



MINIMIZING THE YOUNG CONSUMERS' ATTITUDE- BEHAVIOUR GAP IN GREEN PURCHASING

Sanne van 't Erve

COMMUNICATION STUDIES
BEHAVIORAL SCIENCES

EXAMINATION COMMITTEE
Dr. S.E. Bialkova
Dr. J.J. van der Hoof

DOCUMENT NUMBER
FINAL VERSION -

ABSTRACT

Aim: Although consumers seem to attach great importance to sustainability and even demand companies to produce their products in an environmental friendly way, consumers' green purchasing behaviour lags far behind: an attitude-behaviour gap exists. In addition, young consumers are the ones that could and should make the difference in green purchasing behaviour in the future. The present study investigates how the attitude-behaviour gap among young consumers can be minimized.

Methods: Two studies were conducted. By conduction focus group discussions (N=27), in study A is a deeper understanding of young consumers' attitude-behaviour relation and possible explaining factors thereof has been gained. In study B, a questionnaire (N=267) is used as a method to test 17 factors on their influence on the attitude-behaviour relation, measured by three types of green attitudes and three measures of green purchasing behaviour.

Results: Results show that an attitude-behaviour gap only exists between the attitude towards sustainability and green purchasing behaviour, but not when it concerns the attitude towards green products and the attitude towards purchasing green products. The factors which positively influence the attitude-behaviour relation are: consumer awareness, receiving health benefits, willingness to pay price premium, subjective norm, perceived consumer effectiveness, perceived motivation of the organization, availability of products, willingness to spend the shopping time on purchasing green products and receiving local community benefits. The perceived price of green products negatively influences the attitude-behaviour relation.

Conclusion: The present study contributes to the understanding of the attitude-behaviour relation in young consumers' green purchasing behaviour and shows that this relation is complex. However, the attitude-behaviour relation can be strengthened by communication efforts. Practical implications and future research suggestions are discussed.

CONTENTS

1. Introduction	5
1.1 Research questions and objectives	5
1.2 Relevance	6
1.3 Content of the report	6
2. Theoretical framework	7
2.1 Green products	7
2.2 Attitude-behaviour gap	7
2.3 Young consumers	8
2.3.1 <i>Generation Y</i>	9
2.3.2 <i>Generation Y and green purchasing</i>	9
2.4 Factors influencing the attitude-behaviour gap	10
2.4.1 <i>Habit</i>	11
2.4.2 <i>Economic availability</i>	11
2.4.3 <i>Physical availability</i>	12
2.4.4 <i>Personal benefits</i>	12
2.4.5 <i>Awareness</i>	13
2.4.6 <i>Trust</i>	13
2.4.7 <i>Subjective norm</i>	13
2.4.8 <i>Perceived consumer effectiveness</i>	14
2.4.9 <i>Perceived personal importance</i>	14
2.5 Summary	15
3. Study A	16
3.1 Method	16
3.1.1 <i>Instrument</i>	16
3.1.2 <i>Participants</i>	16
3.1.3 <i>Procedure</i>	16
3.1.4 <i>Analytical procedure</i>	18
3.2 Results	18
3.2.1 <i>Green attitudes</i>	18
3.2.2 <i>Green consumption</i>	18
3.2.3 <i>Factors influencing green consumption</i>	19
3.3 Summary and main outcomes from Study A	23

4. Study B	25
4.1 Research model	25
4.2 Method	27
4.2.1 Research design	27
4.2.2 Respondents	27
4.2.3 Procedure	28
4.2.4 Measures	28
4.2.5 Pre-test	30
4.2.6 Analyses	31
4.3 Results	32
4.3.1 Descriptive results	32
4.3.2 Relation between all factors	34
4.3.3 Analysing the attitude-behaviour relation	37
4.3.4 Explaining the attitude-behaviour relation	38
4.4 Summary main outcomes from Study B	40
5. Discussion and conclusions	41
5.1 Answering hypotheses	41
5.2 The attitude-behaviour gap	41
5.3 Influencing factors	43
5.4 Limitations	44
5.5 Suggestions for future research	45
5.6 Practical implications	46
5.7 In sum	46
Acknowledgements	47
References	48
Appendices	53
A1 Sample characteristics study A	
A2 Discussion guide study A	
A3 Codebook study A	
A4 Cohen's Kappa	
B1 Questionnaire study B	
B2 Pre-test study B	

1. INTRODUCTION

The past decades are characterized by the increasing consumers' consumption worldwide (Chen & Chai, 2010). This causes rapid environmental damage due to depleting of natural resources (Chen & Chai, 2010). For example, the consequences of environmental damage are global warming, erosion, decreased animal-welfare and environmental pollution (Otmann, 1992). Grunert (1995) reported that about 40% of the environmental damage is caused by consumer purchasing activities from private households.

Many researchers report on consumers having very positive attitudes towards preventing environmental damage (Vermeir & Verbeke, 2006; Bhattacharya & Sen., 2004; Sen & Bhattacharya, 2001; Wagner, Bicen & Hall, 2008; Dastous & Legendre, 2009; Ellen, Webb & Mohr, 2006). Consumers even demand companies to produce their products in an environmental friendly way (Bockman, Razzouk & Sirotnik, 2009; Kanarattanavong & Ruenrom, 2009; Schmeltz, 2012). Consumers have the possibility to prevent or decrease the environmental damage by purchasing green products. A green product is a product which contributes to a more sustainable world by protecting and preserving the natural habitat and will not pollute the earth or deplete natural resources (Shamdasami, Chon-Lin & Richmond, 1993). A green product refers to a product that uses less toxic materials and can be recycled or uses less packaging to reduce its environmental impact (Chan & Chai, 2010). A few examples of green products are: free range eggs, energy efficient light-bulbs, clothing and make-up which are produced under environmental friendly circumstances and an eco-friendly washing machine.

Though consumers seem to attach great importance to sustainability and green products, practice shows that green products only have 1-3% of the market share (Bray, Johns & Killburn, 2011). Despite consumers' interest in sustainability and green products, 'green' only plays a small part in the consumers' purchasing criteria (Mohr, Webb and Harris, 2001). Researchers note a gap between what consumers think and what they do when it comes to green purchasing: the so called attitude-behaviour gap (Young, 2004; Vermeir & Verbeke, 2006; Eck, 2009; Kolkailah, Aish & Bassiouny, 2012; Finisterra, Aminda, Raposo, Lino & Leal, 2009; Basu & Hicks, 2008; Chen & Chai, 2010; Mostafa, 2007).

Then there is the generation of young consumers; commonly referred to as Generation Y. This generation is aged between 18 and 30 years old (Strauss & Howe, 1991). The young consumers are considered to be 'the driving power' behind the increased attention to green products (Heaney, 2007). Though their green attitudes are extremely positive, these attitudes are not in any case predictors of behaviour (McDougale, Greenspan & Handy, 2011; Paladino & Serena, 2012). Hume (2010) notes that there exists a clear pattern of contradiction between how Generation Y feels and acts in green purchasing, which makes this group interesting to study. Also, this group is especially interesting to research as they are the ones who could and should be capable of making the difference in green purchasing in the next decennia. Finally, their green (not-)purchasing behaviour is never researched extensively (Kolkailah et al., 2012).

1.1 Research questions and objectives

Despite several studies investigating barriers and positive influencing factors, there is a gap in literature concerning the thorough understanding of the consumer decision making process in green purchasing (Vermeir & Verbeke, 2006). Therefore, the present research is aimed at exploring the relation between attitude and behaviour of young consumers' when it comes to green purchasing behaviour and to identify factors which influence this relation. This is done in order to find out how the attitude-behaviour gap can be minimized. The research questions are therefore as following:

Is there a gap between young consumers' attitudes and behaviour concerning green purchasing?

What are the factors influencing the young consumers' attitude-behaviour relation in green purchasing?

How can the young consumers' green purchasing attitude-behaviour gap be minimized?

1.2 Relevance

The present research contributes to a deeper understanding of the attitude-behaviour relation in green consumerism. Though research on green consumption has increased in the past years, only few studies seek to identify factors determining the attitude-behaviour gap (Bray et al., 2011). In the present research, a broad set of possible influencing factors are identified and tested. Also, researching the young consumers in green purchasing behaviour provides valuable results. The research theme will thus be broadened and deepened. The present research offers a model which, because of its high explanatory value, is a product that can be used in future research.

Besides the scientific relevance, the present research also holds an important societal relevance. The impact of individual green purchasing has tremendous potential in reducing the environmental damage (Csutora, 2012). The results of the present research yield public policy and communication recommendations for stimulating the purchasing behaviour amongst young consumers. The young consumers can be assumed to constitute the main market of green consumption in the future. This research offers a first glance at the complex decision-making process in green purchasing by investigating a lot of important influencing factors, like: economic factors, several types of personal benefits, perceived personal importance, awareness, trust-factors, habit, physical availability factors and subjective norm.

1.3 Content of the report

The current research is organized as follows. Firstly, the theoretical background on green products, the attitude behaviour gap and young consumers and green purchasing will be reviewed. Also, possible influencing factors derived from literature in the young consumers' green attitude-behaviour relation will be identified. Based on the theoretical framework two studies were designed. Study A is a qualitative study with an explorative purpose: by conducting focus groups discussions, a deeper understanding of young consumers' attitude-behaviour relation and possible explaining factors thereof has been gained. Study B is a quantitative study in which 17 factors were tested on their influence on the attitude-behaviour relation, measured by three types of green attitudes and three types of green purchasing behaviour. Lastly, in chapter five, six and seven, the results will be discussed, the research questions will be answered and conclusions will be made.

2. THEORETICAL FRAMEWORK

In this section, literature on green products and green purchasing behaviour will be reviewed in order to get insight into what the attitude-behaviour gap in green purchasing behaviour looks like. Also, the attitudes and behaviours of the young consumer, better known as Generation Y, will be scrutinized. Finally, possible factors influencing the attitude-behaviour gap in green purchasing behaviour of the young consumer will be identified.

2.1 Green products

The current research focuses on green products. A green product is a product which contributes to a more sustainable world by protecting and preserving the natural habitat and which will not pollute the earth or deplete natural resources (Shamdasami, Chon-Lin & Richmond, 1993). A green product refers to a product that uses less toxic materials and can be recycled or uses less packaging to reduce its environmental impact (Chen & Chai, 2010). In general, a green product is also known as an environmentally friendly product or an ecological product. The aspects which make green products environmentally friendly concern, among others, environmental pollution, erosion and animal-welfare (Otmann, 1992). These products can be classified in the following four categories with some examples of the products (Mainieri, Barnett, Valdero, Unipan & Oskamp, 1997; Ethical Consumerism Report, 2010): (1) green food and drink: organic, Fair Trade, Rainforest Alliance, free range eggs, free range poultry and sustainable fish; (2) green home: energy efficient light-bulbs, ethical cleaning products, sustainable timber and paper, rechargeable batteries and buying for re-use household products; (3) green personal products: clothing and make-up which are produced under environmental friendly circumstances and are non-polluting and free of synthetic dyes or perfumes, buying for re-use clothing and real nappies; (4) community: local shopping for green products. Purchasing green products is called: green purchasing behaviour.

2.2 Attitude-behaviour gap

Central in the present study is the relation between attitudes and behaviour. The most frequently cited theory on the attitude-behaviour relation is the Theory of Planned Behaviour (TPB) (Ajzen, 1991). The TPB proposes that behaviour is affected by behavioural intentions, which in turn are affected by attitudes towards the behaviour. The attitude can be defined as 'the result of a consumer's assessment of particular behaviours' (Ajzen, 1991, p14).

Many researchers report on consumers having very positive attitudes towards preventing environmental damage (Vermeir & Verbeke, 2006; Bhattacharya & Sen., 2004; Sen & Bhattacharya, 2001; Wagner et al., 2008; Dastous & Legendre, 2009; Ellen et al., 2006). Consumers even demand companies to produce their products in an environmental friendly way (Bockman et al., 2009; Kanarattanavong & Ruenrom, 2009; Schmeltz, 2012). Other researchers showed that the attitude towards green products definitely is really favourable (Davis, 2012; Tanner & Kast, 2003; Mostafa, 2007). However, if an attitude is "an enduring set of beliefs about an object that predispose people to behave in particular ways toward the object" (Weigel & Weigel, 1978, p.257) and the TPB claims that attitudes are predictors of behaviour, why then does the green product market in the UK only represent three percent of the market share (Bray et al., 2011)?

A lot of researchers studied the attitude-behaviour relation when it concerns green products, and all conclude

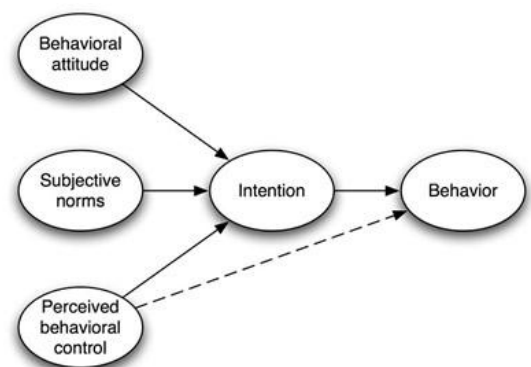


Figure 1: Theory of Planned Behaviour (Ajzen, 1991)

there is a wide gap between what consumers think and what they do regarding to making green purchases (Eck, 2009; Anon, 2009; Finisterra et al., 2009; Basu & Hicks, 2008; Darnall, Pointing & Brust, 2010; Fergusson, 2011). Young (2004) names this gap the attitude-behaviour gap. The attitude-behaviour gap is generally formed when a consumer is concerned about sustainable issues and thinks it is important for companies to be socially responsible and produce green products, but do not interpret their positive attitudes when making a purchase.

In the case of green purchasing behaviour, what causes attitudes to completely fail to predict behaviour? Mainieri et al. (1997) argue that attitude only correlates with behaviour when the behaviour is closely related to the attitude under consideration. In other words, the specificity of the measured attitude will contribute to stronger correlations between attitudes and behaviour. However, most researchers who investigated green purchasing, investigated the attitude towards sustainability also known as the environmental concern or the environmental attitude. Sustainability refers to improving the quality of human life while living within the carrying capacity of supporting eco-systems (Dawkins & Worcester, 2005). The attitude towards sustainability is a broad definition. Therefore, the present research investigates two other levels of specificity in the attitude. The first one is the attitude towards green products: a person's opinion on green products in general. The second type of attitude is the attitude towards purchasing green products: a person's opinion on performing the specific behaviour of purchasing green products. Even though studying more specific types of green consumer attitudes should present a clearer impression of what the consumer purchasing behaviour would be, there will still be a wide gap between attitudes and behaviour (Chen & Chai, 2010).

Nevertheless, the relationship between attitudes and behaviour cannot be rejected completely. Kolkailah et al. (2012) investigated possible factors influencing green purchasing behaviour and showed that consumer's positive green attitudes are actually reflected in an increased purchase intention. Similar studies also show a significant relation between attitudes and sustainable behaviour (Mohr et al., 2001) and attitudes towards green products significantly impacting consumer's green purchase intention (Mohr et al., 2001; Sen & Bhattacharya, 2001; Rahim, Waheeda & Tajuddin, 2011). However, attitudes toward green are no strong predictors in green purchasing behaviour (Davis, 2012; Dawkins and Worcester, 2005; Csutora, 2012). Green attitudes may suggest green purchasing behaviour when taken in isolation, but when looking at the broader purchasing decision, positive green attitudes might not reflect in actual green purchasing behaviour (Vermeir & Verbeke, 2006). This calls for further research into the topic of green consumer behaviour.

2.3 The young consumer

Consumer behaviour can be understood best by researching from a generational approach, due to various lifestyles per generation. The values belonging to these lifestyles will probably greater influence consumers' buying behaviour more greatly than other demographic variables like, gender, income or education do (Hume, 2010). Heaney (2007) explains this by showing that each cohort deals with other conditions, such as: social and economic circumstances, technological developments, social ideas and norms in the community. Each generational cohort will have a different view on green products (Panwar, Han & Hansen, 2012).

The present research focuses on the generational cohort of the young consumers. This segment is chosen due to the fact that young consumers are the consumers of the future (Vermeir & Verbeke, 2006). They are the ones who could and should be capable of making the difference in green purchases in the next decennia. Furthermore, the young consumers are considered to be 'the driving power' behind the increased attention to green products (Heaney, 2007). Also, they are known for contradicting themselves when it comes to their behaviour and their thoughts about certain topics, which makes this cohort especially interesting to research. However, the young consumers' green (not-)buying behaviour is never researched extensively (Kolkailah et al., 2012).

2.3.1 *Generation Y*

The generation of young consumers is known as Generation Y, the Millennials or Generation Me. This generation is aged between 18 and 30 (Strauss & Howe, 1991). In size, Generation Y outnumbers all previous generations (Rainer & Rainer, 2011). Generation Y is known to work together very well, not to break the rules and to accept authority. This generation is clever and feels confident and in control about their future (Strauss & Howe, 1991). At this moment Generation Y is in higher education or in their first jobs. The generation is known for being more narcissistic and sceptical than previous generations and has the tendency to look after its own needs before thinking about the needs of others (Schmeltz, 2012). These young people are looking for identity and happiness by creating a feeling of belonging and contributing to a certain community (Ellis, 2010). However the driving value of this generation is their self-interest (Schmeltz, 2012; Sheahan, 2005).

Generation Y is known to be the most consumption orientated generation ever, caused by the abundance and constant availability of services and products (Sullivan & Heitmeyer, 2008). The generation appreciates functional aspects of brands, which means that Generation Y wants, more than other generations, value for their money and makes high demands upon companies and products. The young consumer has been subjected to commercial messages from an early age, and therefore is knowledgeable about persuasion attempts (Schmeltz, 2012). Neuborne and Kerwin (1999) expect the young consumer to be more sceptical to the messages companies communicate to consumers.

2.3.2 *Generation Y and green purchasing behaviour*

Generation Y holds a very positive attitude towards sustainability in general. Hume (2010) studied Generation Y and their view on the concept of sustainability and their footprint in consumption. He points out that young consumers are very aware of the opportunities for companies to help their environment and reduce the ecological footprint. The ecological footprint resembles the amount of earth- and water surface a certain group uses to maintain their consumption-or production level and process the waste (Otmann, 1992). Other research confirms that, in general, Generation Y cares about the environment, poverty and social issues because they desire 'to save the world'. While the approach to life of this group may be very narcissistic, Generation Y has a well-developed social awareness being concerned with topics like ethical activities and environment protection (Ellis, 2010).

Also, Generation Y causes dynamic changes in the field of corporate social policy making (Neuborne and Kerwin, 1999). The generation thinks it is a company's obligation to invest in a better environment and society and produce products in a sustainable way (Schweitzer & Lyons, 2010). In the US 85% of young adults (18-30 year old) even identify themselves as an environmentalist (Grimmer & Woolley, 2012). Next to that, Schmeltz (2012) shows Generation Y holds a very positive attitude towards green products.

Nevertheless, for young consumers green attitudes are not in any case predictors of behaviour (McDougle et al., 2011; Paladino & Serena, 2012). Hume (2010) notes that a clear pattern of contradiction exists between what Generation Y knows and thinks and how Generation Y acts with regard to green purchasing. Generation Y shows almost no sign of adopting sustainable practices in terms of green purchasing (Hume, 2010). Paladino & Serena (2012) studied the purchase intention towards eco-friendly mobile phones among young consumers. A weak positive correlation was found between attitudes towards the eco-friendly phones and purchase intention towards these phones. The extent to which a consumer held a positive attitude towards sustainability in general did not have any influence on the purchase decision.

Generation Y differs from the older generations in their green attitude and purchasing behaviour. Kollmuss and Agyeman (2002) investigated sustainable attitudes and behaviours and the relation with different demographic factors. Their results indicate that Generation Y shows more concern about environmental destruction than the older generation does. This is in accordance with the results of similar studies (Panwar et al., 2009; Grimmer & Woolley, 2012). One of the reasons for Generation Y to hold more positive green attitudes than previous generations, is public education on

environmental issues which this group received early in life (Kim, Chang, Lee & Huh, 2011). However, in the amount of green purchases, there is no significant difference in age (Matsuba et al., 2012). Older generations might even be better green consumers than Generation Y is, due to the value system of the older generation being more dominant in showing the desired behaviour than it is for Generation Y (Matsuba et al., 2012).

To conclude, the attitude-behavior gap in green purchasing behaviour also accounts for Generation Y, though their very positive green attitudes would suggest otherwise.

2.4 Factors influencing the attitude-behaviour gap

Since only studying green attitudes will not produce conclusive results on young consumers' behaviour in purchasing green products, it is interesting to know which factors influence the attitude-behaviour relation for young consumers. The Theory of Planned Behaviour (TPB) from Ajzen (1991) suggests that also two other factors, than the attitude, directly influence the intention to behave. However, in order to explain why attitudes do not predict behaviour, the present study focuses on identifying the factors which influence the attitude-behaviour relation and not which factors directly influence behaviour (as suggested in the TPB).

Several studies suggest that the green purchasing attitude-behaviour gap exists due to the complex nature of personal and situational influences (Csutora, 2012; Kolkailah et al., 2012).

Personal factors are influences internal to the consumer (Kolkailah et al., 2012). Attitude is an important personal factor in green purchasing, but does not explain why young consumers (do not) purchase green products. Other examples of personal factors are awareness, trust, priorities, emotion and locus of control (the extent to which a consumer believes to have control over the events that affect him or her) (Olsen, Heide, Dopico & Toften, 2008; Csutora, 2012).

Situational influences are the external influences which a person cannot control but do affect the attitude-behaviour relation (Ajzen, 1991). Examples of situational factors are time, opportunity, money or the ability to carry out the intended behaviour (Ajzen, 1991).

To strengthen the relationship between green attitudes and purchasing green products, it is of great importance that the influencing factors are supportive (Csutora, 2012; Phipps et al., 2012; Ölander & Thøgersen, 2002). Even consumers with a negative green attitude tend to buy green products when the influencing factors are highly supportive, while consumers with a positive green attitude could be discouraged to purchase green products when the influencing factors are highly restrictive (Csutora, 2012).

This section provides an oversight of the possible influencing factors in the attitude-behaviour relation identified in literature. The factors could either positively or negatively influence the young consumer's green purchasing behaviour. These factors are: habit, economic availability, physical availability, personal benefits, consumer awareness, trust, subjective norm, perceived consumer effectiveness and perceived personal importance. Table 2.1 provides an overview of the possible influencing factors.

2.4.1 *Habit*

Habits are behavioural routines that are repeated on a regular basis and tend to develop subconsciously. A habit is a fixed way to think, will or feel and is determined by the prior repetition of an experience or the so called frequently performed past behaviour (Ajzen, Czasch & Flood, 2009). When a behaviour is frequently performed, it can bring subsequent behaviour under the control of a habitual process (Ajzen et al., 2009). A large proportion of a persons' behaviour is determined by frequent past behaviours of a person, rather than being determined by cognitions (Sutton, 2006). When an individual acts in a certain way like it is habitual, this individual will be more likely to use simplified decision rules (Aarts, Verplanken & Knippenberg, 1998). For example, the study of Aarts et al. (1998) showed that people who frequently performed a certain behaviour in the past, searched for less information about this behaviour and only focussed on the habitual choice instead of considering alternative actions. Persons who perform habitual behaviour mostly do not notice this, because when undertaking routine tasks, a person does not need to engage in self-analyses (Oulette and Wood, 1998). Next to that, an old habit is hard to break and a new habit is hard to form because the repeated behaviours are imprinted in a person's neural pathways (Ajzen et al., 2009). Oulette and Wood (1998) claim that future responses are guided by past behaviours, because the processing that initiates and controls behaviour becomes automatic. So, the frequency of past behaviour determines the habit strength which has a direct effect on future performance. The exception to this rule is the behaviour that is infrequently performed in varying environments. In that case there is no behaviour frequently performed and a habit is not formed yet.

As regards to habits and green purchasing behaviour, Kollmuss and Agyeman (2006) believe that habits strongly and negatively influence green purchasing behaviour. Consumers are not persistent enough in practicing new behaviour until it becomes a habit. When out of habit green products are never purchased, it is very hard for a consumer to change this habit into purchasing green products (Aarts et al., 1998). Most of the consumers choose the products they have always bought, instead of putting in extra effort to change behaviour and be socially responsible (Ramayah, Lee & Mohammed, 2010). Ramayah et al. studied purchasing and using cloth diapers. The habit of buying regular diapers is so strong that consumers' do not even consider buying and washing cloth diapers.

The factor habit seems strongly applicable for Generation Y. Previous generations are known for opposing their parents and wanting to make their own choices, while Generation Y is known for accepting authority and going along with the decisions their parents make (Rainer & Rainer, 2011). Out of habit the young consumers will make the same choices as their parents do and therefore not purchase green products. Furthermore, Generation Y is the highest consumption orientated generation ever and constantly has to make choices in the constant availability of products, but is also easy going (Sullivan & Heitmeyer, 2008; Kolkailah et al., 2012). This could mean that the choice process becomes automatic and green products will not be considered.

2.4.2 *Economic availability*

The availability of money to purchase green products has a strong negative influence on green purchasing behaviour. A necessary condition for buying green products is that the price and quality of these products should be comparable to the regular products a consumer would buy (Kollmuss & Agyeman, 2006). However, green products are often more expensive than regular ones (Kollmuss & Agyeman, 2006) and consumers are not willing to incur any added costs (Kolkailah et al., 2012). The study of Hainmuller and Hiscox (2012) shows that price is an important barrier in green purchasing. The researchers placed the same sets of sport socks in a store, but labelled one set as being made under good working conditions. When the socks were offered for the same price, 42% of the consumers bought the labelled socks. But when the labelled socks were offered for a higher price, only 20% of the consumers bought the labelled socks. Csutora (2012) notices a relation between income and ecological footprint. Consumers with a higher income have a negative footprint, while consumers with a lower income have a positive footprint. The price of green products in relation to the availability of

money is the most common barrier for consumers not to buy green products or services (Bray et al., 2011).

However, the amount of money spendable also seems to be a personal factor, since it is related to the willingness to pay the price premium. Some studies claim that income does not account for the differences in green purchasing behaviour (Tanner & Kast, 2003; Rahim et al., 2011). Bhattacharya & Sen (2004) even expect this personal factor to outweigh the contextual factor of the availability of money in a consumer decision making process.

The expectation is that the young consumer perceives money as a more important barrier in green purchasing than the older consumer does, because the income of the young consumer is relatively low. Reason for this is that Generation Y is currently in further education or in their first jobs (Schmeltz, 2012). So it is likely that for the young consumer income and willingness to pay price premium negatively influence the attitude-behaviour relation.

2.4.3 Physical availability

The physical availability of green products in relation to the time a consumer has to spend or is willing to spend on shopping, influences the amount of green purchases made (Tanner & Kast, 2003; Wright & Heaton, 2006; Vermeir & Verbeke, 2006). Physical availability is related to the ease or difficulty of obtaining or consuming a green product (Vermeir & Verbeke, 2006). Consumers want to find the green products in the regular shops, next to the conventional products (De Pelsmacker, Janssens, Sterckx & Mielants, 2005). Because of the extra effort a consumer has to make to visit a special shop to be able to purchase green products, the purchasing situation and with that, the availability of products is more important in predicting green purchasing behaviour than green attitudes are (Grimmer & Woolley, 2012).

The physical availability of green products is, especially for Generation Y, expected to negatively influence the green purchasing behaviour. Generation Y is known for being easy-going (Kolkailah et al., 2012) and probably will not bother to visit multiple and/or remote stores to purchase green products.

2.4.4 Personal benefits

Personal benefits, personal concern or self-interest all refer to the focus a person has to fulfil the needs and desires of oneself. Consumers will evaluate whether the expected behaviour (e.g. what they should do) corresponds with their own personal concerns (Davis, 2012). There is the tendency to decide in favour of one's own self-interest, which is related to the fact that consumers are often unable to estimate the actual impact of a (green) purchase (Rokka & Uusitalo, 2008). Consumers will buy a green product when, besides the environmental benefit, they can also see some direct individual benefit in purchasing the product (Nottage, 2008; Stern, 2000).

There is a potential in adding some kind of personal benefit to purchasing green products by the principle of reciprocal determinism (Bandura, 1986). The theory of reciprocal determinism represents the idea that a person's habits can be broken or changed by adding consequences to a decision (Bandura, 1986). Phipps et al. (2012) and Grimmer and Woolley (2012) demonstrate how purchasing a green product can become a habit by giving the consumer advantages of using a green product. A tangible outcome for a consumer of purchasing a green product is receiving economic benefits like a reduced energy bill. An intangible outcome for a consumer of purchasing a green product is receiving a positive feeling of moral satisfaction or confirming a desired self-identity. An example is a consumer who purchases a hybrid vehicle. The consumer can experience tangible outcomes in terms of less tax costs and less gas costs and also have the positive feeling of doing something good for the environment.

In sustainable purchasing, the influencing factor of personal benefits accounts especially for Generation Y. Generation Y is very narcissistic and self-centred and when young consumers engage in green purchasing, they are often driven by egoistic motives (McDougle et al., 2011; Gage & Thapa, 2011). This is confirmed by Grimmer and Woolley (2012), who found that young consumer with a low environmental affect have a higher purchase intention towards green products, when there is some kind of personal benefit in purchasing the green product. The importance of personal benefits is also

visible in the effects of different green product categories on green purchase intention. The young consumer seems to attach most value to the product types focussed on the local community (Schmeltz, 2012). Young consumers can thus best be engaged into green purchasing by focusing on direct personal benefits and on proximity; the nearest environment of the young consumer (Schmeltz, 2012).

2.4.4 Consumer awareness

Consumer awareness is defined as the amount of time that has been spent on processing information about green products (Baker, Hutchinson, Moore & Nedungai, 1986). It is important that a consumer is aware of the fact that purchasing green can be a purchasing criterion (Jones & Eden, 1981) and that a consumer notices and pays attention to the communication of organisations about green products (Schmeltz, 2012). Awareness holds a key role in green purchasing and is a prerequisite for making a green purchase (Bray et al., 2011; Laivate, 2012; Rahim et al., 2011; Kolkailah et al., 2012; Paladino & Serena, 2012; Schmeltz, 2012; Bhattacharya & Sen, 2004; Öberseder et al., 2011). When consumers are not aware of the existence of green products, they will never be capable of forming strong attitudes and intentions towards purchasing green products (Schmeltz, 2012; Paladino & Serena, 2012). So, the level of awareness influences the relationship between green attitudes and green purchasing intentions.

Literature confirms young consumers not having high levels of awareness about green products (Kolkailah, 2012). It is therefore likely that the low levels of awareness of young consumers negatively influence the attitude-behaviour relation.

2.4.5 Trust

The factor of trust or scepticism towards the motivation of the organization to engage in green products, is frequently mentioned in literature as a negative influencing factor in the attitude-behaviour relation. Research suggests that consumers' assessments about the intention of companies to produce green results in a conclusion about the company's efforts. The perceived intentions can either be cause-beneficial or cause-exploitative (Drumwright, 1996). In the case of a cause-exploitative judgement, consumers question how sincere the company's efforts with respect to helping the selected cause are (Fein, Hilton & Miller., 1990).

Low levels of trust towards the motivation of the organization to produce green would especially account for the generation of young consumers, since this generation is known for being more sceptical towards commercial messages than previous generations (Schmeltz, 2012). The low levels of trust are expected to negatively influence the attitude behaviour relation in consumers' green purchasing behaviour.

2.4.6 Subjective norm

Subjective norm is the evaluation of and feelings toward a consumer's perception what the people important to them might think of the action that is being considered (Ajzen, 2002). The subjective norm strongly influences the intention an individual has to act when it concerns purchasing green products (Paladino & Serena, 2009).

Vermeir and Verbeke (2006) studied young consumers' green purchasing behaviour and discovered that their friends and family are usually not very convinced that the consumer should buy green products. However, experiencing social pressure from peers is an explaining variable in the intention to purchase green (Vermeir & Verbeke, 2006). Taking this in account together with the fact that Generation Y is mainly loyal to its closest circle (Hume, 2010), the subjective norm will probably positively influence the young consumer's attitude-behaviour relation.

2.4.7 Perceived consumer effectiveness

The perceived consumer effectiveness (PCE) accounts for “the extent to which the consumer believes that his personal efforts can contribute to the solution of a problem” (Vermeir & Verbeke, 2006, p. 175). In the case of green purchasing, high levels of PCE are essential for consumers to translate positive green attitudes into green purchasing behaviour (Vermeir & Verbeke, 2006; Ellen et al., 1991; Laroche, Bergeron & Barbaro, 2001). Vermeir and Verbeke (2006) suggest that in order to change the behaviour of not purchasing green products, consumers need to believe that when purchasing a green product, it actually positively impacts the environment.

The importance of high PCE especially accounts for young consumers, since this generation wants more than ever value for their money (Sullivan & Heitmeyer, 2008). Therefore, young consumers are not expected to purchase green products, when they do not feel confident about the extra money they spend will truly contribute to the environment.

2.4.8 Perceived personal importance

The perceived personal importance (PPI) is a type of attitude which accounts for whether consumers view sustainability issues as important to themselves or as a problem of society as a whole (Laroche et al., 2001). So, the level of self-involvement towards the environment determines the amount of green purchases consumers make. Laroche et al. (2001) and Vermeir and Verbeke (2006) point out that consumers may have a very positive attitude towards sustainability, but feel that the preservation of the environment is not their responsibility nor do they actually experience the consequences of for example environmental pollution. Instead consumers with low levels of PPI view environmental issues as the responsibility of the government or the industry.

Since young consumers are mainly driven by self-interest, high levels of PPI are essential in young consumers actually purchasing green products.

Table 2.1: Factors, identified in literature, which influence the attitude-behaviour relation in green purchasing.

Factor	Source
Habit	Kollmuss & Agyman, 2006; Aarts et al., 1998; Ramayah et al., 2010.
Economic availability	Kollmuss & Agyman, 2006; Hainmuller & Hiscox, 2012; Csutora, 2012; Bray et al., 2011.
Physical availability	Tanner & Kast, 2003; Vermeir & Verbeke, 2006; Wright & Heaton, 2006; De Pelsmacker et al., 2005; Grimmer & Woolley, 2012.
Personal benefits	Davis, 2012; Rokka & Uusitalo, 2008; Nottage, 2008; Stern, 2000; Phipps et al., 2012; Grimmer & Woolley, 2012.
Consumer awareness	Baker et al., 1986; Jones & Eden, 1981; Schmeltz, 2012; Bray et al., 2010; Laivate, 2011; Rahim et al., 2011; Kolkailah et al., 2012; Paladino et al., 2012; Bhattacharya & Sen, 2004; Öberseder et al., 2011
Trust	Drumwright, 1996; Fein, Hilton & Miller., 1990; Schmeltz, 2012.
Subjective norm	Paladino & Serena, 2009
Perceived consumer effectiveness	Vermeir & Verbeke, 2006; Laroche et al., 2001
Perceived personal importance	Vermeir & Verbeke, 2006; Laroche et al., 2001

2.5 Summary

A green product is a product which contributes to a more sustainable world by protecting and preserving the natural habitat and which will not pollute the earth or deplete natural resources (Shamdasami et al., 1993). Consumers hold positive attitudes towards sustainability in general, green products in general and purchasing green products. However, these positive attitudes do not seem to predict green purchasing behaviour: an attitude-behaviour gap exists. The gap especially accounts for young consumers, since their green attitudes are very positive, but the amount of green purchases seems very low. The factors, identified in literature, and expected to influence the attitude-behaviour relation are: habit, economic availability, physical availability, personal benefits, consumer awareness, trust, subjective norm, perceived consumer effectiveness and perceived personal importance.

Research outline

The present research is aimed at exploring the attitude-behaviour relation in young consumers' green purchasing and identifying factors which could influence this relation. Figure 2 shows an overview of the conceptual research model, based on existing literature. Accordingly, two studies will be conducted. Firstly, by means of focus group discussions study A is aimed at gaining a deeper understanding of young consumer' attitude-behaviour relation and possible influencing factors. Secondly, with the results from study A an extended version of the model presented in figure 2 will be designed and tested in study B.

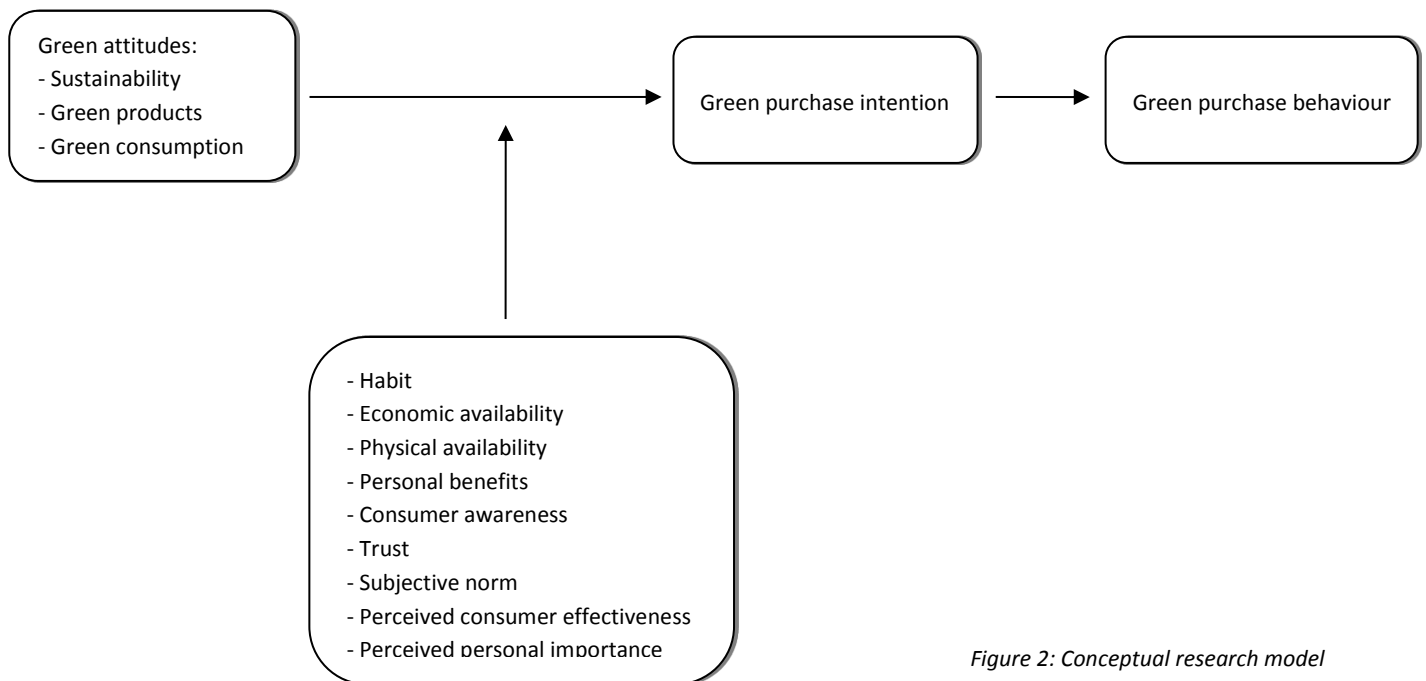


Figure 2: Conceptual research model

3. STUDY A

The first aim of the present study, is to discover whether there is a gap between the young consumers' green purchasing behaviour and the green attitudes (towards sustainability, green products and green purchasing). The second aim of the present study is to explore which factors might determine young consumers' green purchasing behaviour. These results will be used as input for study B.

3.1 Method

3.1.1 *Instrument*

Focus groups were conducted as a method to collect data. The instrument is a qualitative research method in which organised group discussions are held, the so called focus group discussions (Lucassen & Olde Hartman, 2007). This method is chosen because of the exploratory purpose of the study. In a relatively short period a lot of experiences, views and opinions can be collected in a focus group discussion. Moreover, the interaction in a focus group discussion is the crucial feature of this method, because it encourages tapping into a wide range and form of understanding of the subject of discussion. It also facilitates the expression of ideas that might be left unaddressed in an interview (Kitzinger, 1994). Focus groups enable a better understanding of what people say and what they do (Lankshear, 1993). This method is also chosen because when studying green consumerism, the social desirability bias should be taken in account (Longhurst, 2006). Social desirability is the tendency of respondents to give social desirable answers. In green consumerism, the awareness about environmental and social issues has increased the past decades in such a degree that apathy about these subjects is no longer accepted and the chance to get social desirable answers increases (Davis, 2012).

3.1.2 *Participants*

Four focus groups discussions were conducted, each with six to eight participants. The best results are usually obtained when the group has some homogeneous aspects, as the participants can talk in greater depth. In the current study, age category was the common aspect for all focus groups. In total 27 respondents (N=27) participated. Each group consists out of seven participants, except the last discussion group in which six respondents participated. On average, the discussions took one hour and twenty minutes. Table 3.1 shows an overview of the profile per focus group. Appendix A1 presents an overview of what the ideal representative sample would look like, what the differences are with the actual sample and what the distribution of demographic variables per focus group looks like.

3.1.3 *Procedure*

Respondents were recruited via the researcher's network. Potential participants aged between 18 and 30 years and who expressed their willingness to participate in the focus group discussion were contacted by mail. In this mail the participant could find more information about the research and the participant could indicate which dates for the focus group would suit him/her best.

Table 3.1: Demographics per focus group

		Focus group 1 (N=7)	Focus group 2 (N=7)	Focus group 3 (N=7)	Focus group 4 (N=6)	Total (N=27)
Gender						
	Male	57%	29%	29%	50%	41%
	Female	43%	71%	71%	50%	59%
Average age		23	23	21	26	23
Education level						
	Vmbo*	-	14%	-	-	4%
	Havo/vwo*	14%	14%	57%	-	22%
	Mbo*	14%	29%	43%	33%	30%
	Hbo*	43%	43%	-	67%	37%
	Wo*	29%	-	-	-	7%
Gross income per month						
	0-833	29%	29%	100%	17%	44%
	833-1666	-	57%	-	-	15%
	1666-2499	43%	14%	-	17%	19%
	2499-3332	14%	-	-	50%	15%
	3332-4165	14%	-	-	17%	7%

Note. *vmbo=preparatory middle-level applied education, havo/vwo=higher general continued education/preparatory scholarly education, mbo=middle-level applied education, hbo=higher professional education, wo=scientific education.

Before the focus group discussion officially started, a short anonymous questionnaire was distributed to capture the following demographic data of the participants: age, gender, highest achieved education level and gross income per month. The respondents were also asked to sign a consent form in which they agreed on videotaping the discussion and processing the results anonymously. After a general introduction, the process and purpose of a focus group discussion were discussed and the participants were given more insight into the topic of green products by showing them two promotional video's. The first video was about sustainability in general. A farmer who produced sustainable coffee discussed some general sustainability matters. In the second video the advantages of purchasing two green products for both the environment and the consumer were presented. After that, the researcher gave a full definition of sustainability, green consumerism, green products and the four categories in green purchasing (food, home, personal, community), including examples of green products.

The first discussion topics were: attitude towards sustainability, attitude towards green products, attitude towards green purchasing, the green purchase intention and actual purchases made in the past. In the next part of the discussion respondents were asked to name all the factors that would influence their green purchasing behaviour and the researcher wrote the factors down. Next, the respondents elaborated per factor why and how the factor would influence their behaviour. After discussing all factors, each respondent was asked to choose one factor of the list which was most important for him or her in (not) purchasing green products and to explain why. If price was the most important factor, the researcher also asked for the second most important factor. See Appendix A2 for the complete focus group discussion guide and the video's.

3.1.4 *Analytical procedure*

The recorded sessions were transcribed into text. The first step in analysing was reading all the information. The Grounded Theory (Boeije, 2005) was used to analyse the data. This is a method of constantly comparing concepts to group similar data and label concepts. The first stage in this method is 'open coding' whereby important quotes were highlighted on paper. During the second stage of 'axial coding' the highlighted quotes were assigned and compared to quotes similar to the specific quote. The similar quotes were labelled in a concept, which then was defined. Finally during the stage of 'selective coding' some codes were changed and modified so all defined concepts were clear. Then the coding book was complete. A coding book is a guide which contains all possible codes, concepts and definitions to analyse the data.

To achieve a high reliability of the data analyses the researcher and a second coder (an independent fellow communication science student) both coded one focus group discussion (25% of the data) by using the coding book. The coding of two researchers resulted in a Cohen's Kappa of 0,67 (see Appendix A4). The Cohen's Kappa expresses into what extent the accordance between the two coders is distanced from the perfect accordance. When the Cohen's Kappa is between 0,40 and 0,75, like in the present study, there is a reasonable to good accordance between the two researchers. To optimize the coding book the two coders discussed the 28 inagreements and the coding book was adjusted. The final version of the codebook can be found in Appendix A3.

3.2 Results

In this section the results of study A will be presented. The green purchasing behaviour from the participants as a central issue will be explained by several factors which either positively or negatively influence in a certain extent the purchasing of green products. Also the green attitudes and the intention to purchase green products will be discussed in the present section.

3.2.1 *Green attitude*

Green attitudes are the attitudes towards products which help to protect the world. The attitude towards sustainability in general appeared to be very positive. All participants were aware of the sustainability problems and thought it is very important to create a good world for their children and grandchildren. The attitude participants have towards green products is also very positive. Participants appreciate the fact that companies think about the sustainability issues and offer people a choice to purchase green. The attitude towards purchasing green products is positive, though in a lesser degree than the other two types of green attitudes. Participants expressed the opinion that it would certainly be good for them to purchase green products and all decided in favour of buying green products instead of regular products.

3.2.2 *Green purchasing behaviour*

The intention to purchase green products was very low. The actual past green purchasing behaviour seemed at first like there was none. All participants indicated to barely or not at all purchase green products. When taking a closer look at the subject of green purchasing it appeared however that participants did purchase some green products. A statement which illustrates the realization of actually purchasing green products: 'Do there really exist green washing machines? Yes, we have one of those! Really? Oh, that's why it's called eco-bubble!'. There is a difference in green product categories and the frequency of purchasing. Participants purchase in a small extent green home products and purchase from local community shops. Green food and green personal products however are not at all or barely purchased. The green purchases are more often based on coincidence than on consciously decision making to purchase a green product because of its sustainable

features. Whether a product is green, is not a purchasing criterion for the young consumer. The following statements illustrate this: 'I would only purchase the cheese when the quality is extra good, but not because it is produced in a sustainable way' and 'when I notice that I'm purchasing a green product, I think oh ok, a nice addition. I however choose my clothes on how they look. I do not care at all whether it is green or not'.

3.2.3 *Factors influencing green purchasing behaviour*

The gap between the green attitudes that the respondents hold and their actual green purchasing behaviour can be explained by the factors: economic availability, physical availability, habit, trust, awareness, personal relevance and subjective norm.

Economic availability

The factors availability of money versus the price of green products form the most important obstructive factors in green purchasing. Nearly every participant mentions the price of green products as the main reason not to purchase green products: 'When I am in the supermarket and I compare the prices of regular chicken and biological chicken, my choice is made in an instant. Of course I then buy the regular chicken', 'I only buy green products when they are on sale, otherwise I'm just not able to purchase these products' and 'Only when you have enough money, green can take a part in your purchasing decisions and I'm just not able to pay for that'. Green products are also perceived as being more expensive than regular products, even though participants don't know for sure whether the products are in fact more expensive. The presupposition of green being more expensive, results in some participants not even considering a green purchase any more: 'Recently I was doing my shopping and I noticed I coincidentally put biological tomatoes in my cart. Well I threw them out very quickly! Why? Because they must be much more expensive'.

Not only the availability of money but also the willingness to pay price premium for green products plays a role in not purchasing green products. Most of the participants indicate not being willing to pay more money to purchase green. Participants are however willing to spend more money in order to get a better quality or a better looking product. This indicates again the green is not a purchasing criterion. The following statement endorses this: 'When I am making a purchase I only pay attention to the price of a product and the quality. Whether the product is good for the world, that is at the bottom of my priority list'. Only in a few exceptions the price of a green product does not influence the purchasing decision. Economic availability however never positively influences green purchasing behaviour. So even when participants indicate to have enough money in order to purchase green, the green products are not bought, because other obstructive factors take part in the decision making process. Economic availability mainly acts as a barrier in green purchasing.

Personal benefits

The extent in which (direct) tangible or intangible benefits are received from purchasing a green product, can positively influence the decision to purchase a green product. Tangible benefits for the purchaser in the form of saving money can influence the green purchase behaviour: 'Energy saving light bulbs are more expensive than regular light bulbs, but eventually energy saving light bulbs last longer and save electricity costs. Just like a green washing machine. If purchasing a green product means saving money at the end of the month, you just purchase the green products for that. You absolutely do not buy them because they are better for the environment. Benefits for yourself, that is what it is about!'. Another factor influencing green purchasing behaviour is the belief that green products are healthier for your body than regular products. A participant illustrated this by saying: 'Yes but in biological chicken no antibiotics and other bad chemicals are injected, so eating biological chicken is better for your own health, and as a bonus also for the chicken's health'. A participant also mentions: 'If I would purchase a green product, it would primarily be because it is better for my body'.

Another intangible benefit for the consumer of purchasing a green product is receiving a positive feeling of doing good and confirming to a positive self-image: 'When I recently purchased a shirt with an eco-label in it, I thought: well look at that, I did good! It definitely gave me a good feeling'. In local community shopping the community as a whole receives tangible benefits when a green product is purchased. The participants indicated that the community benefitting from purchasing a green products, is a very important reason to purchase green products. A few examples which underline this statement: 'The soccer club sells Christmas decorations. They are super-ugly and extremely expensive, but you buy them anyway, because it profits the village and not some child in a far country that you do not know and have nothing to do with' and 'recently a Parabool shop (a shop almost entirely run by people with a mental disability) was opened in our village. Now everybody buys their bread over there, because it stimulates the economy and the livability of our village'.

Perceived personal importance

The term perceived personal importance accounts for the support of the social cause a green product addresses. So, whether the topic a green product addresses is relevant for the personal situation of the purchaser. In every focus group discussion the participants indicated that the topics most green products address like the environment, human rights or a fair price for the farmer, are not relevant in the daily lives of the participants. Participants name this 'a far from your bed show'. A participant explains this by saying: 'I would not take action for the rising water level of the sea, because it is not directly relevant for me. But when half of our country would be flooded, I would have a totally different opinion'. Other explaining statements: 'I saw that when you purchase diapers from brand Pampers, they make sure that one baby child in a poor country gets a vaccine. Well I can imagine when I would have a small baby, I would not want him/her to get hurt for missing a vaccine. This would probably make you buy the diapers, because the topic is relevant for you' and 'I bought a bracelet from Pink Ribbon (the foundation against breast cancer). Normally I would never do that, but since my aunt had breast cancer and I saw what a terrible disease it is, I bought it'. Concluding: when a consumer feels connected to a green product and its goal, the personal relevance of a green product is high. High levels of personal relevance positively influence the possibility of purchasing the particular green product.

Awareness

Awareness accounts for the degree in which a consumer is aware that purchasing green can be a purchasing criterion and whether a consumer notices and pays attention to the communication of organisations about green products. The degree of awareness is low for the young consumer. Participants are aware of sustainable issues, however participants do not know how their purchasing behaviour can contribute to solving the sustainability issues. The majority of the participants show or notice not being aware of what green products actually are. The following statements illustrate this: 'I hear you talking about different types of green products and I am truly astonished. I had no idea that those products exist. I just purchase my vegetables in the supermarket. Are there also biological vegetables in the supermarket? Really? But what then does biological in fact mean?' Low levels of awareness on green products, result in green not being a purchasing criterion. The factors of awareness and habit relate to each other; since out of habit participants do not explore other purchasing options any more.

Media attention can influence the level of awareness of green products. Mostly, participants do not notice green products on television, in folders and on other media. The action 'Serious Request' forms the great exception to the missing media attention concerning green purchasing: 'It is just not possible not to hear about Serious Request. A few weeks everything in the media is about Serious Request. It makes you really willing to participate in the action'.

Eco-labels on green products stimulate the awareness of green products. But due to the diversity in labels confusion is created and the effect of eco-labels decreases. Participants notice more labels on green food products and

home products than on personal products. Therefore, the awareness concerning for example green clothing is very low. A participant illustrates this by saying: 'In clothing it is less clear what eco-friendly is than in food. In food I feel like there are more than 100 labels. Apart from the H&M eco-label, I have no idea whether there are more sustainable brands in clothing. (...) I know from the H&M eco-label, since I saw a television show on these eco-labels. This television show really made me think how horrible the effects of producing regular can be'.

Also, attractive and notable product packaging can enlarge the awareness concerning green products. Participants indicate their purchasing decisions being driven by the type of product packaging: 'A bar of Fair Trade chocolate does not in any condition look as good as the one from Bon Bon Block. If I had to choose between those two when I was not familiar with both products, I would choose the Bon Bon Block of course'.

Awareness is a precondition for purchasing green. High awareness doesn't necessarily result in green purchasing behaviour.

Trust

There is a fairly strong disbelief that green products actually contribute to an environmental issue. Participants indicate not seeing result of what happens with the money that was spend on green products. Participants do not believe that the extra money spend, will end up at the rightful purpose. A participant illustrates this by saying: 'I always feel like that if I would spend my money on green products, this would not have any effect at all. Do the farmers get indeed more profit? And are there not working any children in factories? I believe not'. Also the motivation of organizations to produce green product is perceived with great scepticism by the participants: 'You're constantly being lied to by companies, because they want to look good. They only want to sell more products by saying that something is produced under good circumstances. I do not believe it. It is just a trick to sell more products'.

The scepticism towards green products exists partially due to several incidents. In these incidents green products appeared not to be as green as they should be or that the money that was generated, was not spend on environmental issues. In every focus group discussion several of these incidents were mentioned. For example: 'In the television programme Kassa they showed that even Max Havelaar and Fair Trade are corrupt. The producers of green products do not get the money that was promised to them. So buying these products is not at all a way to improve the world. If this is true for these brands, which are very well known, then the other green brands will probably not be any better'.

Though in general there is a lot of scepticism towards green products, the level of scepticism differs per organisation: 'The other day when we were doing our shopping at Aldi, there were two packages of meat. One was biological and one was a regular product. The price was the same for both packages. However, we chose the regular one, just because the biological meat was from Aldi. Aldi is only about being the cheapest and we just did not believe Aldi to invest in biological meat'. Another statement which endorses the importance of trust in the selling organisation: 'Would you pay an euro more in order to purchase pudding of which the profit would go to Serious Request? Yes, I definitely would! Because then you are sure that the money you spend extra, will be well-spent.'

A small part of the participants does trust green products and the selling/producing organizations: 'When I see a green label on a product, surely there will be something better about the product. However, I would not buy a green product in the first place, so I never gone into green products in great depth'.

Local community shopping is the only green product category in which organizations are trusted and participants believe the profit actually contributing to the desired goal: 'When I purchase from a farmer or at the Parabool I truly believe that my money will be well-spent. When you enter the Parabool shop you can see the people working there and see what happens with your money. You do not need to look at a label or something, because you instantly know it is right'.

So, the scepticism towards the motivation of organisations to produce green products and the disbelief of green

products really being green is an obstructive factor in green purchasing behaviour, except for local community shopping.

Habit

Behavioural routines in purchasing products/brands certainly act as an obstructive factor in consumers' green purchasing behaviour. Many participants admit to make purchasing decisions automatically, without considering other brands or products. A few examples of statements on habit: 'When I hear you about all the sustainable problems, I really think it is important. However, I am sure that when this Saturday I am at the supermarket, I grab everything I always buy and do not pay attention to green products', 'I think it is a kind of habit to buy the products I always did, because then I do not have to think about the choices I make. And if the products I normally purchase taste fine, why would I change? I always buy from the same brands and do not even consider other brands' and another participant saying: 'When you enter the H&M, in front you only see the regular brands and you definitely would not visit the far corner where the clothing might be eco-friendly'.

Habit as an influencing factor in green purchasing behaviour accounts mainly for relatively cheap products, since only a small risk is involved in purchasing a cheap product. When purchasing a more expensive product, like a washing machine, participants seek for more information about the different types of products. Purchasing decisions are very consciously made. So in purchasing relatively expensive products habit does not influence the purchasing decision.

Physical availability

The availability of products, the availability of shopping time and/or the willingness to spend the available time on visiting multiple and/or remote stores in order to purchase green products, affect the amount of green purchases a consumer makes.

The availability of green products is perceived as being very low by the participants. The majority of participants were not aware, that green products can also be purchased in a regular store. The participants had the impression that in order to purchase green multiple stores should be visited.

Most participants indicate to spend as less time as possible on purchasing products: 'It is also a form of convenience, pretty easy to get all your things at one supermarket, instead of visiting five different stores and drag along all these bags with stuff. Besides, I work full-time and I surely cannot spend half a day doing my shopping'. The category of green personal products forms an exception. When shopping for personal products participants indicate to spend more time, than shopping for the other product categories.

The willingness to spend the available shopping time on purchasing green products is very low: 'To purchase a present, I definitely would not take the effort to visit a fair trade store. Also the Fair Trade shop is only located in the city and I am not willing to travel a quarter of an hour, just to be able to purchase a green product'.

Again local community shopping forms an exception to the low willingness to spend available time on purchasing green products. A great share of the participants agreed on being willing to spend time in order to purchase from a local shop. Reason for this are the benefits the community can experience from local community shopping. A participant explains this as following: 'I always get my milk and eggs at a farmer outside Haaksbergen. I think it is really important for Dutch farmers to have enough money and therefore it is no problem for me to drive a few miles more'. Some participants however do not agree with this statement: 'When a local store would be located in my village, I think that at first I would get my groceries there, but in the end you always have to go to Raalte and then I might as well get all my shopping there instead of visiting all these different locations'.

Product characteristics

Product characteristics like the quality, taste or appearance of a green product are very important and sometimes even decisive in consumers' green purchasing behaviour: 'We once had biological soup from Knorr. It tasted really nice, so now I purchase it all the time. Not because it is a green product, but because the quality was good'. The characteristics of green products can also negatively influence the purchase decision: 'Green clothing you just do not buy, because it looks horrible. Like at the H&M, I have looked at the clothing in the folder and online, but it is just so ugly that of course I do not buy it'.

In contrast to whether a product is green, the quality, taste or looks of a product are purchasing criterions for the participants. The quality and taste of green products is generally perceived and expected to be better than the quality of regular products, because: 'They are just nice and fresh without wrong chemicals and they also last longer'. Participants also admit to be willing to pay more for a better quality or taste. Therefore the perceived quality of green products could positively influence the decision to purchase green products.

On the other hand could the expected quality of green products also act as an obstructive factor in green consumerism: 'Because you have to pay more for a green product, you just expect more from these products'. So since a consumer has to pay more for a green product, he/she expects a green product to last longer or taste better than a regular product. However, when this is not the case a repeat purchase will not occur.

Subjective norm

Subjective norm accounts for the influence people important to the purchaser have on the purchaser's behaviour. Almost none of the participants knew a person who consciously purchases green products. However, participants do recognize the potential of word of mouth or opinion leaders in green purchasing behaviour. Green purchasing could be stimulated by introducing a person with green products, recommending a green product or providing group pressure to purchase green products. The following statements illustrate the potential of subjective norm in green purchasing behaviour: 'There is no word of mouth about the purchasing of green products. I miss the feeling of saying all together 'ok, we can do this!'. If I had this feeling, I would definitely participate more active in green purchasing', 'When my parents are used to a sustainable lifestyle, I would certainly adopt that, because my parents are very important to me. (...) They have the possibility to create who you are and what you buy' and: 'I am very sensitive to the opinion of others. When a friend lets me taste something or tells me something which I should buy, I do that'.

3.3 Summary and main outcomes from Study A

There is a gap between the green purchases participants make and their green attitudes. When participants bought a green food, home or personal product, most of the times this was not due to the green features of the product, but due to other stimulating factors. Green is not a purchasing criterion. The exception to this is community shopping, those products are purchased in order to make the direct environment of the purchaser a better place.

The most important reason in not purchasing green products, is the absence of personal importance; participants do not feel responsible for the topic a green product addresses and therefore the awareness on green products is low. The other most important barrier in not purchasing green products is the economic availability; the availability of money to purchase green products and the willingness to spend the available money on green products. Other factors which obstruct green purchasing behaviour ranked in importance are: habit, scepticism towards the motivation of the organisation to produce green and the product actually contributing to the desired goal (perceived effectiveness), awareness of about green products, the physical availability of products versus the availability of shopping time and the quality of green products, which is expected to be better than the quality of regular products.

The most stimulating factor in making a green purchase according to the participants are the personal benefits of a product; the extent of (direct) tangible or intangible benefits of a green product for the purchaser or his/her local community. Also the subjective norm (the influence people important to the purchaser have on his/her green purchasing behaviour), trust in local initiatives (because participants can see their money being spend well) and the product characteristics (green product are expected to be of better quality and taste and those factors are purchasing criterions) are stimulating factors in green purchasing behaviour.

Table 2.2 provides a summary of all the identified factors and sub-factors in study A and whether a factor positively or negatively influences green purchasing behaviour. These factors are further investigated in study B, as described below.

Table 2.2: Factors, identified in study A, related to green purchasing behaviour (ranked in importance).

Factor	Sub-factor	Direction of the influence	
1. Economic availability	- Availability of money		-
	- Perceived price of green products		-
	- Willingness to pay price premium		-
2. Personal benefits	- Money	+	
	- Health	+	
	- Self-image	+	
	- Local community	+	
3. Perceived personal importance			-
4. Awareness	- Green can be a purchasing criterion		-
	- Product packaging		-
	- Media attention	+	-
	- Eco-labels	+	-
5. Trust	- Perceived effectiveness		-
	- Motivation of the organization		-
7. Habit			-
9. Physical availability	- Availability of green products	+	-
	- Availability of shopping time		-
	- Willingness to spend shopping time on purchasing green products		-
10. Product characteristics	- Quality	+	-
	- Taste	+	
	- Appearance		-
11. Subjective norm	- Opinion leaders	+	-
	- Word of mouth		-

4. STUDY B

Goal of the present study is to discover what the influence is of the factors identified in the theoretical framework and in study A on the attitude-behaviour relationship. And whether the different levels of green attitudes predict green purchasing behaviour. As a method a questionnaire was used.

4.1 Research model

Based on both existing literature and the findings from study A, a conceptual model is developed. Figure 3 shows the research model which will be tested in the present study. Table 4.1 offers an overview of the constructs in the conceptual research model. See paragraph 4.2.3. for more information on the three measures of green purchasing behaviour.

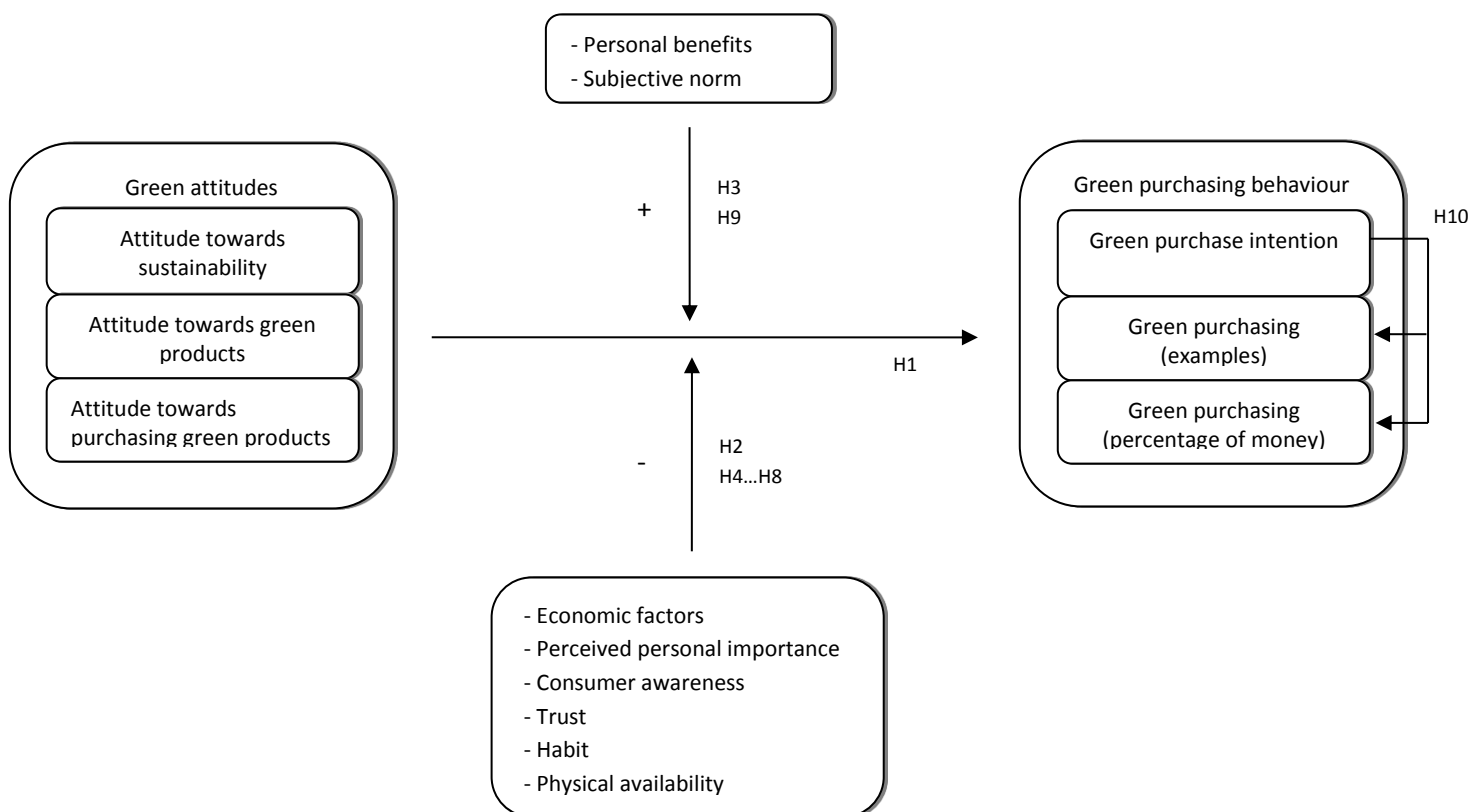


Figure 3: Conceptual research model

Table 4.1: The factors expected to affect the attitude-behaviour relation

Category	Construct	Definition	Direction of the influence	Hypotheses
1. Attitudes	Attitude towards sustainability	The result of a consumer's assessment of sustainability in general (defined by the researcher).	+	H1A: The attitude towards sustainability does positively influence green purchasing behaviour.
	Attitude towards green products	The result of a consumer's assessment of green products in general (defined by the researcher).	+	H1B: The attitude towards green products does positively influence green purchasing behaviour.
	Attitude towards purchasing green products	The result of a consumer's assessment of purchasing green products (defined by the researcher).	+	H1C: The attitude towards purchasing green products does positively influence green purchasing behaviour.
2. Economic factors	Availability of money	Degree to which product price determines purchase decisions (Maio and Olsen, 1995).	-	H2: The attitude-behaviour relation is negatively influenced by the availability of money, the perceived price of green products and the willingness to pay price premium.
	Perceived price of green products	The price level from green products perceived by a consumer (defined by the researcher).	-	
	Willingness to pay price premium	Consumer's willingness to pay more money for green products than for non-green products (defined by the researcher).	-	
3. Personal benefits	Saving money	The tangible benefit of saving money by purchasing a green product (defined by the researcher).	+	H3: The attitude-behaviour relation is positively influenced by receiving personal benefits like: saving money, health benefits, a positive self-image, higher product quality and benefits for the local community.
	Health benefits	The extent in which health benefits are experienced from consuming/using a green product (defined by the researcher).	+	
	Positive self-image	The intangible benefit of receiving a positive self-image from purchasing a green product (defined by the researcher).	+	
	Local community support	The benefits for the local community of purchasing a green product (defined by the researcher).	+	
	Higher product quality	The tangible benefit of receiving a higher product quality of purchasing a green product (defined by the researcher).	+	
4. Perceived personal importance	Perceived personal importance	The emotional state elicited from a particular sustainability issue and whether the effects/problems are directly tangible for a consumer (Darnall, Pointing, Vazquez-Brust, 2010)	-	H4: The attitude-behaviour relation is negatively influenced by the level of perceived personal importance.
5. Consumer awareness	Consumer awareness	The amount of time that has been spent processing information about green products (Baker et al., 1986)	-	H5: The attitude-behaviour relation is negatively influenced by the consumer awareness.
6. Trust	Perceived consumer effectiveness	The extent to which a consumer is confident that his/her personal purchasing decisions have bearing on a critical sustainability issue (Vermeir & Verbeke, 2006)	-	H6: The attitude-behaviour relation is negatively influenced by the perceived consumer effectiveness and the perceived motivation of the organization.
	Perceived motivation of the organization	The degree in which a consumer is sceptic in the perceived motivation of the organization to produce green products (Drumwright, 1996)	-	
7. Habit	Habit	Behavioural routines in purchasing products that are repeated on a regular basis and tend to happen subconsciously (Ajzen et al., 2009)	-	H7: The attitude-behaviour relation is negatively influenced by consumer habits.
8. Physical availability	Availability of green products	The perceived ease or difficulty of obtaining or consuming a green product (Vermeir & Verbeke, 2006)	-	H8: The attitude-behaviour relation is negatively influenced by the availability of green products, the availability of shopping time and the willingness to spend the available shopping time on purchasing green products.
	Availability of shopping time	Whether or not a consumer has enough shopping time to visit multiple and/or remote stores to purchase green products (defined by the researcher).	-	
	Willingness to spend shopping time on purchasing green products	The extent to which a consumer takes sufficient advantage of the available shopping time to purchase green products (defined by the researcher).	-	
9. Subjective norm	Subjective norm	The influence that people important to the purchaser have on his/her green purchasing behaviour (Ajzen, 2002).	+	H9: The attitude-behaviour relation is positively influenced by the subjective norm.
10. Intention	Purchase intention	An indication of an individual's readiness to perform a given behaviour (Ajzen, 2002).	+	H10: The attitude-behaviour relation is mediated by the intention to purchase green products.

4.2 Method

4.2.1 Research design

The hypotheses were tested using an online questionnaire (see Appendix B1). The main advantage of this quantitative instrument is the great reach, resulting not only in broad overview and general valid statements, but also offering the opportunity to calculate statistical coherence. A questionnaire will provide insight in the influence of the identified factors on the attitude-behaviour relation. Another advantage of the questionnaire is the anonymity for the respondents. Anonymity reduces the effects from the social desirability bias, even when respondents have to answer questions about sensitive business topics (Hardin and Hilbe, 2001).

4.2.2 Respondents

The population investigated in the present study is Generation Y: people aged 18-30 years old. By convenience sampling, 527 respondents participated in the present study. After the first question where respondents were asked to select their age category, 51 respondents were not able to participate in the study, since they were aged younger than 18 years old or older than 30 years old. 476 respondents were qualified as able to complete the questionnaire. From these respondents only 355 actually started with the questionnaire of which 88 of them quit at some point during the questionnaire. This leaves the number of respondents who filled in the questionnaire completely 267. The final response rate was not clear due to technical limitations. The 88 respondents who quit during the questionnaire are not included in the analysis. Firstly, they were apparently only moderately motivated to complete the questionnaire, which could relate to the degree of seriousness in giving answers. Secondly, no conclusions could be made concerning this group, since data on the intention to purchase green and the actual green purchasing behaviour is missing.

79 male and 188 female consumers participated in the questionnaire. The average age of the sample was 22 years ($SD = 3,049$). The highest achieved education level was mostly havo/vwo (45%) or hbo (36%). The exact distribution of the demographics can be seen in table 4.2.

Table 4.2: Demographics of the research respondents

	Demographics	N	%	M (SD)
Gender	Male	79	29,6	
	Female	188	70,4	
Age	18 - 21	128	47,9	22 (3,049)
	22 - 25	101	37,8	
	26 - 30	38	14,3	
Highest achieved education level	Vmbo*	4	1,5	
	Havo/vwo*	120	44,9	
	Mbo*	34	12,4	
	Hbo*	96	36,0	
	Wo/wo+*	13	4,9	
Gross income per month	0 - 833	185	69,3	
	833 - 1666	49	18,4	
	1666 - 2499	21	7,9	
	2499 - 3332	8	3,0	
	3332 - 4165	4	1,5	

Note. *vmbo=preparatory middle-level applied education, havo/vwo=higher general continued education/preparatory scholarly education, mbo=middle-level applied education, hbo=higher professional education, wo=scientific education.

4.2.2 Procedure

A questionnaire was created, which was online from the 22th of February until the 4th of March. Participants were recruited by sending email invitations, using online social networks and posting on Dutch online message boards. The email invitations were sent to students from Saxion University of Applied Science and persons in the researcher's network. To increase the response, respondents who finished the questionnaire could win a food package with green products worth €20,-. To make sure that participants understood the concept of green consumption well, an introduction text was written. See Appendix B1 for an overview of the questionnaire.

4.2.3 Instrument

In order to design a reliable research instrument, literature on green products has extensively been reviewed for validated scales. However, a large part of the scales derived from literature needed some adjustments to suit the research context. Since scales were extracted from different researching disciplines, with different research settings, goals and methods, no validated scales were available for some constructs. When this was the case, items were formulated based on participant statements from study A. Per construct a well-balanced decision was made to use the general term 'green products', and also to add items with specific examples of green products. All constructs, except for actual green purchase behaviour, were measured using statements on which respondents could indicate on a 5-point Likert scale to what extent they agreed with the statement (1 = strongly disagree, 3 = neither agree nor disagree, 5 = strongly agree).

Dependent factors

The **behavioural intention** towards purchasing green products was measured using the scale developed by Kolkailah et al. (2012). Participants rate their intention towards purchasing green products. An example of an statement is: 'The next time I do my shopping, I will pay attention to green products'. The scale consisted out of five items and reached high scale reliability with an Cronbach's alpha of $\alpha = .87$.

The **actual green consumption** was measured using two scales. The first measurement scale is developed by Darnall et al. (2010) and measures the extent of consumers' overall green consumption, related to food and household products. Respondents report on 8 consumer purchasing behaviours to what extent they purchase the specific product type. The construct is measured on a 5-point Likert scale (1=never, 5=always). The product categories of personal green products and local community shopping are added by the researcher self and are based on the definition and purchasing behaviours in the Ethical Consumerism Report (2010). The scale consisted out of thirteen items and reached high scale reliability with an Cronbach's alpha of $\alpha = .90$.

The second measurement scale of actual consumer behaviour was designed by Dawkins and Worcester (2005). This scale distinguishes groups of green consumers, ranging from light to heavy. With a single item respondents were asked to specify what percentage of their total amount of money spend on products during the past month, they invested in green products. This was an open question.

Independent factors

Following Dodge (2003) attitudes are considered independent factors in the present research. The factor green attitudes consists out of three types of attitudes. The attitude towards **sustainability in general** was measured using the scale of Weigel and Weigel (1978) on environmental concern. The scale consisted out of five items and reached high scale reliability with an Cronbach's alpha of $\alpha = .86$.

The two constructs of **attitudes towards green products** and **attitudes towards purchasing green products** were measured using Mostafa's (2007) scale. Some adjustments were made to make sure that topics which were addressed,

were determining for green purchasing behaviour. The scales respectively contained four and three items and reached high scale reliability with Cronbach's alphas of respectively $\alpha=.86$ and $\alpha=.81$.

Influencing factors

The **availability of money** was measured using the scale developed by Dahlstrand and Biel (1997). The scale was slightly adjusted to contain the same terms as mentioned in the other statements. Respondents indicated into what extent they have the money available to purchase green products. The scale consisted out of two items and reached high scale reliability with a Cronbach's alpha of $\alpha=.82$.

The scale developed by Dahlstrand and Biel (1997) was also used in combination with the scale of Thøgersen and Ölande (2006) to measure the **perceived price of green products**. From both scales a few items were selected, which best suited the present research context. The items were slightly adjusted, in order to use the same writing style as the other statements. The scale consisted out of three items and reached high scale reliability with an Cronbach's alpha of $\alpha=.88$.

The **willingness to pay price premium** was measured using statements from the scale developed by Laroche et al. (2001). The scale consisted out of three items and reached reliability of an Cronbach's alpha of $\alpha=.67$. After deleting the second item, the scale reliability increased to a Cronbach's alpha from .73.

For three constructs in the category of personal benefits, no existing scales were available. Therefore, the researcher chose statements based on study A. Firstly, this accounted for the construct of the purchaser **saving money** by using/purchasing a green product. The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.73$. Secondly, for the construct **health benefits** no scales were available. The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.72$. Lastly, for the construct of receiving a **positive self-image** of purchasing green products no existing scales suited the construct. The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.91$.

Vermeir and Verbeke (2006) developed a scale for measuring the importance of **receiving local community benefits** from purchasing green products. The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.71$.

The construct **receiving higher quality** was measured using the scale from Rao and Monroe (1989), which is about the perceived quality of products in general and not about green products specifically. Therefore, adjustments in the statements were made. The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.82$.

To measure the construct **perceived personal importance**, the scale from Ölande and Thøgersen (2002) was used. The scale needed some minor adjustments in order to address the same sustainability topics which were mentioned in other statements in the questionnaire. The scale consisted out of four items and reached high scale reliability with a Cronbach's alpha of $\alpha=.70$.

The construct of **consumer awareness** was measured using a combination of the scales from Chiou (1998) and Darnall, Pointing and Vazquez-Brust (2012). The amount of time that has been spent processing information about green products is measured using four items, which together reached high scale reliability with a Cronbach's alpha of $\alpha=.74$.

The **perceived consumer effectiveness** was measured, by combining items from two scales which have been developed and tested by Vermeir and Verbeke (2006) and Darnall et al. (2012). The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.74$.

To find out to which degree a consumer is sceptic in the **perceived motivation of the organization** to produce green products, the scale from Vlachos, Tsamakos, Vrechopoulos and Avramidis (2009) was used. This scale includes statements on the strategic motivation of an organization to produce green. The scale consisted out of four items and

reached high scale reliability with a Cronbach's alpha of $\alpha=.72$.

The construct **habit** is assessed using the scales from Bamberg (2002) and Verplanken and Wood (2006). The scales were combined since both of the scales didn't provide enough items for the present study. The scale consisted out of two items and reached high scale reliability with a Cronbach's alpha of $\alpha=.87$.

In the category physical availability of green products three constructs were measured. The first one was the **(perceived) availability of products**. This construct was measured by the scale from Vermeir and Verbeke (2006), which consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.80$.

For the construct **availability of shopping time**, no suitable existing scale was found. However the design of the scale on economic availability from Dahlstrand and Biel (1997) does match the construct of availability of time and was therefore used as the base for formulating statements on the availability of shopping time. Content for the statements was derived from the qualitative preliminary study. The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.77$.

Finally in the category physical availability the construct **willingness to spend the available time on shopping for green products** was measured using Sanderson's (1976) scale. The scale consisted out of three items and reached high scale reliability with a Cronbach's alpha of $\alpha=.83$.

Finally, the **subjective norm** was measured using the scales developed by Ölander & Thøgersen (2002) and Chiou (1998). Both of the scales are about green products, but had to be rewritten to make the writing style match the other statements in the questionnaire. The scale consisted out of four items and reached high scale reliability with a Cronbach's alpha of $\alpha=.72$.

Construction of the questionnaire

The questionnaire contained eight parts. The first part was about the respondents' age. In the second part of the questionnaire the three levels of green attitudes were measured. And since the experience tells that a lot of respondents do not read the introduction text properly, a definition and a few examples of green products were again presented. In the following four parts respondents gave their opinion on the influencing factors. To decrease the possibility of the halo-effect, first it was chosen not to present the items nested per construct, but in random order. However, nested questions were finally applied, since it appeared from the pre-test that this would stimulate the ease of use. In the seventh part the respondent answered questions on the intention to behave and the actual behaviour. In the final part respondents' demographics were requested.

4.2.5 Pre-test

The penultimate version of the online questionnaire was pretested, in order to filter out possible obscurities or imperfections and to enlarge the usability of the questionnaire. Five respondents completed the questionnaire in the presence of the researcher while thinking out loud. This method is suitable to test the concept version of a questionnaire on possible errors and improvements. Based on these sessions the questionnaire was optimized. Appendix B2 offers an oversight of the problems and adjustments in the questionnaire. Since some major adjustments were made, the questionnaire was again pretested by three respondents. This resulted in a few minor adjustments.

Table 4.3: Example statements per influencing factor

Construct	Source	Example statement
Attitude sustainability	Weigel and Weigel (1978)	I think it is important to protect the earth for the next generation
Attitude green products	Mostafa (2007)	A product should be produced without harming the earth
Attitude purchasing green products	Mostafa (2007)	I feel positive about purchasing green products
Availability of money	Dahlstrand and Biel (1997)	I have enough money to buy the products that I want to buy
Perceived price of green products	Dahlstrand and Biel (1997), Thøgersen and Olande (2006)	When I want all my products to be green, my monthly costs will rise enormous
Willingness to pay price premium	Laroche et al. (2001)	I would accept paying 10 percent more taxes to pay for an environmental cleaning product
Saving money	Developed by the researcher	For me is it a great advantage if a washing machine saves me money on my energy bill at the end of the month
Health benefits	Developed by the researcher	Green products are produced with purer ingredients/materials and are therefore better for my body
Positive self-image	Developed by the researcher	When I buy a green product I feel good about myself
Local community benefits	Vermeir and Verbeke (2006)	I do not care whether the profit of a product goes to my local community or not
Higher product quality	Rao and Monroe (1989)	Regular products are of higher excellence than green products are
Perceived personal importance	Thøgersen and Olande (2006)	The rising sea level is not personally affecting me
Consumer awareness	Chiou (1998), Darnall et al. (2012)	I am completely unfamiliar with green products
Perceived consumer effectiveness	Vermeir and Verbeke (2006), Darnall et al. (2012)	There is no point in trying to reduce immersions at individual level
Perceived motivation of the organization	Vlachos et al. (2009)	Organizations who produce green do this because they hope to increase profits by offering a green product
Habit	Bamberg (2002), Verplanken and Wood (2006)	I automatically buy the same products
Availability of green products	Vermeir and Verbeke (2006)	Green products are easy to find in my neighbourhood
Availability of shopping time	Dahlstrand and Biel (1997)	I don't have time to visit multiple stores to do my shopping
Willingness to spend shopping time on purchasing green products	Sanderson (1976)	I consider it acceptable to spend more time doing my shopping in order to purchase green products
Subjective norm	Ölander & Thøgersen (2002), Chiou (1998)	Most people who are important to me would consider purchasing green products as very foolish

4.2.6 Analyses

After removing outliers and recoding scales, Pearson correlation was applied to measure the relation between all independent, influencing and dependent factors. Multiple linear regression (MLR) analysis was used to draw a linear relationship between the attitudes, the intention to behave and the actual green purchasing behaviour. One-way ANCOVA tests were used to measure the moderating impact of the influencing factors on the attitude-intention and attitude-behaviour relationship.

4.3 Results

In the subsequent paragraph the results of study B are presented. In paragraph 4.3.1 the descriptive results will be presented. In paragraph 4.3.2 a correlation table with all independent, influencing and dependent factors will be presented and discussed. And finally in paragraph 4.3.3 the outcomes of the tested research model will be presented.

4.3.1 Descriptive results

All factors were measured on a 5-point Likert scale (1=totally disagree, 5=totally agree). The scales were recoded and tested for significant difference from neutral (3) by means of an one-sided T-test. The descriptive results can be found in tables 4.4, 4.5 and 4.6.

Independent factors

The attitudes towards sustainability in general (M = 3.83, SD = .84) and green products in general (M = 3.83, SD = .86) are positive. However, the attitude towards purchasing green products is neutral (M = 2.93, SD = .68). Respondents apparently hold positive feelings towards sustainability in general and green products, but feel neutral about themselves purchasing green products.

Table 4.4: Psychometric properties of the independent factors

Construct	N (respondents)	M	SD
Attitude sustainability	267	3.83***	.84
Attitude green products	267	3.83***	.86
Attitude purchasing green products	267	2.93	.68

Note. T-test: *p<0.05, **p<0.01, ***p<0.001

Influencing factors

Respondents feel that they don't have enough money available to purchase green products (M = 2.55, SD = 1.05), perceive the prices of green products as very high (M = 4.19, SD = .81) and are not willing to pay the price premium for green products (M=2.76, SD = 1.01).

All factors of personal or community benefits are perceived as advantages of purchasing green products. Saving money turns out to be the greatest advantage of purchasing a green product (M = 3.96, SD = .80), shortly followed by receiving health benefits (M = 3.87, SD = .88). Also receiving a positive self-image (M = 3.31, SD = 1.04), higher product quality (M = 3.27, SD = .86) and local community benefits (M = 3.28, SD = .83) are advantages of purchasing green products.

Respondents feel neutral about the perceived personal importance (M = 3.02, SD = .78). This means that the emotional state elicited from a particular sustainability issue is not positive, nor negative. Also, the effects of sustainability issues are not directly tangible, nor intangible for a consumer.

The consumer awareness is positive (M = 3.29, SD = .68). Meaning that respondents report to spent time processing information about green products.

In the category trust, the factor perceived consumer effectiveness is negative (M = 2.89, SD = .84). This means that a consumer is not very confident that his/her personal purchasing decisions have bearing on a critical sustainability issue. The perceived motivation of the organization is neutral (M = 2.96, SD = .83). So a consumer does not perceive the motivation to produce/sell green products as completely strategic driven nor as completely morally driven.

Respondents report a high degree of habit in their purchasing decisions ($M = 3.57$, $SD = 1.14$). This means that many of the purchasing decisions young consumers make are behavioural routines which are repeated on a regular basis and tend to happen subconsciously.

In the category physical availability, the availability of products is neutral ($M = 3.04$, $SD = .97$), just like the availability of shopping time ($M = 2.97$, $SD = 1.01$). While the willingness to spend the available shopping time on purchasing green products is negative ($M = 2.49$, $SD = .96$).

Last the subjective norm is negative ($M = 2.26$, $SD = .97$). This means that the people important to the respondent don't mention or purchase green products often.

Table 4.5: Psychometric properties of the influencing factors

Construct	N (respondents)	M	SD
Availability of money	267	2.55***	1.05
Perceived price of green products	267	4.19***	.81
Willingness to pay price premium	267	2.76***	1.01
Saving money	267	3.96***	.80
Local community benefits	267	3.28***	.83
Positive self-image	267	3.31***	1.04
Higher product quality	267	3.27***	.86
Health benefits	267	3.87***	.88
Perceived personal importance	267	3.02	.78
Consumer awareness	267	3.29***	.86
Perceived consumer effectiveness	267	2.89*	.84
Perceived motivation	267	2.96	.83
Habit	267	3.57***	1.14
Availability of green products	267	3.04	.97
Availability of shopping time	267	2.97	1.01
Willingness to spend shopping time	267	2.49***	.96
Subjective norm	267	2.26***	.79

Note. T-test: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Dependent factors

The intention to purchase green products is negative ($M = 2.51$, $SD = 1.02$). The actual past consumption is also negative ($M = 2.48$, $SD = .93$). Respondents spend on average 11,18 percent ($SD = 14.79$) of their money on green products. The difference between the two results on actual green purchases could be explained by the questioning. In the construct where respondents rated how often they purchased certain products, the given examples of products are the better known and more regular types of green products.

All purchasing categories score negative, though green home products ($M = 2.70$, $SD = 1.10$) are the most often purchased products, followed by green food ($M = 2.57$, $SD = 1.05$) and local community shopping ($M = 2.57$, $SD = 1.25$). Green personal products ($M = 2.20$, $SD = 1.08$) are purchased least often.

Furthermore, gender does not significantly affect the actual green purchasing behaviour, $t(143) = -1.52$, $p > .05$. However a significant effect for gender on the intention to purchase was found, $t(156) = -2.00$, $p < .05$, with women having a more positive intention to purchase green products.

Table 4.6: Psychometric properties of the dependent factors

Construct	N (respondents)	M	SD
Purchase intention	267	2.51***	1.02
Actual consumption: all categories	267	2.53***	.93
Actual consumption: green food	267	2.57***	1.05
Actual consumption: green home	267	2.70***	1.10
Actual consumption: green personal products	267	2.20***	1.08
Actual consumption: local community shopping	267	2.57***	1.25
Percentage of money spend on green products	267	11.18	14.79

Note. T-test: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

4.3.2 Relation between all factors

To explore the relationship among all dependent, independent and influencing factors and to find out whether factors strengthen or weaken each other, a Pearson product-moment correlation coefficient was calculated. Preliminary analyses were performed to ensure the assumptions of normality, linearity and homoscedasticity.

Table 4.7 shows the result of the correlation analysis. All the significant correlations are marked bold. When the correlation (r) is between .10 and .30, the strength of the correlation is small. A correlation between .30 and .50 represents a relationship of medium and when the correlation is between .50 and 1, there is a large correlation.

There appeared to be several relationships of which the strength of the correlation is very strong. First, the three levels of attitude correlate highly and significant with each other. Especially, the relationship between the attitude towards sustainability and attitude towards green products is very strong, $r(267) = .81$, $p < .01$. Also the intention to purchase green products correlates strongly with the actual purchase behaviour, $r(267) = .54$, $p < .01$. Other factors which correlate strong and positive with each other are: the attitude towards purchasing green products and receiving a positive self-image, $r(267) = .50$, $p < .01$, the willingness to pay price premium and the intention to purchase green products, $r(267) = .52$, $p < .01$, receiving higher product quality and receiving a positive self-image, $r(267) = .51$, $p < .01$, the willingness to spend the available shopping time on purchasing green products and the subjective norm, $r(267) = .53$, $p < .01$, the willingness to spend the available shopping time on purchasing green products and the intention to purchase green products, $r(267) = .58$, $p < .01$ and the subjective norm and the intention to purchase green products, $r(267) = .56$, $p < .01$.

Another set of correlations are of medium strength, but tend towards large strength and therefore are interesting to mention. First the attitude towards purchasing green products correlates fairly strong with receiving community benefits, $r(267) = .48$, $p < .01$. A fairly strong relation also accounts for the willingness to pay price premium and receiving a positive self-image, $r(267) = .49$, $p < .01$. The perceived consumer effectiveness correlates reasonable high with the willingness to spend the available shopping time on purchasing green products, $r(267) = .46$, $p < .01$. The perceived consumer effectiveness even correlates a little bit higher with the intention to purchase green products, $r(267) = .47$, $p < .01$.

Furthermore, all identified influencing factors correlate significant with the intention to purchase green products and the actual green purchasing behaviour. The only factors not correlating significant with both the intention to purchase

and the actual purchase behaviour are: the perceived price of green products, the perceived personal importance and habit. The availability of money correlates significantly with the intention to purchase green products, but not with the actual purchasing behaviour.

Another remarkable result is the direction of the relationship being positive for all significant correlations. Meaning that a high value for one factor results in an increased value for the other factor. There are a few significant relationships which are negative. The first small negative relation is the one between the attitude towards green products and the availability of money, $r(267) = -.12$, $p < .05$. This means that the a more positive attitude towards green products means a lesser amount of money available or the other way around. The second negative relationship is of medium strength and is the one between the availability of money and the perceived price of green products, $r(267) = -.30$, $p < .01$. So the more money a person has available, the lower the price of green products is perceived. The last negative relationship accounts for the factors perceived price of green products and the subjective norm, $r(267) = -.13$, $p < .01$, and is of small strength. The more positive people important to the purchaser are about purchasing green products, the lower the perceived price of green products. Or the other way around: the higher the perceived price of green products, the more negative the people important to the purchaser are about purchasing green products.

Not shown in table 4.7, but nonetheless a remarkable result: income level, education level and age did not show any significant correlations with the intention to purchase green, the actual green purchasing behaviour and the percentage of money spend on green products.

Table 4.7: Pearson product-moment correlations between all factors

Construct	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.
1. Attitude sustainability	-																					
2. Attitude green products	.809**	-																				
3. Attitude purchasing green	.505**	.583**	-																			
4. Availability of money	-.062	-.120*	-.062	-																		
5. Perceived price	.271**	.254**	.283**	-.30**	-																	
6. Willingness to pay	.369**	.390**	.418**	.140*	.039	-																
7. Saving money	.380**	.423**	.395**	-.111	.337**	.195**	-															
8. Local community benefits	.360**	.400**	.482**	-.027	.118	.418**	.322**	-														
9. Positive self-image	.273**	.379**	.504**	-.036	.095	.488**	.226**	.379**	-													
10. Higher product quality	.177**	.245**	.283**	-.052	.117	.259**	.179**	.236**	.508**	-												
11. Health benefits	.368**	.421**	.451**	-.088	.298**	.289**	.394**	.293**	.411**	.406**	-											
12. Personal importance	-.057	.032	.030	.013	.168**	-.048	.039	-.037	.023	-.020	.100	-										
13. Consumer awareness	.327**	.292**	.339**	.066	.125*	.312**	.253**	.295**	.301**	.220**	.291**	.132*	-									
14. Perceived effectiveness	.304**	.340**	.380**	.024	.060	.411**	.246**	.322**	.446**	.263**	.378**	.026	.417**	-								
15. Perceived motivation	.079	.098	.068	.083	.070	.044	.123*	.047	.077	.087	.156*	.156*	.272**	.165**	-							
16. Habit	.127*	.135*	-.031	-.082	.244**	-.068	.171**	.005	.023	.104	.153*	.121*	.066	.059	.336**	-						
17. Availability of products	.101	.101	.069	.126*	.078	.102	.084	.149*	.032	.003	.120	.011	.255**	.072	.346**	.216**	-					
18. Availability of time	.113	.153*	.117	-.023	.111	.034	.066	.105	.104	.068	.253**	.135*	.106	.100	.266*	.228**	.262**	-				
19. Willingness spend time	.177**	.236**	.292**	.110	-.098	.412**	.073	.303**	.399	.219**	.251**	.049	.347**	.462**	.185**	.036	.265**	.211**	-			
20. Subjective norm	.089	.148*	.127*	.082	-.134*	.313**	.021	.239**	.235**	.220**	.130*	-.010	.218**	.213**	.200**	.092	.259**	.235**	.530**	-		
21. Purchase intention	.281**	.299**	.367**	.156*	-.039	.523**	.164**	.414**	.422**	.237**	.299**	.038	.330**	.470**	.271**	.039	.297**	.169**	.575**	.558**	-	
22. Purchasing (examples)	.298**	.309**	.336**	.104	-0.05	.386**	.215**	.292**	.371**	.222**	.305**	.113	.412**	.350**	.140*	.112	.223**	.134*	.438**	.358**	.536**	-
23. Purchasing (percentage)	.247**	.306**	.330**	.17**	-.037	.386**	.163**	.266**	.357**	.165**	.223**	-.026	.296**	.344**	.020	-.070	.056	.109	.355**	.270**	.424**	.440**

Note. Pearson correlation: *p<0.05, **p<0.01

4.3.3 Analysing the attitude-behaviour relation

Several analyses were conducted in order to test the research model and to examine the hypothesized attitude-behaviour relation and the influence of the identified factors on the attitude-behaviour relation.

The relationship between attitudes and intention to purchase

Multiple regression was used to assess the ability of the three levels of attitudes (attitudes towards sustainability, green products and purchasing green products) to predict the intention to purchase green products. From table 4.8 it can be seen that the attitudes explain 14,8% of the variance in the intention to purchase green products, $R^2 = .148$, $F(3) = 15.224$, $p < .001$. The only type of attitude which significantly positively influences the intention to purchase green products is the attitude towards purchasing green products.

Table 4.8: The influence of attitude on intention to behave

	R^2	β	t
Attitude sustainability	.148	.083	.860
Attitude green products		.064	.625
Attitude purchasing green products		.278	4.087***

Note. Multiple regression analysis: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

The relationship between attitudes and the actual purchase behaviour

Multiple regression was used to assess the ability of the three levels of attitudes (attitudes towards sustainability, green products and purchasing green products) to predict the green purchasing behaviour. From table 4.9 it can be seen that the attitudes explain 15,9% of the variance in green purchasing behaviour (from the construct with examples of green purchasing behaviours), $R^2 = .159$, $F(3) = 16.523$, $p < .001$. It is remarkable that the attitude-intention gap is a little bigger than the attitude-behaviour gap. Besides the attitude towards purchasing green products being significant related to actual purchasing behaviour, the attitude towards green products also is.

However, these results are not in line with the second measure concerning green purchasing behaviour, which measures the percentage of money consumers spend on green. A regression analysis shows that only the attitude towards purchasing green products holds predicting value in green purchasing behaviour. From table 4.10 it can be seen that the attitude explains 12,9% of the variance in green purchasing behaviour, $R^2 = .129$, $F(3) = 12.939$, $p < .001$. The measure of percentage of money holds higher levels of abstractness than the measure with the examples of green products.

Table 4.9: The influence of attitude on actual purchase behaviour (examples of products)

	R^2	β	t
Attitude sustainability	.159	-.020	-.210
Attitude green products		.278	2.717**
Attitude purchasing green products		.184	2.639**

Note. Multiple regression analysis: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4.10: The influence of attitude on actual purchase behaviour (percentage of money)

	R ²	β	t
Attitude sustainability	.129	-.023	-.239
Attitude green products		.191	1.839
Attitude purchasing green products		.230	3.240**

Note. Multiple regression analysis: *p<0.05, **p<0.01, ***p<0.001

The relationship between intention and actual behaviour

The intention to purchase green products significantly predicts actual green purchase behaviour, see table 4.11. Intention explains 28,7% of the variance in behaviour measured by the examples of products and 18,1% of the variance in behaviour measured by the percentage of money. Attitudes only explain 13-16% of the variance in behaviour. Results from an one-way Ancova showed that the explaining value of the attitude-behaviour model when adding intention, rises to 33%. This confirms the mediating role of intention in the attitude-behaviour relation.

Table 4.11: The relationship between intention and actual behaviour

	R ²	β	T
Intention-behaviour (examples)	.287	.487	10.203***
Intention-behaviour (percentage)	.181	.425	7.593***

Note. Multiple regression analysis: *p<0.05, **p<0.01, ***p<0.001

4.3.4 Explaining the attitude-behaviour relation

A one-way ANCOVA was used to measure the moderating influence of the possible influencing factors on the three types of attitude-behaviour relationships. Preliminary checks were conducted to ensure that there was no violation of the assumptions of homogeneity of regression slopes, linearity or too high correlations among the covariates ($r=.8$ and above).

The influencing factors in the attitude-intention relationship

The attitude-intention model presented in table 4.12 consists out of all possible influencing factors, which are tested on the relationship between the independent variable of the attitude towards purchasing green products and the dependent variable of the intention to purchase green products. The model explains 61,2% of the variance in the attitude-intention relationship, $R^2 = .612$, $F(30) = 12.411$, $p<.001$. The model has a very high explanatory value.

Eight from the selected influencing factors together appear to best explain the attitude-intention relation. These moderators are: the perceived price of green products, the willingness to pay price premium, the community benefits, the perceived personal effectiveness, the perceived motivation of the organization, the availability of green products, the willingness to spend the available time on purchasing green products and the subjective norm. From table 4.12 it can be seen that all factors positively influence the intention to purchase green, except for the perceived price of green products.

There is no factor in specific which very strongly affects the attitude-intention relation, instead the sum of the explaining factors makes the model strong. Though, the strongest explaining factor is the subjective norm. This factor explains 12,6% of the attitude-intention relation, as indicated by a partial eta squared value of .126. Also the willingness to pay price premium and the perceived consumer effectiveness are two of the strongest explaining factors, with partial eta squared values of respectively .044 and .040.

The influencing factors in the attitude-behaviour relationship (measure: examples of products)

The attitude-behaviour (examples) model presented in table 4.12 consists out of all possible influencing factors, which are tested on the relationship between the independent variables of the attitude towards green products and the attitude towards purchasing green products and the dependent variable of the actual green purchasing behaviour measured by examples of green products. The model explains 56,7% of the variance in the attitude-behaviour relationship, $R^2 = .567$, $F(95) = 2.354$, $p < .001$. This model also has a very high explanatory value.

Surprisingly, the factors which explain the attitude-behaviour relationship differ from the factors explaining the attitude-intention relationship. The significant and positive explaining factors are: receiving health benefits and consumer awareness.

The influencing factors in the attitude-behaviour relationship (measure: percentage of money)

The attitude-behaviour (percentage) model presented in table 4.12 consists out of all possible influencing factors, which are tested on the relationship between the independent variable of the attitude towards purchasing green products and the dependent variable of the actual green purchasing behaviour measured by the percentage of money which is spend on green products. The model explains 35,3% of the variance in the attitude-behaviour relationship, $R^2 = .353$, $F(29) = 4.382$, $p < .001$. The explaining value of the present model is lower than the previous models. This could be due to the more abstract level of the measure used.

The factors which explain the attitude-behaviour relationship show similarities with the previous attitude-behaviour model. The significant and positive influencing factors are: the willingness to pay price premium and consumer awareness.

Table 4.12: Influencing factors in the attitude-behaviour relationship in green purchasing

Construct	Intention		Actual behaviour (examples)		Actual behaviour (percentage of money)	
	$R^2 = .612$		$R^2 = .567$		$R^2 = .353$	
	F	ηp^2	F	ηp^2	F	ηp^2
Availability of money	.803	.003	.395	.004	1.695	.007
Perceived price of green products	4.119*	-.017	1.219	.013	1.095	.005
Willingness to pay price premium	10.894**	.044	.350	.004	4.329*	.018
Saving money	.007	.000	.015	.000	.256	.001
Local community benefits	4.524*	.019	.056	.001	.003	.000
Positive self-image	.855	.004	.133	.001	3.128	.013
Higher product quality	.420	.002	.018	.000	.280	.001
Health benefits	1.225	.005	2.278*	.024	.164	.001
Perceived personal importance	1.621	.007	1.298	.014	.030	.000
Consumer awareness	1.705	.007	6.506***	.067	5.154*	.022
Perceived consumer effectiveness	9.933**	.040	.321	.004	2.135	.009
Perceived motivation	5.709*	.024	.349	.004	1.331	.006
Habit	.030	.000	1.678	.018	.101	.000
Availability of green products	4.974*	.021	.075	.001	.814	.003
Availability of shopping time	.694	.003	.667	.007	1.838	.008
Willingness to spend shopping time	4.461*	.019	.724	.008	.806	.003
Subjective norm	33.899***	.126	.221	.024	1.963	.008

Note. One-way Ancova: * $p < .05$, ** $p < .01$, *** $p < .001$

4.3 Summary and main outcomes from study B

The attitude towards sustainability in general has no significant predicting value on the intention to purchase green and the actual green purchasing behaviour. Findings show mixed results on the attitude towards green products. This attitude holds no predicting value in the intention to purchase green and the percentage of money spend on green, but surprisingly does have predicting value in the construct of actual behaviour measured with examples of products. The attitude towards purchasing green has predicting value on the intention to behave and the actual green purchasing behaviour.

Intention mediates the attitude-behaviour relationship and is a strong predictor of behaviour. The explaining value of the attitude-intention model when adding the influencing factors is 61%. Factors which significantly influence the attitude-intention relation are: the perceived price of green products, the willingness to pay price premium, the community benefits, the perceived personal effectiveness, the perceived motivation of the organization, the availability of green products, the willingness to spend the available time on purchasing green products and the subjective norm. With the last factor having the strongest influence.

The explaining value of the attitude-behaviour model when adding the influencing factors, is 57% (measured by the examples of green products) and 35,5% (measured by the percentage of green). It is remarkable that the influencing factors in the attitude-behaviour relationship are almost completely different from the variables influencing the attitude-intention relation. The three factors which significantly influence the attitude-behaviour relation are: the willingness to pay price premium, receiving health benefits and consumer awareness.

Another remarkable fact is that, all influencing factors positively moderate either the attitude-intention relation or the attitude-behaviour relation. The one exception concerns the perceived price of green products: the higher the price of green products is perceived, the more negative the purchase intention will be.

Moreover, another striking result is the fact that both income and the economic availability don't influence the attitude-behaviour relation or the attitude-intention relation. Though the perceived price of green products and the willingness to spend the available money on green do influence the attitude-intention relation.

Figure 4 shows an overview of the final attitude-behaviour relation and the influencing factors.

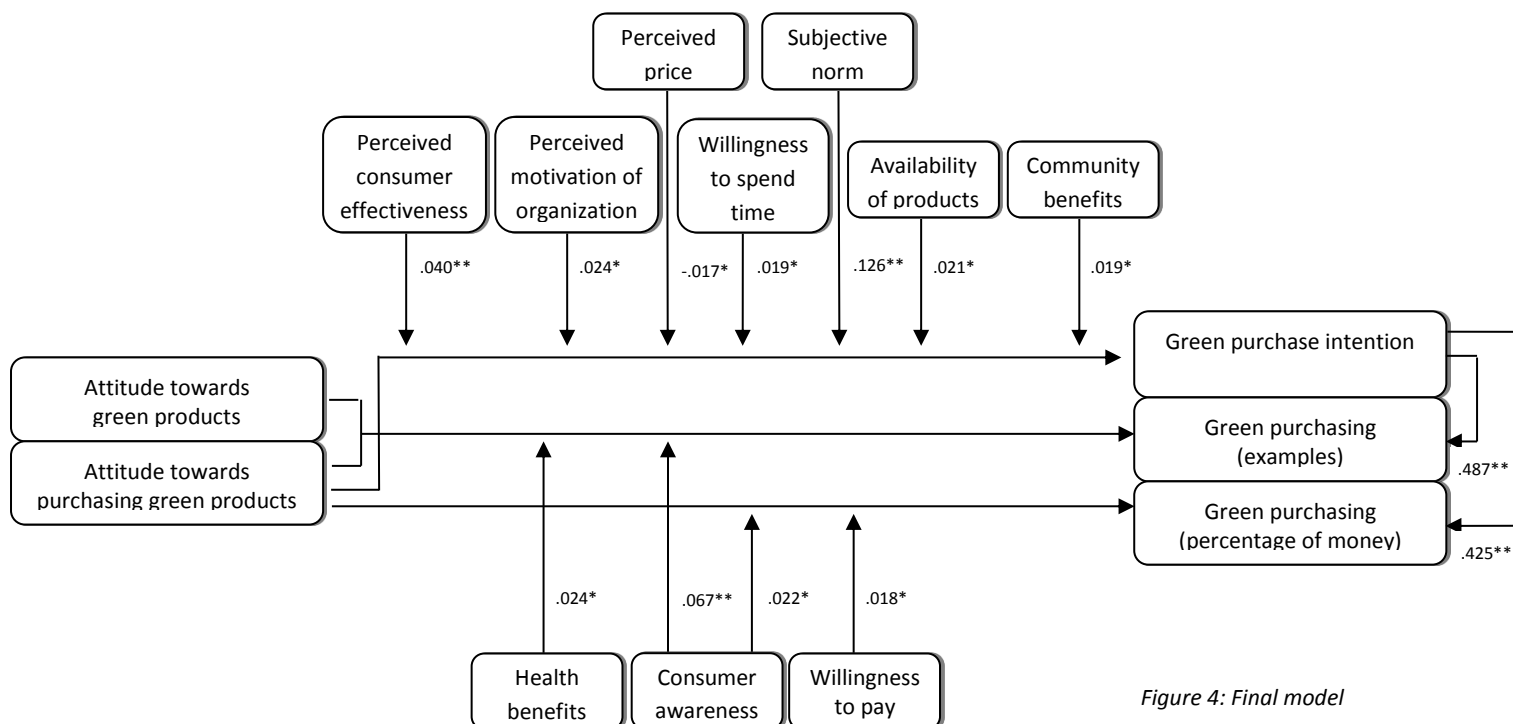


Figure 4: Final model

Note. $*p < 0.05$, $**p < 0.01$

5. DISCUSSION AND CONCLUSIONS

In the present chapter the research results will be discussed and conclusions will be made. Firstly the hypothesis and the first two research questions will be answered: Is there a gap between young consumers' attitudes and behaviour concerning green purchasing? And what are the factors influencing the young consumers' attitude-behaviour relation in green purchasing? Also, limitations of the present study will be presented and suggestions for future research will be given. In the sixth paragraph, the practical implications of the present study will be presented and final research question will be answered: how can the young consumers' attitude-behaviour gap in green purchasing be minimized? Finally, a definite conclusion will be drawn.

5.1 Answering the hypotheses

The attitude towards sustainability does not influence the green purchasing behaviour. However, the attitudes towards green products and purchasing green do. Therefore, hypothesis 1 can only partially be accepted. From all the economic factors, only the perceived price of green products negatively influences the attitude-behaviour relation. The willingness to pay price premium does also influence the attitude-behaviour relation. Unlike expected, the direction of the influence is positive. Surprisingly, the availability of money does not influence the attitude-behaviour relation. Hypothesis 2 can only partially be accepted. Also, hypothesis 3 concerning the positive influence from personal benefits can only partially be accepted, since receiving health benefits and local community benefits does influence the attitude-behaviour relation. However, saving money, receiving a positive self-image and receiving higher product quality do not influence the attitude-behaviour relation. The fourth hypothesis can be rejected; perceived personal importance does not influence the attitude-behaviour relation. The fifth hypothesis is only partially confirmed; consumer awareness does influence the attitude-behaviour relation. However, the direction of the influence is positive. Hypothesis 6 can also be only partially accepted. Also in this case it appears that the direction of the influence of the perceived consumer effectiveness and the perceived motivation of the organization on the attitude-behaviour relation is not negative, but positive. Furthermore, it was shown that hypothesis 7 can be rejected; habit does not influence the attitude-behaviour relation. The eighth hypothesis can partially be accepted. The availability of green products and the willingness to spend shopping time on purchasing green products, do influence the attitude-behaviour relation, though the direction of the influence is positive. The availability of shopping time does not influence the attitude-behaviour relation. The subjective norm does positively influence the attitude behaviour relation. Therefore, hypothesis 9 is accepted. Hypothesis 10 is also accepted: The intention to behave mediates the attitude-behaviour relation.

5.2 The attitude-behaviour gap

The present paragraph concerns the research question whether there is a gap between young consumers' attitudes and behaviour concerning green purchasing. Many researchers claim that the attitude-behaviour gap in green consumerism is clearly present (Eck, 2009; Anon, 2009; Finisterra, et al., 2009; Basu & Hicks, 2008; Darnall et al., 2010; Fergusson, 2011). However, the results from the present research contradict this statement by only partially confirming the existence of an attitude-behaviour gap in young consumers' green purchasing behaviour. An attitude-behaviour gap generally exists when attitudes hold no predicting value in behaviour (Kollmuss & Agyeman, 2002). Findings show that whether or not the attitude-behaviour gap exists, depends on the level of specificity in the measured attitude. The more the attitude type is

nuanced, the more predicting value the attitude has about the intention to behave and the actual behaviour. In the present study three types of green attitudes are measured: the attitude towards sustainability in general, the attitude towards green products in general and the attitude towards purchasing green products.

The first and most general type of attitude is the attitude towards sustainability. This is the attitude type which is studied most in previous research (Eck, 2009; Anon, 2009; Finisterra et al., 2009; Basu & Hicks, 2008; Darnall et al., 2011) and on which it is claimed that there is a gap between the values consumers hold and their green purchasing behaviour. Findings on the attitude towards sustainability in relation to green purchasing behaviour from the present study are in line with previous findings: the attitude-behaviour gap exists. Young consumers hold very positive attitudes towards sustainability and feel that they are responsible for protecting the earth, but do not interpret these values when making a purchase: the attitude towards sustainability is not a predictor of the intention to purchase green nor of the actual green purchasing behaviour.

The second type of studied attitude is the attitude towards green products in general. Previous researches show that this attitude type is positive among consumers (Chen & Chai, 2010; Paladino & Serena, 2012; Mohr et al., 2001). Consumers even demand companies to produce their products in an environmentally friendly way (Bockman et al., 2009; Kanarattavong & Ruenrom, 2009; Schmeltz, 2012). This is in agreement with the present study: young consumers hold a positive attitude towards green products. Paladino and Serena (2012) found that the attitude towards green products correlates weakly with the purchase intention. Whether this is also the case in the present study is doubtful. Findings contradict each other, since different results were found on the two measures of actual green purchasing behaviour. In the first measure respondents indicated how often they purchased different green products. The second measure was more abstract as respondents named the percentage of the money spend on green products. Towards the intention to purchase and the second measure of green purchasing behaviour, the attitude with regards to green products holds no predicting value: an attitude-behaviour gap exists. However, attitude towards green products does have predicting value in the actual green purchasing behaviour measured by the examples of green products. There is, however, a methodological issue involved which might explain this contrary finding. When respondents answered the items on their attitude towards green products, they had just been primed with examples of green products, which are partially the same products used to measure the actual purchasing behaviour. So, this could explain why no attitude-behaviour gap exists when using these measures.

The present research goes one step further, by measuring a third type of attitude: the attitude towards purchasing green products. This concrete and specific type of attitude is not measured in previous studies on the attitude-behaviour gap, though Mostafa (2007) expects this type of attitude to generate more conclusive results with regard to green purchasing behaviour. His expectation came true: the attitude towards purchasing green products amongst young consumers is neutral and is a clear predictor of the intention to purchase green as well as the two measures of actual green purchasing behaviour. For the attitude towards purchasing green products the attitude-behaviour gap in green purchasing for young consumers does not exist.

In literature a rather negative image is drawn of consumers' green purchasing behaviour. Bray et al. (2011) for example conclude that in the UK the green market only represents three percent of the market share. This is not in accordance with findings from the present study, where respondents report to spend on average 11% of the total amount of money spend in a month, on green products. On green purchasing behaviours ranging from always to never, respondents almost indicate neutral, though the examples of products were better-known and more popular types of green products. Furthermore, self-reported behaviour might suffer from the social desirability bias (Davis, 2012).

Concluding, the present research contributes to existent literature by showing that the extent to which the attitude-behaviour relation is nuanced determines whether the attitude-behaviour gap exists.

5.3 Influencing factors

The present paragraph addresses the second research question: what are the factors influencing the young consumers' attitude-behaviour relation in green purchasing? Even though there is a relation between green purchasing behaviour and green attitudes towards green products and green purchasing, attitudes only explain 16% of the variance in behaviour. It is interesting to know which factors have the possibility to either positively or negatively influence the attitude-behaviour relation.

Many possible influencing factors on the attitude-behaviour relation were tested on their significance. Three analyses were conducted: one based on the purchase intention and two on the two measures of actual purchasing behaviour. Purchase intention showed in the present study to be a legitimate measure to determine actual behaviour.

Factors which influence the attitude-behaviour (examples of products) relation are: consumer awareness and receiving health benefits. Factors which influence the attitude-behaviour (percentage of products) relation are: consumer awareness and the willingness to pay price premium. The strongest influencing factor was consumer awareness: the more time a consumer has spent on processing information on green consumption, the stronger the attitude-behaviour relation will be. Also, the more a consumer experiences health benefits of consuming a green product and is willing to pay price premium for a green product, the stronger the attitude behaviour relation will be.

Factors which influence the attitude-intention relation, ranged in strength, are: subjective norm, willingness to pay price premium, perceived consumer effectiveness, perceived motivation of the organization, availability of products, willingness to spend the shopping time and local community benefits. The subjective norm is by far the strongest influencing factor: when significant others feel, talk and act positive on green consumption, this will greatly influence the attitude-behaviour relation. The attitude-behaviour relation will also strengthen under the following conditions: the more willing a consumer is to pay price premium, the more a consumer is confident that his/her personal purchasing decisions influences a critical sustainability issue, the more the motivation of the organization to produce/sell green is perceived as morally driven, the higher the availability of green products is perceived, the more willing a consumer is to spend the available shopping time on purchasing green products and, finally, the more consumers will experience benefits for their local community.

It is very remarkable that except for the willingness to pay price premium, completely different factors influence the attitude-intention and the attitude-actual behaviour relation. Especially since the two quite different measures of actual green purchasing behaviour show very high similarities in their results on influencing factors. So it seems, the difference in influencing factors is not caused by a methodology issue. Davis (2012) provides a possible explanation for the difference in influencing factors. He states that the results of a study which focuses on purchasing intention will very likely be distorted, since in the context of green consumption there is a big difference between intention and actual behaviour. In order words, even though in the present study intention does have great predicting value in the actual green purchasing behaviour, it is possible that the factors influencing the attitude-intention relationship are not necessarily as relevant as the factors influencing the attitude-behaviour relationship. However, further research is needed into this complex relation.

What is clear is that awareness holds a key role in the attitude-behaviour relationship, since both types of behaviour measures single out awareness as having a great share influencing the attitude behaviour relation. Several studies agree on the importance of consumer awareness and even view awareness as an important pre-condition in forming a positive green attitude (Bray et al., 2010; Laivate, 2011; Rahim et al., 2011; Kolkailah et al., 2012; Paladino et al., 2012; Schmeltz, 2012; Bhattacharya & Sen, 2004; Öberseder et al., 2011). Since in the present study green attitudes already have shown to be positive, it was tested whether awareness also influences the attitude-behaviour relation. The present research shows that awareness might not only be a prerequisite in forming a green attitude, but also is of strong

influence in translating positive green attitudes into green purchasing behaviour. Research from Schmeltz (2012) shows that young consumers hold low levels of awareness on green products. The present study shows that measuring consumer awareness is complicated. In study B consumers self-reported to have reasonable high levels of awareness. This was initially also the case in study A, but on second hand it turned out that participants overestimated their amount of knowledge on green products and a lot of the information that was given was new to the participants. However, the potential of a high consumer awareness is made very clear in the present study.

Surprisingly, nor the availability of money or the income level did influence the attitude-behaviour relation and did not even relate to the purchase intention and the green purchasing behaviour. Also, receiving economic personal benefits did not take part in the attitude-behaviour relation. However, the willingness to spend the available money on green products did influence the attitude-behaviour relation. Many researchers claim that the amount of money spendable, determines the degree in which a consumer purchases green (Csutora, 2012; Kollmuss & Agyeman, 2006; Hainmuller & Hiscox, 2012). The present study contradicts this. The absence of an effect from income as an influencing factor is especially remarkable since the amount of money spendable is relatively low for Generation Y. Bhattacharya and Sen (2004) already expected the willingness to outweigh the availability of money and Rahim et al. (2011) also showed that income does not account for differences in green purchasing behaviour. However, the fact that income does not take part in green purchasing behaviour for Generation Y is a new and valuable finding. It is not a matter of (not) having enough money to purchase green, but being willing to pay price premium. According to the present study young consumers' are not willing to spend money on green. This is in accordance with results from previous studies (Mainieri et al., 2012; Kim et al., 2011). However, (Mainieri et al., 1997) challenge the validity of consumers' willingness to spend extra money on a currently socially desirable concept like environmentalism. So, consumers' might even be less willing to pay price premium than they self-reported in the present study. The willingness to pay price premium is a very important influencing factor in the attitude-behaviour relation in green purchasing.

The present study claims that the subjective norm does influence the attitude-behaviour relation. This is in coherence with literature (Vermeir & Verbeke, 2006; Ellen et al., 1991; Laroche et al., 2001). The present study shows that subjective norm is not only of direct influence on green purchasing behaviour (like claimed in literature and in the Theory of Planned Behaviour, Ajzen, 1991), but also influences the relation between attitudes and behaviour. Therefore, the subjective norm is an important influencing factor in green purchasing behaviour.

A surprising finding is the absence of an effect of perceived personal importance (PPI). The PPI does not influence the attitude-behaviour relation in green purchasing, but also does not even correlate to green attitudes or green purchasing behaviours. Therefore, the present study contradicts Vermeir and Verbeke (2006). They found that by emphasizing importance of green products, the attitude towards green and therefore also the green purchasing behaviour increased. However, Vermeir and Verbeke studied only one specific type of green product. The present research shows that their finding cannot be generalized to the broader picture of green purchasing behaviour. So, the emotional state elicited from a particular sustainability issue does not influence the attitude behaviour relation. However, feeling that, by purchasing a green product, an individual consumer can contribute to protecting the environment does, which is in line with the results from Vermeir and Verbeke (2006).

5.4 Limitations

Few limitations of the present research are notable and should be taken into account in future research. Firstly, the absence, the incompleteness or the adjustments of several measures is a limitation of the present study. Even though study B appeared as an excellent source of consumer statements on several constructs and all scales reached high

Cronbach's alphas, several measures were previously never validated in research.

Secondly, there are some limitations concerning the respondent sample in study B. For instance, the education level was relatively high among respondents. This could bias the results, since some researchers believe that education level influences green purchasing behaviour (Davis, 2012). In the present study however, no significant effects of education level were found.

Furthermore, respondents in study B were told that if they participated, they could possibly win a package filled with green products. This might result in not-motivated participants, who would not fill in the questionnaire seriously. However, all participants who did not fill in the questionnaire completely were not included in further analyses.

Some remarks could also be made concerning the sample selection of study A. Three out of four focus groups consisted out of participants from the first degree network from the researcher. This is not the most optimal method of sample selection, but in this way a proper variance in demographics could be assured. Another flaw in study A, the second and probably more reliable Cohen's Kappa was not measured. However, after discussing the first Cohen's Kappa, the researchers agreed on the changed version of the coding book.

Lastly, there is one more potential bias, since a part of the young consumers may not buy home- or food products for themselves, or may not regard themselves as to being able to actually purchase these kinds of products and only perceive sustainability issues as very abstract. This bias was limited by focussing on the intention to behave and presenting concrete examples of green products.

5.5 Suggestions for future research

The focus of the present research was mainly on the attitude-behaviour link in green consumerism. It must however be acknowledged that in real life purchasing situations, a lot of different factors could influence the decision making process. The presented conceptual framework needs further research in order to expand the external validity of the model. Also, additional individual characteristics, situational constraints and product-related factors can be identified.

Another finding which needs further investigation, is the intention-behaviour relation in green purchasing. The present study shows that intention does predict behaviour, but why is it that the factors influencing the intention and behaviour differ? Is it due to the role of consumer awareness, which is very determining in actual green purchasing behaviour, but takes no part in the intention to behave? Davis (2012) notes an intention-behaviour gap. This gap needs further investigation, in order to draw conclusions on factors influencing actual green purchasing behaviour.

A remarkable finding of the present study is that the availability of money takes no part in the attitude-behaviour relation in green purchasing. It would be interesting to further investigate in the relation between the availability of money and green purchasing behaviour.

Green purchasing behaviour has shown to be very complex, since per measure of green purchasing behaviour, different factors influence the attitude-behaviour relation. The present research demonstrates that the degree in which behaviour is specified, determines which factors influence the behaviour. Further research is needed to show why different measures generate different results on influencing factors and how these measures relate to each other.

Finally it would also be a suggestion for future research to perform longitudinal research into the effects of several interventions to increase consumer awareness about green products on the actual green purchasing behaviour. Is awareness really such an important concept in green consumerism as the present study suggests?

5.6 Practical implications

The results of the present research yield public policy and communication recommendations for stimulating the consumption of green products among young consumers. The young consumers can be assumed to constitute the main market of green consumption in the future. This research offers a first glance into the complex decision-making process in green purchasing behaviour by investigating influencing factors on the attitude-behaviour relation.

The attitude-behaviour gap in green purchasing can be minimized by raising awareness, the willingness to pay price premium, the willingness to spend the available shopping time on purchasing green products, the perceived consumer effectiveness, the perceived motivation of the organization, the subjective norm and the personal benefits of an improved health and social community benefits. The high perceived price of green products explains why consumers are not willing to spend the available money on green products, even though the attitudes might be positive.

The greatest result can be achieved by focussing on the factors that have the potential to influence the attitude-behaviour relation positively, but which now are evaluated negatively or neutrally by consumers. These factors are: willingness to pay price premium, perceived consumer effectiveness, perceived motivation of the organization, willingness to spend the available shopping time on purchasing green and the subjective norm. Only when these factors are evaluated positively by consumers, they will have a positive effect on the attitude-behaviour relation. The reversed type of relation accounts for the negative influencing factor the perceived price of green products, which is now evaluated as very high. Once the price of purchasing green is not perceived as high as it is now, the negative influence of perceived price will not affect the attitude-behaviour relation any more.

Most importantly, the present research shows that some of the greatest influencing factors in the attitude-behaviour relation can successfully be influenced by communication efforts. For example the consumers' awareness is a matter of the time a consumer processes information on green products, which can be enlarged by increasing media-attention, attractive and notable product-packaging and using eco-labels. Also, by providing information and using communication strategies the perceived price of green products, the perceived consumer effectiveness, the perceived motivation of the organization and the extent to which personal benefits are experienced, can be influenced. In this way the gap between attitudes and green purchasing behaviour can be minimized.

5.7 In sum

In sum, the present research contributes to the understanding of the attitude-behaviour relation in young consumers' green purchasing behaviour and highlights the factors which influence the attitude-behaviour relation. This study shows that the attitude-behaviour gap existence depends on the specificity of measures. There is a gap between the attitude towards sustainability and green purchasing behaviour and partially between the attitude towards green products and green purchasing behaviour. The attitude towards purchasing green products was found to predict both the intention to behave as actual green purchasing behaviour and thus: no attitude-behaviour gap exists. Furthermore, the present research is innovatory in investigating a broad set of factors and their influence on the attitude-behaviour relation. The present research shows that the attitude-behaviour relation can be strengthened by raising awareness, the willingness to pay price premium, personal health benefits, the subjective norm, community benefits, perceived consumer effectiveness, perceived motivation of the organization, availability of products and the willingness to spend shopping time on purchasing green products. Moreover, the attitude-behaviour relation can be influenced by communication efforts.

ACKNOWLEDGEMENTS

Writing this master thesis would not have been possible without the guidance, support and help of several individuals. First of all, I would like to thank my supervisors from the University of Twente, MSc Jeroen Timmer, dr. Svetlana Bialkova and dr. Joris van Hoof, for their constructive criticism, valuable suggestions and help regarding my master thesis.

Also, I would like to thank my family and friends for their support and patience during this research project. A special thanks to Lisa, of whom I received a lot of feedback on my English writing. Last, but definitely not least, many thanks to Roel for his encouragements and unfailing support.

REFERENCES

- Aarts, H., Verplanken, B., & Knippenberg, A. (1998). Predicting behavior from actions in the past: Repeated decision making or a matter of habit? *Journal of Applied Social Psychology*, 28(15), 1355-1374.
- Ajzen I. (1991). The theory of planned behavior. *Organizational Behavior and Planned Decision Processes*, 50, 179–211.
- Ajzen, I., Czasch, C., & Flood, M. G. (2009). From Intentions to Behavior: Implementation Intention, Commitment, and Conscientiousness. *Journal of Applied Social Psychology*, 39(6), 1356-1372.
- Anon, B. (2009). Consumers doubt green efforts. *Marketing Management* 18, 5-20.
- Auger, P., Devinney, T. M., Eckhardt, G., & Birtchnell, T. (2006). The other CSR: Consumer social responsibility. *Stanford Social Innovation Review, Fall 2006*. Available at SSRN: <http://ssrn.com/abstract=901863>.
- Baker, W., Hutchinson, J. W., Moore, D., & Nedungadi, P. (1986). Brand familiarity and advertising: Effects on the evoked set and brand preference. *Advances in Consumer Research*, 13(1), 637-642.
- Bamberg, S. (2002). Implementation intention versus monetary incentive comparing the effects of interventions to promote the purchase of organically produced food. *Journal of Economic Psychology*, 23, 573-587.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359-373.
- Basu, A., & Hicks, R. (2008). Label performance and the willingness to pay for Fair Trade coffee: Across-national perspective. *International Journal of Consumer Studies* 32, 470–8.
- Bhattacharya, C. B., & Sen, S. (2004). Doing better at doing good: When, why, and how consumers respond to corporate social initiatives. *California Management Review*, 47(1), 9–24.
- Bockman, S., Razzouk, Y., & Sirotnik, B. (2009). Going green – from left to center stage: An empirical perspective. *Journal of the American Academy of Business* 14(2), 8–17.
- Boeije, H. (2005). *Analyseren in kwalitatief onderzoek: Denken en doen* (1e druk). Amsterdam: Boom onderwijs.
- Bray, J., Johns, N., & Kilburn, D. (2011). An exploratory study into the factors impeding ethical consumption. *Journal of Business Ethics*, 98(4), 597–608.
- Chen, T., & Chai, L.T. (2010). Attitude towards the environment and green products: Consumer's perspective. *Management Science and Engineering*, 4(2), 27-39.
- Chiou, Y. (1998). The effects of attitude, subjective norm and perceived behavioral control on consumers' purchase intention: The moderating effects of product knowledge and attention to social comparison information. *Proc. Natl. Sci. Counc*, 9(2), 298-308.
- Conner, M., & Armitage, C. J. (1998). Extending the theory of planned behavior: A review and avenues for further research. *Journal of applied social psychology*, 28(15), 1429-1464.
- Consumer Research Association (ECRA). (2010). *Ethical consumerism report*. Manchester
- Cowe, R., & Williams, S. (2000). Who are the ethical consumers. *Co-operative Bank, Manchester*.
- Csutora, M. (2012). One more awareness gap? The behaviour–impact gap problem. *Journal of consumer policy*, 1-19.
- Dahlstrand, U., & Biel, A. (1997). Pro-Environmental Habits: Propensity Levels in Behavioral Change. *Journal of Applied Social Psychology*, 27(7), 588-601.
- Darnall, N., Pointing, C., & Vazquez-Brust, D. A. (2012). Why consumers buy green. *Green Growth: Managing the Transition to a Sustainable Economy*, 287-308.
- Dastous, A., and Legendre, A. (2009). Understanding consumers' ethical justifications: A scale for appraising consumers' reasons for not behaving ethically. *Journal of Business Ethics* 87, 255–68.
- Davis, I. (2012). How (not) to market socially responsible products: A critical research evaluation. *Journal of Marketing*

- Communications*, 1-15. doi: 10.1080/13527266.2012.696076
- Dawkins, J. and Worcester, R. (2005). Surveying ethical and environmental attitudes. *The Ethical Consumer*. L.: *Sage Publications*, 189-203.
- De Pelsmacker, P., Janssens, W., Sterckx, E., and Mielants, C. (2005). Consumer preferences for the marketing of ethically labeled coffee. *International Marketing Review* 22, 512–30.
- Drumwright, M. E. (1996). Company advertising with a social dimension: The role of noneconomic criteria. *The Journal of Marketing*, 71-87.
- Eck, S. (2009). Teures Gewissen. *Werben & Verkaufen* 8, 22.
- Ellen, P. S., Webb, D. J., & Mohr, L. A. (2006). Building corporate associations: Consumer attributions for corporate socially responsible programs. *Journal of the Academy of Marketing Science*, 34(2), 147–157.
- Ellis, T. (2010). *The new pioneers: Sustainable business success through social innovation and social entrepreneurship*, Wiley, Chichester.
- Fein, S., Hilton, J. L., & Miller, D. T. (1990). Suspicion of ulterior motivation and the correspondence bias. *Journal of Personality and Social Psychology*, 58(5), 753-764.
- Ferguson, K. (2011). Consumer perceptions of green: Are we expecting too much?. Available at SSRN 1909604.
- Finisterra, P., Arminda, M., Raposo, B., Lino, M., & Leal, W. (2009). Identifying the green consumer: a segmentation study. *Journal of Targeting, Measurement & Analysis for Marketing* 17, 17–25.
- Gage, R., & Thapa, B. (2011). Volunteer motivations and constraints among college students: Analysis of the volunteer function inventory and leisure constraints models. *Nonprofit and Voluntary Sector Quarterly*, 1-26
- Grimmer, M., and Wooley, M. (2012). Green marketing messages and consumers' purchase intentions: Promoting personal versus environmental benefits. *Journal of Marketing Communications*, 1-20. doi:10.1080/13527266.2012.684065
- Grunert, S. C., & Juhl, H. J. (1995). Values, environmental attitudes, and buying of organic foods. *Journal of economic psychology*, 16(1), 39-62.
- Hainmueller, J., & Hiscox, M. (2012). The socially conscious consumer? Field experimental tests of consumer support for fair labor standards. *Field Experimental Tests of Consumer Support for Fair Labor Standards (May 18, 2012)*.
- Hardin, J., & J. Hilbe. 2001. Generalized Linear Models and Extensions. College Station, TX: Stata Press.
- Heaney, J. (2007). Generations X and Y's internet banking usage in Australia. *Journal of Financial Services Marketing*, 11(3), 196–210.
- Hume, M. (2010). Compassion without action: Examining the young consumers consumption and attitude to sustainable consumption. *Journal of World Business*, 45, 385–394
- Jones, S., & Eden, C. (1981). OR in the community. *Journal of the Operational Research Society*, 335-345.
- Kanarattanavong, A., & G. Ruenrom. (2009). The model of corporate environmentalism: The effects of perceived market uncertainty upon marketing, environmental, and social performance. *The Business Review, Cambridge* 12(2), 140–7.
- Kim, H., Chang, H., Lee, J. W., & Huh, C. (2011). Exploring gender differences on generation y's attitudes towards green practices in a hotel.
- Kitzinger, J. (1994). The methodology of focus groups: the importance of interaction between research participants. *Sociology of health & illness*, 16(1), 103-121.
- Kolkailah, S.K., Aish, E.A., & Bassiouny, N. (2012). The impact of corporate social responsibility initiatives on consumers' behavioural intentions. *International Journal of Consumer Studies*, 2, 19-35
- Kollmuss, A., & Agyeman, J. (2002). Mind the gap: why do people act environmentally and what are the barriers to pro-environmental behavior? *Environmental education research*, 8(3), 239-260.

- Laivate, A. (2012). CSR communication and the young consumer, A study of the most appropriate ways to communicate CSR to young consumers in Sweden. *Master thesis, University of Gothenburg, Sweden.*
- Lankshear, C. (1993). *Critical literacy: Politics, praxis, and the postmodern*. SUNY Press.
- Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of consumer marketing*, 18(6), 503-520.
- Longhurst, M. (2006). Mediating for sustainable consumption. *Consumer Policy Review* 16, 131–146.
- Lucassen, P. L. B. J., & Olde-Hartman, T. C. (2007). Kwalitatief onderzoek: praktische methoden voor de medische praktijk. Bohn Stafleu van Loghum.
- MacIntosh J. (1981) 'Focus groups in distance nursing education', *Journal of Advanced Nursing* 18, 1981-85.
- Maio, G. R., & Olson, J. M. (1995). Relations between values, attitudes, and behavioral intentions: The moderating role of attitude function. *Journal of Experimental Social Psychology*, 31(3), 266-285.
- Mainieri, T., Barnett, G., Valdero, T., Unipan, J.B., & Oskamp, S. (1997) Green buying: The influence of environmental concern on consumer behavior. *The Journal of Social Psychology*, 137(2), 189-204.
- Matsuba, M. K., Pratt, M. W., Norris, J. E., Mohle, E., Alisat, S., & McAdams, D. P. (2012). Environmentalism as a context for expressing identity and generativity: Patterns among activists and uninvolved youth and midlife adults. *Journal of personality*, 80(4), 1-25.
- McDougle, L., Greenspan, I., & Handy, F. (2011). Generation green: Understanding the motivations and mechanisms influencing young adults' environmental volunteering. *International Journal of Nonprofit and Voluntary Sector Marketing* 16, 325-341.
- Mohr, L. A., & Webb, D. J. (2005). The effects of corporate social responsibility and price on consumer responses. *Journal of Consumer Affairs*, 39(1), 121–147.
- Mohr, L. A., Webb, D. J., & Harris, K. E. (2001). Do consumers expect companies to be socially responsible? The impact of corporate social responsibility on buying behavior. *Journal of Consumer Affairs*, 35(1), 45–72.
- Mostafa, M. M. (2007). Gender differences in Egyptian consumers' green purchase behaviour: the effects of environmental knowledge, concern and attitude. *International Journal of Consumer Studies*, 31(3), 220-229.
- Neuborne, E., & Kerwin, K. (1999). Generation y. *Business Week*, 46-50.
- Nottage, A. (2008). The green agenda gets personal. *Marketing, July*, 33–5.
- Öberseder, M., Schlegelmilch, B., & Gruber, V. (2011). Why don't consumers care about CSR? A qualitative study exploring the role of CSR in consumption decisions. *Journal of Business Ethics* 104, 449–460. doi: 10.1007/s10551-011-0925-7
- Ölander, F., & Thøgersen, J. (2002). Human values and the emergence of a sustainable consumption pattern: A panel study. *Journal of Economic Psychology*, 23(5), 605-630.
- Olsen, S., Heide, M., Dopico, D., & Toften, K.(2008). Explaining intention to consume a new fish product: A cross-generational and cross-cultural comparison. *Food Quality and Preference*, 19, 618–627
- Ottman, J. A. (1992). Industry's response to green consumerism. *Journal of Business Strategy*, 13(4), 3-7.
- Ouellette, J. A., & Wood, W. (1998). Habit and intention in everyday life: the multiple processes by which past behavior predicts future behavior. *Psychological bulletin*, 124(1), 54.
- Paladino, A., & Serena, N. (2012). An examination of the influences on 'green' mobile phone purchases among young business students: an empirical analysis. *Environmental Education Research*, doi:10.1080/13504622.2012.687044
- Panwar, R., Han, X., & Hansen, H. (2012). A demographic examination of societal views regarding corporate social responsibility in the US forest products industry. *Forest Policy and Economics* 12, 121–128

- Phipps, M., Ozanne, L. K., Luchs, M. G., Subrahmanyam, S., Kapitan, S., Catlin, J. R. & Weaver, T. (2012). Understanding the inherent complexity of sustainable consumption: A social cognitive framework. *Journal of Business Research*.
- Rahim, R., Waheeda, J., & Tajuddin, K. (2011). The importance of corporate social responsibility on consumer behaviour in Malaysia. *Asian Academy of Management Journal*, 16(1), 119–139
- Rainer, T., & Rainer, R. (2011). *The Millennials: Connecting to America's largest generation*. B&H Books: Nashville Tn.
- Ramayah, T., Lee, J. W. C., & Mohamad, O. (2010). Green product purchase intention: Some insights from a developing country. *Resources, Conservation and Recycling*, 54(12), 1419-1427.
- Rao, A. R., & Monroe, K. B. (1989). The effect of price, brand name, and store name on buyers' perceptions of product quality: An integrative review. *Journal of marketing Research*, 351-357.
- Rokka, J., and Uusitalo, J. (2008). Preference for green packaging in consumer product choices – do consumers care? *International Journal of Consumer Studies* 32, 516–25.
- Sanderson, H. W. (1976). Student attitudes and willingness to spend time in unit mastery learning. *Research in the Teaching of English*, 10(2), 191-198.
- Schlegelmilch, B. B., Bohlen, G. M., & Diamantopoulos, A. (1996). The link between green purchasing decisions and measures of environmental consciousness. *European Journal of Marketing*, 30(5), 35-55.
- Schmeltz, L. (2012). Consumer-oriented CSR communication: Focusing on ability or morality? *Corporate Communications: An International Journal*, 17(1), 29-49
- Schweitzer, L., & Lyons, S. T. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of business and psychology*, 25(2), 281-292.
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research (JMR)*, 38(2), 225–243.
- Shamdasani, P., Chon-Lin, G. O., & Richmond, D. (1993). Exploring green consumers in an oriental culture: role of personal and marketing mix factors. *Advances in consumer research*, 20(1), 488-493.
- Sheahan, P. (2005). *Generation Y: Thriving and surviving with generation Y at work*. Australia: Hardie Grant Books.
- Sheeran, P. (2002). Intention—behavior relations: A conceptual and empirical review. *European review of social psychology*, 12(1), 1-36.
- Smith, V., & Langford, P. (2009). Evaluating the impact of corporate social responsibility programs on consumers. *Journal of Management and Organization*, 15(1), 97–109.
- Stern, P. (2000). Toward a coherent theory of environmentally significant behavior. *Journal of Social Issues*, 56(3), 407-424
- Strauss, W., & Howe, N. (1991). *Generations: The history of America's future, 1584 to 2069*. New York: William Morrow.
- Sullivan, P., & Heitmeyer, J. (2008). Looking at Gen Y shopping preferences and intentions: Exploring the role of experience and apparel involvement. *International Journal of Consumer Studies*, 32, 285–295.
- Sutton, S. (2006). Predicting and explaining intentions and behavior: How well are we doing? *Journal of Applied Social Psychology*, 28(15), 1317-1338.
- Tanner, C., & Kast, S. (2003). Promoting sustainable consumption: Determinants of green purchases by Swiss consumers. *Psychology & Marketing* 20, 883–902.
- Vermeir, I., & Verbeke, W. (2006). Sustainable food consumption: exploring the consumer “attitude–behavioral intention” gap. *Journal of Agricultural and Environmental Ethics*, 19(2), 169-194.
- Verplanken, B., & Wood, W. (2006). Interventions to break and create consumer habits. *Journal of Public Policy & Marketing*, 90-103.
- Vlachos, P. A., Tsamakos, A., Vrechopoulos, A. A., & Avramidis, P. K. (2009). Corporate social responsibility: attributions, loyalty, and the mediating role of trust. *Journal of the Academic Marketing Science*, 170-180.

- Wagner, T., Bicen, P. & Hall, Z. (2008). The dark side of retailing: Towards a scale of corporate social irresponsibility. *International Journal of Retail & Distribution Management*, 36, 124–142.
- Weigel, R., & Weigel, J. (1978). Environmental Concern The Development of a Measure. *Environment and Behavior*, 10(1), 3-15.
- Wright, L. T., & Heaton, S. (2006). Fair Trade Marketing: An exploration through qualitative research. *Journal of Strategic Marketing*, 14(4), 411-426.
- Young, A. (2004). The octagon model of volunteer motivations: Results of a phenomenological analysis. *International Journal of Voluntary and Nonprofit Organizations*, 15(1), 21-46.

Appendix A1: Sample characteristics study A

Per focus group the sample can be reasonably homogeneous. In total however all participants together should form a representative sample of Generation Y in The Netherlands. They should be evenly distributed in having the following characteristics. Source of the data: statline.cbs.nl.

Age and sex

Age	% of people from 18-30 years old	% of male people from 18-30 years old	% of female people from 18-30 years old	Desired sample (number of people) N=32	Actual sample (number of people) N=27
18	8,2	48,8	51,2	Male: 2, Female: 2	Male: 0, Female: 0
19	8,4	48,8	51,2	Male: 2, Female: 2	Male: 2, Female: 2
20	8,6	49,2	50,8	Male: 2, Female: 2	Male: 2, Female: 2
21	8,7	49,2	50,8	Male: 2, Female: 2	Male: 0, Female: 1
22	8,4	49,7	50,3	Male: 2, Female: 2	Male: 0, Female: 1
23	8,4	49,6	50,4	Male: 2, Female: 2	Male: 0, Female: 3
24	8,5	49,4	50,6	Male: 2, Female: 2	Male: 0, Female: 5
25	8,5	49,2	50,8	Male: 2, Female: 2	Male: 2, Female: 2
26	8,3	49,5	50,5	Male: 2, Female: 2	Male: 2, Female: 0
27	8,1	49,4	50,6	Male: 2, Female: 2	Male: 1, Female: 0
28	7,9	49,6	50,4	Male: 2, Female: 2	Male: 1, Female: 0
29	8,0	49,8	50,2	Male: 2, Female: 2	Male: 1, Female: 0
Total				Male: 16, Female: 16	Male: 11; Female: 16

Highest achieved education level

Education level	% of people from 18-30 years old	Desired sample (number of people)	Actual sample (number of people)
Preliminary school	5,4	2	0
Vmbo	18,6	6	1
Mbo	28,8	9	8
Havo/vwo	19,7	6	6
Hbo	19,0	6	10
Wo	8,5	3	2

Gross income per month

Incomecategory (€)	% of people from 18-30 years old	Desired sample (number of people)	Actual sample (number of people)
0 – 833	34,0	11	12
833 - 1666	24,0	8	4
1666 - 2499	15,3	5	5
2499 – 3332	13,1	4	4
3332 – 4165	8,3	3	2
4165 – or more	5,3	1	0

Actual sample per focus group

Focus group 1

Respondent	Age	Sex	Highest achieved education level	Gross income per month
1	19	Male	Havo	0-833
2	23	Female	Hbo	1666-2499
3	28	Male	Wo	3332-4165
4	24	Female	Wo	2499-3332
5	24	Female	Hbo	1666-2499
6	25	Male	Hbo	1666-2499
7	19	Male	Mbo	0-833

Focus group 2

Respondent	Age	Sex	Highest achieved education level	Gross income per month
1	24	Female	Mbo	833-1666
2	23	Female	Hbo	833-1666
3	26	Male	Hbo	833-1666
4	25	Male	Hbo	1666-2499
5	20	Female	Mbo	0-833
6	20	Female	Vmbo	833-1666
7	21	Female	Havo	0-833

Focus group 3

Respondent	Age	Sex	Highest achieved education level	Gross income per month
1	23	Female	Mbo	0-833
2	25	Female	Mbo	0-833
3	20	Male	Havo	0-833
4	20	Male	Havo	0-833
5	19	Female	Havo	0-833
6	19	Female	Havo	0-833
7	22	Female	Mbo	0-833

Focus group 4

Respondent	Age	Sex	Highest achieved education level	Gross income per month
1	26	Male	Hbo	3332 - 4165
2	24	Female	Mbo	0-833
3	25	Female	Hbo	2499 – 3332
4	27	Male	Hbo	2499 – 3332
5	24	Female	Mbo	1666 - 2499
6	29	Male	Hbo	2499 – 3332

Appendix A2: Discussion guide study A

Introductie van het onderzoek

- Welkom
- Introductie van het onderzoek in het algemeen
- Waarom jullie deelnemen
- Demografische factoren noteren en toestemmingsformulier ondertekenen

Uitleg van het proces

- Groepsdiscussie: doel informatie verzamelen, niet overeenstemming bereiken
- Er is geen goed of fout antwoord, het gaat om je persoonlijke mening en ervaringen. Alle ideeën en suggesties zijn welkom. Wat vind jij belangrijk? Wat zijn je ideeën? Laat het horen.
- Ik zal een aantal vragen stellen, maar het is de bedoeling dat jullie reageren op elkaar.
- De discussie zal worden opgenomen, maar de informatie zal confidentieel en anoniem worden verwerkt.
- De discussie zal ongeveer een uur duren.
- Vragen?

Uitleg groene consumptie

- Video Albert Heijn 'Boodschappen met een boodschap': <http://www.youtube.com/watch?v=ZjOwJQASeRY>
- Video Plus en fair trade koffie:
<http://www.youtube.com/watch?v=lpYFAPlo78o&list=UUQWcyDN3tvr1QAQIYjAbNhw&index=6>
- Dit zijn een paar voorbeelden van groene consumptie, maar het begrip houdt veel meer in. Namelijk:
- Uitleg groene consumptie: De producten die je koopt die bijdragen aan een duurzame wereld door niet de aarde te vervuilen of natuurlijke bronnen uit te putten. Onderwerpen die deze producten duurzaam maken zijn onder andere dierenwelzijn, milieubescherming en erosie, mensenrechten.
- Eten en drinken: Organisch (alprosoja), fair trade, scharreleiren, scharrelkip, vegetarisch, duurzame vis.
- In huis: milieu vriendelijk papier, schoonmaakmiddelen, spaarlampen.
- Persoonlijke producten: make-up, kleding (VB Kuyichi goed, Jack and Jones slecht)
- Community: kopen bij lokale winkels

Attitude: duurzaamheid in het algemeen

- Hoe belangrijk vind je het om in het algemeen bij te dragen aan een duurzamere wereld?
- Maak jij je zorgen om het milieu? Kinderarbeid? Mensenrechten? Dierenwelzijn?
- Vind je dit soort onderwerpen belangrijk?

Attitude: groene consumptie/producten

- Wat vind je van groene producten?
- In hoeverre vind je het belangrijk dat deze producten er zijn?
- In hoeverre vind je het belangrijk dat deze producten verkocht worden?

Attitude: kopen groen product

- Wat vind je van het kopen van groene producten?
- Wat zou je er van vinden als mensen om je heen groene producten kopen?

Gedrag: verleden en intentie

- Wil je groene producten kopen?
- Koop je groene producten?
- Kopen je vrienden groene producten?

Factoren bepalend voor het gedrag

- Wat zijn voor jou redenen om groene producten wel of niet te kopen?
- En voor je vrienden, waarom zouden zij deze producten wel of niet kopen?
- Noem alles wat in je op komt. Dan gaan we zo meteen dieper op de genoemde factoren in.

Indien onderstaande factoren niet genoemd zijn, deze introduceren a.d.h.v. bijgaande vraag.

- Gewoonten: In hoeverre bepaalt wat jij altijd koopt of je groene producten koopt? Koop je deze niet omdat je ze niet eerder hebt gekocht?
- Geld: Zijn de producten te duur voor je? Geef je je geld liever ergens anders aan uit?
- Fysieke beschikbaarheid: Kom jij in aanraking met de groene producten? Zie je ze staan in de winkel? Zou je een speciaalzaak hiervoor bezoeken?
- Persoonlijke relevantie: In hoeverre is het belangrijk dat een product jou of je directe omgeving iets oplevert?

Vervolgens per factor uitweiden.

- Waarom speelt deze factor een rol?
- Hoe speelt deze factor een rol?
- Is deze factor wel of niet bepalend voor het kopen van groene producten?
- Wat zou er moeten veranderen om er voor te zorgen dat deze factor bijdraagt aan meer groene aankopen?

Slotvraag

Welke van de lijst factoren weegt voor jou het zwaarst bij het wel of niet kopen van groene producten? Licht kort toe waarom.

Appendix A3: Codebook study A

Attitude	1. Sustainability in general	1.1 Positive attitude	The attitude towards protecting the world in general. Attitude towards subjects like: child labour, animal welfare, water level, human rights, environmental pollution.
		1.2 Negative attitude	
	2. Green products	2.1 Positive attitude	The attitude towards products which help protect the world. These are among others: (1) food: organic, fair trade, range eggs, sustainable fish, range chicken. (2): home: energy saving lamps, green cleaning products, environmentally friendly paper. (3): personal products: make-up, clothing. (4): community: purchasing from local stores.
		3.2 Negative attitude	
	3. Green consumption	3.1 Positive attitude	The attitude towards purchasing green products.
		3.2 Negative attitude	
Behaviour	4. Past green purchasing behaviour		Actual green purchases made in the past
	5. Green purchasing behavioural intention	5.1 Positive intention	The intention to purchase green products in the future.
		5.2 Negative intention	
Factors influencing green purchasing behaviour	6. Economic availability	6.1 No influence	The availability of money to purchase green products and the willingness to spend the available money on green products.
		6.2 Negative influence	
	7. Physical availability	7.1 No influence	The availability of products, the availability of shopping time and/or the willingness to spend the available time on visit multiple and/or remote stores to purchase green products.
		7.2 Negative influence	
	8. Habit	8.1 Positive influence	Behavioural routines in purchasing products/brands
		8.2 Negative influence	

	9. Personal relevance	9.1 Positive influence	Self-interest: the extend of (direct) tangible or intangible benefit of a green product for the purchaser or his/her local community determines whether a green product is purchased.
		9.2 Negative influence	
	10. Scepticism	10.1 Positive influence	The (dis)belief of green products actually contributing to the desired goal and the trust/scepticism in the motivation of the organization to produce green products.
		10.2 Negative influence	
	11. Awareness	11.1 Positive influence	The degree in which a consumer is aware that purchasing green can be a purchasing criterion and whether a consumer notices and pays attention to the communication of organisations about green products. Subjects: labels, product packaging and media attention.
		11.2 Negative influence	
	12. Subjective norm	12.1 Positive influence	The influence that people important to the purchaser have on his/her green purchasing behaviour.
		12.2 Negative influence	
	13. Product quality	13.1 Positive influence	The perceived quality of green products
		13.2 Negative influence	

Appendix A4: Cohen's Kappa

	1.1	1.2	2.1	2.2	3.1	3.2	4.1	4.2	5.1	5.2	6.1	6.2	7.1	7.2	8.1	8.2	9.1	9.2	10.1	10.2	11.1	11.2	12.1	12.2	13.1	13.2	Niet	
1.1	4																											4
1.2																												
2.1			2																									2
2.2				3																								3
3.1					2																							2
3.2						1																						1
4.1							4																				1	5
4.2								1																				1
5.1																												
5.2										3																		3
6.1											4	2																6
6.2												6																6
7.1													2									3					1	6
7.2														6					4									10
8.1															3					1						1		4
8.2																13			3							1		17
9.1																	9											9
9.2																	3	6										9
10.1														2		1												3
10.2																3				7								10
11.1																					8							8
11.2																					2	6						8
12.1																							6					6

12.2																								1				1
13.1																									5		1	6
13.2														2												3		5
niet		1		2																								3
	4	1	2	5	2	1	4	1		3	4	9	2	8	5	17	12	6	7	8	10	9	6	1	5	4	3	139

Fraction of agreement: $105/139 = 0,75539568$

Fraction of expected agreement:

$4/139 \times 4/139 + 1/139 \times 0/139 + 2/139 \times 2/139 + 5/139 \times 3/139 + 2/139 \times 2/139 + 1/139 \times 1/139 + 4/139 \times 5/139 + 1/139 \times 1/139 + 0/139 \times 0/139 + 3/139 \times 3/139 + 4/139 \times 6/139 + 9/139 \times 6/139 + 2/139 \times 6/139 + 8/139 \times 10/139 + 5/139 \times 4/139 + 17/139 \times 17/139 + 12/139 \times 9/139 + 6/139 \times 9/139 + 9/139 \times 3/139 + 8/139 \times 10/139 + 10/139 \times 8/139 + 9/139 \times 8/139 + 6/139 \times 6/139 + 1/139 \times 1/139 + 5/139 \times 6/139 + 4/139 \times 5/139 + 3/139 \times 3/139 = 0.0551731277$

Cohen's Kappa: $0,75539568 - 0.0551731277 / 1 - 0.0551731277 = 0,6450494246$

Appendix B1: Questionnaire study B

INTRODUCTION

In dit onderzoek ben ik op zoek naar jouw mening over het kopen van groene producten. Dit zijn de producten die bijdragen aan een duurzame wereld door niet de aarde te vervuilen of natuurlijke bronnen uit te putten. Onderwerpen die deze producten duurzaam maken zijn onder andere dierenwelzijn, mensenrechten, milieubescherming en erosie.

Bij groene producten kun je denken aan eten en drinken zoals organisch, scharrelkip en duurzame vis maar ook aan producten voor in huis zoals milieuvriendelijk papier, schoonmaakmiddelen, spaarlampen, een groene wasmachine. Daarnaast kunnen ook je persoonlijke producten groen zijn. Bijvoorbeeld kleding of parfum dat niet vervuילend is en vrij is van synthetische kleurstoffen. Lokaal geproduceerde producten zijn ook een vorm van groene producten.

Lees de vragen goed en geef eerlijk je mening. Het invullen van de vragen zal maximaal tien minuten van je tijd in beslag nemen. Het is niet mogelijk om de antwoorden van voorgaande pagina's corrigeren. Wil je kans maken op één van de groene-producten-pakketten t.w.v. €20, laat dan bij de laatste enquêtevraag je gegevens achter.

Alvast ontzettend bedankt voor je deelname!

Sanne van 't Erve

START ENQUETE

Ik ben ... jaar oud

- ➔ Tussen 18 en 30 jaar oud? Door naar enquête
- ➔ Niet tussen 18-30 jaar oud? Einde enquête.
'Helaas, je leeftijd voldoet niet aan de voorwaarde om deel te nemen aan deze enquête.'

	Questions' structure	Construct
1.	In hoeverre ben je het eens met onderstaande stellingen? (1=totaal mee oneens, 2=oneens, 3=neutraal, 4=eens, 5=totaal mee eens) De volgende stellingen gaan over je mening m.b.t. duurzaamheid Ik vind het belangrijk om de aarde te beschermen voor volgende generaties De stijgende zeespiegel is een belangrijk probleem We moeten voorkomen dat diersoorten uitsterven Ik vind duurzaamheid belangrijk Milieuvervuiling moet tegen gegaan worden	Attitude sustainability
2.	De volgende stellingen gaan over je mening m.b.t. groene producten Ik vind het belangrijk dat een product bijdraagt aan een beter milieu Een product zou gemaakt moeten zijn zonder de aarde te schaden Het is belangrijk dat groene producten bestaan Ik vind het positief wanneer producten op een duurzame manier geproduceerd zijn	Attitude green products
3.	De volgende stellingen gaan over je mening m.b.t. het kopen van groene producten Ik sta positief tegen over het kopen van groene producten	Attitude purchasing green products

	<p>Wanneer een vriend of vriendin een groen product zou kopen, zou ik dit als positief ervaren</p> <p>Ik zie het kopen van een groen product als een slecht idee</p>	
4.	<p>De volgende stellingen gaan over of de hoeveelheid geld die je beschikbaar hebt om producten van te kopen</p> <p>Ik heb te weinig geld om groene producten te kopen</p> <p>Ik heb genoeg geld om de producten te kopen die ik graag wil kopen</p>	Availability of money
5.	<p>De volgende stellingen gaan over of je je geld uit wilt geven aan groene producten</p> <p>Ik zou het goed vinden om 10 procent meer te betalen voor een milieuvriendelijk schoonmaakmiddel</p> <p>Ik zou bereid zijn om €10 euro extra per week te betalen om zo groene producten te kunnen kopen</p> <p>Zelfs wanneer ik voldoende geld zou hebben om groene producten te kopen, dan zou ik het nog niet doen</p>	Willingness to pay price premium
6.	<p>De volgende stellingen gaan over de prijs van groene producten</p> <p>Wanneer ik alleen maar groene producten zou willen kopen, dan nemen mijn maandlasten enorm toe</p> <p>Groene producten zijn duurder dan normale producten</p> <p>Biologische producten zijn duurder dan niet biologische producten</p>	Perceived price of green products
7.	<p>De volgende stellingen gaan over de economische voordelen van groene producten voor jezelf</p> <p>Ik vind het een groot voordeel wanneer een wasmachine me geld bespaart op mijn energierekening</p> <p>Spaarlampen zijn in de aanschaf misschien duurder, maar ze besparen me wel geld op mijn energierekening</p> <p>Een voordeel van het kopen van groene producten is dat op de lange termijn het je geld bespaart</p>	Saving money
8.	<p>De volgende stellingen gaan over de voordelen van groene producten voor gemeenschap</p> <p>Ik vind het een voordeel wanneer een product mijn gemeenschap iets oplevert</p> <p>Ik vind het belangrijk om van een lokale winkel te kopen om zo de werkgelegenheid in mijn gemeenschap te stimuleren</p> <p>Het maakt mij niet uit of de winst van een product naar mijn gemeenschap gaat of niet.</p>	Local community benefits
9.	<p>De volgende stellingen gaan over of jij een goed gevoel krijgt van het kopen van groene producten</p> <p>Het zou me een goed gevoel geven wanneer ik een groen product zou kopen</p> <p>Wanneer ik een groen product heb gekocht, geeft me dit een tevreden gevoel</p> <p>Ik vind het goed van mezelf als ik opmerk dat ik een groen product heb gekocht</p>	Positive self-image
10.	<p>De volgende stellingen gaan over de kwaliteit van groene producten</p> <p>Ik verwacht dat groene producten van betere kwaliteit zijn dan normale producten</p> <p>Groene producten gaan langer mee dan gewone producten</p> <p>Een voordeel van groene producten is dat je betere kwaliteit ontvangt voor je geld.</p>	Higher product quality
11.	<p>De volgende stellingen gaan over de mogelijke voordelen van groene producten voor je gezondheid</p> <p>Groene producten zijn gezonder voor mijn lichaam omdat er geen antibiotica zijn gebruikt bij de productie</p> <p>Groene producten zijn geproduceerd met betere ingrediënten/materialen en zijn daarom beter voor mijn lichaam</p> <p>Organisch eten is beter voor mijn gezondheid dan normaal eten</p>	Health benefits
12.	<p>De volgende stellingen gaan over hoe relevant duurzaamheidsproblemen voor je</p>	Personal relevance

	<p>zijn.</p> <p>Ik merk weinig van de klimaatverandering daarom is het niet erg belangrijk voor me</p> <p>In mijn dagelijks leven ervaar ik de consequenties van milieuvervuilende fabrieken</p> <p>Ik merk weinig van alle duurzaamheidsproblemen</p> <p>Ik ervaar geen consequenties van de stijgende zeespiegel</p>	
13.	<p>De volgende stellingen gaan over je kennis van groene producten</p> <p>Ik weet precies waar en hoe ik groene producten kan kopen</p> <p>Voor deze vragenlijst wist ik bijna niets over groene producten</p> <p>Ik heb nog nooit een reclame voor groene producten gezien</p> <p>Wanneer ik inkopen doe vallen de groene producten mij op</p>	Consumer awareness
14.	<p>De volgende stellingen gaan over het effect van het kopen van groene producten.</p> <p>Het voegt echt iets toe wanneer een consument besluit iets aan milieuvervuiling gaat doen</p> <p>Wanneer ik een groen product koop heeft dit nauwelijks effect op het daadwerkelijke probleem</p> <p>Wanneer ik biologische groenten koop, zal dit nauwelijks effect hebben op het beschermen van de aarde</p>	Perceived consumer effectiveness
15.	<p>De volgende stellingen gaan over waarom organisaties groene producten verkopen.</p> <p>Organisaties die groene producten verkopen/produceren:</p> <p>Doen dit omdat zij zo hopen meer winst te kunnen maken</p> <p>Maken gebruik van het goede doel om zo hun eigen merk te versterken</p> <p>Doen dit niet om meer klanten te krijgen</p> <p>Willen hierdoor hun imago verbeteren</p>	Perceived motivation of the organization
16.	<p>De volgende stellingen gaan over je koopgewoontes.</p> <p>Ik koop automatisch vaak dezelfde producten</p> <p>Het inkopen van producten is voor mij een routine</p>	Habit
17.	<p>De volgende stellingen gaan over de beschikbaarheid van groene producten in de buurt waar je woont.</p> <p>De winkels die ik normaal bezoek verkopen nauwelijks groene producten</p> <p>Wanneer ik groene producten wil kopen moet ik een behoorlijke afstand afleggen</p> <p>Wanneer ik groene producten wil kopen moet ik veel verschillende winkels bezoeken</p>	Availability of green products
18.	<p>De volgende stellingen gaan over de tijd die je besteedt aan het doen van inkopen.</p> <p>Ik zou graag meer tijd hebben om mijn inkopen zorgvuldig te kunnen doen</p> <p>Ik heb tijd om veel verschillende winkels te bezoeken wanneer ik inkopen doe</p> <p>Ik heb genoeg tijd om winkels op afstand te bezoeken als ik dat zou willen</p>	Availability of shoppingtime
19.	<p>De volgende stellingen gaan over de tijd die je wilt besteden aan het doen van groene inkopen.</p> <p>Ik wil niet mijn winkeltijd besteden aan het bezoeken van winkels ver van mijn huis om groene producten te kunnen kopen</p> <p>Ik vind het niet erg om veel verschillende winkels te bezoeken, om groene producten te kunnen kopen</p> <p>Ik vind het acceptabel om meer tijd te besteden aan het doen van inkopen zodat ik groene producten kan kopen</p>	Willingness to spend shopping time on purchasing green products
20.	<p>De volgende stellingen gaan over de mensen die belangrijk voor je zijn.</p> <p>De meeste mensen die belangrijk voor me zijn zouden het dom vinden om groene producten te kopen</p> <p>Ik denk dat de meeste van mijn vrienden vinden dat ik groene producten moet kopen</p>	Subjective norm

	Veel mensen in mijn omgeving praten positief over groene producten Mijn familie koopt altijd groene producten	
21.	De volgende stellingen gaan over je intentie om groene producten te gaan kopen. Ik heb het gevoel dat ik verplicht ben om groene producten te kopen Ik wil producten kopen die bijdragen aan bijvoorbeeld een beter milieu of het welzijn van dieren De volgende keer wanneer ik in de supermarkt ben, wil ik meer producten met een eco-label gaan kopen. Wanneer ik producten ga kopen ga ik letten op of producten wel verantwoord geproduceerd zijn	Purchase intention
22.	Van het totale bedrag dat je de afgelopen maand hebt gependend aan het kopen van producten, welk percentage hiervan heb je besteed aan groene producten?	Actual purchase behaviour
23.	Heb je onderstaande groene producten in de afgelopen maanden altijd, vaak, soms of nooit gekocht? Fair Trade producten Duurzame vis Biologische groenten Scharrelkip Natuurlijke schoonmaakmiddelen Recyclet toiletpapier Spaarlampen Elektrische apparaten met energielabel A Eerlijke kleding Proefdiervrije make-up of andere persoonlijke producten Producten van winkels die eerlijk produceren zoals The Body Shop Producten uit een lokale buurtwinkel Lokaal geproduceerde producten	Actual purchase behaviour

Wat is je geslacht?

- Man
- Vrouw

Wat is het niveau van je hoogst afgeronde opleiding?

- Basisschool
- Vmbo
- Havo/vwo
- Mbo
- Hbo
- Wo/wo+

In welke van onderstaande categorieën valt je bruto maandinkomen?

- 0-833
- 833-1666
- 1666-2499
- 2499-3332
- 3332-4165

Indien je kans wilt maken op het pakket vol met groene producten, vul dan hier je e-mailadres in:

Appendix B2: Adjustments in the questionnaire as a result of the pretest

Problem	Situation after pretest
All respondents indicate the questionnaire is way too long	- Instead of four or five statements per construct, only three or four statements per construct are used.
The pages with questions are too long and all the same. No structure is provided.	<ul style="list-style-type: none"> - Items not in random order anymore, but nested per construct. - Introduction sentence per construct is added: 'The following statements are about your opinion on green products'. - A maximum is set of two constructs per page. This way the respondent doesn't have to scroll in a page and the questions are visible in one glance. - The definition of green products is not shown on all pages, but just on one page. And not between the questions any more, but in a separate text block.
Actual purchase behaviour is measured with the terms: totally agree-totally disagree	- This is changed into a 5-point Likert scale with the terms: always - never.
Language errors	<ul style="list-style-type: none"> - Double word in introduction - Page 2, item 3: error in item - Page 4, item 6: error in item
Statements on community benefits are not clear	- Language wasn't proper Dutch. Statements revised.