior

information available to the individual. As beliefs link attributes to objects, an attitude towards an object can be seen to be formed by the function of a person's evaluations of these attributes (Fishbein & Ajzen 1975, 216).

Since previous research has established a positive influence of brand equity on consumer preferences and purchase intention (Cobb-Walgren et al. 1995, 28), it can be established that brand equity indicates consumer attitudes towards the brand and attitude objects associated with the brand. According to Aaker (1991, 15), brand equity is "a set of assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or that firm's customers". Therefore, a brand is only as strong as consumers perceive it to be.

Universally, brands strive to associate good qualities to their brand. According to Patel et al. (2018, 1), packaging very much associates with a company's brand equity and it can be seen to build loyalty, create preferences and help position a company in the market, among other benefits. Particularly the sustainability of packaging, therefore, can be seen to create positive associations in the mind of consumers and, further, to create positive attitudes and intentions to purchase. Because definitions for sustainability and attitudes towards sustainable consumer behaviour can be expected to vary, it must be assumed that consumers who are influenced by sustainable packaging are also sustainable consumers. On the basis of this and the previous reasoning, the following hypotheses are formulated:

H1   There is a positive relationship between sustainable packaging and sustainable consumer behaviour.

H2   Sustainable packaging positively influences how consumers perceive a brand.

H3   Brand perception has a (positive) influence on a consumer's intention to purchase sustainably.

A central part of any behaviour is one's intention to partake in that activity. According to Fishbein and Ajzen (1975, 288), intention can be defined as a person's subjective probability to perform a specific behaviour. Fishbein and Ajzen's theory of reasoned action (TRA) suggests that a person's behavioural intention depends entirely on their attitude towards the behaviour and their subjective norm. The premise of the TRA is that human behaviour is completely under volitional control, however, because that is not always the case, the aspect of perceived behavioural control was included in the theory of planned behaviour (TPB). Perceived behavioural control refers to a person's perception regarding their ability and capability to engage in a certain behaviour. (Park & Ha 2014, 279-280.)

According to the TPB, behavioural intention is a function of three determinants: attitude towards the behaviour, subjective norm and perceived behavioural control. Applying these determinants to sustainable consumer behaviour in relation to sustainable packaging, this study assumes that the intentions consumers have towards purchasing sustainably packaged products are in correlation with their positive attitude towards sustainable packaging. Furthermore, these intentions are more likely when consumers believe that people who are close to them (i.e. family and friends) consider similar purchasing patterns important. (Park & Ha 2014, 279-281.)

Sustainable consumer behaviour can be seen as a form of altruistic behaviour since this type of behaviour does not bring immediate rewards for the action but, instead, relates to concern for others (e.g. the next generation). In the norm activation model (NAM) Schwartz (1977) views behaviour to be guided by altruistic behaviour, which he denotes to be the responsibility of personal norms rather than social norms. However, he finds that personal norms and altruistic behaviour are significantly correlated only in the case of those who are willing to accept responsibility and that one's awareness of consequences can mediate the impact of personal norms on altruistic behaviour (Schwartz 1977, 230, 242). This study posits that higher personal norms will lead to greater intention to partake in sustainable consumer behaviour.

The NAM suggests that awareness of consequences and ascription of responsibility are key factors in activating a consumer's personal obligation towards a certain altruistic behaviour (Park & Ha 2014, 282). However, studies (e.g. Osterhus 1997; Schwartz & Howard 1980) find that ascription of responsibility should be considered more of a moderator in the link between personal norms and behaviour. Due to the uncertainty in the role of ascription of responsibility and because an aim of this study is to create a simple predictive model of sustainable consumer behaviour, this dimension was excluded.

Regarding the impact of one's awareness of consequences, it is hard to feel a strong personal obligation towards a behaviour without being aware of the consequences of said behaviour. When consumers are aware of the impacts of different packaging solutions on the environment and the possibilities regarding their recycling, they are more likely to feel motivated to consider their choices and consume sustainably. Based on the above argumentation, the following hypotheses are formed:

H4a-e   The relationship between sustainable packaging and intention formation is mediated by the a) brand of the product and the b) attitude, c) subjective norm, d) perceived behavioural control, e) personal norm and f) awareness of consequences of consumers.

H5   One's awareness of consequences is positively correlated to their personal norms.

Ajzen (1985) expected the TPB to represent universal decision-making processes in the case of intentional behaviour and that, as such, the model should show a consistent pattern of influence of the key relationships across samples. This suggests that the psychological antecedents of intention would be consistent across cultures. Although there is wide support towards this premise, altering views have been proposed and, for example, Moriano et al. (2012, 167) perceive that culture can be found to moderate relationships between the TPB constructs. One of the main dimensions on which cultures vary, according to the authors, is individualism and collectivism. People from more individualistic countries consider themselves as more autonomous and differentiated from the opinions of others compared to people from more collectivistic countries. Similarly, Pavlou and Chai (2002) who studied the relationship between three of Hofstede's cultural dimensions (individualism/collectivism, power distance, long term orientation) and the TPB found that social norm was strongly related to intention with consumers from a collectivistic culture in comparison to consumers from an individualistic society. These findings suggest that the theory is perhaps less universal than originally proposed and, therefore, the following hypothesis shall be proposed:

H6   The relationship between both TPB and NAM constructs and intention can be found to be moderated by culture.

Finally, because the premise of this study is that sustainable consumer behaviour is caused by the intention to consume sustainably and that the influence of brand perception has on intention is mediated by attitude, subjective norm, perceived behavioural control, personal norm and awareness of consequences, it must be assumed that there is a positive relationship between intention and behaviour:

H7   Intention positively influences sustainable consumer behaviour.

The research framework and hypotheses are portrayed in Figure 9.
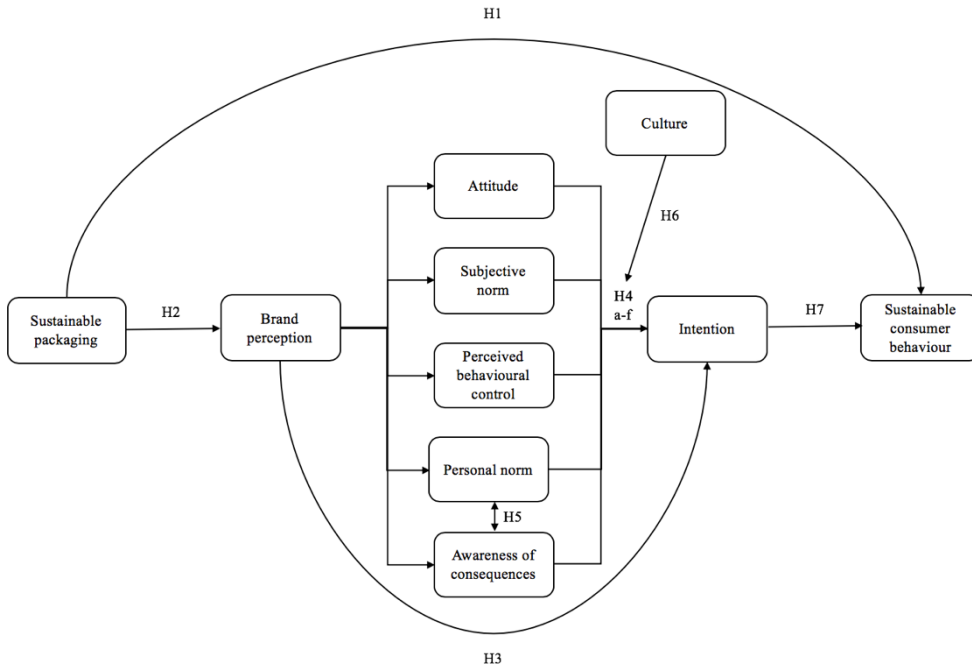
Figure 9 Hypotheses formation in relation to the conceptual framework

To conclude, the premise of this study is that sustainable packaging influences brand perception, which ultimately influences consumer behaviour. Intention to behave sustainably is influenced by attitude, subjective norm, perceived behavioural control, personal norm, and one's awareness of consequences, which function as a mediator in the relationship between brand perception and intention. Culture is assumed to moderate the relationship between both TPB and NAM constructs on intention.

4 RESEARCH METHODOLOGY

4.1 Research approach

The existing research gap in the area of sustainable packaging and especially in understanding how different (sustainable) materials influence consumer behaviour highlights the need for further research and the development of new theories (Davies 2006, 111). Although the qualitative method is helpful when the aim is to achieve deeper understanding on a research topic, the quantitative method is valuable when the aim is to learn more about the demographics of a population, understand trends, or examine attitudes and behaviour (Goertzen 2017, 12). The quantitative method, due to its typically deductive approach and predetermined sets of standardized responses based on theory, fails to provide insight into the individual and personal experiences of respondents, but in the case of FMCG where marketers are interested in understanding larger trends this is more beneficial than detrimental (Yilmaz 2013, 313). For these reasons, a quantitative method was chosen for this thesis.

A positivist approach is typically perceived suitable when conducting a quantitative study (Choy 2014, 100). Characteristic to positivist researchers is their assumption of a single, objective reality that exists independently of what individuals perceive. The social world, as well as the physical world, exists independent to individual perceptions as an unchanging structure, never mind subjective interpretations. Therefore, reality is perceived as a structure composed of relationships that are formed between various entities. Furthermore, whereas interpretivist researchers purely aim to understand behaviour and behaviour is seen as more of a process than an end product, positivists view behaviour deterministically in that human behaviour can be determined beforehand. Behaviour is, therefore, a chain of events where individuals behave reactively due to causal linkages. (Hudson & Ozanne 1988, 509-512.)

Because of the central focus on consumer behaviour in this thesis, a positivist approach was found suitable. The research question discusses the influence of sustainable packaging on brand perception, which implies a more qualitative than quantitative research question, but because brand perception is assumed to precede intention and finally behaviour, a positivist approach is needed to identify and explain causalities (Hudson & Ozanne 1988, 512). From a subjective point of view, behaviour is determined by various causalities, but when inspecting the market as whole, certain objective generalizations are detrimental in order to identify larger trends.

Furthermore, this thesis can be defined as an explanatory examination into the world of sustainable packaging, since the aim of this thesis is to not only describe the situation in which sustainable packaging influences brand perception and consumer behaviour, but

to explain what factors influence this chain of events. Research designs can be classified into explanatory, exploratory and descriptive research designs, of which explanatory research is best in defining causal relationships. (Maxwell & Mittapalli 2012, 324; Dudovskiy 2019.) The explanatory research design is suitable for answering the "what" and "how" questions of a given situation, which is also one of the central goals for quantitative research that aims to build accurate and reliable measurements for answering these types of questions (Goertzen 2017, 12).

Quantitative research uses survey questionnaires and other systematic measurements involving numbers, of which the former was seen as most appropriate for the needs of this thesis (Yilmaz 2013, 315). The survey method is typically used to define respondents' knowledge and attitudes about a subject, on top of which it is ideal for collecting demographic information about the respondents (Uusitalo 1991, 92-93). The questions used in this survey have been validated by prior research, and they were analysed with statistical methods to enable examining relationships, testing of specific hypotheses and comparing results to previous findings.

Regarding the cross-cultural approach applied in this thesis, there are essentially two different approaches to performing cross-cultural analysis: those utilizing primary data, and those using secondary information sources (Yeniyurt & Townsend 2003, 383). Although the survey method was applied to measure brand perception and the influence of the different TPB and NAM constructs had on sustainable consumer behaviour, in order to evaluate the impact of cultural dimensions on sustainable consumer behaviour, secondary information was used Hofstede's cultural dimension scores were applied. This approach has been applied by previous studies (e.g. Liobikienė et al. 2016, Pavlou & Chai 2002), which is why it was deemed appropriate. More discussion on the selection and use of measures can be found in the next chapter.

4.2   Measure development

4.2.1   Selection of measures

The theoretical concepts discussed in previous chapters have served as a basis for the selection of appropriate measures used in this study. In order to be able to generalize the findings of this study to the population, it is essential that the employed measures are not only carefully selected but also proven to be valid and reliable. However, in order to assess the validity and reliability of the measures used, it is vital to first discuss the reasoning for the selection of the measures used in this study. This entails the operationalization of said concepts, in which the concepts from the theory and hypotheses are translated into

variables that are essentially attributes on which respondents differ. (Hirsjärvi et al. 2007, 151; Bryman & Cramer 1997, 4.) Furthermore, indicators are needed to reflect central concepts and the variables derived from them. The use of multiple indicators is often best as multiple-item measures are more likely to capture the totality of a broad concept than a single question. Additionally, they allow the researcher to draw finer distinctions between the respondents and compensate misunderstood questions by those that are properly understood. (Bryman & Cramer 1997, 54-55.)

Research identifies two key theories as viable frameworks for explaining and predicting sustainable consumer behaviour: Fishbein and Ajzen's (Fishbein & Ajzen 1975, Ajzen 1985, Ajzen 1991) theory of planned behaviour and Schwartz's (1977) norm activation model. Although the TPB has been proven to have excellent predictability on its own, some studies (e.g. Bamberg et al. 2007; Harland et al. 1999) suggest that combining the TPB with the NAM offers a better model for predicting intention that leads to sustainable behaviour, since the behaviours of consumers are not only guided by rational choices but also by our personal norms, which in the context of sustainable consumer behaviour represents itself through altruistic behaviour. Because the norm activation model expects people to have an interest in the well-being of others, it associates behaviour with one's awareness of consequences and their ascription of responsibility. (Park & Ha 2012, 391; Park & Ha 2014, 281.) The two models describe antecedents to intention, and following the guidelines of Park and Ha (2012, 2014) in combining the two theories, the following variables were selected as measures: awareness of consequences, subjective norm, attitude, personal norm, perceived behavioural control and intention. The variables and the associated indicators are represented in Table 1 below.

Table 1 Applied variables and examples of indicators

Variable	Question	Examples of indicators
Sustainable packaging Cue perceptions (Steenis et al. 2017) (Korhonen et al. 2015) Material perceptions (Korhonen et al. 2015)	8-12, 20	How important do you perceive the following statements when purchasing fast-moving consumer goods? (1=not important; 7=very important) - Package is recyclable. - Package contains only one type of material.
Sustainable consumer behaviour (Korhonen et al. 2015)	13	How well do the following statements apply to you? (1=entirely disagree, 7=entirely agree) - I worry about the safety and the environmental impact of products I eat or use. I encourage my friends to ethical or sustainable consumption.

Intention
 	
(Park & Ha 2012)
 	
(Park & Ha 2014)
 	
Awareness of
consequences
Subjective norm
Attitude
Personal norm
Perceived behavioural
control
	14-19	Purchasing sustainably packaged products is a way to...
		(1=entirely disagree, 7=entirely agree)
		   - Reduce the amount of waste sent to
		   - landfill/treatment facilities
		How well do the following statements apply to you? (1=entirely disagree, 7=entirely agree)
		   - My friend's positive opinion influences me to purchase sustainably packaged products
		I think that purchasing sustainably packaged products is...
		   - Unwise – Wise
		How well do the following statements apply for you? (1=entirely disagree, 7=entirely agree)
		   - I am willing to put in additional effort to purchase sustainably packaged products on a regular basis
		How well do the following statements apply for you? (1=entirely disagree, 7=entirely agree)
		   - I have the resources, time and willingness to purchase sustainably packaged products.
		How well do the following statements apply for you? (1=entirely disagree, 7=entirely agree
		   - I intend to recycle whatever materials I find in packaging.

Brand perception
 	
(Lassar et al. 1995)
 	
Performance
Social image
Value
Trustworthiness
Attachment
	21-24	Think about X as a smoothie brand, how well do these following statements apply to you?
		(1=entirely disagree, 7=entirely agree)
		   - From this brand of smoothie, I can expect good quality.
		   - This smoothie brand matches my personality.
		   - I get my money's worth with this smoothie.
		   - I consider the company and people who stand behind this brand to be very trustworthy.
		   - I can imagine growing fond of this brand of smoothie

In measuring how well a brand succeeds compared to other brands, brand equity measures can be used to measure this. Marketing literature distinguishes between two different perspectives to brand equity, namely the financial and consumer-based perspectives. While the financial perspective focuses on the asset value of a brand, the consumer-based perspective focuses on measuring the perceptions consumers have of a brand. (Lassar et al. 1995, 12.) Because the consumer-based brand equity is directly derivative of the perceptions consumers have towards the marketing mix of a brand (Keller 1993, 8), the variables for measuring brand perception were derived from brand equity measures.

Regarding measuring brand equity, several methods have been suggested over time by researchers, marketing practitioners and consulting firms based on the consumer-based perspective (Pappu et al. 2005, 144). Prior to more sophisticated methods, researchers used to measure brand equity at the aggregate or segment level, which lead some researchers (e.g. Park & Srinivasan 1994) to divide brand equity into attribute and non-

attribute-based components, while others (e.g. Yoo & Donthu 2001; Lassar et al. 1995) divided brand equity into different dimensions (Sinha & Lesczyzc 2000, 156; Pappu et al. 2005, 144). One of the most common classifications in brand equity, however, is the one proposed by Aaker (1991), who distinguishes between five dimensions: brand awareness, brand associations, perceived quality, brand loyalty and other proprietary brand assets. In practise, only the first four dimensions are used in consumer-based brand equity research, since they refer to consumer perceptions, while other proprietary brand assets refer to patents, trademarks and channel relationships, which are not of the essence to consumer-based brand equity. (Gil et al. 2007, 189; Christodoulides & De Chernatony 2010, 47.)

In addition to the aforementioned classifications on consumer-based brand equity research, two approaches can be identified: the direct and the indirect approaches. For this study, an indirect approach was selected, as it adopts a more holistic view of brand equity than a direct approach that is also unsuccessful in sheding light on the sources of brand value. (Christodoulides & De Chernatony 2010; 51, 54.) This in mind, the five dimensions developed by Lassar et al. (1995) were selected and used as measures for this study: performance, value, social image, trustworthiness and attachment.

Lassar et al. (1995) base their measures on a study by Martin and Brown (1990), who make a distinction between perceived quality, perceived value, image, trustworthiness and commitment, on which they made their own deviations. For instance, they replaced the quality dimension with performance, which according to them is "a consumer's judgment about a brand's fault-free and long-lasting physical operation and flawlessness in the product's physical construction". Furthermore, they replaced the reference to the image of the brand with a social dimension, calling it social image, referring to the perception of esteem in which a consumer's social group holds the brand. Finally, because they distinguish brand equity as purely perceptual rather than behavioural, they replaced commitment with attachment to highlight the difference between commitment as a feeling and commitment as an action. Value is measured through consumers' willingness to pay for the product of a brand because the price of a product determines how highly consumers value the product and what they are willing to give up in order to receive it. Furthermore, trustworthiness is included as a dimension because consumers place higher value on brands that they trust. (Lassar et al. 1995, 13-14.)

The variables for measuring sustainable packaging were elicited from two sources. The first of the two is a study conducted by Steenis et al. (2017), whose study consisted of three stages. In this first stage, respondents were presented with seven randomly generated sets of three tomato soups (triads) selected from the total pool of 14 images (APPENDIX 3) and they were asked to sort the soups in such a way that two were similar and different from the third. For each triad, respondents were asked to write down their cue perceptions. In the second stage, respondents were presented with cue perceptions

and asked to indicate which of these described each of the 14 soup packages in a "check all that apply" format. The third stage asked respondents to score all packages on eight benefits. Additionally, they compared their findings with data on consumer perceptions about the sustainability of different materials they had gathered from a secondary source. Due to the amount of other variables in this study and this not being a study purely on cue perceptions, the three stages of the study by Steenis et al. (2017) were summarized so that respondents were asked to distinguish the one package they would choose from a triad and, unlike in the study of Steenis et al. (2017), the amount of sets presented was decreased from seven to three.

Contrary to Steenis et al. (2017), data on perceptions about the sustainability of different materials was gathered with primary data with measures created by Korhonen et al. (2015). In their study material perceptions were studied from eight different perspectives, but only the one examining perceptions towards the sustainability of different materials was included in this study. The different materials included in their comparison were paper, cardboard, glass, aluminium, tin and plastic. Aluminium and tin were considered too similar, for which reason tin was subtracted from the variables used in this study and replaced with bioplastic. Bioplastics vary depending on their biodegradability and whether the end-product is bio- or petroleum-based (APPENDIX 1). Because their sustainability is so questionable, studying perceptions on this particular material was deemed noteworthy.

Gathering perceptions on sustainable packaging itself was deemed important so as to not only understand which packaging features respondents associate with sustainability, but also to what degree. These questions were derived from the study by Korhonen et al. (2015) and examples of the questions can be found in Table 1. Variables measuring other packaging features were applied from the same study as control variables. These include the following factors: experiential, environmental, aesthetic, instrumental, price, information and functional factors. The experiential factors, for example, measure the importance respondents put on the design of a packaging and whether they would consider a well-designed package to bring them joy. Although control variables are not of central interest in this study, they are paramount for the proper understanding of the relationship between independent and dependent variables (Webb 2018, 1842).

Finally, selecting appropriate measures for research on culture and its influence on a given topic requires examining some of the methodological issues related to cross-cultural research. First and foremost, research on culture and culture's influence must specify why and in what way is culture relevant to the phenomenon being studied (Craig & Douglas 2006, 335). According to Sun et al. (2014, 338), the accelerating globalization of business means that marketing researchers of practitioners cannot afford to ignore cultural differences in consumer psychology and behaviour. Furthermore, sustainable packaging (and sustainability in general) is a topic that should be of interest worldwide and,

therefore, it is imperative for individual countries and companies operating in them to understand the attitudes of consumers towards the subject.

Another issue in cross-cultural research is posed by the diversity of culture as a concept since individuals may be influenced by different levels of culture or by multiple cultures at the same time. For instance, national cultures are often challenged by cross-national and sub national (e.g. urban) levels. Furthermore, the purity of national cultures is challenged by outside influences in a cultural unit due to interactions with people from other cultures or from people that have travelled a lot. (Craig & Douglas 2006, 335-337.)

Despite the common perception of the continuous homogenization of cultures worldwide, it has been found that even after tremendous exposure to globalization, consumers from different cultures have different attitudes, perceptions, preferences and values, and remain sceptical towards foreign products (Yeniyurt & Townsend 2003, 378). In similar vein, De Mooij (2000, 104-105) states that cultural values are strongly rooted in history and appear to be stable over time. Furthermore, she claims that although there is evidence of convergence of economic systems, there is no evidence of convergence of peoples' value systems. Therefore, it can be deduced that cultural differences remain an important aspect of international marketing, since cultural norms and beliefs are powerful forces that shape the perceptions and behaviours of consumers (Yeniyurt & Townsend 2003, 378).

Yeniyurt and Townsend (2003, 379) find that although there may be diverse cultural groups within the borders of a country, nationality still remains a viable proxy for culture, since all members of a nation tend to share a language, history and religion. Therefore, nationality was used as a measure for culture in this study and due to resource limitations, nationalities were formed into subgroups based on the work of Hofstede. The rhetoric for this was discussed in Chapters 3.2 and 3.3. Country scores for individualism and collectivism made available by Hofstede Insights (2019) and they were used to create dummy variables with which the moderating effect of culture was examined.

4.2.2   *Validity and reliability of measures*

It is generally accepted that when a concept has been operationally defined, in that a measure of it has been proposed, the ensuing measurement device should be both reliable and valid (Bryman & Cramer 1997, 62). Before performing any type of analysis, it is important to ensure the representativeness of the variables chosen to represent and measure a concept and that they do so in an accurate and consistent manner. Here, accuracy is associated with the term validity, while consistency is associated with the term reliability. (Hair et al. 2016, 251.) The most common and relevant criteria for assessing the accuracy and consistency of measures include content and construct validity, along with internal

and external reliability. (Hair et al. 2016, 251-259; Heale & Twycross 2015, 66-67; Heikkilä 2014, 177-178; Bryman & Cramer 1997, 62-67).

Content validity looks at whether the instrument adequately covers all of the content that it should with respect to the variable (Heale & Twycross 2015, 66). Establishing the content validity of a scale involves a systematic but subjective assessment of a scale's ability to measure what it is supposed to measure. Typically this might mean consulting a small sample of typical respondents or experts to pass judgement on the suitability of the indicators chosen to represent the construct. (Hair et al. 2016, 257.) To increase the content validity of the study, the survey was distributed for testing to the members of our master's thesis seminar group and to the two supervisors, who were able to give their professional opinion. Alterations were made to the survey according to this consultation.

Construct validity assesses what the construct or scale is truly measuring and whether you can draw conclusions about the test scores related to the concept being studied (Hair et al. 2016, 258; Heale & Twycross 2015, 66). These issues were discussed in hypothesis formation and in further detail in the operationalization of this study, where the use of specific measures was justified with prior conceptualizations and studies. Further, construct validity can be assessed through two related concepts: convergent and discriminant validity. The former, convergent validity, is the extent to which the construct is positively related with other measures of the same construct. The latter, discriminant validity, is the extent to which the construct does not correlate with other measures that are different from it. (Hair et al. 2016, 258.) In this study, factor analysis was used to establish discriminant validity (Table 2), while correlation analysis was used to provide evidence for the convergent validity of measures used (Table 3).

Table 2 Discriminant validity of the measures

Rotated Component Matrix(a)

	Component								
	1	2	3	4	5	6	7	8	9
SP3									.598
SP6									.720
SP7									.635
SCB1	.745								
SCB2	.676								
SCB3	.758								
SCB4	.758								
SCB5	.676								
SCB6	.648								
SCB7	.681								
SCB8	.647								

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	1	2	3	4	5	6	7	8
SCB9	.719							
AWC1				.771				
AWC2				.673				
AWC3				.764				
AWC4				.679				
SN1							.836	
SN2							.834	
SN3							.753	
ATT1					.742			
ATT2					.795			
ATT3					.797			
PN1	.622							
PN2	.526							
PN3	.478							
PBC1				.806				
PBC2				.566				
PBC3				.762				
PBC4				.611				
PBC5				.413				
INT1						.760		
INT2						.829		
INT3						.528		
INN1			.792					
INN2			.864					
INN3			.688					
INN4			.632					
INN6			.575					
INN7			.630					
INN9			.695					
INN10			.732					
FRO3		.775						
FRO4		.727						
FRO5		.799						
FRO6		.825						
FRO7		.795						
FRO8		.814						
FRO9		.798						
FRO10		.792						

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

Rotation converged in 8 iterations.

Table 2 above gives the results of the factor analysis. Four items regarding sustainable packaging (SP1-2, 4-5), one regarding subjective norm (SN4), one regarding perceived behavioural control (PBC6) and two regarding intention (INT4-5) had to be removed because of poor loadings on the main factor and rather strong loadings on others. Further, two items regarding Innocent's brand equity (INN5 and INN8) and two regarding Froosh's (FRO1-2) were removed for the same reason. Personal norm was included in the table although all of its items gave a strong loading on sustainable consumer behaviour, suggesting that the two variables actually represent the same concept. However, because both concepts refer to our internal convictions towards sustainability, they can both be seen to have discriminant validity as they correlate with each other and not with measures they should not correlate with (Trochim 2006). After all modifications, the factor analysis produced nine dimensions representing sustainable packaging, sustainable consumer behaviour/personal norm, awareness of consequences, intention, and the two brand equities.

Table 3 Convergent validity of the measures

	SP	SCB	INT	AWC	SN	ATT	PN	PBC	FRO	INN
SP	1									
SCB	.425**	1								
INT	.296**	.427**	1							
AWC	.114	.445**	.431**	1						
SN	.074	.396**	.201*	.204*	1					
ATT	.031	.374**	.317**	.521**	.127	1				
PN	.378**	.726**	.556**	.580**	.306**	.458**	1			
PBC	.386**	.573**	.408**	.337**	.278**	.387**	.608**	1		
FRO	.155	.144	-.002	.106	.034	.323**	.195*	.282**	1	
INN	.236*	.193*	.071	.090	.054	.234*	.253**	.287**	.634**	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

As shown in Table 3, there was correlation between the constructs. All TPB/NAM constructs correlated with sustainable consumer behaviour on a significant 0.01 level. Less items correlated with sustainable packaging, but the correlations for sustainable consumer behaviour, personal norm and perceived behavioural control were highly significant. Further, all TPB/NAM constructs correlated with intention, as expected. Out of the two smoothie brands, Innocent correlated more with the other items than Froosh.

A survey instrument is considered reliable if its repeated application results in consistent scores. Although reliability is important no matter what form the question takes, it is most frequently associated with multi-item scales, which consist of multiple variables

representing a concept, with a single item being a statement or question that respondents evaluate as part of the entire concept. If the instrument is a multi-item scale, then for it to be reliable the scores for individual items should be correlated and the stronger the correlations, the more reliable the scale will be. Similarly, the weaker the correlations, the more unreliable the scale will be. (Hair et al. 2016, 252.)

The reliability of a research can be evaluated either as internal or external reliability. External reliability is the more common of the two meanings and refers to the degree of consistency of a measure over time and repetition. However, internal reliability is particularly important in connection with multi-item scales as it raises the question of whether each scale is measuring a single idea and, therefore, whether the items that make up the scale are internally consistent. (Bryman & Cramer 1997, 63.) There are three types internal consistency reliability, namely split-half reliability, coefficient alpha (also referred to as Cronbach's alpha) and composite reliability, of which Cronbach's alpha is probably most often applied. (Hair et al. 2016, 255; Heikkilä 2014, 178.) External validity can be measured with the test-retest method, which is the act of administering a test on two occasions to the same group of subjects. Due to the purpose of this study and lack of resources, this method was not applied on this study. However, in order to measure internal reliability, Cronbach alphas were calculated (see Table 4 below).

Table 4 The reliability values of constructs

Construct	Number of items	Cronbach's alpha
Sustainable packaging	3	0.698
Sustainable consumer behaviour	8	0.912
Awareness of consequences	4	0.837
Subjective norm	2	0.893
Attitude	2	0.901
Personal norm	2	0.793
Perceived behavioural control	4	0.842
Intention	2	0.815
Innocent's brand equity	8	0.920
Froosh's brand equity	8	0.930

As Table 4 shows, Cronbach's alphas were calculated for each multiple-item measure to ensure the internal reliability of the research (Heikkilä 2014, 178). Cronbach's alpha is a popular method that indicates how well a set of items measures a single construct and it essentially measures the correlation between two items. As we can see from the Table 4 above, all items were at a good level or close to a good level (over 0.7), thus supporting the reliability of the measures and indicating that the data was reliable and suitable for

further analysis. The number of items for each construct listed in the table vary from the results of the factor analysis as the results of the reliability analysis suggested excluding certain items from the variable. For instance, excluding ATT1 from the variable increased the Cronbach's alpha of Attitude from 0.863 to 0.901.

4.3   Data collection

4.3.1   Development of questionnaire

The first part of data collection involved the selection of respondents and developing appropriate questions for the survey. An anonymous online survey was selected as the method of data collection for this study. As with any survey, this survey had three objectives. First, the survey was to translate the needed information into specific questions that respondents would be willing to answer. Further, the aim was to motivate and encourage respondents to cooperate by completing the survey with truthful answers. Finally, the survey was to minimize the possibility of response errors that may arise due to misinterpretation of questions or response alternatives. (Malhotra & Birks 2007, 371-372.) The main objective in designing the survey for this study was to create a method of data collection that was easy, fast and appealing for respondents to give their answers to.

In addition to the survey, a cover letter was developed as part of the survey to further inform and instruct respondents about the study. The link to the survey was attached to the body of the cover letter, which was sent to the respondents in the form of an email message. As the cover letter plays a significant role in motivating respondents to fill out the survey, its main mission was to make respondents interested enough to open the link and answer the survey. The mention of this survey being completely anonymous and only to be used for the purposes of this thesis were incorporated in the message in effort to decrease possible concerns.

The survey was structured in a way that was perceived the easiest for the respondents to answer. A typical design was followed as the survey consisted of three major parts: introduction, demographics and body. Alike the cover letter, the introduction section of the survey informed respondents about the purpose of the study along with some background information of the topic of study and contact details in case any problems or general observations occurred. The introduction was followed with a section covering the demographics of the respondents, in which respondents were asked about their age, sex, field of study, nationality and language proficiencies. Because the survey consisted of two questions that included images, these questions were positioned in the survey so that one was the first question following the questions related to demographics and the other

concluded the survey. This way respondents did not have to swift focus between visual and textual stimuli. Further, because the aim was to gather unbiased responses on material perceptions regarding their sustainability, the visual question probing which packaging alternative was preferred was asked before it became apparent to the respondents that this was a survey focusing particularly on sustainable packaging and not on packaging solutions in general since consumers tend to interpret questions and respond according to their interpretations, which are influenced by the contents of adjacent questions (Schwarz 1999). For this particular reason, both the cover letter and the introduction only described this as being a general survey on packaging solutions.

The survey consisted primarily of structured questions, which predetermine the set of response alternatives and the response format, and which can be multiple choice, dichotomous (i.e. consisting of two alternatives) or a scale of alternatives (Malhotra & Birks 2007, 381-383). As the variables of this study required standardized information, all of the questions were close-ended and were mostly formed as statements to which respondents reported their attitude on a scale. Unstructured or open-ended questions were not very suitable for the purposes of this study, which is why they were not incorporated in the survey.

Most of the measures of the survey were assessed with a seven-point Likert scale that used the anchors such as 1 for "strongly disagree" and 7 for "strongly agree". Because it was acknowledged that some of the themes questioned might not be the kind that everyone thinks about on a regular basis, which is why respondents were also given an alternative of "unsure" in most questions. The Likert scale was chosen as the main scaling method in this study because it is a common and proven approach to the measuring of multiple-item measures. (Bryman & Cramer 1997, 55.) A seven-point Likert scale was chosen over a five-point scale because the more points you use, the more precision you get with regard to the extent of the agreement or disagreement with a statement (Hair et al. 2016, 237).

The questions in this survey have all been validated by prior research, although the wording of the questions was somewhat modified in order to fit this particular context. Before sending to the respondents, the questionnaire was tested on small number of respondents and some modifications were made to both the questions and answer alternatives as a result. Finally, a reminder was sent to respondents after the survey had been open for two weeks, which significantly improved the number of respondents. The full survey can be examined in the appendices (APPENDIX 4).

4.3.2   Selection of respondents

When performing a quantitative study, a researcher can choose to do a census study, in which all of the members of the population are studied. Alternatively, they can choose to study a representative sample of the population called a sample survey. Because researchers rarely have the sufficient amount of time and resources to conduct a research on all of the individuals that could potentially be included in a study, a sample survey is often needed. (Heikkilä 2014, 31.)

Because the aim is to study international consumers, the population of this study can be extended to the entire world population. Therefore, a sample survey was conducted on international students from different disciples at the University of Turku and at the Turku University of Applied Sciences. A form of cluster sampling was seen as most appropriate for the selection of respondents since the aim was to collect an approximately even amount of responses from respondents of different cultural backgrounds. Therefore, because particularly the number of Finnish respondents was to be limited, in the case of the University of Turku the survey was distributed to email lists consisting mainly of international students. The person responsible for communication at the University of Applied Sciences informed me that they do not have email lists consisting of only international students and that email communication is only reserved for very official correspondence with the students, but that an intranet page for international students was in place that could be used for the purposes of distributing the survey, so an exception was made in the distribution of the survey in this case. However, as expected, the number of respondents from the latter university remained very limited most likely due to people generally not checking for updates on the intranet as often as they check their emails.

A common argument against the use of cluster samples is that in spite of the feasibility and economic advantages of cluster samples, they provide estimates that are less precise than results obtained from simple random samples. The main reason for this is that the sampling units within selected clusters are inherently more homogenic than the population it represents. (Fahimi 2011, 99.) However, because the cluster samples studied consist of international students, they come from a variety of backgrounds, which decreases the homogeneity of the group.

The optimum sample size depends on a number of factors, including the heterogeneity of the population, the amount of detail required for the interpretation of results, the level of reliability and the amount of resources available for the project (Bradley 2007, 185-186; Heikkilä 2014, 43). Because the aim was to make comparisons between groups within the sample, namely between those who belong to a highly collectivistic culture and those who belong to a highly individualistic culture, a sample size of 200 and over was desired. However, a minimum sample size of 100 and 30 units per group were

reached. (Heikkilä 2014, 43.) The small sample size will be further discussed in the limitations of this study.

4.4   Methods of data analysis

Examining connections among variables can take one or multiple of the following three forms of analysis: univariate, bivariate and multivariate analysis. At the core of data analysis is describing the data with univariate analysis, which happens through examining and presenting information in relation to a single variable. However, the analysis of a single variable is unlikely to suffice, and the researcher will probably be interested in the connection between that variable and a number of other variables, and, consequently, they will go through bivariate analysis that is interested in the connections between two variables. Similarly, a multivariate analysis studies multiple variable at a time. A key feature of statistical analysis is understanding what methods to employ under each circumstance. (Bryman & Cramer 1997, 6.)

   The data for this study was analyzed using the IBM SPSS 25 software. The software allows for extensive statistical analysis of which multiple different methods of analysis were applied on this study. As we can see from Table 5 below, measure validation was carried through with factor and correlation analyses as well as with the calculation of Cronbach's alphas. Additionally, frequencies and other simple descriptive statistics were used in order to assemble a general overview of the data. The t-test for related samples along with the split file function were employed to compare responses between groups.

Table 5 Analysis methods used

Phase of research	Analysis method
Measure validation	Factor analysis
	Correlation analysis
	Cronbach's alpha
Preliminary analysis	Descriptive statistics
	T-test for related samples
Testing of hypotheses	Regression analysis

   The single most important data analysis method used in this study was regression analysis, which was employed to test all of the hypotheses. Likert scales were used in the survey and although they are ordinal, they are commonly used by researchers with interval procedures (Bradley 2007, 210). Accordingly, regression analysis was used in testing the hypotheses.

In order to test the central framework of this study, a number of mediation analyses were performed. According to Edwards and Lambert (2007, 3), mediation can be established if four conditions are met: 1. there is a significant relationship between the independent (IV) and dependent variable (DV), 2. there is a significant relationship between the mediator (M) and the DV, 3. the coefficient of the M should be significant when both the IV and M are regressed against the DV, and 4. the relationship between the IV and DV should be insignificant or significantly smaller than the relationship in the first condition. Mediation analysis was employed, for example, to examine the nature of the relationships between sustainable packaging, brand and intention.

Testing the influence of culture on the framework required the use of moderation analysis, for which the subgroup approach was applied. According to Edwards and Lambert (2007, 3), moderation analysis can be performed by splitting the sample into subgroups that represent different values of the moderator variable and upon assessing mediation within each subgroup. The moderator variable may refer to naturally occurring subgroups, such as men and women, or to a setting where a variable is dichotomized to form subgroups. Further, according to this approach, mediation analysis was to be performed for each subgroup and if evidence for mediation differed between subgroups, it could be concluded that mediation is moderated by the subgrouping variable. In the case of culture, scores for individualism and collectivism were turned into dummy variables and the split file function was used so that each dimension could be examined separately.

When examining relationships between variables, it is important to keep in mind that correlation does not always imply causality. In order to establish causality, three conditions must be met: 1. there must be a relationship between variables, 2. the relationship is nonspurious, and 3. cause must precede the effect (Bryman & Cramer 1997, 7-9). A spurious relationship exists when there appears to be a relationship between two variables, but the relationship is not real as it is being produced by a relationship between a third variable. The mediation and moderation analyses in themselves provide support for the framework, but additional support was provided by the use of control variables, including age and gender, but also by question 24 of the survey that was included in the survey for this purpose. (Bryman 2008, 330-331.) These together prove the confirmed relationships between variables nonspurious and causal in the predicted manner.

4.5 Respondent profile

Respondents were all university students, but there was still some variation in their demographics. Out of the 113 respondents, the majority were female (63.7%) and one respondent identified as non-binary. Unsurprisingly, taken that the respondents were all students, the vast majority (74.3%) were under 30-year-olds, and social sciences was the

typical field of study (51.3%). The rest of the respondents studied natural sciences (15.9%), humanities (10.6%) and formal sciences (8.8%), with 15 respondents studying something outside of the listed alternatives. Respondents were very international, as can be seen from Figure 10 below in which the grey areas represent respondents' home countries. Out of the total of 113 respondents, most people came from Finland (n=26), while other noticeable home countries were Russia (n=7), China (n=6), Belarus (n=6), the United States (n=5) and Vietnam (n=5). Nine respondents did not perceive any single country to represent their cultural home.

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Figure 10 Respondents' home countries

Respondents had 36 different native languages, out of which Finnish (n=25), Russian (n=12) and English (n=10) had the most native speakers. When asked what language the respondents primarily used in their everyday life, English was chosen the most often with 66.4% of the respondents (n=75) using it on a daily basis. Finnish was the second most popular alternative with 19.5% of respondents (n=22) stating it to be their primary language at the moment. The results reflect high linguistic capabilities amongst the respondents, especially since 58,4% of the respondents stated that they spoke three or more languages fluently (i.e. can hold a conversation with a native speaker). Only 3,5% of the respondents (n=4) stated they were only fluent in one language, and 38,1% (n=43) in two.

Generally, sustainability was seen as an important dimension of packaging, as can be seen from Figure 11 below. Environmental had the same median as Functionality, however, the standard deviation for the latter was bigger (6.40227>6.02928) signifying that

there was bigger variation in how respondents felt about the importance of functionality than of that of sustainability. Informativity had the smallest standard deviation, signifying that respondents were fairly unanimous in their opinion on this dimension. Price was seen as the least important dimension.
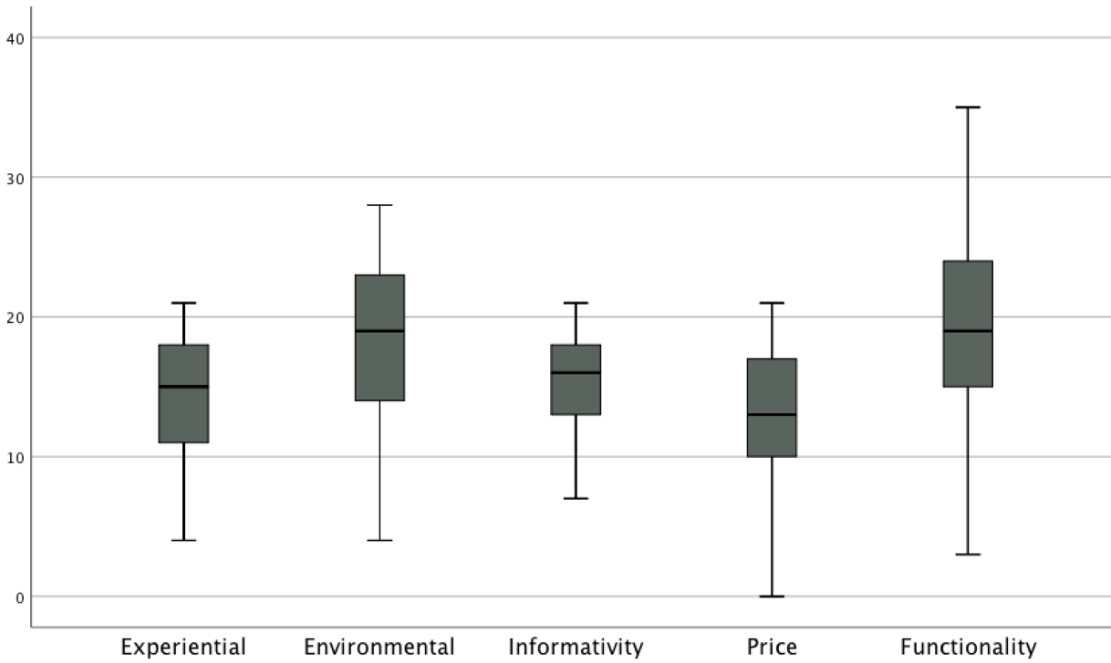

Figure 11 Respondents' opinion on different packaging dimensions

5 RESULTS

5.1 Sustainability in relation to packaging preferences and behaviour

The results of the survey indicated that the respondents have a general interest towards sustainability. Perceptions towards sustainable packaging were assessed with a set of questions whose results are presented in Figure 12 below. The statements were presented on a 7-point Likert scale where low scores indicated little agreement with the statement and high scores, inherently, high levels of agreement.
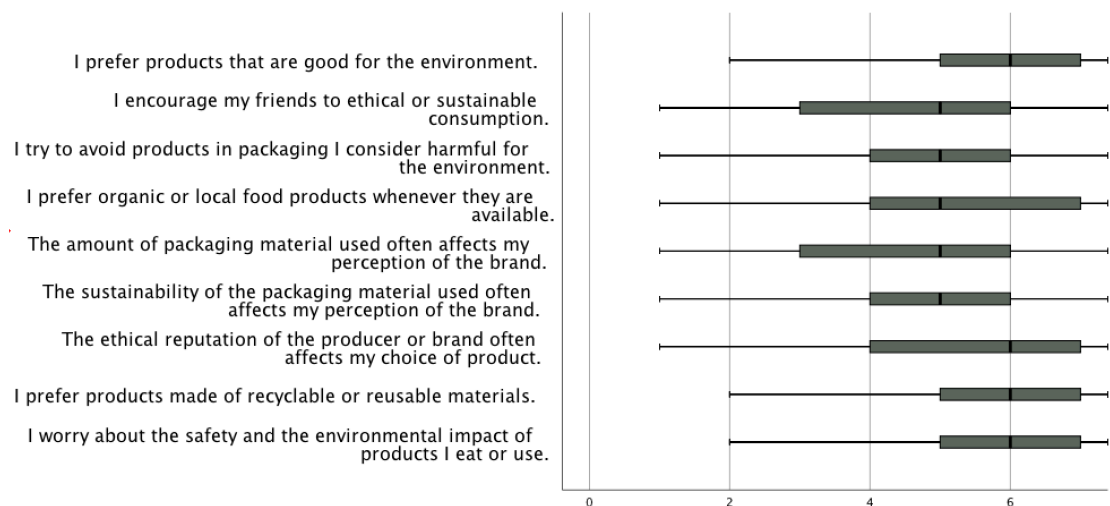

Figure 12 Perceptions towards sustainable consumer behaviour

The differences in the scores of different statements are small, but they still suggest an attitude-behaviour gap between the value consumers put on the sustainability of the products they buy and use, and how they actually behave. For instance, for those statements that use a more passive wording (e.g. I worry, I prefer), median values are higher than for those that have a more active wording that questions the actual behaviour of the respondent (e.g. often affects, I encourage). This same effect was portrayed in the answers of both male and female respondents, and in all age groups.

Perceptions towards sustainable packaging were measured with a range of questions that focused on the general attitudes' respondents had towards different materials, how important different packaging attributes were perceived and what types of choices they made when given the option to select between different packaging alternatives for the same product. Figure 13 below depicts how important different packaging attributes were

found. The results are in line with the general perceptions respondents had towards sustainability as sustainable packaging was perceived important.
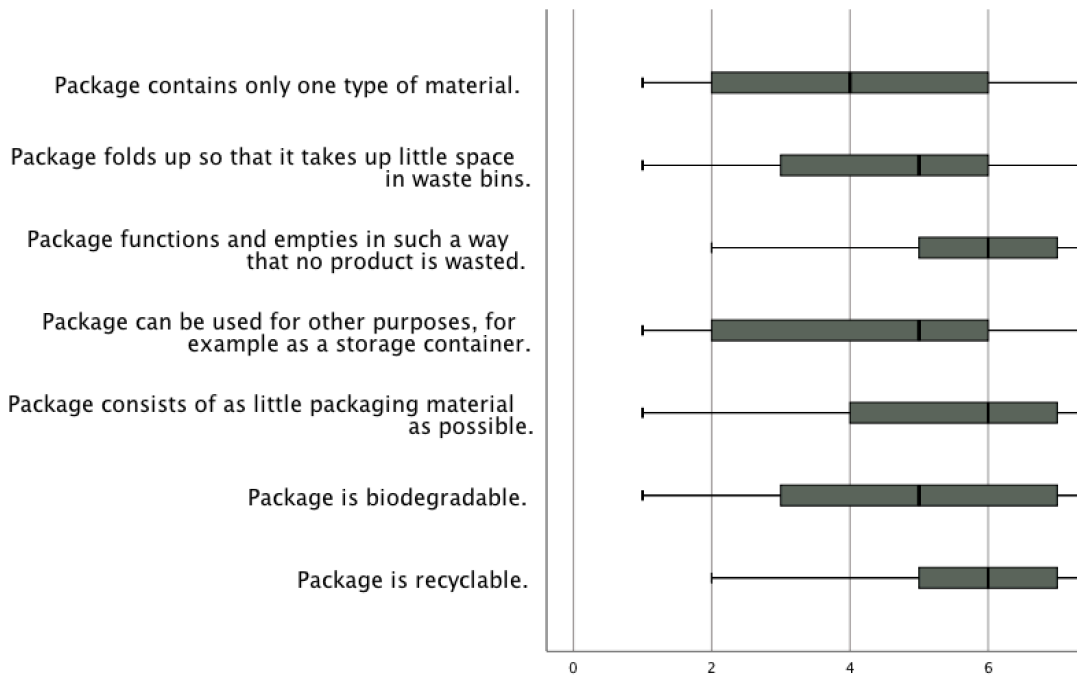

Figure 13 Perceived importance of different packaging attributes

The causal relationship between sustainable packaging and sustainable consumer behaviour was examined with linear regression analysis. As Table 6 shows, sustainable packaging correlated with sustainable consumer behaviour. Respondents preference towards sustainable packaging accounted for 17,4% of the variance in their likelihood to partake in sustainable consumer behaviour. The correlation between sustainable packaging and sustainable consumer behaviour is 0.425, which is the amount that one's likelihood to partake in sustainable consumer behaviour would increase if one's positive attitude towards sustainable packaging was increased by one unit.

Table 6 Regression analysis for sustainable packaging and sustainable consumer behaviour

Constant	Sustainable consumer behaviour	R^2	Std. error
Sustainable packaging	0.425*	0.174	0.185

The results indicate that sustainable packaging contributes to predicting sustainable consumer behaviour. Therefore, the results support our first hypothesis.

H1   There is a positive relationship between sustainable packaging and sustainable consumer behaviour. → *Supported.*

5.2   Sustainable cues in packaging and brand perception

Studying material perceptions was deemed important so as to see whether consumers place different value on different materials and, ultimately, if this influences their decisions. Unsurprisingly, consumers ranked plastic as the least sustainable alternative, however, female respondents were much harsher in their opinion than male respondents (M = 2.0556 < 3.0250, p≤0.05). Bioplastic and paper were found the most sustainable. The big standard deviation of aluminium signifies that respondents were more unsure about their opinion about this material.
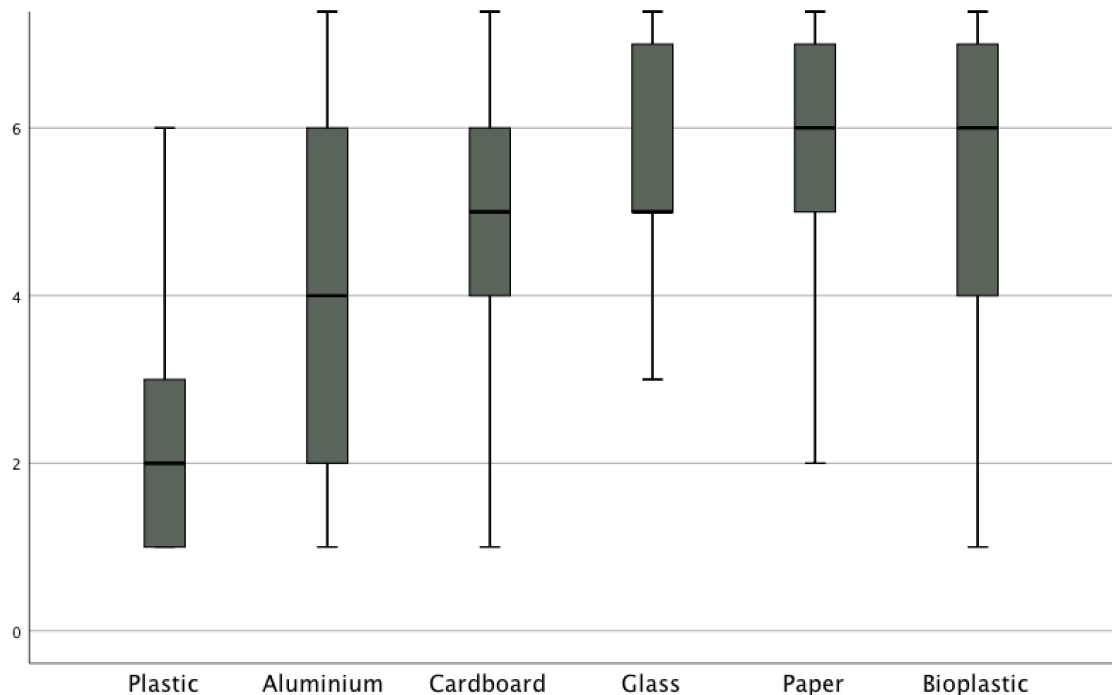

Figure 14 Material perceptions regarding their sustainability

Comparing the results of Figure 14 to the life-cycle analysis results by Steenis et al. (2017), it is interesting to find how consumer perceptions differ from scientific findings. The study whose results are portrayed in Figure 15 was used as basis for measuring cue perceptions in questions 9-11 of the survey, which is why the figure refers to packaging alternatives rather than materials alone. The figure reads in such way that glass jars were found the least sustainable and other alternatives are expressed as relative to it. Interestingly, while plastic was found least sustainable among respondents, life-cycle analysis

results place this packaging alternative in the middle of the studied materials. Further, whereas bioplastic was found the most sustainable, it is actually less sustainable than plastic.
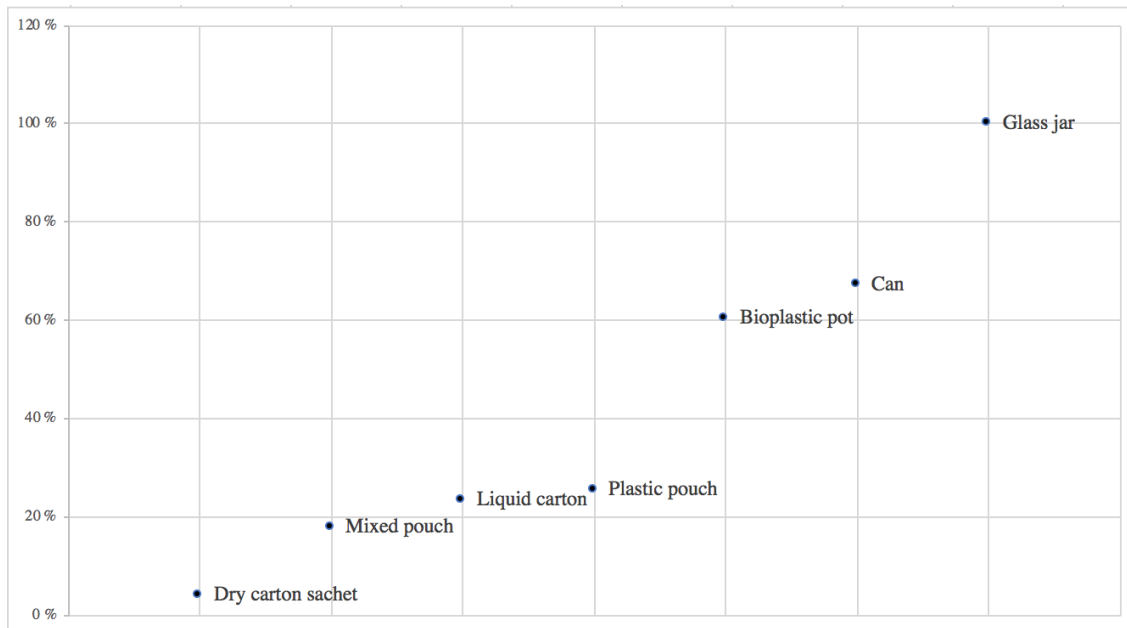

Figure 15 LCA results of different packaging alternatives (Steenis et al. 2017)

Figure 15 should also be compared to the results of questions 9-11 presented below in Table 7 Preferred packaging alternatives for tomato soup. From the results we find that glass jar was most frequently (F) preferred in the first set of alternatives, liquid carton in the second, and can in the third. The mixed material pouch seemed to be the least preferred alternative, overall. Female respondents were slightly more sustainable in their choices than men as they were more likely to choose the mixed material pouch and liquid carton, while they were less likely to choose can or bioplastic. However, men were more likely to choose dry carton sachet and less likely to choose the glass jar than female respondents.

Table 7 Preferred packaging alternatives for tomato soup

	Selection set	1		2		3	
Material		F	F%	F	F%	F	F%
Mixed	Male					3	7,5
material	Female	2	2,8			9	12,5
pouch	Total	2	2			12	11
Glass jar	Male	**28**	**70**				
	Female	**58**	**80,6**				

	Total	**87**	**77**				
Plastic pouch	Male	12	30			16	40
	Female	12	16,7			28	38,9
	Total	24	21			44	39
Dry carton sachet	Male			6	15		
	Female			8	11,1		
	Total			14	12		
Bioplastic pot	Male			18	45		
	Female			19	26,4		
	Total			37	33		
Liquid carton	Male			**16**	**40**		
	Female			**45**	**62,5**		
	Total			**62**	**55**		
Can	Male					**21**	**52,5**
	Female					**35**	**48,6**
	Total					**57**	**50**

Brand perception was measured by comparing the mean values (M) of the two smoothie brands, Froosh and Innocent. Respondents were presented with information about two fairly similar smoothies that consisted of mango and other fruit. Both smoothies were similar in price, although Froosh was slightly more expensive (Froosh: 2,31€, Innocent: 2,04€). Both smoothies were also of same quantity and the most obvious difference between the two was that the Froosh smoothie was in a glass bottle whereas Innocent was packaged in plastic. When looking at how consumers perceived the smoothie brands to perform, Froosh was perceived better, as can be seen from Table 8 below.

Table 8 Smoothie brands' perceived performance

Item	Innocent		Froosh	
	M	**SD**	**M**	**SD**
From this brand of smoothie, I can expect good quality	4.8938	1.27028	**4.9204**	1.16605
This brand produces tasty smoothies	4.6549	1.28014	**4.7080**	1.16252
Total: Performance	9.5487	2.38294	**9.6283**	2.19250

Froosh was also seen to have a better social image, as can be seen from Table 9.

Table 9 Smoothie brands' perceived social image

Item	Innocent		Froosh	
	M	SD	M	SD
This smoothie brand matches my personality	3.8673	1.54980	**4.0354**	1.40744
I feel proud drinking this smoothie in public	3.3894	1.65526	**3.6018**	1.68788
Total: Social image	7.2566	2.94527	**7.6372**	2.86001

Innocent was clearly seen to be better priced and that one could get their money's worth with the smoothie (Table 10). This was slightly unsurprising, given that the consumers had been informed about the prices of the two smoothies and Innocent being the cheaper one of the two.

Table 10 Smoothie brands' perceived value

Item	Innocent		Froosh	
	M	SD	M	SD
This brand of smoothie is well priced	**4.0177**	1.52352	3.8584	1.45692
I get my money's worth with this smoothie	**3.8496**	1.54816	3.7876	1.41075
Total: Value	**7.8673**	2.92314	7.6460	2.75136

Respondents also considered Innocent more trustworthy than Froosh (Table 11).

Table 11 Smoothie brands' perceived trustworthiness

Item	Innocent		Froosh	
	M	SD	M	SD
I consider the company and people who stand behind this brand to be very trustworthy	**3.8761**	1.44626	3.7965	1.35725
I believe that this company does not take advantage of consumers	**3.6814**	1.44708	3.6549	1.34808
Total: Trustworthiness	**7.5575**	2.70561	7.4513	2.50710

Finally, respondents had more positive feelings towards Innocent as a brand but were more likely to imagine themselves growing fond of Froosh (Table 12). Overall, however, Froosh scored higher on this dimension.

Table 12 Smoothie brands and attachment

Item	Innocent		Froosh	
	M	SD	M	SD
I can imagine growing fond of this brand of smoothie	3.7345	1.45785	**3.8230**	1.40299
I have positive feelings towards this brand of smoothie	**4.1150**	1.44390	4.0973	1.43281
Total: Attachment	7.8496	2.74909	**7.9204**	2.70628

Out of all the respondents, the majority (52,6%, N=113) had never tried either of the smoothies, while 14% had tried both, 16,7% had tried only Froosh and 15,8% had tried only Innocent. As we can see from Table 13, Froosh was preferred among those that had only tried Froosh and Innocent, similarly, was preferred among those that had tried their smoothie. Interestingly, those that had tried neither of the smoothies preferred Froosh while those that had tried both preferred Innocent. Among all respondents Froosh was slightly preferred ($p \leq 0.05$).

Table 13 Brand mean sums according to smoothies tried

Smoothies tried	Innocent		Froosh	
	M	SD	M	SD
Neither (n=60)	38.3333	11.97549	**39.4167**	11.04888
Froosh (n=19)	42.4211	10.83880	**43.5789**	12.26248
Innocent (n=18)	**42.1111**	11.11379	39.1111	11.25056
Both (n=16)	**41.5625**	10.83801	40.9375	6.98063
All (N=113)	40.0796	11.50865	**40.2832**	10.80465

Regression analysis was performed to see whether the value respondents put on sustainable packaging correlated with the two smoothie brands. Sustainable packaging did not correlate with Froosh's brand equity, but it correlated with Innocent. Therefore, the following hypothesis is supported:

H2 Sustainable packaging positively influences how consumers perceive a brand
→ *Supported.*

Table 14 Sustainable packaging's influence on brand perception

Constant	Inno-cent	R^2	Std. Error	Froosh	R^2	Std. Error
Sustainable packaging	0.236*	0.047	0.175	0.155	0.015	0.180

As we can see from Table 14 above, a one unit increase in the attitude respondents had towards sustainable packaging resulted in a 0.236 unit increase in Innocent's brand equity. This variance in brand equity was explained 4,7% by changes in attitudes towards sustainable packaging, and it suggests that consumers who place more value on sustainability regarding the packaging in which a product is in prefer Innocent over Froosh. This is supported by the notion that Innocent correlates with sustainable consumer behaviour (b=0.193, p=0.041≤0.05), whereas Froosh doesn't. However, because the correlations between the smoothies and intention were both insignificant (p>0.05), we must reject the following hypothesis:

H3 Brand perception has a (positive) influence on a consumer's intention to purchase sustainably. → *Not supported.*

5.3 Intention formation among different demographics

The TPB and NAM constructs were measured by examining respondents' self-reports about their awareness of consequences, subjective norm, attitude, personal norm, perceived behavioural control, and intention. The results for respondents' self-report about their awareness of consequences are presented in Table 15 below. The results indicate that respondents were generally very aware of the consequences that might transpire if they behave unsustainably. Females were reportedly more aware than men (M=23.5556>21.2000; $n_{female.}$=72, $n_{male.}$=40; p≤0.05) and higher age also increased awareness (M=23.5172>22.7843>21.9394; $n_{30+.}$=29, $n_{25-29.}$=51, n_{19-24}=33).

Table 15 Respondents' awareness of consequences

Item	n	M	SD
Purchasing sustainably packaged products is a way to…			
Conserve vital resources	113	5.3451	1.38725
Reduce waste	113	5.9823	1.16483
Conserve energy	113	5.3363	1.46757
Reduce the amount of waste sent to landfill/treatment facilities	113	6.0619	1.28371

The results for subjective norm, on the other hand, indicate that respondents do not feel particularly pressured to behave sustainably. Respondents somewhat felt that most people who are important to them would approve their sustainable consumer behavior and even that they are influenced by other peoples' opinions, yet they gave lower scores to the two statements that indicated pressure to behave in a certain way. Higher age also increased subjective norm (M=12.5517>12.0196>11.1212; $n_{30+.}$=29, $n_{25-29.}$=51, n_{19-24}=33).

Table 16 Respondents' subjective norm

Item	n	M	SD
Most people who are important to me think that I should avoid unsustainable packaging	113	3.4159	1.66221
Most people who are important to me think that I should consume sustainably	113	3.5752	1.79187
Most people who are important to me would approve me purchasing products that are packaged sustainably	113	4.9027	1.66886
My friend's positive opinion influences me to purchase sustainably packaged products	113	4.0619	1.79425

Attitudes towards sustainable consumer behaviour were measured with three pairs of words, where high scores referred to positive adjectives and low scores to negative ones. As we can see from Table 17 below, respondents perceived purchasing sustainably packaged products as wise, pleasant and satisfying. Age didn't influence attitudes, but gender did as females had more positive attitudes (M=12.3472>10.8250; $n_{female.}$=72, $n_{male.}$=40; $p \leq 0.05$).

Table 17 Attitude towards sustainably packaged products

Item	n	M	SD
I think that purchasing sustainably packaged products is…			
Unwise - Wise	113	6.5221	0.89739
Unpleasant - Pleasant	113	5.8407	1.39237
Unsatisfying - Satisfying	113	5.9823	1.30919

As with subjective norm, respondents didn't report on a particularly high feeling of personal norm. Their willingness to behave sustainably was higher than their feeling of personal obligation towards this type of behaviour and higher than their feeling of guiltiness if they behaved unsustainably. Again, age influenced responses as those who were thirty or over felt more personal obligation (M=9.8621, $n_{30+.}$=29) than 25-29 -year-olds (M=9.6078, $n_{25-29.}$=51) or 19-24 -year-olds (M=9.4545, n_{19-24}=33). Females (M=10.3333>8.4750; $n_{female.}$=72, $n_{male.}$=40; p≤0.05) also reported a higher level of personal norm.

Table 18 Personal norm of respondents

Item	n	M	SD
I feel a strong personal obligation towards purchasing sustainably packaged products	113	4.7522	1.74505
I am willing to put in additional effort to purchase sustainably packaged products on a regular basis	113	4.8761	1.60986
I would feel guilty if I purchased unsustainably packaged product	113	3.9292	1.95355

Respondents perceived themselves to have a moderately high control over their sustainable behaviour as they felt that they had the ability to recognize sustainable packaging solutions, and the resources, time and willingness to partake in such activity, however, they were less confident with the availability of sustainably packaged products and felt that unnamed external factors were hindering their ability to behave sustainably. Respondents, who were thirty-year-old's or older (M=18.5517>17.9091>17.5294; $n_{30+.}$=29, n_{19-24}=33, $n_{25-29.}$=51) perceived they had more behavioural control.

Table 19 Perceived behavioural control towards sustainable consumer behaviour

Item	n	M	SD
I am confident in my ability to recognize sustainable packaging solutions	113	4.1327	1.75002
If it were entirely up to me, I am confident that I would only purchase sustainably packaged products	113	4.4071	1.89283
I see myself as capable of purchasing sustainably packaged products in the future	113	5.2124	1.51452
I have the resources, time and willingness to purchase sustainably packaged products	113	4.1504	1.53659
Sustainably packaged products are generally available in the shops where I usually do my shopping	113	3.8230	1.72808
I feel that purchasing sustainably packaged products is not totally within my control	113	5.0177	1.78777

Regarding intention, respondents were fairly optimistic about their intention to behave sustainably. Interestingly, in the first three statements that cover recycling, the more precise the statement regarding the means of recycling, the lower the score is for intention. Further, respondents were more likely to purchase products that they considered to be packaged sustainably than to think about the sustainability of the product or the brand. Females reported a higher level of intention than men (M=28.2639>25.2000; $n_{female.}$=72, $n_{male.}$=40; p≤0.05). Also, whereas higher age has signified a higher medium sum in other dimensions, here the 25-29 -year-olds reported a highest level of intention (M=28.1961, $n_{25-29.}$=51), followed by the 30+ -year-olds (M=27.2414, $n_{30+.}$=29) and the 19-24 -year-olds (M=25.5455, n_{19-24}=33).

Table 20 Respondents' intention to behave sustainably

Item	n	M	SD
I intend to recycle within the next three months	113	5.9735	1.61721
I intend to recycle whatever materials I find in packaging	113	5.3805	1.78445
I intend to take apart packaging in order to recycle the different materials	113	5.1239	1.84261
I will consider purchasing sustainably packaged products	113	5.5398	1.52383
I will consider switching to sustainable brands for environmental reasons	113	5.1593	1.66136

5.4   The influence of different constructs on intention formation

Regression analysis was conducted to see whether the different constructs of this study mediated one's intention purchase sustainably. As Table 21 below shows, sustainable packaging can be found to explain 7.9% of the change in one's intention to behave sustainably. However, the brand of the product has less influence.

Table 21 Sustainable packaging's influence on intention formation

Constant		Intention	R^2	Std. error of the estimate
Sustainable packaging		0.396*	0.079	0.058
Mediated by	Innocent's brand equity	0.295	0.071	0.060
	Froosh's brand equity	0.303	0.073	0.059

As previously stated, mediation can be established if four conditions are met: 1. there is a significant relationship between the independent (IV) and dependent variable (DV), 2. there is a significant relationship between the mediator (M) and the DV, 3. the coefficient of the M should be significant when both the IV and M are regressed against the DV, and 4. the relationship between the IV and DV should be insignificant or significantly smaller than the relationship in the first condition. (Edwards & Lambert 2007, 3.) As we can see from Table 21, the coefficients decreased when brand equities were added to the regression. However, the relationship between Innocent and intention was found insignificant (p=0.455>0.05) as was between Froosh and intention (p=0.979>0.05). Further, the coefficients of both brands were insignificant when both the IV and M were regressed against the DV. Therefore, the following hypothesis is not supported:

> H4a   The relationship between sustainable packaging and intention formation is mediated by the a) brand of the product → *Not supported.*

Another mediation analysis was performed for the TPB and NAM constructs to examine their mediating role between sustainable packaging and intention.

Table 22 Mediation analysis of different variables in relation to intention

Constant		Intention	R^2	Std. error of the estimate
Sustainable packaging		0.296*	0.079	0.058
Mediated by	Awareness of consequences	0.250*	0.234	0.053
	Attitude	0.286*	0.167	0.055
	Subjective norm	0.282*	0.104	0.057
	Perceived behavioural control	0.162*	0.174	0.059
	Personal norm	0.100*	0.305	0.054

Table 22 above depicts how the relationship between sustainable packaging and intention is mediated by different variables. The relationship between the mediators and intention was significant with all five variables, as were the relationships between sustainable packaging and intention. Further, the coefficients of the mediators were all significant (p≤0.05) and the relationship between sustainable packaging and intention was smaller when both the IV and M were regressed against the DV. According to Edwards and Lambert (2007, 3), full mediation is inferred when the coefficient of the IV is insignificant when both IV and M are regressed against the DV and partial mediation when the coefficient's significance is lower than that of the IV's when solely regressed against the DV. These conditions are met only by perceived behavioural control and personal norm, as the significance levels of awareness of consequences (p=0.003), attitude (p=0.001) and subjective norm (p=0.002) are not lower than that of sustainable packaging (p=0.001). However, when sustainable packaging and all five TPB/NAM dimensions are regressed against intention, its coefficient is insignificant (p=0.207), signifying that the dimensions function as mediators when examined as a single entity. Therefore, the following hypotheses are supported:

H4b-d, f   The relationship between sustainable packaging and intention formation is mediated by the […] b) attitude, c) subjective norm, d) perceived behavioural control, e) personal norm and f) awareness of consequences of consumers. → *Supported.*

As personal norm is described to mediate the relationship between awareness of consequences and intention in the NAM, we must conduct another mediation analysis, where we first assess the correlation between awareness of consequences and personal norm. The results of this analysis confirmed that awareness of consequences and intention have a significant correlation (b=0.431, p=0.000≤0.005) as well as personal norm and intention (b=0.556, p=0.000≤0.005). Further, the coefficient of personal norm is significant when it is regressed with awareness of consequences against intention (p=0.000≤0.05), while the coefficient of awareness of consequences is insignificant (p=0.089>0.05) personal norm and awareness of consequences have a significant correlation (b=0.556, p=0.000≤0.05). Further, the relationship between personal norm and intention was significant (b=0.473, p=0.000≤0.05). Thus, the following hypothesis is supported:

H5 One's awareness of consequences is positively correlated to their personal norms.
→ *Supported.*

The role of culture in this context was inspected by subgrouping each of the constructs according to the cultural background of the respondent. Hofstede's cultural dimensions were applied, based on which two dummy variables were created for individualism and collectivism. Because the mediating effects of TPB/NAM constructs on intention were already established, the moderating effect of culture was determined by adding the dummy variables into the models and comparing the coefficients between the construct and intention based on each subgroup. If culture were to moderate the relationship between one of the constructs and intention, it's coefficient would have to have been less than that between the initial construct and intention. The results of this analysis can be seen in Table 23 below.

Table 23 Culture's moderating effect on intention

Constant		Intention	R^2	Std. error of the estimate
Awareness of consequences		0.431*	0.179	0.061
Moderated by	Individualism	0.571*	0.311	0.079
	Collectivism	0.499*	0.231	0.082
Attitude		0.317*	0.092	0.109
Moderated by	Individualism	0.329*	0.089	0.136
	Collectivism	0.369*	0.115	0.214

Subjective norm		0.201*	0.032	0.089
Moderated by	Individualism	0.387*	0.131	0.121
	Collectivism	-0.047	-0.023	0.136
Perceived behavioural control		0.408*	0.159	0.049
Moderated by	Individualism	0.461*	0.195	0.063
	Collectivism	0.370*	0.116	0.087
Personal norm		0.556*	0.217	0.081
Moderated by	Individualism	0.503*	0.237	0.116
	Collectivism	0.622*	0.372	0.118

As can be seen from Table 23 above, one's cultural background had an effect in the case of perceived behavioural control, where collectivism seems to have functioned as a moderator. Further, because individualism appears to mediate the relationship between personal norm and intention, it can also be labelled as a moderator, although this dimension lacks discriminant validity. All-in-all, however, it appears that culture does not moderate the relationships between TPB/NAM constructs and intention and, therefore:

H6   The relationship between both TPB and NAM constructs and intention can be found to be moderated by culture. → *Not supported.*

Finally, to confirm our final hypothesis, one last regression analysis was performed to confirm the positive relationship between intention and sustainable consumer behaviour. The results of this analysis are presented in Table 24 below.

Table 24 Intention's influence on sustainable consumer behaviour

Constant	Sustainable consumer behaviour	R^2	Std. error of the estimate
Intention	0.427*	0.175	0.292

Based on the results of the table above we can confirm that there is correlation between intention and sustainable consumer behaviour. A one unit increase in intention increases one's likelihood to behave sustainably by 0.427 units with a 17.5% likelihood. Based on these findings we can state the following:

H7   Intention positively influences sustainable consumer behaviour. → *Supported.*

6   CONCLUSIONS

6.1   Theoretical discussion

The framework used in this study that was discussed in Chapter 3.4 combined theories developed by Ajzen, Fishbein and Schwartz. According to this framework, intention, which precedes behaviour, was to be influenced by sustainable packaging, the brand of the product, and both TPB and NAM constructs. As we can see from Table 25 below, the majority of the hypotheses used in this study were supported.

Table 25 Hypotheses and results

Hypothesis		Result
H1	There is a positive relationship between sustainable packaging and sustainable consumer behaviour.	Supported
H2	Sustainable packaging positively influences how consumers perceive a brand.	Supported
H3	Brand perception has a positive influence on a consumer's intention to purchase sustainably.	Not supported
H4	The relationship between sustainable packaging and intention formation is mediated by the:	
	a) brand of the product and the	Not supported
	b) attitude,	Supported
	c) subjective norm,	Supported
	d) perceived behavioural control,	Supported
	e) personal norm and	Supported
	f) awareness of consequences of consumers.	Supported
H5	One's awareness of consequences is positively correlated to their personal norms.	Supported
H6	The relationship between both TPB and NAM constructs and intention can be found to be moderated by culture.	Not supported
H7	Intention positively influences sustainable consumer behaviour.	Supported

The results of this study very much supported previous research, as we were able to find evidence that both the TPB and NAM constructs predicted intention and, perpetually, sustainable consumer behaviour. Unfortunately, the brand of the product and the cultural

background of the respondent could not be linked to the intention of respondents to consume sustainably. However, the packaging used did influence how respondents perceived the two smoothie brands as Innocent's brand equity correlated with sustainable packaging on a significant level, while Froosh's didn't.

The interesting feature about the correlation between Innocent and sustainable packaging is that Innocent was presented in a plastic bottle while Froosh was in a glass bottle. Correlation analysis between the two brands and different packaging dimensions found a significant correlation between the environmental features of packaging and Innocent as well as with the experiential and functional features that Froosh also correlated with. Further, while both brands correlated with attitude, personal norm and perceived behavioural control, only Innocent correlated with sustainable packaging and sustainable consumer behaviour. These results together highlight the fact that respondents perceived Innocent's plastic packaging as more sustainable than Froosh's, which is interesting considering that respondents rated plastic as the least sustainable material and glass as the third most sustainable out of the six alternatives. Comparing to the results of the life-cycle analysis performed by Steenis et al. (2017), Innocent's packaging is, indeed, more sustainable as the plastic alternative was calculated to be the fourth most sustainable alternative out of seven packaging alternatives for soup, while the glass alternative ranked last. This in mind, it appears that consumers are confused by what is sustainable regarding packaging because of the inconsistence in their responses.

Additionally, there appears to be a gap between the attitude's consumers hold and the way they behave. Although we have been unable to measure actual behaviour, this is apparent in the differences between the different statements measuring the perceptions respondents have towards sustainable consumer behaviour. Statements that used passive wording such as "I worry" and "I prefer" scored higher mean values than those that used a more active wording questioning actual behaviour. For instance, respondents stated that they were likely to worry about the environmental impact of certain things and prefer sustainability, but when asked if the sustainability of the packaging material or the amount of packaging used often affects someone's perception, the scores were lower.

Generally, sustainability was seen as the most important dimension of packaging, followed by functionality and informativity. This signifies that consumers are interested in the sustainability of different packaging alternatives, and that this can be achieved by smart and functional packaging that not only helps store the product and also allows the efficient usage of the product, but also by informative labels that give reliable insight to the product and its sustainability. Further, because consumers held very positive attitudes towards sustainability whilst not being quite sure what accounted for sustainable regarding different packaging alternatives, it can be presumed that with more informative packaging labels consumers would place more focus on the packaging of the product regarding its sustainability from a life-cycle perspective and also on the correct way to dispose of

the packaging. Further, although consumers reported to have a moderately high control over their sustainable behaviour regarding their ability to recognize sustainable packaging alternatives and their overall resources to partake in such activity, they were less confident with the availability of sustainably packaged products and felt that external factors hindered their ability to behave sustainably. Therefore, we can presume that with more informative packaging labels the attitude-behaviour gap could be reduced to an extent.

Finally, culture could not be found to explain sustainable consumer behaviour in any way, which can be explained by multiple reasons. First and foremost, this study was limited by a relatively small response rate, and with a larger pool of responses it is possible that more noticeable differences could have been observed between respondents from different cultural backgrounds. Further, we have only studied culture on a single dimension, namely that of individualism/collectivism by Hofstede, and had we studied culture on another dimension or from a different aspect, more significant differences may have been detected between respondents due to their cultural backgrounds. However, the results of this study have left the impression that either culture, indeed, does not influence our behaviour or that the concept is more complicated than how it has been perceived here.

Supporting the first view, the results of this study found that personal norm was much more predictive of our intention to behave sustainably than subjective norm. Diverging from the assumptions previously presented in this study, we must adopt the notion of Bamberg et al. (2007, 201) that social norm's influence on our behaviour is less caused by our fear of social sanctions and more by their function as an easily accessible source of information. Therefore, our results may also have been tampered by the fact that all respondents of this study were at the time residents of Finland and, therefore, their subjective norm was more influenced by their social setting here than in their native homes. Further, the cultural setting in Finland is more supportive of individualistic values, hence those respondents from more collectivistic cultures may have converged their values to support the more individualistic values of their current home country culture.

6.2 Managerial implications

This study has multiple managerial implications as it provides insight into consumer perceptions and what factors influence these perceptions and actual behaviour. One of the key challenges for managers, marketers and designers of sustainable packaging is to develop packaging designs that are not only sustainable but also accepted by consumers. Therefore, while developing different packaging solutions, it should be considered that different materials communicate different levels of sustainability to consumers that may or may not be in line with LCA results. Therefore, although consumers may generally

hold positive attitudes towards sustainable packaging, it should not be assumed that consumers will automatically make choices that are in line with their attitudes. This presents a challenge in terms of persuading consumers to choose factually sustainable packaging alternatives that are not in line with their perceptions of sustainability. Simultaneously, because sustainability is a credence attribute, meaning that consumers are unable to tell for themselves whether something is sustainable or not and must trust the information provided to them, companies must be able to provide accurate information about sustainability in a simple manner without appearing to be practicing greenwashing.

Further, although culture could not be found to influence sustainability perceptions or intention to purchase sustainably, that is not to say that consumer demographics should not be considered when designing a package. Different elements of packaging are not only efficient means of bringing attention to the product, but they are also a way of positioning the product through associations that may be culturally sensitive. Colours, for example, have been proven to evoke different associations depending on the persons cultural background, but also on their age and gender.

Informativity was found to be an important aspect of packaging by respondents, which highlights the need for managers to ensure that packaging labels carry all relevant information. The packaging should also be able to evoke some sort of emotion in consumers, which means that the packaging should stand out from others in a positive way whilst retaining its functional properties. The challenge for managers is to do this all in a cost-efficient manner and in a way that packages are as light as possible, easy to stack and transport and, obviously, easy to recycle.

6.3   Limitations and suggestions for further research

There are two major limitations to this study, of which possibly the most important one is caused by the extensive use of secondary data. In the context of cross-cultural research secondary data was used by pairing Hofstede country scores with the nationalities of respondents. Although there are multiple studies that have used the same approach (e.g. Liobikienė et al. 2016, Yeniyurt & Townsend 2003), this approach has been criticized for being inconsistent and unreliable. Because of convergence of cultures and the respondents being likely to have been influenced by the local culture in Finland and by the international atmosphere in their study programmes, it may have been more lucrative to add measures to the questionnaire (e.g. Sreen et al. 2018) that would have distinguished each respondent's cultural background more reliably. Secondary data was also used to compare responses regarding perceptions of sustainability of different materials to their actual sustainability on a life-cycle basis as measured by Steenis et al. (2017), however, here the use of secondary data was justified. Future researchers could, nevertheless, consider

providing primary data on the LCA used. The other most important limitation of this study, which is the small number of respondents, has already been mentioned throughout this study. Further, this study has used a student sample, which may or may not have influenced the responses. Future researchers should ensure a larger number of responses to warrant the generalizability of all findings made.

Because of the extensive number of other variables, the amount of sets used to measure cue perceptions were reduced to only three sets of three images, posing another limitation, as a larger number of triads would have allowed for more thorough understanding on consumer perceptions. Further, some of images of the packages may have appeared more sustainable to respondents due to the inclusion of the colour green in the label, which may have distorted the responses slightly. Future researchers could include open-ended questions in order to gather more insight on the cue perceptions respondents hold on the different packaging materials used.

In order to be able to quantify the attitude-behaviour gap that was observed in the results of this study, future researchers could consider designing and testing interventions to reduce this gap. Researchers could, for instance, consider testing if more knowledge on the sustainability of different packaging alternatives could reduce the attitude-behaviour gap. This could be done by testing and re-testing the same group of respondents or by having a control group that would be provided with packaging alternatives with more informative labels. Further, because consumers may be less likely to extensively compare different packaging solutions in real-life purchase situations, it would be interesting for future researchers to use a more natural setting with concrete versions of the different packaging alternatives.

7 SUMMARY

Sustainable packaging can be defined as packaging that meets four principles: effectiveness, efficiency, cyclicity and safeness. Essentially, a packaging solution should be both cost-effective and functional, use as little packaging materials as possible, and be recyclable and safe to use for it to be considered sustainable. Further, sustainability can be approached in three different ways. Governmental sustainability refers to the legal requirements of packaging, while scientific sustainability considers the entire life cycle of packaging when assessing its sustainability. This thesis has been mainly focused on the consumer approach to sustainability, which focuses on the perceptions consumers have of the sustainability of certain packaging solutions.

Consumer behaviour is mainly driven by psychological factors, which exert considerable influence on behaviour as a consumer's motivation, ability and opportunity to practice certain behaviour influence what that person is exposed to, what they pay attention to, and what they perceive and comprehend. Ultimately, these factors influence decision-making as they affect how consumers categorize and interpret information, how they treat memories and how their develop attitudes. Motivation is caused by a discrepancy between our actual and ideal states, and it increases our likelihood to go through internal and external information search. Ability limits our extent to carry out certain behaviour due to our lack of resources that can include financial, cognitive, emotional or physical resources. Finally, opportunity influences whether or not we are able to do something, regardless of our motivation or ability, and it is caused by three key factors: lack of time, distraction and the complexity of information.

Theoretically, a sustainable consumer is someone who is motivated, and has ability and opportunity, however, because our everyday consumption patterns are also heavily influenced by convenience, habit, price and hedonism, there is often an attitude-behaviour gap between our sustainable intentions and actual behaviour. A sustainable consumer, however, typically has a more positive initial outlook towards sustainability than unsustainable consumers, which tends to increase their likelihood to not only behave sustainably but also to actively search and process information regarding the sustainability of the products they buy and use. According to the theory of planned behaviour (TPB) intentions are the single most important predictor of human behaviour and anyone that has been able to develop an intention to behave in a certain way, will most likely pursue their intention. This theory along with the norm activation model (NAM) was applied on this thesis due to their strong predictive abilities.

Branding is very important for companies because it helps them separate themselves from competitors, and packaging has been found to have an important role as a brand builder. Three aspects of packaging can be seen to influence consumer behaviour: communication, functionality and environment. The communication aspect refers to the

communicative features of packaging, such as the graphic design, product information and language used. Functionality, on the other hand, describes practical elements of packaging that influence how the product is transported, used and stored. These elements include the size, shape and material of the packaging. Finally, the environmental aspect refers to the recyclability of the packaging solution, which is generally influenced by the materials used. As noted by Magnier and Crié (2015, 53-54), in order for a package to influence consumers to whom the sustainability of packaging is important, it must be categorized as sustainable by these consumers and consequently trigger a positive attitude. Thus, sustainable packaging influences intention only when the packaging is categorized as sustainable.

Regarding one's cultural background, it may influence the symbolism attached to certain features of brands (and their packaging) and, for example, religion can even restrict the types of products we're allowed to acquire. Generally, culture has been found to influence consumer behaviour and it has been even used to explain sustainable consumer behaviour in previous studies. However, although this study could not prove culture to directly influence sustainable consumer behaviour, past studies have found cultural values and practices to moderate the relationships between the TPB constructs. For instance, subjective norms have been found to increase sustainable behaviour in collectivistic societies as they motivate people to behave according to the example set by others, whereas consumers from individualistic countries tend to put more value on their personal attitudes.

The results of this study showed support for the predictive properties of both the TPB and NAM. Attitude, subjective norm, perceived behavioural control, personal norm and awareness of consequences were all found to precede intention and to mediate the relationship between sustainable packaging and sustainable consumer behaviour. The brand of the product itself could not be proven to influence intention, however, sustainable packaging was found to positively influence how consumers perceive a brand. A major finding of this study was that attitude-behaviour gap does, in fact, exist between the attitudes consumers hold towards sustainable packaging and their actual behaviour. Based on consumer responses, this gap could be reduced with more informative labelling, but packaging should also be able to evoke emotion with a packaging that stands out from others in a positive way.

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APPENDICES

APPENDIX 1

Most common materials used in packaging include glass, metal, paper and board, and plastic. Glass has a long history in fast-moving consumer goods' (FMCG) packaging, and it is composed using a mixture of naturally occurring minerals, including silica, soda ash and limestone, which are heated up and moulded to shape. In most countries, bottles and other glass containers are either returned to be refilled or are recycled at a high rate. (Patel et al. 2018, 3-4; Glass Packaging Institute 2018; ECR Europe & EUROPEN 2009, 8.) Metal is a versatile and durable material that can be used to make containers, foils and various types of closures. The two most predominately used metals in packaging are aluminium and steel. Metals, alike glass products, are widely recycled. (Patel et al. 2018, 4; ECR Europe & EUROPEN 2009, 8.) Paper and board are manufactured from natural fibres that can be sourced from wood or other biomass sources and are also recycled to a high degree. However, they are frequently used in combination with coatings, such as foil, wax or plastic materials that provide barrier properties and sealability. (ECR Europe & EUROPEN 2009, 8.)

Multiple types of plastics are used as materials in FMCG, the most common types by polymer being petroleum-based plastics such as polyethylene (PE), polypropylene (PP), polystyrene (PS) and polyethylene terephthalate (PET). According to Eskelinen et al. (2016, 13), the majority of plastic waste from packaging originates from either high or low density polyethylene (HDPE, LDPE), which are commonly used in plastic bags. The third largest source of plastic waste is PET, which is a common material for plastic bottles. (ECR Europe & EUROPEN 2009, 8; Emadian et al. 2017, 526-527.) Although technologies for plastic recycling have improved and several innovations regarding bioplastics have been made, an increase in world population to about 9 billion in 2050 places higher demand on plastic production and, eventually, on waste treatment facilities (Emadian et al. 2017, 526-527). Currently, about 320 million tons of plastic is produced annually, of which only 2.05 tons are bioplastics (European Bioplastics 2018).

Plastics can be classified into four groups depending on their biodegradability and whether the end-product is bio- or petroleum-based (Figure 16). According to this classification, bioplastics are plastics that are biobased or biodegradable (or both), and they typically have the same properties as conventional plastics along with additional advantages, such as reduced carbon footprint or additional waste management options such as composting (European Bioplastics, 2018). Although recycling technologies have developed, the majority of plastics still end up in landfills where they generate greenhouse gases and leachate. Some countries in the European Union (EU) have banned landfilling

for all plastics and resolve to incineration instead, however, this alternative creates huge amount of ash and slag containing hazardous and toxic compounds that are required to be disposed of. (Emadian et al. 2017; 526-527, 530-531.) Furthermore, large amounts of plastic waste accumulate in oceans (approx. 8 million tons annually), where they, due to their semi-permanent stability in aquatic surroundings, cause marine pollution that can have an impact on marine animals (Le Guern 2017; Emadian et al. 2017, 531).
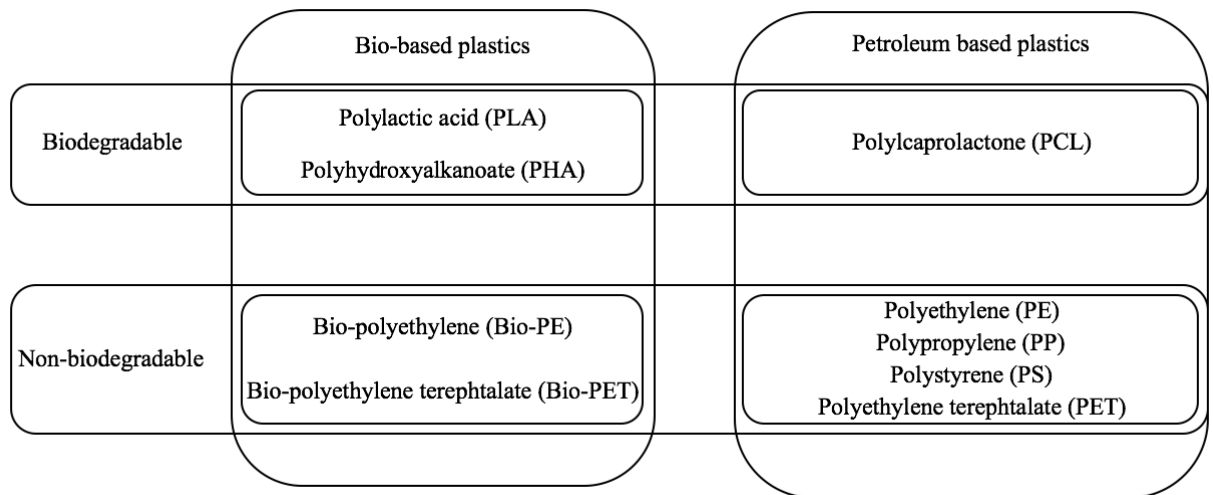
Figure 16 Examples of the four types of plastic (European Bioplastics, 2018)

One of the arguments for the further development of particularly biodegradable bio-plastics has been that they put an end to the accumulation of plastic in the environment, however, research has found that even biodegradable plastics have been found in marine environments in the form of microplastics, which are plastics that are smaller than 5 millimetres in diameter (Straub et al. 2017; Fjäder 2016, 17). For a plastic to be classified as biodegradable a set of standards are used to define the conditions needed for the decomposing of the plastic, such as the temperature and acidity conditions. These standards are set by statute ASTM 6400 in the United States, by EN13432 in Europe and internationally by the International Organization of Standardization in the statute ISO 17088. According to statute EN 13432, for example, 90% of the plastic material must decompose within six months of decomposing, and no more than 30% of the remains is allowed to pass 2 millimetres in diameter after three months of decomposing. (Fjäder 2016, 17.)

Research on the environmental benefits of bioplastics is currently inconclusive. Several studies have found that biobased plastic alternatives consume less non-renewable energy resources than their fossil based counterparts during their entire life cycle (Weis et al. 2007; 261, 271). However, in a study conducted by the Finnish Environment Institute in 2009 it was found that in most cases a biodegradable plastic bag was a worse alternative than its plastic, paper, fabric and recycled plastic alternatives (Mattila et al.

2009, 45). The bioplastic in this case was PBAT, which has been proven to show lower degrees of biodegradation than PLA and PHA plastics (that decompose completely in the matter of 1-2 months) due to its fossil ingredients (Emadian et al. 2017, 530). Therefore, further research on bioplastics is needed.

APPENDIX 2 CHALLENGES OF PACKAGING ALONG THE PRODUCT VALUE CHAIN

ECONOMICAL, TECHNICAL AND FUNCTIONAL CHALLENGES

| Availability of raw materials
Raw material costs
Transport costs
Refining costs | Material costs
Processing costs | Adaptability to existing packaging process
Product specific requirements for materials
Material costs | Use of space
Packaging size
Shelf life
Waste minimization
Standing out
Consumer preferences | Protection
Wastage
Informativeness
Hygiene
Ease of use
Aesthetics | Ease of emptying
Ease of recycling
Cost of recycling |

All materials required for packaging → Production of packages → Packing of products → Distribution → Use → End of life

| Energy consumption
Water consumption
Waste management
Harmful compounds | Material efficiency
Energy consumption
Water consumption
Waste prevention
Harmful compounds
Waste water | Material efficiency
Energy consumption
Waste prevention | Sustainability of transportation method(s) | Energy consumption
Spoilage
Harmful substances | Biodegradability
Reusability
Recyclability
Littering from harmful substances e.g. microplastics |

ENVIRONMENTAL CHALLENGES

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APPENDIX 3   STIMULI

"Conventional-looking" graphic scheme

Plastic pouch   *Liquid carton*   *Glass jar*   *Mixed material pouch*

Can   Bioplastic pot   Dry carton sachet

"Sustainable-looking" graphic scheme

Plastic pouch   *Liquid carton*   *Glass jar*   *Mixed material pouch*

Can   Bioplastic pot   Dry carton sachet

APPENDIX 4   SURVEY

UNIVERSITY OF TURKU

Packaging survey

Welcome to answer this survey and thank you in advance for your responses!

This survey has been created to be used as a part of my master's thesis regarding packaging and brand perception in fast-moving consumer goods. Fast-moving consumer goods are products that can be found in the supermarket, so the term incorporates a variety of packaging solutions from foodstuff to soap bottles. The aim of this survey is to measure the impact different packaging solutions have on brand perception and one's intention to make a purchase, but also if one's cultural background has an influence on this thought process.

I hope you answer truthfully and according to your best judgement. All answers will remain completely anonymous and they will be used solely for the purposes of my thesis. The survey takes approximately 15 minutes to complete. In case of any questions or comments, you can contact me by email: anna.l.bjorklund@utu.fi.

Best regards,
Anna Björklund

Next

UNIVERSITY OF TURKU
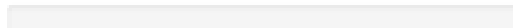
Packaging survey

1. Gender

[Select ▼]

2. Age

[Select ▼]

3. Field of study

[Select ▼]

4. What country are you from? In case you do not perceive any (single) country to be your cultural home, please select 'citizen of the world'.

[Select ▼]

5. What is your native language?

[Select ▼]

6. What is your primary language (i.e. the language you speak most in your everyday life at the moment)?

[Select ▼]

7. How many languages do you speak fluently (i.e. can hold a conversation with a native speaker)?

[Select ▼]

[Previous] [Next]

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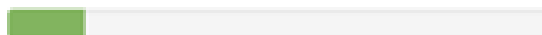
Packaging survey

8. Which one of the following three packaging options for tomato soup would you be most likely to choose if they were all the same price?

Mixed material pouch   *Glass jar*   *Plastic pouch*

Select ⬍

9. Which one of the following three packaging options for tomato soup would you be most likely to choose if they were all the same price?

Dry carton sachet   *Bioplastic pot*   *Liquid carton*

Select ⬍

10. Which one of the following three packaging options for tomato soup would you be most likely to choose if they were all the same price?

Plastic pouch   Can   *Mixed material pouch*

Select ⬍

Previous Next

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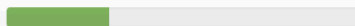
Packaging survey

11. How important do you perceive the following statements when purchasing fast-moving consumer goods? (1=not important; 7=very important)

	1	2	3	4	5	6	7	unsure
Package is recyclable.	○	○	○	○	○	○	○	○
Package is biodegradable.	○	○	○	○	○	○	○	○
Package consists of as little packaging material as possible.	○	○	○	○	○	○	○	○
Package can be used for other purposes, for example as a storage container.	○	○	○	○	○	○	○	○
Package functions and empties in such a way that no product is wasted.	○	○	○	○	○	○	○	○
Package folds up so that it takes up little space in waste bins.	○	○	○	○	○	○	○	○
Package contains only one type of material.	○	○	○	○	○	○	○	○

12. In general, how sustainable do you perceive the following packaging materials? (1=environmentally unfriendly; 7=very sustainable)

	1	2	3	4	5	6	7	unsure
Plastic	○	○	○	○	○	○	○	○
Aluminium	○	○	○	○	○	○	○	○
Cardboard	○	○	○	○	○	○	○	○
Glass	○	○	○	○	○	○	○	○
Paper	○	○	○	○	○	○	○	○
Bioplastic	○	○	○	○	○	○	○	○

13. How well do the following statements apply to you? (1=entirely disagree, 7=entirely agree)

	1	2	3	4	5	6	7	unsure
I worry about the safety and the environmental impact of products I eat or use.	○	○	○	○	○	○	○	○
I prefer products made of recyclable or reusable materials.	○	○	○	○	○	○	○	○
The ethical reputation of the producer or brand often affects my choice of product.	○	○	○	○	○	○	○	○
The sustainability of the packaging material used often affects my perception of the brand.	○	○	○	○	○	○	○	○
The amount of packaging material used often affects my perception of the brand.	○	○	○	○	○	○	○	○
I prefer organic or local food products whenever they are available.	○	○	○	○	○	○	○	○
I try to avoid products in packaging I consider harmful for the environment.	○	○	○	○	○	○	○	○
I encourage my friends to ethical or sustainable consumption.	○	○	○	○	○	○	○	○
I prefer products that are good for the environment.	○	○	○	○	○	○	○	○

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14. Purchasing sustainably packaged products is a way to... (1=entirely disagree, 7=entirely agree)

	1	2	3	4	5	6	7
Conserve vital natural resources	○	○	○	○	○	○	○
Reduce waste	○	○	○	○	○	○	○
Conserve energy	○	○	○	○	○	○	○
Reduce the amount of waste sent to landfill/treatment facilities	○	○	○	○	○	○	○

15. How well do the following statements apply to you? (1=entirely disagree, 7=entirely agree)

	1	2	3	4	5	6	7
Most people who are important to me think that I should avoid unsustainable packaging	○	○	○	○	○	○	○
Most people who are important to me think that I should consume sustainably	○	○	○	○	○	○	○
Most people who are important to me would approve me purchasing products that are packaged sustainably	○	○	○	○	○	○	○
My friend's positive opinion influences me to purchase	○	○	○	○	○	○	○

17. How well do the following statements apply for you? (1=entirely disagree, 7=entirely agree, 0=unsure)

	1	2	3	4	5	6	7	0
I feel a strong personal obligation towards purchasing sustainably packaged products	○	○	○	○	○	○	○	○
I am willing to put in additional effort to purchase sustainably packaged products on a regular basis	○	○	○	○	○	○	○	○
I would feel guilty if I purchased unsustainably packaged products	○	○	○	○	○	○	○	○

18. How well do the following statements apply for you? (1=entirely disagree, 7=entirely agree, 0=unsure)

	1	2	3	4	5	6	7	0
I am confident in my ability to recognize sustainable packaging solutions.	○	○	○	○	○	○	○	○
If it were entirely up to me, I am confident that I would only purchase sustainably packaged products.	○	○	○	○	○	○	○	○
I see myself as capable of purchasing sustainably packaged products in the future.	○	○	○	○	○	○	○	○
I have the resources, time and willingness to purchase sustainably packaged products.	○	○	○	○	○	○	○	○
Sustainably packaged products are generally available in the shops where I usually do my shopping.	○	○	○	○	○	○	○	○
I feel that purchasing sustainably packaged products is not totally within my control.	○	○	○	○	○	○	○	○

19. How well do the following statements apply for you? (1=entirely disagree, 7=entirely agree, 0=unsure)

	1	2	3	4	5	6	7	0
I intend to recycle within the next three months	○	○	○	○	○	○	○	○
I intend to recycle whatever materials I find in packaging.	○	○	○	○	○	○	○	○
In the case of mixed material packaging, I intend to take apart packaging in order to recycle the different materials.	○	○	○	○	○	○	○	○
I will consider purchasing sustainably packaged products.	○	○	○	○	○	○	○	○
I will consider switching to sustainable brands for environmental reasons.	○	○	○	○	○	○	○	○

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20. How well do the following statements apply to you? (1=entirely disagree, 7=entirely agree, 0=unsure)

	1	2	3	4	5	6	7	0
I often buy products with packaging that stands out from the others in a positive way.	○	○	○	○	○	○	○	○
I value good design in packaging.	○	○	○	○	○	○	○	○
Nice packages make me happy.	○	○	○	○	○	○	○	○
I feel guilty buying environmentally harmful packages.	○	○	○	○	○	○	○	○
I always buy non-packaged food, if possible.	○	○	○	○	○	○	○	○
I won't buy products if I think they're over-packaged.	○	○	○	○	○	○	○	○
I value reusable packaging.	○	○	○	○	○	○	○	○
I prefer packages that clearly show the producer and origin of the product.	○	○	○	○	○	○	○	○
I prefer packages that clearly state the proper way to dispose of the packaging.	○	○	○	○	○	○	○	○
I keep some packages because they're pretty.	○	○	○	○	○	○	○	○
I seldom look at the price tag, if a product has an especially appealing package.	○	○	○	○	○	○	○	○
I can think of several packages that I avoid buying because they are too difficult to open.	○	○	○	○	○	○	○	○
I often look for the cheapest packaging alternative available.	○	○	○	○	○	○	○	○
I buy all products based on the cheapest package size available per weight unit.	○	○	○	○	○	○	○	○
The appearance of packaging is not important to me, it's the price that counts.	○	○	○	○	○	○	○	○
Before buying, I carefully read product descriptions on packages..	○	○	○	○	○	○	○	○
I prefer packages that provide long shelf life.	○	○	○	○	○	○	○	○
Packages with empty space make me angry.	○	○	○	○	○	○	○	○

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21. The following questions concern two similar smoothie brands that are generally available at convenience stores. Please look at the two packages and the information provided before answering to the questions.

Innocent mango and passion fruit smoothie	Froosh mango and orange smoothie
- 2,04€ (250 ml) - contains apple, mango, banana, orange, passion fruit,	- 2,31€ (250 ml) - contains apple, mango, banana, passion fruit and

23. Think about Innocent as a smoothie brand, how well do these following statements apply to you? (1=entirely disagree, 7=entirely agree)

	1	2	3	4	5	6	7
From this brand of smoothie, I can expect good quality.	○	○	○	○	○	○	○
This brand produces tasty smoothies.	○	○	○	○	○	○	○
This smoothie brand matches my personality.	○	○	○	○	○	○	○
I feel proud drinking this smoothie in public.	○	○	○	○	○	○	○
This brand of smoothie is well priced.	○	○	○	○	○	○	○
I get my money's worth with this smoothie.	○	○	○	○	○	○	○
I consider the company and people who stand behind this brand to be very trustworthy.	○	○	○	○	○	○	○
I believe that this company does not take advantage of consumers.	○	○	○	○	○	○	○
I can imagine growing fond of this brand of smoothie.	○	○	○	○	○	○	○
I have positive feelings towards this brand of smoothie.	○	○	○	○	○	○	○

24. Now think about Froosh as a smoothie brand and think about how the following statements apply to you (1=entirely disagree, 7=entirely agree)

	1	2	3	4	5	6	7
From this brand of smoothie, I can expect good quality.	○	○	○	○	○	○	○
This brand produces tasty smoothies.	○	○	○	○	○	○	○
This smoothie brand matches my personality.	○	○	○	○	○	○	○
I feel proud drinking this smoothie in public.	○	○	○	○	○	○	○
This brand of smoothie is well priced.	○	○	○	○	○	○	○
I get my money's worth with this smoothie.	○	○	○	○	○	○	○
I consider the company and people who stand behind this brand to be very trustworthy.	○	○	○	○	○	○	○
I believe that this company does not take advantage of consumers.	○	○	○	○	○	○	○
I can imagine growing fond of this brand of smoothie.	○	○	○	○	○	○	○
I have positive feelings towards this brand of smoothie.	○	○	○	○	○	○	○

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Thank you for your answers!

Questions? Please contact me at: anna.l.bjorklund@utu.fi

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