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Green Habit Formation:
The Role of Frequent Purchase and Cognitive Influencing Factors

Problem formulation:

Developing a framework for ecological habit formation based on frequent consumption and exploring the cognitive influencing factors for ecological attitude and purchase behavior.

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Declaration of authorship

I hereby declare that this thesis I am submitting is the result of my own work, except where otherwise stated or indicated by reference.

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Preface

Executive summary

To investigate the possibility of changing a consumer habit from purchasing conventional milk to purchasing ecological milk, 15 volunteer consumers from Rema 1000 Ølstykke, Denmark, purchased EM through a period of 8 weeks. The participants filled out questionnaires and were interviewed 3 times during the program.

The participants' behaviors were analyzed in relation to their concern for animal welfare, personal health and the environment as well as their 'concern score' based on environmental and health related behavior. These were fitted into an analytical framework created on the basis of Bañeguil's and Chamorro's 'ecological consumer purchasing model' (2002) combined with Duhigg's 'habit loop' (2012). The participants were analyzed according to their ability to *move* from one level of the model to the next, based on attitude and behavior as well as an identification tool for the negative CIFs (Cognitive Influencing Factors) that prevented the participants from continuing the ecological behavior.

The exploration revealed changes in purchasing behaviors as well as CIFs preventing *moves* between the steps of the framework. The findings of this paper are in congruence with previous conducted research revolving around ecological food purchases.

Keywords: ecological milk, consumer attitude, habit change, cognitive perception, concern, behavior change

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Chapter 1
Introduction

"The more clearly we can focus our attention on the wonders and realities of the universe about us, the less taste we shall have for destruction." – Rachel Carson[1]

Poll trends show an increase in population concern for the environmental challenges facing us and the implications that may be created for human health and way of life, (Royne, Levy, & Martinez, 2011). Markets are offering eco-friendly products in all categories from clothes to furniture and cars, trying to persuade consumers to act more sustainably through their purchases.

Consumers are often categorized as creatures of habit. Purchases are made automatically based on past purchase experiences with only minor consideration for the cognitive goal and the value of the purchase outcome. For most consumers, their purchase habits are cued by entering a store, leading to the automatic response of buying what they usually buy, (Wood & Neal, 2009). This means that even though consumers claim to care for the environment, when it comes to the point of action their behavior often fails to reflect their claimed attitude, (Akehurst, Afonso, & Goncalves, 2012). This is evident, especially in the retail business where more and more ecological products take their places on the shelves amongst their conventional substitutes, catering for the demand for ecological products, when in fact little is to be found. For everyday consumption, the challenge of creating a healthier and more sustainable community lies in the changing of the behaviors that people have been performing most of their lives. Conventional behaviors need to make way for more eco-friendly behaviors in order to maintain our environment and preserve our health without having to alter the entire course of people's everyday lives.

A deeper look into the social practice reveals that even though some consumers have turned to the 'green side', the mindset of ecological purchase behavior is limited to groups of consumers with the proper motivation and attitude to engage in and sustain ecological purchase behavior. The discrepancy between consumer attitude, concern and their purchase behavior must be dealt with. According to Duhigg (2012), the discrepancy is caused by habits, automatically performing certain behaviors despite our intention.

[1] (Goodreads, 2013)

1.1 Problem formulation

Based on the above contemplations revolving around the discrepancy between consumers' attitude and behavior and the negative side of 'force of habit' the following problem statement and research area of this paper emerged:

Developing a framework for ecological habit formation based on frequent consumption and exploring the cognitive influencing factors for ecological attitude and purchase behavior.

1.2 Purpose of the study

Firstly, how attitudes related to ecological behavior are created and how they drive purchase behavior. Secondly, how purchase behavior may be shifted using repetition and cognitive rewards. Thirdly, how behavior may re-position itself after the shift, depending on what Cognitive Influencing Factors (from here on known as CIFs) either prevent or encourage the ecological behavior.

For the purpose of this paper, CIFs are defined as the chosen cognitive 'barriers' that prevent consumers from adopting a certain behavior based on their attitude. In this context a consumer may have a positive attitude towards ecological food products, however, barriers (or CIFs) such as willingness to pay the added expense or skepticism concerning the perceived benefits of the ecological product may prove to be too influential to carry out the desired action. A distinction is made between negative CIFs (barriers) and positive CIFs (motivators).

The focal point of the study will be on ecological milk (from here on EM) versus conventional milk (from here on CM). Investigating consumer behavior towards ecological food products is an area of study that has become of growing interest in recent years due to the increased span of ecological products and brands as well as the ongoing focus on environmental concern and health benefits from ecological food products.

The conclusions to this study will shed light on the continuous area of study that is consumer behavior and how it changes. The results gathered will be beneficial for social scientists wanting to explore this area further; for retails wanting to expose their consumers to more ecological groceries and to marketeers on how to influence consumer behavior.

1.3 Scope and Limitations

Scope

This paper seeks to contribute to the vast amount of literature concerning pro-environmental behavior by designing a specific angle by combining habit creation theory with literature on attitude and behavior in relation to ecological food.

Since the choices of ecological foods vary largely across a wide spectrum ranging from vegetables to meat, it was decided that this paper should focus solely on one type of ecological food; EM. This was decided based on the following reasons:

Firstly, milk is a highly needed type of every-day grocery which is used in practically every home in Denmark.

Secondly, due to its limited shelf-life and freshness it is a type of food product that requires frequent purchase. This was seen as a definite strength for this study since 'frequency of purchase' is a vital component in the creation of a habit.

Thirdly, EM is widely available and often has at least one other ecological substitute in the form of competing brands.

A minor complication with the choice of EM emerged. According to literature, willingness to pay for ecological products has its limits in the minds of the consumers. According to a Danish survey amongst households, only 31% of the surveyed would pay more for ecological products. Most consumers are unwilling to pay any additional expense, (Center for Bioetik of Risikovurdering, 2011). The price of EM exceeds the 25% added expense. Most EM costs approximately 60%[2] more than CM. This may be seen as a negative factor as many consumers may be unwilling to pay the higher price for the product. However, it can be argued that the relatively low price of the milk can make the added expense acceptable.

Limitations

There are a number of limitations to the present study:

Time:

Time is seen as a major constraint since a specific habit may take a long time to develop and manifest. Within the given timeframe of 7 months it should be theoretically possible to conclude on whether or not a formation of a habitual behavior has been initiated. Further, it is seen achievable to identify which CIFs (if any) may prevent the consumers from sustaining and developing the habit further.

[2] Prices in Rema 1000: Danmælk Minimælk 4.95 DKK versus Arla Økologisk Minimælk 7.95 DKK

Geography:

For time constraints and the limited scope of this paper, only Danish consumers (specifically Danish consumers in the town of Ølstykke in the outskirts of Copenhagen) were considered for the study.

Sample size and characteristics:

The number of participants of the study were kept relatively low. In total, 18 participants were willing to participate. However, only 15 participants came back for the 1st interview. The analysis and conclusion is therefore based on a total of 15 participants: Ideally, the sample size would be larger in order to provide more evidence as to the outcome of the study. Nevertheless, the sample size, despite being small, may still be able to provide conclusive evidence that may blaze the trail for future studies in this area.

The sample for the study was gathered amongst consumers in a local Rema 1000 discount store in Ølstykke, Denmark. This setting was chosen for reasons of availability and easiness of access. The sample of the participants may therefore not represent a correct sample of Danish consumers in general as their characteristics in terms of percentages of gender, age, income, educational level, societal status etc. may differ from a true sample of the Danish population of consumers.

Chapter 2
Methodology

2.1 The present study

As mentioned, this study aims to investigate the negative CIFs that may prevent consumers from purchasing EM despite possible habit formation through frequent purchase.

In this paper, the author makes use of the exploratory approach in attempting to understand unique and subjective experiences as a part of the 'consumer behavior' field. Each individual perception and interpretation of a given situation or experience are taken into account when conducting the analysis.

The paper is written from a deductive perspective based on small samples to get a broader perspective. The process is depicted below:

2.1.1 Exploratory Thesis Process

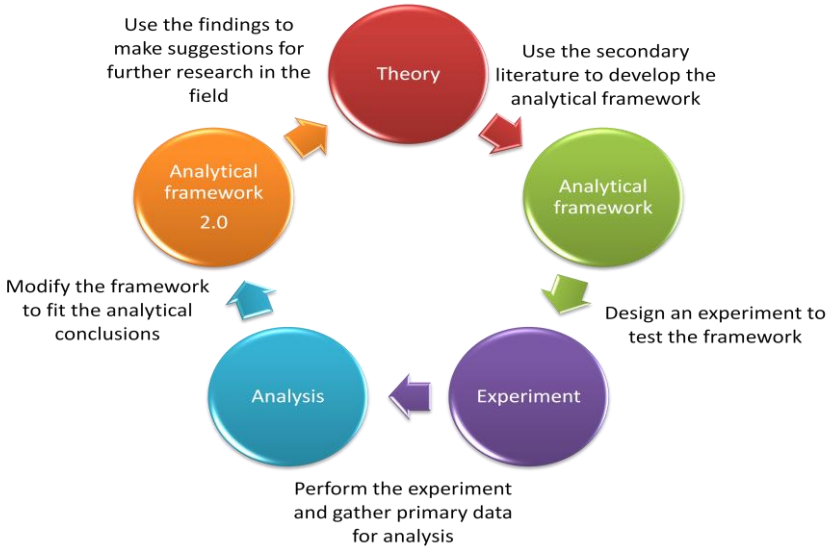

Figure 1 Exploratory thesis process

Source (Toustrup, 2013a)

Firstly, theory and literature taken from the literature review chapter were used to develop the analytical framework for this paper. Secondly, specific theories on ecological consumerism, attitude and behavior as well as habitual formation have been chosen to develop the analytical framework for this paper. Thirdly, an experiment was conducted using participants in the situational consumption context from Rema 1000

Ølstykke, Denmark, in order to gather primary data for the analysis. Fourthly, the data obtained and the conclusions from the analysis served as new evidence. Finally, the newly drawn conclusions served as guidelines for further investigations and research possibilities in the field of consumer behavior and ecological habits.

Much literature can be found in the field of consumer behavior and habitual change. Similarly, much literature is present concerning consumer attitudes towards ecological consumption. The body of literature diminishes when combining these fields into behavioral change for ecological consumption and even less literature can be found on the exact focal point of this study. There are both positive and negative consequences of this situation. On the negative side, the field niche of this study lacks substantial research in order to make generalized conclusions for the population and to support new arguments. However, on the positive side, the situation demands a fresh and innovative perspective in the given circumstance, and any new findings will contribute, however in a limited manner, to the growing body of literature in this niche of the consumer behavior field.

This present study recognizes the main contributions already made to the combined field of consumer behavior and ecological consumer attitudes. It seeks to build upon the massive body of literature in order to combine the best possible theories, arguments and findings for the creation of the analytical framework that will provide the 'recipe' for the experiment and assist in supporting the findings.

2.1.2 The participants

Participants in the study were recruited from a screening survey conducted in Rema 1000 during 3 weekdays in April. The goal was to find a minimum of 15 consumers willing to participate in the study. This number was chosen as a sufficient amount of participants as their answers would provide a valid body of data for analysis. The experiment faced a barrier in the sense that the consumers chosen would have to pay the actual price for EM and take an active part in the program, thus a larger sample size would have been difficult to attain based on the time constraints.

2.1.3 The screening survey

In order to recruit the most eligible consumers for the study, a screening survey was developed. *(Please see appendix Figure A).* The purpose of the screening survey was to eliminate any consumers who were not considered applicable for this particular study. Consumers were approached at the dairy section of the store and asked about their shopping behavior in relation to milk. If the consumers answered according to pre-set desired answers they were proved eligible and were introduced to the study. They were asked to participate in a consumer program for the promotion of EM and were not informed of any underlying

themes or the actual purpose of the study. This was a conscious choice in order to eliminate the possibility of bias in the form of socially desirable answers given by the participants.
A total of 125 consumers were screened for the study out of which 28 were deemed eligible. 18 of these chose to participate in the study, but only 15 showed up for the first round of questions. The analysis is therefore based on these 15 participants.

2.1.4 The experiment

The experiment was designed as an 8-week test-period, starting in week 16 and ending in week 24, in which the participants would repeatedly purchase EM instead of CM. All CM in Rema 1000 has an ecological alternative, and participants were kindly persuaded to exchange their CM with the ecological equivalent. The participants had 2 different ecological brands to choose from, depending on their individual taste and preference. For the duration of the study, the prices on the most expensive brand of EM were lowered to match the price for the other EM to give consumers a free choice for preference and not price. The participants were informed of this price reduction (and return to normal state after the study) before their initial purchase. Furthermore, the participants were informed of the duration of the study and the planned interviews as well as a reward for their participation. The reward was put in place to partly enforce the desired behavior in the participants and thus hopefully spark the initiation of a habitual behavior and partly as a reminder to the consumer to purchase the EM. A bonus card was handed out to the participants in order to 'track' their purchases and keep score of their reward after 10 and 25 purchases. *(Please see appendix Figure B).*
The participants would come down to the store to hand in their finished bonus cards after 10 purchases, (approximately 2-3 weeks) and were given a gift of ecological products for home consumption, and they were kindly asked to participate in an interview. After another 15 purchases (approximately 5 weeks) they would be interviewed (and rewarded) again.

The desirable number of purchases chosen for the study was between 20 and 25. This number was chosen based on the findings by Lally et al. (2009) stating that it took between 18 and 254 days to create a new habit (provided the new behavior took place on a daily basis), (Lally, Van Jaarsveld, Potts, & Wardle, 2009). These data are based on the creation of an entirely new habit whereas the present study focuses on altering an existing habit. It can be assumed that the mere changing of an everyday habit does not take up to 8 months, but may occur in a matter of weeks. Therefore, 20-25 purchases were deemed sufficient (and necessary due to the time constraints) provided the ecological purchases took place minimum twice per week.

2.2 Data collection

Data for this paper was collected during the 7 months of the given time frame and was retrieved from various sources.

2.2.1 Primary data

The primary data for this paper was obtained using questionnaires and open ended interview questions. *(Please see appendix Figure C and Figure D).* The primary data was gathered 'in the field', on location in Rema 1000. The participants in the qualitative data collection are generic consumers in that particular store. The shop was chosen as a real life setting for which the specific context of the investigated behavior is particularly important. The familiar surroundings and groceries in the shop provided the stable context needed for strengthening habit formation and development.

For analytical reasons, the questionnaires were general in nature and not solely focused on ecological groceries. For the majority of the questions, participants were asked to note the frequency of the action posed by the question, e.g. how often they re-used shopping bags. For other questions, they were asked to state reasons for their opinion e.g. 'How do you perceive the price of EM'? For the remaining part, the consumers were asked to register their level of agreement/disagreement, for instance, if they agreed/disagreed to a lesser/larger extent with the attitude posed in the question. For these types of questions, no neutral option to their agreement was available. This was decided due to the fact that all the participants had to display some degree of attitude to the statements made.

2.2.2 Secondary data

Most of the data for the literature review, methodology and the analytical framework chapters was gathered through various scholar databases such as 'business source complete' and 'science direct'.
The secondary data has browsed the subjects of consumer behavior, habit formation and ecological decision making and provided building block for the design of the analytical framework. Most of the data has been gathered from individual articles from various business journals and universities. Other sources include websites and books. Furthermore, the secondary data will be used as references throughout the analysis, using already discovered information to support (or discuss) new findings.

2.3 Analytical method

The analysis is quantitative in its essence with elements of qualitative data from the questionnaires, encompassing the cognitive attitudes and behaviors of the limited amount of participants to the study. The combined approach was chosen based on the desired depth of the data as well as analytical

possibilities provided by the quantity of answers. The qualitative results gathered are incorporated into the analysis in order to support and expand the depth of the answers. (Saunders, Lewis, & Thornhill, 2003). The analysis is divided into parts according to the steps of the analytical framework. The analysis is built as a discussion encompassing the new findings compared to previous research in the field, and conclusions are drawn based on the primary and secondary data discussed in unison and in accordance with the analytical framework.

2.3.1 Participant profile groups

For analytical purposes the participants were divided into 4 profiles, based on their concern score and their prior experience with EM. This was done in order to be able to make general conclusions on attitude, behavior and habitual change in each group. During the interviews the participants were asked questions concerning their actions in regards to environmental preservation and personal health. The questions used for assessing the participants' *concern score* were based on several tips for healthcare (food and exercise) and a 'greener' lifestyle.

For assessing concern for personal health, the participants were asked questions concerning their frequency of purchasing food products branded with the 'wholegrain' and 'keyhole' marks (both known healthcare brands on the Danish food market) as well as a question relating to frequency of exercise. The questions concerning healthcare were based on tips to improve one's health taken from Nutrition Vista (2013), (Nutrition Vista, 2013). For assessing environmental concern, the questions related to the most popular actions for environmental conservation; transportation, waste, energy consumption and recycling. Inspiration for these was provided by the World Wide Fund (2013), (World Wide Fund, 2013).

2.3.1.1 Concern score

The participants' concern score was determined on the basis of 7 questions all related to actions to improve or benefit personal health and the environment. The participants were given a score between -2 and +2 for each answer, depending on the frequency of the action. This score, combined with possible previous purchases of EM determined their profile.

On the basis of the concern score and prior experience with milk, 4 profile groups were created; the 'true skeptic', 'the value skeptic'; the 'curious' and the 'refuser'. Each of these groups represents a type of consumer, their level of concern connected to the environmental and their own personal health as well as their assumed attitude towards ecology (based on the concern score, prior purchase and the fact that *none* of the participants were purchasing EM at the initiation of the program).

Each of these groups, their definitions and analytical expectations are outlined in detail below:

Group	Score	Prior purchase experience with EM	Definition	Analytical expectations
Group A **True Skeptic**	Between -14 and -1	No	Skeptical of ecology in general based on low concern score and no prior purchase experience with EM.	Assumed to be the most difficult group to develop an ecological attitude due to high level of skepticism.
Group B **Value Skeptic**	Between 0 and +14	No	Skeptical of value from EM based on their high concern score but no prior experience.	Assumed to be a difficult group for creating a habitual behavior due to no prior experience.
Group C **Curious**	Between -14 and -1	Yes	Curious of EM based on prior experience despite low concern score.	Assumed to be acceptable for attitude development to sustain ecological purchase behavior.
Group D **Refuser**	Between 0 and +14	Yes	Stopped the purchase of EM despite the high concern score.	Assumed to be the easiest group to convince of benefits and value through frequent purchases due to high concern and prior experience.

2.3.1.2 Participants' level of attitude

The participants' level of attitude is determined for analytical reasons in order to illustrate the cognitive perception that the participants hold towards EM and its benefits. The level of attitude will assist in determining the participants' likeliness to develop a positive ecological attitude possibly a decision to continue the EM purchase.

The level of attitude is based on the participants' cognitive perception of the benefits of EM towards the most benefitted areas of ecological, extracted from the Danish Økologisk Landsforenings "10 reasons to purchase ecology"; personal health, the environment, and animal welfare, (Økologisk Landsforening, 2013).

It is seen vital to mention that the notion of 'concern for animal welfare' is not listed as a strong motivator for ecological purchase in general, however, since this paper's focus is not dairy products (specifically milk), concern for animal welfare is assumed to have a noteworthy influence on consumer's attitude towards ecology (Økologisk Landsforening, 2013), and for this reason it is included in the analysis.
The participants' levels of attitude towards EM are based on the answers from the 2nd interview round (after 8 weeks). The participants with a positive attitude towards only one benefitted area are said to have a 'weak attitude'. Those who perceive benefits for 2 areas are said to have a 'medium attitude', and those who perceive that EM will benefit all 3 areas are said to have a 'strong attitude'

2.4 Data quality issues

Reliability

In its essence, reliability in concerned with the issue of consistency of measure. Ensuring reliability may prove difficult since the data gathered from participants are verbal answers, filtered through a conscious mind. Thus, it may be difficult to claim 100% accuracy since consumers are able to provide biased answers. This is a concern which should be considered in the analysis phase of the paper, (Hill D. , 2003). It must be assumed that the participants involved are being truthful, and measures were taken to ensure that questions for both the surveys and the interviews will be non-biased.
The data of this specific study is collected to represent a reality in the time they were collected and is therefore not intended to be accurately repeatable in the future, (Saunders, Lewis, & Thornhill, 2003).
The focal point of this paper is on cognitive perception and highly subjective attitudes. The more cognitive the perspective, the less possible it may be to replicate. The participants chosen for this study were picked randomly based on attitude and willingness to participate and as such may not be an accurate sample of the general population.

Validity

Validity refers to the conclusions based on access into participants' knowledge and experience. Validity can be ensured covering topics from more than one angle and by making questions as clear as possible for the participants, (Saunders, Lewis, & Thornhill, 2003).
In this paper, questionnaires and interviews are made as neutral as possible, using likers scales to measure participants level of agreement or frequency. This was done in order to minimize the likelyhood of biased questions and answers.

Chapter 3
Literature review

3.1 Introduction to consumer attitudes and behaviors

In the following paragraph consumer attitudes and behaviors will be explicated for use throughout this study.

3.1.1 Consumer attitudes

Attitudes are defined as

"*Lasting, general evaluations of people (including oneself), objects, advertisements or issues".*[3]

Attitude facilitates social behavior, and as such is a major focus point of this paper. A further notion on attitudes includes the link to behavior:

"An attitude is an enduring set of beliefs about an object that predisposes people to behave in a particular way toward the object".[4]

An attitude is most often formed on the basis of personal experiences, thoughts, beliefs etc. and is a highly personalized cognitive perception of things. It is therefore highly possible that 2 individuals may share the same attitudes for different reasons. Due to the cognitive origin of attitudes, they can be extremely difficult to alter or eliminate, (Jansson-Boyd, 2012). Attitudes are seldom developed as a consequence of a single action at a given point in time; rather, they are developed over time, in congruence with various situations, experiences, thoughts and beliefs. Most often, attitudes are created unconsciously; the consumer holding the attitude is not always clear on its actual origin, (Jansson-Boyd, 2012).

3.1.1.1 ABC model of attitudes

Based on past research, it has been concluded that an attitude as a single unit is comprised of 3 components; affect, behavior and cognition (known as the ABC model of attitudes, (Solomon, Bamossy, Askegaard, & Hogg, 2010)).

Affect refers to the specific feeling associated with an object towards which consumers have an attitude.

Behavior reflects the intention the consumer has towards acting on the attitude towards an object.

[3] Source: (Solomon et al.2010) p. 275

[4] Source: (Weigel, 1983) p. 257

Cognition is the specific set of beliefs, knowledge and perception that consumers hold about certain objects.

Thus, the model depicts the relationships between knowing, feeling and doing and how those combined factors shape the attitude. All 3 components of the model are essential in determining a consumer's attitude towards an object, however, their respective influence will vary according to the consumer's own levels of motivation, values and intention to act. The combination of the components that is most applicable for this paper is depicted below. (*Please see appendix Figure E for the full depiction of the model)*.

ABC model of attitude:

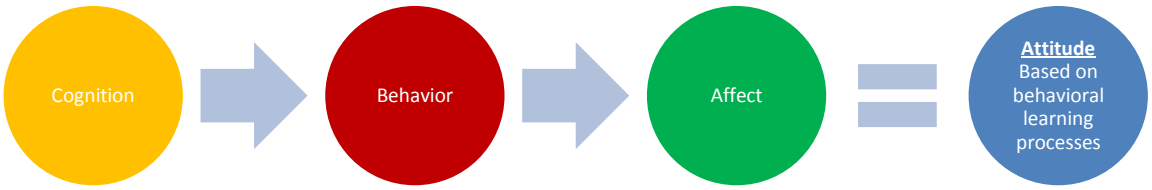

Figure 2 ABC model of attitude

Source: (Solomon et al. 2010) p. 277

This attitude is formed based on a behavioral learning process in which personal perception directly influences the behavior. Only after the behavior has been performed does the consumer evaluate their feelings towards it, thus creating an either positive or negative attitude based directly on behavior, (Solomon et al. 2010).

For the sake of this paper, the attitude of interest is based on a behavioral learning process. This is the attitude formation that produces the most habitual automatic behaviors, (Solomon et al. 2010). To support the ABC model of attitudes, Jansson-Boyd (2012) described attitudes as being mostly developed based on cognition, behavior or emotions and as manners in which consumers perceive products, (Jansson-Boyd, 2012).

Psychologist Daniel Katz (1973) has proposed his 'Functional Theory of Attitudes'; several attitude functions that alone or most combined explains the functional motives of attitudes to consumers, (Solomon et al. 2010). *(Please see appendix Figure F).*

The perspective used in this paper as adopted from Katz's (1973) attitude functions is the combination of the utilitarian function (the fundamental principle of reward vs. punishment) and the value-expressive function ('we are what we buy'), (Solomon et al. 2010).

In order to persuade the consumers to purchase a different kind of milk than what they are used to, the rewards were put in place. The reward system makes the participants more likely to perform the desired action as they may anticipate a reward. The theory of the reward to spark the behavior is further discussed later in the chapter.

To develop ecological purchase as a social practice, it is necessary to develop a sense of ecological consumer identity a so called "green consumer", (Jansson-Boyd, 2012). Consumers are often highly sensitive to their social status, and the reputation of displaying conservation and health can be very appealing, (Griskevicius, Van den Bergh, & Tybur, 2010). Thus, attitudes are vital for consumer behavior as consumers perceive their CIFs as a function of their attitudes which may lead to the desired attitude-guided behavior or, if not, lead to the discrepancy between attitude and behavior.

Various factors such as economic issues, perception of benefits and other cognitive influencing factors on purchase behavior all have a part to play in this question. Throughout the paper, this reoccurring concept of 'which cognitive influential factors motivate or prevent ecological purchase' will be discussed and tested through the experimental study.

3.1.2 Consumer behavior

This section will focus on consumer behavior in relation to consumer attitude, its influence and prediction.

3.1.2.1 Theory of reasoned action

One of the first and most known theories attempting to highlight the process in which attitude may predict behavior is Ajzen's and Fishbein's 'Theory of reasoned action' (1981), (Ajzen, The Theory of Planned Behavior, 1991). (*Please see appendix Figure G)*.

Ajzen and Fishbein (1980) describe behavior as being an action determined by intention which in turn is depending on a combination of attitudes and subjective norms. In Ajzen's and Fishbein's theory (1981) theory, cognitive beliefs and personal evaluation form the individual attitude which then influences behavior. The subjective norms are created based on normative beliefs and personal motivation to comply. Thus, subjective norms are based on whether or not the individual consumer is motivated or willing to comply with socially sanctioned norms. Personal attitude and cognitive perception of 'what society demands', create the basis for intention to purchase, (Ajzen, The Theory of Planned Behavior, 1991).

When touching upon the field of purchase intention and behavior, many researchers refer to Ajzen's (1991) 'Theory of Planned Behavior', (Ajzen, The Theory of Planned Behavior, 1991), as their main tool to investigate and analyze the approach to behavioral prediction and change. Ajzen's and Fishbein's 'Theory of Reasoned Action' (1981) and its extension 'Theory of Planned Behavior' (1991), (Papaoikonomou, Ryan, &

Ginieis, 2010; Park & Ha, 2012; Unsworth, Dmitrieva, & Adriasola, 2012; Wood, Quinn, & Kashy, 2002). However, for the purpose of this paper, the author has chosen *not* to base the analysis on Ajzen's work for reasons listed below:

- Even though Ajzen's 'Theory of Planned Behavior' (1991) is based on cognitive processing and behavioral change, it only assesses cognitive emotions in a limited fashion. However, the model is not seen as a direct applicable tool but as an inspirational factor.
- Furthermore, the focal point of this study revolves around exploring the negative CIFs that influence ecological purchase and is not directed on predicting behavior as such, but altering behavior instead to evoke a different cognitive response to attitude.

The contributions by the above mentioned authors provided the starting point for linking consumer attitudes and behaviors to the theory of consumer habits. This area will be explored next.

3.2 Consumer habits

According to William James (professor of psychology at Harvard University 1876-1907) in 1892:

"All our life, so far as it has definitive form, is but a mass of habits". [5]

Every single day, we humans are faced with a vast amount of choices for each of our daily decisions. How we make decisions stems from a thorough and well considered decision making process. But in truth, most of what we do each day runs 'on autopilot'. Many of our actions are the results of habits that we have built up over time. A habit in itself, may be a very small and insignificant action, but all habits added together such as when we brush our teeth each morning, the route we take to work, the way we organize our daily tasks, the way we make lasagna and how often we exercise have massive impacts on our lives, (Duhigg, 2012).

For many years, scientists have been focused on revealing the subconscious mechanisms that affect our decision making. Even though we may believe we constantly make well-reasoned decisions, we are actually influenced by subconscious urges that we may not understand ourselves, or even recognize, (Duhigg, 2012).

[5] Source: (Goodreads, 2013) taken from http://www.goodreads.com/author/quotes/15865.William_James?page=3

3.2.1 Habit creation

The reason for habit formation, according to scientists, is due to the brain searching for ways to save effort. As a large energy consumer, the brain is constantly on the lookout for making any routines into habits, thus saving effort and allowing our minds to relax more often. When our brain is efficient, we stop thinking about basic actions such as breathing, eating and walking, and can instead spend our mental energy on other tasks, (Duhigg, 2012).

In order to deal with the uncertainty for *when* to power down, the brain spends a lot of energy at the beginning of a habit formation in order to be able to recognize a certain 'cue' that tells it what habit to use. For this, the brain has developed a 3-step habit loop: (Duhigg, 2012).

3.2.1.1 The habit loop

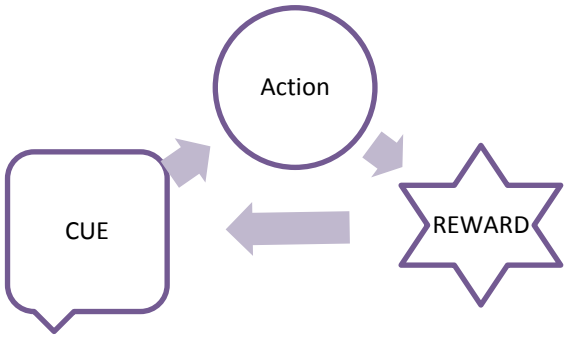

Figure 3 The habit loop

Source: (Duhigg, 2012)

1. The first step is a cue; the specific trigger mechanism, telling the brain which repetitive behavior to perform thus allowing it to power down.
2. The second step is the action; the physical, mental or emotional action that we have performed countless times and perfected to the point where it no longer requires our decision making.
3. Finally, the reward; the outcome of the action. A reward good enough to make your brain remember this specific habit loop and desire it for future use.

The more often a particular loop is used, the more automatic it becomes. The mind starts developing a sense of craving and anticipation for the outcome and that in itself becomes a trigger, thus fostering a habit, (Duhigg, 2012).

Often, people do not remember how a habit started, what underlying experience or sensation made it emerge, but once it is there, it influences how we act to certain things, often without us even realizing – or permitting – it. In the early phases of development, habits are initiated by the presence of cues. A broad range of triggers can create cues and generate specific habitual behavior (Duhigg, 2012). For this paper, triggers are provided by mental and location factors as presented by Duhigg (2012).

The cue itself may range from being very simple to being extremely complex. Some cues result in instant cravings, whereas others take longer to manifest. After the presence of a cue has triggered the desired behavior, the mind requires a type of reward in order to remember the behavior and allow the unconscious mind to repeat the behavior, provided the reward was found to be sufficiently pleasing. Rewards are very individual and may show themselves as either physical or emotional (Duhigg, 2012).

Often, habits are created on the basis of a certain craving. This craving can be either self-built or it can be influenced by other people setting the scene for developing a craving based on certain placed cues or rewards. In its basic foundations, the craving for the reward is what creates the habit loop and keeps it spinning, (Duhigg, 2012). Thus, the first stage of habit formation is launched as an action that is believed to attain a desired reward, (Wood & Neal, 2009).

Anticipating a reward can make habits form and develop in 3 different ways, (Neal, Wood, & Quinn, 2006):

1. *Through direct context cuing:*

With repeated activation of certain behaviors comes the creation of a link in a consumer's memory between the context (which will eventually become the cuing mechanism) and the response.

2. *Through implicit goals:*

With focus on implicit goals, habits develop when consumers repeatedly perform a certain action resulting in reaching a desired reward.

3. *Through motivated context:*

This last antecedent of habitual performance draws on the direct context in which the habit is performed repeatedly. But unlike direct context cuing, motivated context becomes a drive in itself, without having to wait for the cuing mechanism. It is the specific context that energizes an associated reaction without further triggers.

A combination of some – or all – of these mechanisms for habitual behavior is known as multiple habit mechanism, (Neal, Wood, & Quinn, 2006). According to Wood et al. (2002) everyday habits repeated often

are likely to be based on a combination of these mechanisms and not just one. Regardless of which antecedent first sparked the habit, whether it was the context or the reward, all habits are essentially triggered by the specific situational circumstances in which the consumer finds himself daily, (Wood, Quinn, & Kashy, 2002).

Researchers are in disagreement about the length of time or number of repetitions it takes to create a habit. A research paper on habit formation found that it takes from 18 to 254 days to reach a level of 95% automaticity for a new behavior, (Lally et al. 2009). In this case however, the main point is to *replace* an existing habit, not develop a new one from scratch, thus, the time span for the habit creation may prove to differ from this past research. Research papers indicating time span for replacing or altering habits are limited.

Past research has emphasized the importance of context stability in habit formation. This means that the contexts in which the habit forms, performs or changes are established in unwavering contexts which are familiar to the consumer. When habits are performed in a stable context, there are no unfamiliar or changing variables to take into account, thus the habit may unfold when cued, (Lally, 2009).

3.2.1.2 Number of repeated actions for habit formation

The study by Lally et al. indicated a duration for establishing a habitual behavior to take between 18-254 days for participants to reach 95% of their automatic response to the presented cue, (Lally et al. 2009).
For this particular paper, the participants had a total of 8 weeks, in which the desired action was performed between 15 and 25 times. It was assumed that an approximate number of purchases to form a habit would be 20-25 times. For some consumers, the habit may have been shaped within 5 purchases, for others it would take longer.
Based on a 'rule of thumb' the first 3 weeks of a new behavior will be the actual *changing* of the behavior, (Maltz, 1898).[6] If this theory holds true, then daily repetition of a certain action could replace an existing action within 3 weeks. This is consistent with between 20 and 25 purchases of EM.

3.2.2 Habits as predictors of behavior

Habits can in their essence be regarded as unconscious occurrences interfering with norm directed behavior. Norm directed behavior deals with actions that are sprung out from social and personal norms. Habits may be integrated into normative decision making depending on the number of repeats for a

[6] This rule of thumb is said to originate from Dr. Maxwell Maltz in his book "Psycho-Cybernetics" (1960). He discovered that it took it took 21 days for amputees to cease feeling phantom sensations in the amputated limb. And thus he concluded that it took 21 days (of unrepeated behavior) to create a habit, (Maltz, 1898).

specific behavior. Klöckner & Matthies (2004) has created an extended model of normative decision making based on the original 'Model of Normative Decision-Making', by Schwartz & Howard (1981), (Klöckner & Matthies, 2004).

3.2.2.1 The model of normative decision making

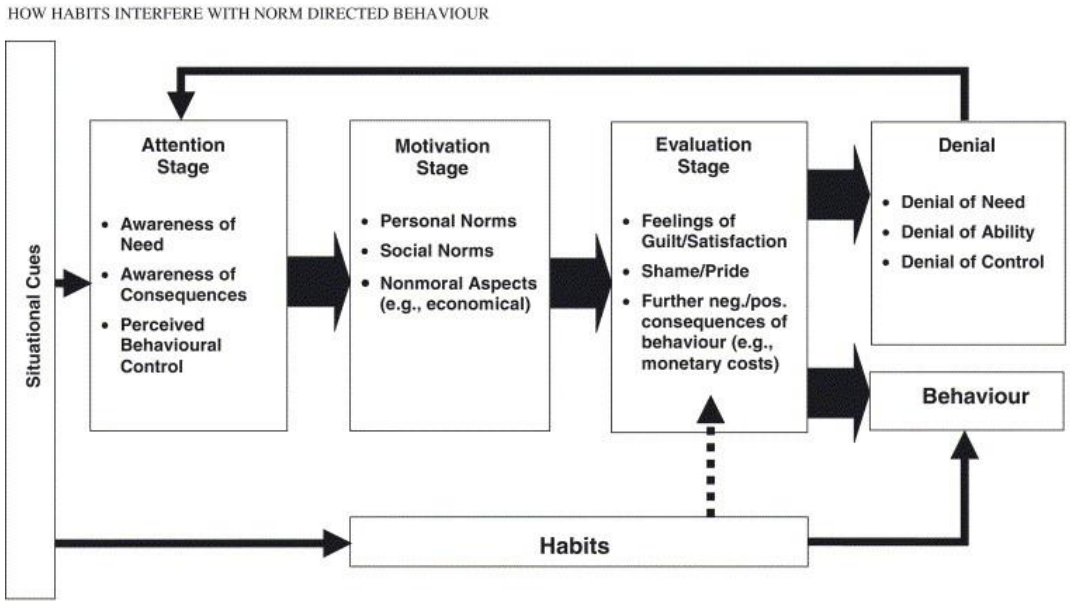

Figure 4 The model of normative decision making

Source: (Klöckner & Matthies, 2004).

The model depicts the normative decision making process initiated by the presence of situational cues. When the cues are presented, the consumer becomes attentive to whether or not the specific behavior awoken by the cues is needed, what the consequences are and whether or not the actual behavior is unconsciously controlled by the consumer. Next, the consumer reaches the motivation stage in which aspects such as personal and social norms are regarded along with non-moral reasons for initiating the behavior. Lastly, the consumer reaches the cognitive evaluation stage; the outcome of which will determine whether or not a behavior will be carried out or denied, (Klöckner & Matthies, 2004).

The way habits interfere with norm directed behavior, as explained by Klöckner & Matthies is as follows: From a previous study by Klöckner & Matthies (2003), 2 different ways of integrating habitual behavior into the original 'Model of Normative Decision-Making' were discussed. Both ways are depicted in the model above.

The first way was to regard habits as being part of the non-moral decisional aspects, appraised in the evaluation stage. Here, the consumer would evaluate the benefits and consequences of his personal and

social norms and act on the habitual behavior accordingly. (Klöckner & Matthies, 2004).
The second way to integrate a habit into the norm directed behavior as put forward by Klöckner and Matthies (2003), was to regard habits as overriding the main process of the normative decision making by making them react to specific situational cues.

This model was seen as highly applicable in the way it illustrates habits as 'overriding' the normative decision making process, by making the desired behavior automatic. This model functions as an underlying theory for habitual creation from which habitual change can be analyzed.

3.2.3 The habitual consumer in retail

The habitual consumer differs from a habitual individual in several aspects. For habitual individuals, approximately 40% of daily actions are categorized as being habitual performances, (Wood, Quinn, & Kashy, 2002); however, when becoming consumers, it can be discussed whether certain actions or decisions may be categorized as habits, or simply, carefully decided actions based on a number of different factors such as price, quality, preference etc. (Wood & Neal, 2009).

It is more likely for habits to develop if the consumer is less experienced in the behavior in relation to the desired outcome. The more experienced they are, the more they may expect from the outcome and the less likely it is for the habit to develop. Thus, the lower the experienced action to the outcome, the more the rewards may trigger the response and the more likely it is for the pattern to be stored in memory for future use, (Wood & Neal, 2009). According to Wood et al. (2002), not all purchase behaviors shown by consumers are initiated by a conscious intention. When behaviors stem from intentions, it takes no more than a random thought to produce, alter, implement or cease prior repeated actions in stable contexts. Essentially, when purchase behavior is not preceded by conscious intention *that* is what can be defined as a consumer habit. This is one of the reasons why predicting consumer behavior is proven difficult; researchers cannot know which behaviors occur as a part of a habit loop or which are based on conscious intention, (Wood, Quinn, & Kashy, 2002).

According to Verplanken & Wood (2006), the main distinction between conscious consumer purchase and habits is that habits are automatic or semi automatic responses to a direct cuing mechanism. In opposition, conscious consumption is based on past experience or a conscious decision to purchase a specific product, (Verplanken & Wood, 2006).

With time, habits build in strength, and alternative choices are reduced in accessibility. For any given context, the habit becomes the dominant performance, neglecting alternative choices. At other times, consumers may prefer the habits simply because it feels *easy*. Often repeated actions are fluent, quick and

easy to execute, whereas new routines take a long time to develop the same level of ease, (Wood & Neal, 2009).

3.3 Sustainable consumption

Over the past decades, the world has experienced a tremendous rise in news concerning the ongoing deterioration of the environment. Environmentalist groups have promoted their causes through campaigns as an attempt to make the general population more aware of protection and conservation of the environment.
Steadily, a growing concern for the environment has begun to influence purchasing behavior and consumer attitude, making way for a different kind of consumer; the ecological consumer, (Finnisterra do Paco & Raposo, 2008).

With every single purchase, there is the potential of choosing a path that leads to a more (or less) sustainable path of consumer behavior. A study undertaken by Kjærnes and Holm (2007) has shown that in Denmark, organic consumption has been "normalized". (Hjelmar, 2011).
In 2010, Denmark was the country with the highest ecological sale per citizen. The ecological sale in Denmark has been steadily increasing during the financial crisis, as consumers have become more aware of what they buy and what they get for their money. The Danish 'Ø'-brand has become a trusted mark for pure food products, animal welfare and sustainable production, (Økologisk Landsforening, 2011).
In 2011 the category of ecological dairy products had seen the largest increase with 10% compared to 2010. With revenue of 1.9 billion DKK, dairy is the single largest sales category of ecological foods in Denmark, (Danmarks Statistik, 2012).

Before discussing the ecological consumer, it is necessary to establish the actual definitions used in this paper when it comes to defining ecology.

3.3.1 The concept of ecology

In its essence, ecology means the relationship between organisms and their environment, (Dictionary.com, 2013). The study of ecology is a branch of biology that studies living organisms and their interaction with their environment.
For the purpose of this paper, no distinction is made between organic and ecological food products since the definitions in relation to natural foods differ very little, (L'arbre Vert, 2013) .

3.3.2 Ecological versus conventional food products

Økologisk Landsforening has in joint collaboration with the Danish Food Ministry defined the 10 best reasons why ecological groceries should be preferred over conventional groceries. The list entails a number of health benefits of ecological food products as well as factors that have been proved to have a beneficial effect for both the environment and animal welfare, (Økologisk Landsforening, 2013). *(Please see appendix Figure H).*

Since more care is taken in production of these ecological products, it goes without saying that the price of purchasing an ecological product is higher than with a conventional product. However, there are more reasons for the price premium:

- The price for the ingredients is more costly, making the final product even more costly
- Basic supply and demand is making the ecology more expensive since not enough consumers are purchasing it, so no manufacturers or retailers can afford to keep the prices lower

Certain types of ecological foods (especially fruits and vegetables) have much shorter shelf-life than conventional products, resulting in larger amounts of waste. To make up for this lost cost, retailers have to keep prices up, (Økologisk Landsforening, 2013).

3.3.3 Profiling the ecological consumer

This type of consumer is defined as an individual seeking only to purchase products that cause as little impact as possible – preferably none – on the environment, (Akehurst, Afonso, & Goncalves, 2012). This is generally due to the fact that most ecological consumers are concerned about their natural environment and their own impact on it, (Ha-Brookshire & Norum, 2011). In general, consumers with a 'green' attitude avoid consuming products that they perceive as either:

- Risky to their health
- Harmful to the environment during any of the stages in the product life cycle (production, use and disposal)
- Consuming excess energy
- Have unnecessary packaging
- Contain ingredients from threatened habitats or species

(Akehurst, Afonso, & Goncalves, 2012)

Thus, a consumer with a an ecological attitude can be defined as a consumer who perceives the positive attributes of an ecological product in regards to the benefits for the environment and their personal health.

Many studies have tried to profile the ecological consumer and have come to the general conclusion that the average ecological consumer is a mature female with children living at home, (Hjelmar, 2011). Further evidence points towards a person with an above average level of education and an above average level of socioeconomic status, (Laroche, Bergeron, & Barbaro-Forleo, 2001).

An investigation conducted in Denmark in 2012 showed that up to 90 percent of the Danish population purchase ecological products to a lesser or larger extent, (Landbrug og Fødevarer, 2013). The investigation further revealed that the common idea of the typical ecological consumer being a mature female in the capital no longer holds true for all segments, in fact, in the public sector, the male ecological consumers exceeded the female ecological consumers, (Landbrug og Fødevarer, 2013).

The presence of the attitude-behavior gap reminds us that intention to be ecological consumers and actually *being* an ecological consumer may be parted by a wide gap. According to Young et al. (2010), there are several factors that influence whether or not a green consumer attitude results in actual sustainable purchase behavior. These factors are carefully evaluated cognitively during the decision making process before resulting in either accepting or neglecting the purchase, (Young, Hwang, McDonald, & Oates, 2010). The mentioned factors are listed below:

- The strength of their green values
- Previous purchase experience
- Amount of time for research and decision making
- Amount of knowledge concerning the relevant issues related to green products
- Availability of green products
- Affordability of the green product and willingness to pay by the consumer

(Young et al. 2010)

If any of these factors are not sufficiently strong, it may weaken the consumer's criteria for an ecological product and result in a compromise to a less green product to be decided upon in the final purchase.

3.3.4 Motivational CIFs for ecological purchase

Consumer motivation for engaging in sustainable purchasing is an area that has been well-researched in the last couple of decades. Several antecedents for sustainable actions have been defined and tested through

various studies. The most acclaimed antecedent for general sustainable behavior is environmental concern. However, when it comes to ecological food consumption, concern for personal health has been proven as the strongest antecedent of sustainable behavior, along with (to a lesser degree) concern for the environment.

Concern for the environment

When consumers express environmentally friendly behavior, it often relates back to them taking a standpoint based on their general concern for the environment. The term 'environmental concern' may be viewed as an attitude to take a stand against environmental consequences caused by consumption. Essentially, the decision is based upon the individual consumers' perception of the product, its benefits and consequences. It is during this decision process that attitudes of pro-environmental nature and a concern for the environment may surface in order to guide consumer decision making towards more sustainable products, all depending on the cognitive level of environmental concern and the consumer perception of own personal responsibility, (Finnisterra do Paco & Raposo, 2008).

Environmental concern is created based on individual environmental knowledge, meaning how much any individual consumer is aware about the environmental issues. The development of environmental concern has been recognized as a vital factor influencing every step of a green consumer's decision making process, (Finnisterra do Paco & Raposo, 2008). It is further argued that environmental concern in a single citizen is a much stronger antecedent for sustainable buying behavior than other antecedents, such as a financial incentive or health benefits. This argument is based on the fact that consumer attitudes lie deeper within a consumer's mentality than their behavior. Thus, behaviors may be compromised or even altered, but attitudes are much harder to influence, (Young et al. 2010).

Further arguments put forward by Kim et al. (2005) state that environmental concern and a consumer's individual level of knowledge as to environmental issues are the most useful predictors of sustainable behavior ranging from recycling to green buying behavior, (Kim & Choi, 2005).
It is fundamentally acknowledged that an individual's level of concern for the environment is directly related to their fundamental values and beliefs and may come to influence his buying behavior.
It has been proven that a positive relationship between attitude and intention to purchase exists, indicating that consumer's environmental attitude *does* have a positive influence on their intention to purchase ecological products. Findings show that consumers who have developed cognitively motivated environmental attitudes in general purchase more ecological products than consumers with no environmentally friendly attitude, (Smith & Paladino, 2010).

In conclusion, environmental concern is good for predicting sustainable behavior. However, when it comes to sustainable *purchase* behavior (especially in relation to groceries) the horizon for concern broadens. In the case of purchasing ecological food, the most determined factor for predicting environmentally friendly behavior is concern for personal health and not for the environment in general.
It can be assumed that concern for personal health is an sub-category of environmental concern due to the fact that deterioration of the physical surroundings (such as air, water and scarce resources) has direct effects on human quality of life.

Health concerns

Generally, ecological products are perceived as being healthier than conventional products, (Magnusson, Arvola, & Hursti, 2001). Recent research has indicated that concern for personal health is the strongest motivator for purchasing ecological groceries, (Smith & Paladino, 2010). Under these circumstances, concern for health is meant to include concern for personal health as well as concern for their families' health.

Studies have shown that there is a positive correlation between concern for health and the purchase of ecological groceries. However, these studies indicate further that the likelihood of purchase based on concern for personal or family health highly depends on the type of the ecological grocery in question. Certain ecological groceries are more valued by consumers than others (e.g. fresh fruits and vegetables seem to be more valued in their ecological format than for instance bread and flour), (Smith & Paladino, 2010).

A consumer survey among Swedish consumers conducted by Magnusson et al. (2001) supports the idea of personal health being a larger influential factor on ecological purchase behavior than concern for the environment. The study revealed that perception of personal health benefits and taste were the major purchase criteria for ecological foods, with concern for the environment slightly further down the list of criteria, (Magnusson, Arvola, & Hursti, 2001).

Magnusson et al. (2003) found that the most important motivators for purchasing ecological products are health issues and nutritional concerns, (Magnusson, Arvola, Hursti, Åberg, & Sjödén, 2003). Among the lesser motivators are the superior taste, environmental concerns, food safety, animal welfare and support of the local community and economy, (Hjelmar, 2011).
Combined, these concerns and motivators create consumers' underlying attitudes towards the purchase of ecological products. Thøgersen (2011) further states that consumers generally believe that ecological

products will taste better, be of superior quality to conventional products as well as improve their health, (Thøgersen, 2011).

Throughout this paper, the term 'concern' accounts for both concern for the environment and for personal health unless a direct 'area of concern' is specified.

Apart from environmental and health concerns, other motivators for green behavior can initiate ecological purchase behavior. According to Dagher & Itani (2012) green purchase behavior can be influenced heavily by subjective norms such as peer pressure in society. Green 'word of mouth' is distributed via green consumers' constant search for new ecological products and has become a strong marketing tool for shaping social influence to green purchase behavior, (Dagher & Itani, 2012).
Research further concludes that simple measures, such as availability and convenience in itself can trigger a desire for ecological purchase, (Smith & Paladino, 2010). Essential to all these motivators is the demand for a growing body of knowledge. A basic understanding of the term 'ecological', its characteristics and attributes has a highly positive influence on the consumer decision making process towards ecological products, (Smith & Paladino, 2010). It can be argued that a more communicated knowledge about ecological products and their benefits will assist in eliminating consumers' unwillingness to pay due to skepticism. Knowledge can be regarded as the most conclusive link between the conventional consumer decision making process and the preference for ecological products.

3.3.5 Going 'green'

For green consumers, their ethical value driving their purchase behavior has become a strong incentive for habit creation. When consumers highly value their green attitudes, scanning the shelves for green products becomes habitual. The basic principles developing the habitual behavior is the same as for conventional consumers, however, some triggers in their personal values turn them towards green products. For researchers, it is vital to investigate in the specific changes in value that may turn consumers from conventional to green consumption. Switching behavior from conventional products to green products may require consumers to make alterations (slight or larger depending on personal values and motivation) to their lifestyles with the aim of reducing the impact that consumers 'wrong' choices have on the environment, animals and society as a whole, (Hall, 2011). Bañeguil and Chamorro (2002) has developed a framework which outlines a simplified process in which cognitive concerns develop into ecological attitudes and further results in ecological purchase behavior.

3.3.5.1 Bañeguil's and Chamorro's 'Ecological consumer purchasing model'

Consumption is a way by which people may express their moral obligations. Furthermore, consumption is an action that enables people to assert responsibility and ethics through their decision making.
Thus, one key factor for changing consumers' habits is to make a distinct cognitive connection between the consumers' personal concern for the environment and their purchase behavior. Once the connection is made, the consumers may be able to observe the gaps in their own behavior as reflected by their concern for the environment, and that may initiate a change, (Hall, 2011).

Bañeguil and Chamorro (2002) have developed a framework for analyzing the various steps of consumer concern for the environment and its relation to purchase behavior. The framework consists of 5 steps of consumer behavior, ranging from being ecologically indifferent to carrying out the action of a sustainable purchase, (Manzano, Rivas, & Bonilla, 2012).

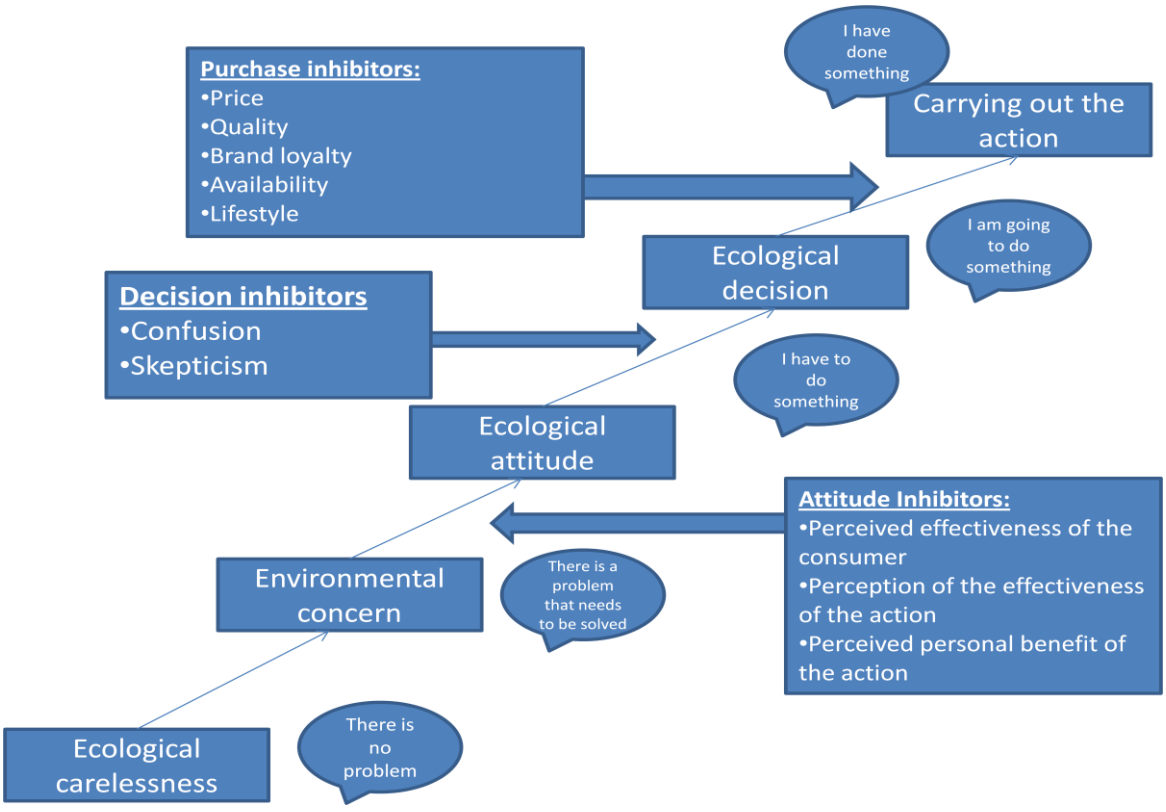

Figure 5 Ecological consumer purchasing model

(Manzano, Rivas, & Bonilla, 2012)

Information in this model is adopted from Manzano et al. (2012) as the original text by Bañeguil & Chamorro was written in a foreign language not spoken by the author.

In its essence, the model by Bañeguil and Chamorro (2002) depicts a 5-step move in consumer attitude, going from 'ecological carelessness' to 'carrying out the action'. The 5 steps are listed below:

1. *Ecological indifference*

   Places all people who do not believe that the damage to the natural environment is a grave problem.

2. *Environmental concern*

   Where people believe there is a problem that needs to be solved. Here, individual level of interest can be measured as well as their perception of gravity of the problem. Concern is seen as an important step in behavior change.

3. *Ecological attitude*

   Pre-stage to taking personal action to solve environmental problems and willingness to accept proposed measures.

4. *Ecological decision*

   Here the individual decides to take real measures to protect the environment, however, an ecological attitude does not always translate into a decision to act.

5. *Carrying out the action*

   Action implementation or actual environmental performance is when the individual implements the measures for environmental protection.

(Manzano, Rivas, & Bonilla, 2012)

The argument given by the literature is that any consumer's mentality and attitude towards the purchase of ecological products can be positioned in one of the 5 steps of the model, (Manzano, Rivas, & Bonilla, 2012). Depending on the point of 'departure', there are various inhibitors between the steps that may or may not prevent the consumer from reaching the next outlined steps of the model. These inhibitors are categorized into 3 groups and are described below, (Manzano, Rivas, & Bonilla, 2012):

Attitude Inhibitors:

These attitude inhibitors are located between the steps of 'environmental concern' and 'ecological attitude'. For the attitude inhibitors to be applicable, the consumer must have developed a cognitive concern for the environment.
This cluster of inhibitors includes the consumers' cognitive perceptions of the benefits and effectiveness of his purchase action. If these perceptions are negative, the consumer may be prevented from moving further up the steps towards developing an ecological attitude.

Decision inhibitors:

Between the steps of 'ecological attitude' and 'ecological decision', we find the decision inhibitors. These take effect when the consumer has developed a personal ecological attitude and before they decide to *intend* to become an ecological consumer. These decision inhibitors include confusion and skepticism concerning ecological products and may prevent the consumer from intending to purchase them.

Purchase inhibitors:

The final inhibitors present themselves after the consumer has developed an intention to purchase ecological products. They are the final factors that will ultimately determine the outcome of the intention - whether or not it results in actual purchase behavior at the crucial moment. These final inhibitors consist of the consumers' perception of the price, quality, availability, lifestyle and brand loyalty of the ecological products compared to the conventional product. (Manzano, Rivas, & Bonilla, 2012).

This model is deemed highly applicable for the present paper in terms of detailing the actual *move* in ecological consumer behavior based on level of concern. The model will be modified for the purpose of developing the analytical framework that will serve as the guiding instrument for the analysis.

3.4 Changing habits

For all strongly rooted everyday habits there is a golden rule of change:

"You cannot extinguish a bad habit, you can only change it." – Charles Duhigg[7]

This is the ultimate rule as identified by Charles Duhigg (2012): using the same cues and providing the same rewards, it becomes possible to alter the routine and thus change the habit. With time, it is possible to provide new rewards, giving the consumer a chance to change their habits even further. These changes in rewards often stems from alternative values that consumers come to desire and consume by, (Duhigg, 2012).

There are 2 ways in which habits can successfully be changed, both of which highly depend on the consumers' *wish* to change and *belief* that change is possible, (Wood & Neal, 2009):

1. Remove oneself from the context that is certain to trigger the undesired habit
2. Change the response to the cue, thus avoiding the old habit by creating a new one

[7] Source: (Duhigg, 2012).

Not being able to change or exit a habit does not necessarily point to bad willpower or insufficient knowledge, but simply the powerlessness of the situation that triggers responses. Even though most habitual contexts are stable it does not signify that the consumer is in control. For this reason, the only ways to alter (or destroy) a habit is to change the context, not attempt to control it, (Neal, Wood, & Quinn, 2006).
This theory is further supported by Verplanken & Wood (2006) who claim that change in behavioral patterns is not only a matter of the change in context or goals, but of maintenance and monitoring. The authors state that habits may be created as intervention goals intending to replace the old (possibly bad) habits with new and modified habits that are based on positive intervention, (Verplanken & Wood, 2006).

Even though the consumer may succeed in changing their habits by redirecting the routine based on the cue, the old habit will still be stored deep in memory. There are ways in which the old habit may be re-awoken:

When distracted, consumers act on old habits:

Here, a distraction is defined as a task or action that disrupts the current string of performances done by the consumer. When the consumer's focus switches from the string of actions to a secondary task, it may reduce a person's ability to decide on the new task in order to prevent the old habit from re-emerging. A distraction occupies the brains' work, and again the brain is forced to rely on simplified decisions thus locking the consumer back in the old habit loop, reducing his ability to see and act on alternative choices, (Wood & Neal, 2009).

When self-control resources are limited, consumers act on old habits:

Changing habits deeply depends on any consumer's level of self-control. If the self-control is not present or not strong enough, it will not be possible to change the course of action from the old habit to new decisions. Sometimes, self-control may be present, but exerted too much throughout the day may drain it. When people have too much on their minds that require restrain, motivation or any level of self-control to be performed satisfactory, they may not possess the needed regulatory resources at the end of the day to change their habits. Consumers with low self-control are not able to exercise enough effort to alter performance to reach new goals and end up simply falling back on old habits which require much less effort, (Wood & Neal, 2009).

During the analysis of this paper, these disruptions of behavior are referred to as mis-actions, indicating that the consumer performed a mis-directed action (purchasing CM), contrary to the preferred action of purchasing EM during the course of the program.

According to Duhigg (2012) there is no possible way to overpower a habit unless the specific craving triggering the habit has been recognized, accepted and dealt with. Several studies have shown that a strong habit does not solely consist of a cue and a reward, but more the *expectancy* of the reward to come as a result of the action. This knowledge is vital if new habits are to replace old ones. It is not sufficient to install a new cueing mechanism and practice a new action to get a new reward if the mind guiding the action is not expecting the new reward, (Duhigg, 2012).

There may be several reasons why consumers – whether they are disposed to green purchase behavior or not – do not prefer green groceries as opposed to conventional ones. There are several attitudes and cognitive barriers that must be crossed for consumers do adopt eco-friendly consumerism.

3.4.1 Negative CIFs for ecological purchase

As soon as habits are formed, they become a conservative force behind the action, making it much harder for consumers to act freely and seek variety and change. The habitual pattern in a person's memory is a very slow process to change, whereas habits acting on cues are fairly quick to initiate, often without consumer consciousness. For consumers to change the habit, they must prior to the cuing mechanism decide to act differently, thus overriding the habitual response stored in their memory when the cue presents itself, (Wood & Neal, 2009).

From the literature, there can be found several cognitive influencing factors that determine why consumers are reluctant to purchase ecological products, and these reasons might turn into impregnable barriers for purchasing ecological foods instead of conventional foods. Generally, all consumers – green or not – do not base their purchase decision solely on the premise of being a green consumer. Other factors such as price, quality, brand name and convenience are considered in the decision making process, (Ha-Brookshire & Norum, 2011).

Through literature, the most negative CIFs are identified as: willingness to pay; concern; skepticism (concerning benefits and value); and repetition (the maintenance of the new habit). These will be discussed in turn below:

3.4.1.1 Willingness to pay

Laroche et al. (2001) has indicated that a strong correlation between skepticism and willingness to pay has been proven to exist. The more knowledgeable a consumer is about environmental and/or health issues the more likely they are to pay the high premium for ecology, whereas consumers who are skeptical about perceived benefits are hesitant to purchase at a higher price, (Laroche, Bergeron, & Barbaro-Forleo, 2001). In addition, Albayrak et al. (2011) found further evidence that general skepticism had a highly negative influence on consumers' green purchase behavior concluding that even though consumers might think or behave in an sustainable manner, the likelihood that they will initiate ecological purchase behavior is very low if they do not perceive the benefits of their actions, (Albayrak, Caber, Moutinho, & Herstain, 2011).

It may prove difficult to discover the exact reasons affecting consumer willingness to pay for ecological products, (Ha-Brookshire & Norum, 2011). One study done by Hjelmar (2011) revealed that many consumers are still too price conscious to switch to ecological products, (Hjelmar, 2011). The practical consumer is still aware of the 'good bargains' when it comes to distributing the household economy. Laroche et al. (2001) developed a conceptual framework derived from various researches attempting to frame the issue of willingness to pay for ecological products. (*Please see appendix Figure I).*

According to the framework, consumers' willingness to pay more for environmentally friendly products depends on 5 different factors; demographics; knowledge; values; behaviors and attitudes, (Laroche, Bergeron, & Barbaro-Forleo, 2001). These 5 factors will now be discussed below:

Demographics:

As mentioned, the combined results from various research depict the general environmentally friendly consumer as a pre-middle aged female with children living at home and a higher than average level of both education and socioeconomic status, (Laroche, Bergeron, & Barbaro-Forleo 2001; Hjelmar, 2011). In general, evidence points towards women being more ecologically conscious in their shopping than men, (Laroche, Bergeron, & Barbaro-Forleo, 2001). From an economic point of view, income has less influence on willingness than actual *un*willingness to pay a price premium. Consumers may not lack the money, but they are still highly price conscious, and often the bar of the premium price is set too high, making the ecological product less desirable, (Welsch & Kühling, 2009).

Consumers' knowledge:

A positive link has been proven to exist between consumers' degree of knowledge concerning environmental and health related issues and their willingness to pay a premium price for environmentally

friendly products, (Laroche, Bergeron, & Barbaro-Forleo, 2001). Even though knowledge may serve as a pre-stage to environmental concern, it cannot be pinpointed as a clear indicator of sustainable behavior. However, research has indicated that providing additional information to ecological products has a positive effect on the consumer attitude and the intention to purchase it, (Bougherara & Combris, 2009).

Consumers' values:

Values may be seen as either collective or individual. Consumers with a collective state of mind and collective attitudes tend to be more environmentally friendly to benefit society as a whole and do what they ought to do, such as recycling their waste or buying ecological products, not for their own personal gain but for the good of society and the environment. Consumers with a more individualistic state of mind with associated values tend to focus more on the personal benefits of the decision, (Laroche, Bergeron, & Barbaro-Forleo, 2001).

According to Young et al. (2010) green values seem to have a weak influence on consumers' decision making process when actually facing a purchase decision. This could be explained in terms of many other factors that in themselves influence consumers' green values. These are factors such as: brand strength; cultural background; demographic characteristics; financial situations; habits; lack of information; lifestyle and personality. Thus, even though green values are held to a certain extent, it far from predicts neither intention to purchase nor actual purchase behavior, however, evidence suggests that whichever values the consumer may have will have an influence (either positive or negative) on willingness to pay for ecological products, (Young et al. 2010).

Consumers' attitude:

According to Laroche et at. (2001) the 2 most essential attitudes related to ecological purchases are summarized as importance and inconvenience. Here, importance indicates the degree of concern and respect for the environment and how this is translated into actual expressed behavior. Individual perception of the severity of the deteriorating environment and the consumer's role in the scenario has been proven to be a strong influential factor on willingness to pay the premium price for ecological products. Inconvenience refers to how convenient the individual consumers perceive sustainable behavior. Combined, these 2 attitudes pose a general problem; a consumer may feel that purchasing ecological groceries is good for long-term sustainability, but the inconvenience of finding the ecological groceries may be enough to prevent the actual purchase, (Laroche, Bergeron, & Barbaro-Forleo, 2001).

Consumers' behaviors:

There are various ways in which behavior can be sustainable. By purchasing ecological products, recycling, decrease energy consumption and use more sustainable methods of transportation people can display an ecologically conscious behavior. Consumers who are generally ecologically conscious will find ways to try and protect the environment; however, it remains unsure how consumers' willingness to pay more for ecological products fits together with other possible sustainable activities, (Laroche, Bergeron, & Barbaro-Forleo, 2001).

In conclusion, willingness to pay can be seen as being a highly subjective CIF as cognitive perception of value, concern, skepticism and belief can influence the decision to pay a price premium for a product that has a cheaper alternative. An economic analysis performed in Denmark showed that 25% of Danes stated price as being the biggest consideration for their choice of food, (Landbrug og Fødevarer, 2013).

3.4.1.2 Skepticism

Skepticism in this context is a term that refers to several different aspects of being skeptical. According to various research, consumers can be skeptical about ecological products on various grounds: product characteristics (such as quality and taste) and perceived benefits and effectiveness (such as health benefits or environmental benefits).

Product characteristics:

As many studies indicate, consumers with an ethical mind generally claim that ecological foods taste better than conventional foods, however, if the taste difference is not detectable, the more practical consumers tend to become skeptical. Specifically in regards to dairy products, research has shown that taste is amongst the strongest motivators for ecological purchase. However, motivators for one consumer may be inhibitors for others. Taste is highly subjective, and improved taste on ecological food products may not be a shared opinion amongst the majority of consumers.
Furthermore, ecological fruits and vegetables in particular tend to have a shorter 'shelf life' than conventional fruits and vegetables due to the lack of additives, making them even less desirable for some of the practical consumers. Research has even detected that consumers dislike the appearance of ecological food products in terms of size and colour in comparison with conventional food products (Smith & Paladino, 2010).

Perceived benefits and effectiveness:

According to research, Perceived Consumer Effectiveness (from hereon PCE) can be defined as a reflection of the beliefs that consumers hold about their actions helping to solve environmental problems. It has

further been proved that there is a direct positive connection between PCE and environmentally conscious behavior. Thus, if consumers are skeptical about the perceived benefits they gain from purchasing ecological products, it will prove much more difficult to evolve ecological purchase behavior, (Albayrak et al. 2011).

Some consumers consider the communicated benefits of ecology to be exaggerated or even driven by profit, and this may lead them into unjustified negative perceptions about ecological groceries, (Albayrak et al. 2011).

PCE is furthermore connected to perceived health benefits. Generally, consumers tend to hold the beliefs that ecological products are healthier, better tasting and more nutritious. Yet, according to some researchers, the slight elevation in nutritional value in ecological foods compared to conventional foods are too insignificant to have any direct health benefits for consumers, (Albayraket al. 2011). Other research points towards a significant health increase in ecological groceries due to the lack of additives and better quality ingredients, (Økologisk Landsforening, 2013). Despite this ongoing discussion of health benefits in ecological food, it all boils down to the end consumers' perception of health benefits and whether or not they choose to believe the elevated nutritional value and its benefits.

Having the right type of knowledge about environmental problems, health related issues and even general knowledge about the term ecological is vital, as it is regarded as having a large influence on consumer skeptical aspects of the decision making process. Research points towards knowledge being a key influencer in the behavior of purchasing ecological products. The level of ecological knowledge is highly affected by consumers' trust is the labeling of the ecological product. Slight mistrust about correct use of the term ecological and the possible gap between what the term means to manufacturers compared to what the term refers to in the mind of the consumer may lead to increased skepticism about the trustworthiness of ecologically labeled products and thus create doubt about the origin and ecological benefits of the product, (Smith & Paladino, 2010).

3.4.1.3 Availability

Lack of availability is often considered as a major inhibitor of ecological purchase. Research further points towards consumers' increased willingness to purchase ecological foods if these were more readily available, (Smith & Paladino, 2010).

For many consumers, it is vital that the weekly shopping routines are performed efficiently, (Hjelmar, 2011). This statement will only fit with positive attitudes towards ecological products if these are easily available and visible to the efficient consumer. Some supermarkets tend to 'cluster' the entire range of

ecological products, making it easy for the searching consumers to find everything they need. Other shops mix the ecological products in with the conventional products on the shelves, giving consumers an opportunity to choose between the 2 products, comparing price, quality etc.

One sub factor to availability is convenience for consumers to purchase ecological products. It requires both cognitive and physical effort on consumers part to exchange a conventional habit with an ecological habit, and motivation is required for them to purchase any other product than what they are used to, (Smith & Paladino, 2010). Thus, making it more convenient for consumers to purchase ecological products may prevent the barriers of availability and increase the potential for new conventional-going-ecological consumers.

3.4.1.4 Lifestyle

Taken from the survey done by Hjelmar (2011) it was obvious that the participants had considered and reflected on the issue of ecological groceries. In some cases, these reflections had a positive influence on purchase decisions. One discussed principle was connected to the overall issue in society, stating that what you have to do as a consumer is to act responsibly. For some respondents, buying ecological products was closely connected to the principles of a certain lifestyle, (Hjelmar, 2011).

Based on the evidence put forward in this chapter it can be concluded that changing a habit is easier in theory than in practice. Many cognitive considerations for perceptions must be taken into account as well as the most deciding factor, willingness to pay, must be assessed in accordance with perception of value and benefits.

Based on past experience of performance leading to desired rewards, consumers may conclude that their habits are by far the most appropriate response in the given context. This attitude prevents the consumer from seeking information concerning alternatives, thus limiting pursue of different patterns of behavior. In sum, when people reflect on their habits, they often conclude that continuity is better than change, (Wood & Neal, 2009).

Throughout this chapter, secondary literature has been explored in order to frame the themes of this paper and to present the theories and models that will provide the basis for the theory behind the creation of the analytical framework. The next chapter will combine and use the literary models and arguments put forwards in his chapter in order to create the analytical framework for this paper.

Chapter 4
Analytical framework

Since the focal point of this research is narrow and uses a very cognitive situational perspective, no models found in the literature seemed solely applicable to this specific context. Instead, literary arguments and tested models have been chosen in order to create a new framework to use as an analytical tool for this study.
The outline was clear: The framework should depict the cognitive steps from concern and through its connection to attitude and lastly to ecological purchase behavior. The framework should incorporate elements of repeated purchase along with CIFs for ecological purchase behavior that may or may not determine future intention for purchase. Criteria for each *move* up the steps of the model have been incorporated.

4.1 Creating the analytical framework

The analytical framework was created by combining 2 different models taken from the literature and described in detail in the literature review. The first is Bañeguil's and Chamorro's 'Ecological consumer purchasing model' (2002), outlining the 5 steps of consumers' environmental concern and its perceived connection to actual purchase behavior. The second model is the 'habit loop' created by Charles Duhigg (2012), which describes the creation and repetitive element of a habitual behavior and its cognitive manifestation.

The model by Bañeguil and Chamorro (2002) lays the foundation for the proposed analytical framework. It was chosen for 3 specific reasons that deemed it highly applicable for this study:

Firstly, the model not only shows the various steps in the consumer's concern; it further assumes the cognitive response to each step, thus connecting the notion of cognitive perception of value to the level of environmental concern. This connection is to be explored further in the study.
Secondly, the model has included levels of inhibitors that directly relate to sustainable purchase at the given 'concern' step, thus incorporating cognitive barriers that may prevent consumers from acting sustainably.
Thirdly, the model is basic in its essence, allowing for modifications to its levels and incorporations of other models, in this case, Duhiggs 'habit loop', (2012).

With this model as the foundation, the proposed framework will be able to show the steps in growth and increase in concern and what cognitive complications this may pose.

The next step is to add the repetition of purchase in order to assess its effect on attitudes and behaviors. Charles Duhigg's model of the 'habit loop' was chosen for specific reasons:

Firstly, its simplicity in design and application makes it straightforward to incorporate as a tool for creating a specific habit, in this case, an ecological habit.
Secondly, it is sufficiently diverse; It can be used both to illustrate the existing habit by adding situational factors to the steps in the generated analytical framework, or; it may be used as an analytical tool to habitual creation and/or change.

4.2 Proposed analytical framework:

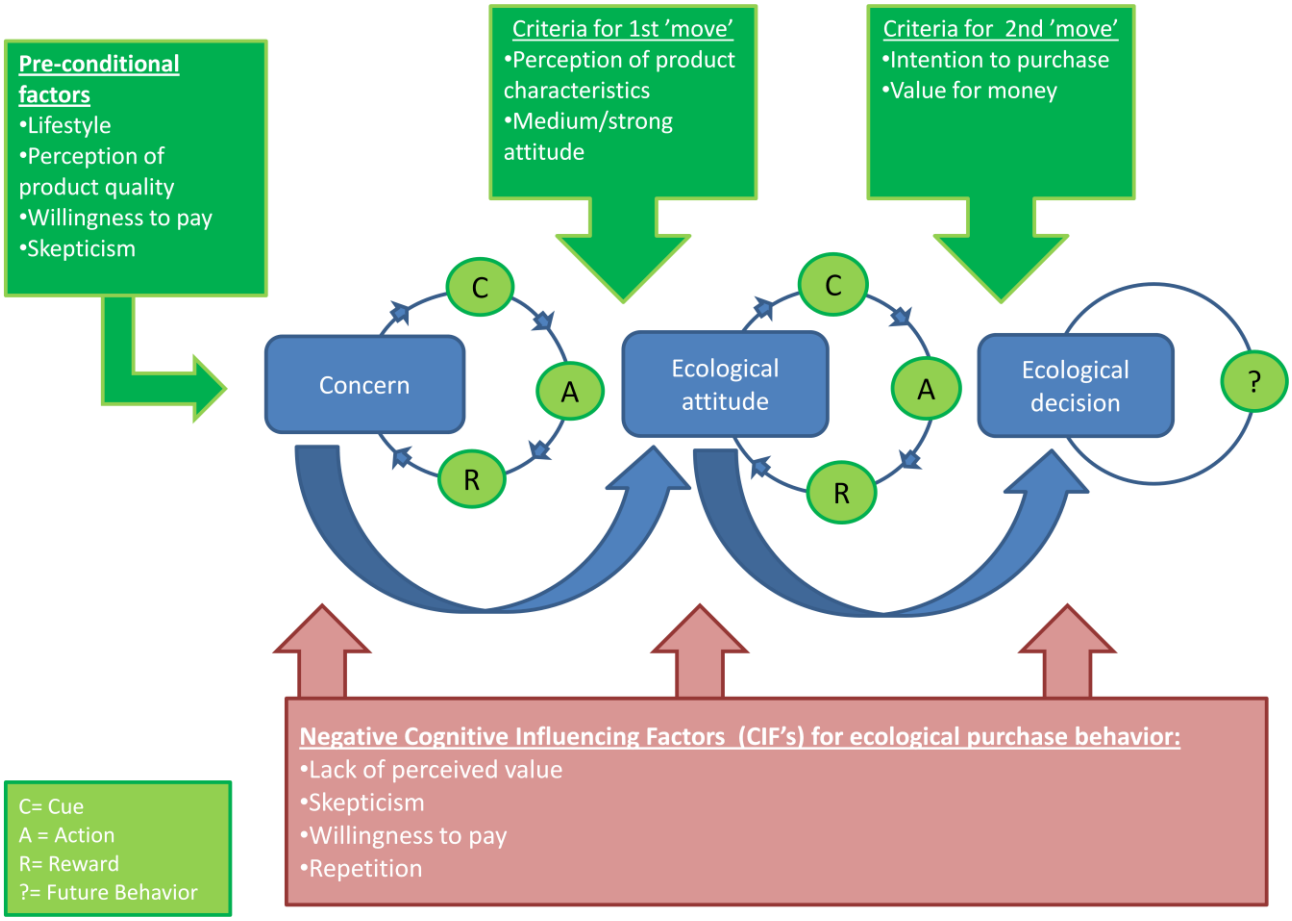

Figure 6 Proposed analytical framework

Source: (Toustrup, 2013b)

In its essence, the framework consists of 3 steps: concern, ecological attitude and ecological decision, each representing a level of concern and its further connection to attitude and behavior.

The pre-conditional factors

The participants had to fulfill a set of pre-conditional factors. These were vital for determining whether or not the consumer was eligible for participation in the program. The pre-conditional factors are described below:

- The participants had to be regular purchasers of milk. There had to be an original habit in place before a change can be attempted. To ensure this, consumers were only approached when they were choosing their milk from the store refrigerators.
- The consumers had to believe that the new ecological product they were purchasing provided the same (or better) quality, e.g. in terms of taste. If the consumers had negative perceptions of the product, they would simply refuse to purchase it. Some of the consumers had tasted the product beforehand, others had not. However, none of the chosen participants with prior experience found the taste bad.
- Most important, the consumers had to be willing to pay the additional expense for the EM compared to the conventional.
- The final pre-condition for participation was for consumers to display some form of skepticism towards the product. Consumers who bought it too frequently or were too fond of it were not eligible for the present study. The consumers' skepticism was assessed in 2 different ways:
    - Firstly, during the week of the screening survey the EM was on sale, and the price was reduced to only exceeding the cost of the CM by 1 DKK (as opposed to 3 DKK at the regular price). Thus it can be argued that consumers who chose the CM *despite* the EM being on sale were in some way skeptical towards the EM. Only these particular consumers were approached for the screening process.
    - Secondly, a question in the screening process was directed at their regular choice of milk. If they answered 'ecological' they were deemed ineligible.
      Only those consumers who did *not* answer 'ecological' were introduced to the program.

These pre-conditional factors are not to be mistaken for motivational factors. They simply state whether or not a consumer is actually *capable* (and willing) of purchasing EM.

The main steps of the analytical framework:

- ***Step 1. Concern***

This step is taken from the original Bañeguil and Chamorro model but has been modified to fit this study. This step was intended to indicate the combined level of concern the individual consumer had for the environment and his own health (derived from the actions they perform that will benefit the present situation of environmental and healthcare).
In order for the consumer to *move* from this step to the next, their level of concern should be reflected in the way they perceive ecological products and EM in particular, its benefits and qualities.

- ***Step 2. Ecological attitude***
  At this step, the given consumer has made the necessary connection between their level of concern and their attitude towards ecological products. Bañeguil and Chamorro defined this step as the pre-stage to taking personal action to solve environmental issues. Thus, the consumer has recognized the problem and develops the willingness to take measures into their own hands.
- ***Step 3. Ecological decision***
  At this final step of the proposed framework, the consumer has made the final decision of adopting elements of sustainable consumerism into their lifestyle. The consumer has been able to make the vital connection between their level of concern and their consumer attitude and behavior. The closer they come to embrace this connection, the more their attitude will influence their purchase behavior. A realistic consumer in this step would actively seek out behaviors that will help preserve the environment and improve their health. This type of consumer does not just act sustainably because society demands it, but of their own accord and values.

The habitual element

Throughout step 1 and 2 (and possibly step 3) of the proposed framework, the participants will engage in the habit loop as described by Duhigg (2012). This is done in order to explore whether or not an ecological habit can be created based on repetition while attempting to increase a consumer's concern and develop their attitude. The habitual changing factor lies in the exchange of the current action (the purchase of CM) with the preferred action (the purchase of EM). It represents a situation in which the consumer repeatedly purchases the EM within the time span of the study.

The theory of the habit loop is taken directly from Duhigg (2012) and applied to the proposed framework and the situation in context.

1. ***The cue:***
   The cue presents itself when the consumer decides to shop for milk. The cue remains constant and is not affected by the changes made to the action.

2. ***The action:***

   This second step of the habit loop was modified. The current action of the consumer was to purchase the CM as demanded by their attitude or habitual behavior. The *modified* action was to have the consumer purchase EM instead. This was the one tangible factor that was modified during this study and as such was a vital exchange that was explored in depth in the analysis.

3. ***The reward:***

   Despite modification to the original behavior, the reward of the new behavior should theoretically still reflect the old reward, (returning home with milk).

   However, to act as a reminder of the purchase and as a reward to engage in the desired behavior on a frequent basis, the participants were given a bonus card recording the number of purchases they made.

Criteria for moving from one step to another

Criteria for 1st move:

In order to make the *move* from the level of 'concern' to the level of 'ecological attitude' the participants had to:

- Have an indifferent or positive perception of the product. Some consider ecology superior in both taste and quality and some cannot perceive any difference. However, the participants *moving* from 'concern' to 'ecological attitude' must not perceive any negative attributes of EM compared to the conventional.
- Have a medium or strong attitude. The participants must have a positive perception of the benefits to the environment and/or personal health and/or animal welfare as these are seen as the most conclusive positive CIFs.

  Without a sufficient belief in the attributes of the EM, it is unlikely that the participants' attitude will result in a change in purchase behavior.

Criteria for 2nd move:

In order to make the *move* from 'ecological attitude' to 'ecological decision' the participants had to:

- Have developed an intention to purchase the EM after the completion of the program.
- Perceive a cognitive value for money. Without perceived value, it is unlikely that the intention to purchase ecolocigal milk will be sustained.

Negative CIFs

Following the steps of the proposed framework is a set of CIFs that may hinder *movement* from one step to the next, depending on how strongly the individual consumer values them. The CIFs represent partly a few of the original in-between-step-barriers proposed by Bañeguil and Chamorro with the support of literary arguments on the subject as put forward in the literature review.

The proposed CIFs are:

- ***Lack of perceived value***

  In order for any consumers to be willing to continue the purchase after completion of the program, it is essential that they perceive a certain level of value from the EM compared to the CM. If any additional expense is to be justified, the participant had to perceive personal benefits in the product.

- ***Skepticism***

  As mentioned in the literature review, skepticism concerning personal health benefits, value for money and/or perception of actual ecological benefits for the environment may greatly influence how consumers perceive ecological products and may even prove to prevent the consumers' *moving* from one step of the model to the next. Skepticism is a factor that may also be influenced by repeated consumption and perception of personal value. However, the development of actual belief in ecology and its benefits lie with the individual consumer.

- ***Willingness to pay***

  Essentially, willingness to pay is proven to be the most influencing factor in terms of switching to ecological purchase behavior. Consumers may be *capable* of paying the additional expense, they may possess a certain level of concern that influences their attitudes, and they may even recognize the personal benefits from ecological purchase, but if they are not willing to pay the additional expense for the ecological product in the end, the rest is of little importance.

- ***Repetition***

  As this study mainly investigates habit creation in relation to EM, the concept of frequent and repetitive purchase is a vital component in the consumer program. Without the repetitive element, the consumer will not activate the necessary triggers for the habitual behavior and may thus never experience a change in behavior from the exchange of the conventional action to the ecological action. In the initial stages of the program, a reward system was put in place as a motivational reminder for the consumer to engage in the modified habitual behavior when the need to purchase milk was present.

4.3 Changes

Certain aspects of the original Bañeguil and Chamorro's (2002) model needed to be modified to fit the current study.

Firstly, the original model was exploring ecological behavior based on environmental concern alone. For the sake of this study, the term 'concern' was broadened to encompass both environmental and health concerns.

Secondly, the original model contained 5 steps ranging from 'ecological indifference' to 'carrying out the action'. This span of steps seemed too vast for this study, therefore, step 1 & 2 of the original model have been combined into one step for the proposed framework; namely 'concern'. The last step of the original model entitled 'carrying out the action' was removed. This study is based on a trial purchase of EM during an 8 week period in which the consumer may or may not develop a habit of purchasing EM. Therefore, the proposed framework concludes with the step of ecological decision, in which the consumer predicts their intention to whether or not they will continue the ecological purchase behavior after the program has ended.

Thirdly, the original model contained 3 levels of inhibitors; attitude inhibitors, decision inhibitors and purchase inhibitors. These have been replaced by the notion of negative CIFs, present at all 3 steps of the framework. This decision was made in order to eliminate the concept of 'inhibitors' (or barriers) as this was seen as being too hard to overcome and the notion of CIFs were chosen in order to counter for the continuous present factors that influence whether or not consumers are willing to make the *move* from one level of the framework to another.

Finally, a set of pre-conditional factors was created in order to screen for participants who were most eligible for the study.

At this point, it is vital to acknowledge that the proposed framework describes only one route scenario in which environmental and health concern influences and (hopefully) creates ecological attitude followed by ecological behavior as a result of repeated consumption and their attitudes to the statements posed in the questionnaires. However, other possible scenarios exist and must be acknowledged:

- It is possible that the individual consumer will develop personal motivators sooner than expected, based on cognitive perceptions of e.g. personal benefits. If this occurs, the consumer will not follow the order of the steps in the proposed framework and may adopt a sustainable behavior with only a minor level of concern.

- Unforeseen inhibitors may prevent the consumer from *moving* from one step to the next in the framework. Depending on the strength of these inhibitors, it may not be possible to see a change in the consumer attitude and behavior during the course of the study.

In summary, the proposed analytical framework has incorporated the most applicable parts of respectively Bañeguil and Chamorro's 'ecological consumer purchase model' (2002) and Duhigg's 'habit loop' (2012) in combination to create a framework for understanding the development of ecological consumer behavior and the possible cognitive factors that may prevent future ecological purchase behavior. With this model, the author seeks an insight into how repeated consumption of an ecological product may create an ecological habit and how CIFs may influence attitude development.

Chapter 5

Presentation of results

For the purpose of the analysis due to the anonymity of the participants, all were given a number (1-15) and throughout the remaining part of the paper, they are referred to as Par 1 to Par 15.

5.1 Status quo

Before initiating the analysis for this paper, it is necessary to establish the status quo obtained from the primary data in regards to participants' concern scores and level of attitude (as explained in the methodology chapter).

5.1.1 Profile groups

Based on the participants' frequency of engaging in various actions regarding environmental preservation and own personal health combined with their prior experience with EM, the participants were divided into the 4 profile groups: 'true skeptics', 'value skeptics', 'curious' and 'refusers'. These profile groups were generated based on participants' answers from the 1st round of interviews (after 10 purchases, approximately 2-3 weeks).

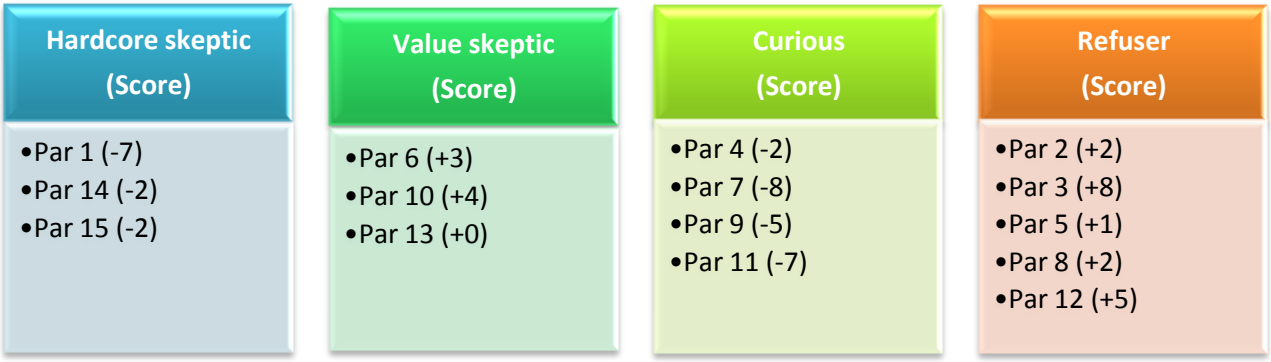

Figure 7 Profile groups

Source: (Toustrup, 2013c)

The table illustrates the number of participants in each of the 4 profile groups along with their initial concern score obtained from the 1st round of interviews.

These groups are referred to in the analytical chapter when their characteristics are of importance to the analysis. In the time between the 1st and 2nd round of interviews, several of the participants increased their concern score. This change will be analyzed further in the next chapter.

5.1.2 Level of attitude

The participants' level of attitude was based on their positive perception of benefits towards animal welfare, health and the environment from the consumption of EM.

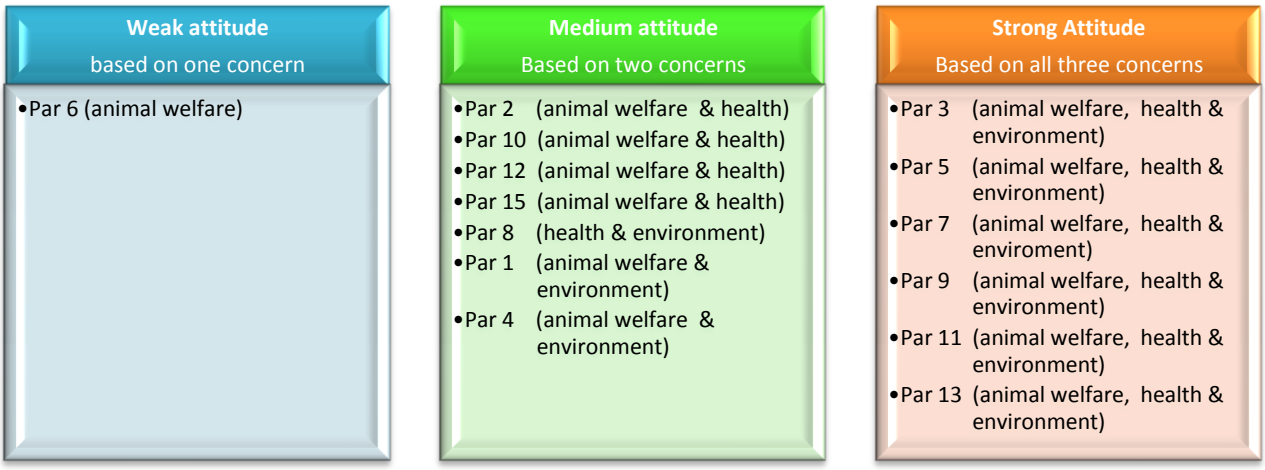

Figure 8 Level of attitude

Source: (Toustrup, 2013d)

This table indicates the number of participants at each level of attitude and towards which benefits from EM their perception is positive. Notice that Par 14 is not listed due to his lack of positive perception towards either factor. This lack of positive attitude will be explored further in the next chapter.

These levels of attitude will be referred to in the analytical chapter when they are of importance to the analysis and conclusions.

This established status quo indicates the platform from which the analytical chapter will take its starting point.

5.1.3 Accepters and decliners

Based on the answers to the questions concerning ecological decision in the future *(please see appendix table 6),* 6 out of the remaining 11 participants at the 'ecological attitude' level claimed that they would continue purchasing EM despite the ending of the program. These are the people that have been

concluded to reach the final step of the analytical framework, named 'ecological decision'. This group of people is divided in 2; the *'early accepters'* and the *'late accepters'*:

- The 'early accepters' are the participants who had made the decision to continue the purchase of EM after having only participated in the study 2-3 weeks (after 10 purchases of EM).
- The 'late accepters' are the participants who did not make their decision before later in the program and in the end decided to continue the purchase of EM, (after another 5-15 purchases).

The remaining 5 participants who reached the 'ecological attitude' level of the framework made the decision to not continue the purchase of EM after the conclusion of the program. This group of participants will be referred to as the *'decliners'*:

- The decliners are the participants who did not intend to continue the purchase of EM after neither 10 purchases (approximately 2-3 weeks) nor at the end of the program.

In part 2 of the analysis, these 3 groups of people will be analyzed in turn.

5.1.4 Further presentation of results

For an outline of the participants, their characteristics and profiles, please see appendix Figure J.

For a full presentation of the results from the questionnaires, please see appendix Figure K.

For a transcribed version of the statements taken from the interviews and used in the analysis, please see appendix Figure L.

Further results from the experiment which are considered important for the analytical and conclusive parts of this paper will be elaborated on the next chapter.

Chapter 6
Analysis

The analysis is constructed as a 3 part discussion according to the analytical framework.
Part 1 takes its starting point from the status quo established in the above chapter. This part revolves around the 'concern' step of the framework, analyzing the participants' attitudes to EM and concludes on the participants who successfully made the *move* from 'concern' to 'ecological attitude'.
Part 2 concerns 'ecological decision' and analyze participants' willingness to continue the ecological purchase based on attitude and perception of CIFs. The conclusion will reveal which of the participants made the actual *move* from 'ecological attitude' to 'ecological decision'.
Together, parts 1 and 2 make up the analysis for the *moves* along the steps of the analytical framework. The conclusions to these revealed the participants who successfully made the *move* from the initial 'concern' step further to 'ecological attitude' and even to 'ecological decision'.

Part 3 deals with the additional perspective of the study, namely the change of habitual behavior. The analysis will conclude on which participants successfully developed a habitual behavior change.

6.1 Part 1 – Ecological attitude

Taking the starting point from the status quo established in the previous chapter, it was noticeable that one participant (Par 14) lacked any level of positive attitude. Further, Par 6 only believed the EM was beneficial for the animals. Based on their respective profiles, both participants are categorized as highly skeptical. The fact that their perception of benefits from EM is low could relate to both participants' missing of experience with EM. This finding indicates an early difficulty in convincing these participants of the benefits of EM which (depending on their perception of product characteristics) may prevent these participants from *moving* to the 'ecological attitude' level of the framework.

In the category of medium attitudes we find the 2 remaining 'true skeptics', who despite a relatively positive attitude towards the perceived benefits of EM, has chosen not to engage in purchasing it prior to the study. Their medium level of attitude indicates a positive perception of the benefits of ecology despite the no prior experience. This attitude could prove to be sufficient in creating a lasting preference for EM. However, it is assumed that certain CIFs have prevented the ecological purchase in the past.
As is further evident from the status quo, the majority of those with a strong positive attitude towards EM

are 'curious' and 'refusers', both groups have had prior experience with the purchase of EM. This high level of attitude could indicate a pre-disposed position towards ecological purchase behavior. Nevertheless, it can safely be assumed that certain CIFs have influenced the prior purchase behavior, making it undesirable.

The participants' cognitive perception of health-, environmental- and characteristic benefits will now be analyzed in turn in order to conclude on which participants were able to make the *move* from 'concern' to 'ecological attitude' by having developed a positive attitude towards EM and its benefits.

6.1.1 Cognitive perception of health benefits from EM

4 participants (Par 7, 9, 12 &13) agreed in both interview 1 and 2 that EM was beneficial for personal health. This indicates an overall positive ecological attitude that may have been developed prior to the program or established within the first 3 weeks leading up to the first interview. Their answers in the open questions concerning the benefits of EM showed positive aspects after having tried the product. One mentioned that:

"I generally believe that ecology is healthier for us than conventional food products, especially fresh products such as fruits, vegetables, meat and milk. […] There's something about there not being as many additives as in regular milk and that can't not *be good"* (Par 7).

This statement allows for assumptions regarding the positive influence of knowledge on the perception of EM. The participant is aware of the benefits of EM and from there perceives it to be beneficial. The fact that this attitude was developed either before the study or during the time prior to the 1st interview round suggests a strong cognitive belief in the health benefits possibly stemming from a sufficient level of knowledge in the matter as indicated by Par 7. This assumption is congruent with the theory that lack of knowledge is one of the most influential reasons why people are not purchasing ecological products. General lack of knowledge leads to increased skepticism and thus a general disbelief in the benefits of ecology, (Magistris & Gracia, 2008).

7 participants (Par 2, 3, 5, 8, 10, 11 & 15) visibly changed their perception of health benefits during the program (from disagree to agree in relation to perceived health benefits). This indicates that something during the course of the program made them realize the cognitive benefits. 3 of these pointed towards a more fresh taste in the open questions. Par 8 indicated that:

"The only perceivable difference is that the taste is often a bit fresher than CM" (Par 8).

This indicates a positive correlation between the fresher taste of ecology and the belief that it will be healthier in general. In the Swedish survey by Magnusson et al. (2001), good taste and health were listed in

the top 3 of purchase criteria for ecological products, proving that in the mind of the consumer, taste and perception of health benefits are generally accompanying factors influencing consumer behavior, (Magnusson, Arvola, & Hursti, 2001).
However, another 3 of the participants indicated strong skeptic views concerning perceivable health differences between ecological and CM. One stating that:

"Essentially, it just looks like CM. There is not much of a difference" (Par 10).

Initially, this statement leads the author to assume that health benefits from EM often is perceived based on visible differences between conventional and ecological. Despite the slight skepticism towards the perceived health benefits of EM, these 3 participants changed their negative perception to a positive perception during the course of the program. This supports a positive attitude development in relation to perception of health due to frequent consumption, a theory that was supported by Magistris & Gracia (2008) in stating that a positive correlation exists between frequency of purchase and a positive attitude to ecology. (Magistris & Gracia, 2008). The remaining 4 participants (Par 1, 4, 6 & 14) did *not* perceive any health benefits from EM. Par 1 stated in the first interview that:

"*It is not like you can actually* see *the milk is healthier when you pour it"* (Par 1).

Thus indicating a clear distrust of perceived benefits as well as displaying an overall lack of knowledge concerning the manufacturing of the EM and the 'ecology' in ecology.
Par 6, in the 2nd interview mentioned that:

"I don't feel healthier after these 8 weeks, ergo it can't be that good" (Par 6).

This statement clearly shows an overall skepticism towards the benefits of the ecological products, and the perceived benefits of the repeated consumption did not manage to alter this attitude. This attitude is further held by Par 4 and 14, who said:

"I understand why people buy it in the belief that it is better, but I just don't know if I can really believe that it is healthier. It is not like conventional products are harmful to your health. They are just not as healthy as ecological products are thought to be. […]I don't think it is as healthy as everyone says, I personally cannot detect any difference" (Par 4).

"*I just don't think I know enough about it to turn it into a lifestyle"* (Par 14).

Again, skepticism is being shown towards perceived benefits of the EM. Par 1, 4 & 6 indicate a negative attitude to ecology combined with a high skepticism concerning its perceived benefits. This last statement

by Par 14 guides an assumption that again, lack of knowledge fosters skepticism that in turn influences consumers' ecological decision as supported by Magistris & Gracia (2008), (Magistris & Gracia, 2008). The fact that the definition of the ecological aspects in EM is not even stated on the carton may add to the overall skepticism of the pre-disposed skeptic consumer. This points to a general lack of knowledge resulting from a limited amount of communicated information by society. According to Dagher & Itani (2012), the 'green word of mouth' destributed through society can have a highly positive influence on ecological purchase behavior, (Dagher & Itani, 2012). Based on this, is can be assumed that the general lack of knowledge displayed by the participants points towards a lack of communicated knowledge from society and the actual products. Further, due to the fact that some of the previously held negative attitudes turned positive from repeated purchase leads to the conclusion that frequent consumption and the conjoint familiarity and knowledge assist in creating a positive attitude towards the health benefits of EM.

Thus, it may be concluded that when it comes to perceived health benefits of EM, the most negative CIF that prevented the consumer from developing a positive attitude in relation to perceived health benefits was skepticism. This skepticism is most likely stemming from a lack of information concerning the product and its positive attributes.
Contradictory, some participants believed in the health benefits of EM, mainly due to the freshness of taste. This could point towards a *desire* to believe in the health benefits of ecology do to the perception of better taste. This finding is congruent with the Swedish study by Magnusson et al. (2001).
It may therefore be concluded that not only knowledge but also perceived attribute differences can foster a positive attitude towards health benefits.

6.1.2 Cognitive perception of environmental benefits from EM

In the question of environmental benefits from EM 4 participants (Par 7, 8, 9 & 13) believed in the environmental benefits by the time the 1st interview was conducted and a further 5 (Par 1, 3, 4, 5 & 11) changed their perception from negative to positive in the 5 weeks between the 2 interviews. However, in the open questions, environmental benefits were not amongst the most stated opinions. One participant *did* say:

"Somehow or another, it must be healthier and probably better for the animals and nature. Everybody says so" (Par 9).

The fact that the theme 'environmental benefits' was not often commented on in the interviews indicates a slight disregard for the connection between EM and preservation of the environment. This could further indicate that when consumers consider 'benefits of EM' environmental benefits do not rank as highly as

animal welfare and health benefits. This assumption is further supported by the fact that more participants changed their perception of health benefits than environmental benefits during the course of the program. Nevertheless, according to the findings, *some* perceived level of environmental benefits must have triggered the 5 participants to change their attitudes from negative to positive during the course of the program. One solution is assumed to be the continuous consumption of an ecological product that may have aspired to higher beliefs in the benefits. Previous evidence has pointed towards consumers' increase in perception of benefits stemming from ecological products as a result of frequent and repeated purchase, (Magistris & Gracia, 2008). It can therefore be argued that it is highly possible that the change in cognitive perception towards the environmental benefits of EM is a direct consequence of the repeated consumption of the product. As was the case with perceived health benefits, this also pointed towards the fact that the mere consumption of the ecological product could develop a belief in ecology and a *desire* to perceive the positive benefits of the purchase. This further points towards a more positive attitude developing through familiarity based on frequent purchase as a sense of 'green-self' is developed on the basis of the ecological purchase.

Par 7 supported this assumption by stating that:

*"I think of myself as a better person by buying it [*EM*]"* (Par 7).

This statement supports the assumption that a sense of higher self may be acquired through repeated purchase, knowing that one is benefitting the environment, society, the animals and one's personal health with the consumption of EM. It can therefore be supposed that belief in one's actions can bring about change that cannot be influenced in the same degree by society. Perception of benefits is in this case seen as a highly cognitive issue and can therefore easily be influenced by own beliefs in the attributes from the ecological purchase, (Kim & Choi, 2005). Nevertheless, as deemed by the participants' answers, some simply have little confidence in the attributes and may be harder to convince unless pure facts are provided.

On the negative side, a total of 6 participants (Par 2, 6, 10, 12, 14 & 15) did not perceive any environmental benefits from EM. When asked about their perception, the answers pointed towards skepticism of benefits for the additional expense of ecology. One participant stated that:

"It does taste good, but so does CM, and that costs nearly half the price. It may be healthier in the long run, but I simply just can't afford it. […] I don't see how it can really benefit the environment. Some EM comes in bags, this is maybe better than a carton, but the one I buy is still in a carton, so what is the point?" (Par 15).

Based on this statement is can be assumed that the most influential CIF fostering this attitude is skepticism resulting in a distinct unwillingness to pay. As before, the willingness of repeated purchase at high expense was having a vital influence on the perception of benefits. A direct correlation between positive environmental attitudes and the purchase of ecological foods (especially in relation to the frequency of the purchase) has been detected, (Magistris & Gracia, 2008). This correlation supports the participants' lack of environmental belief and its negative influence on purchase behavior.

Evidently, consumers still lack certain evidence of the actual benefits of EM, not only in relation to environmental benefits but also health benefits. According to the present findings, more consumers believed in the health benefits of the ecological product than in the environmental benefits. This finding is consistent with the continuous research proving that cognitive perception of health benefits is a better indicator for ecological purchase behavior than perception of environmental benefits, (Magnusson, Arvola, & Hursti, 2001).

Based on the above findings and indications of cognitive factors that negatively influence ecological attitude it may be assumed that a lack of knowledge shown by consumers is a general issue that needs to be cared for if ecological purchase is to be more desired. Based on the evidence from prior research and this present study, it is safe to conclude that consumers with higher ecological food knowledge will be more likely to develop positive attitudes towards an ecological food product and their benefits, (Magistris & Gracia, 2008).

6.1.3. Cognitive perception of animal welfare benefits from EM

The findings from the interviews indicated an interesting pattern. 11 out of the 15 participants perceived EM as benefitting animal welfare by the time the 1st interview was held. By the 2nd interview, another 2 participants had changed their perception of animal welfare from negative to positive. At the conclusion of the program, only 2 participants (Par 8 & 14) could not perceive any benefits for animal welfare through the consumption of EM. This finding makes animal welfare the most popular cognitive perception of benefits out of the 3 (health, environmental and animal welfare), however, according the past research, animal welfare is not as motivating for ecological behavior as health and environment, nor is it a high ranking purchase criteria for choice of food, (Hjelmar, 2011). This finding indicates that when consumers consider benefits from EM, it is perceived as more credible that the animals benefit from the purchase, more than the consumers themselves. This could be caused by a general lack of *visible* evidence of health and environmental benefits from EM. Thus, consumers find it easier to believe that the animals benefit from the ecological production and that the standard rules to ecology are being upheld. Statistics from 2012 has revealed that only 6 percent of the Danish consumers regard animal welfare as the highest

influencing factor on their choice of food consumption. In comparison, freshness and taste account for 17% and 14% respectively, (Landbrug og Fødevarer, 2013). Since the focal point of this study is specifically on ecological dairy products and not ecology in general, the participants' perception of animal welfare combined with the Danish statistics clearly indicates an overall positive perception of one branch of benefits. This may prove as enough motivation to make participants choose EM as opposed to CM. However, as deemed by the analytical framework, the participants must also display a positive attitude towards the product characteristics in order to be concluded as eligible for the *move* to the next level of the framework.

6.1.4 Cognitive perception of superior characteristics of EM

In total, 7 participants (Par 2, 3, 7, 8, 9, 12 & 13) believed in the superior taste benefits of EM. Most answers concerning taste were briefly stating the perceived difference:

"It does taste a lot better. And it's fresher" (Par 9).

"It tastes slightly fresher than regular milk" (Par 11).

"I think the taste is better" (Par 12).

These statements indicate a clear perception of believed difference in taste, making the EM more desirable in terms of freshness than the CM. This taste difference is important, as perception of superior quality may lead to a more general positive attitude towards EM. Another 6 participants (Par 1, 4, 5, 10, 11& 15) could not perceive any positive difference in taste attributes from EM. Par 1 simply stated that:

"I can't perceive any significant difference in the taste" (Par 1).

This statement is in direct opposition to the statements above leading the author to assume that taste is an attribute in itself and can be regarded as an abstract and highly subjective theme. Essentially, it can be assumed that the taste of EM should still resemble that of CM. On the one hand, evidence points towards a fresher taste attribute in EM as opposed to the CM. This could simply be the result of one or two fewer days in transportation from the milk farms to the store shelves. On the other hand, the term 'ecology', according to Magnusson (2005) is cognitively regarded as more neutral and cleaner due to the lack of additives and this alone might improve the idea of a superior taste in the minds of the consumers, (Magnusson, 2005). However, in relation to positive cognitive attitude towards EM it is argued as essential that the consumers liked the taste of EM as much as the regular. Added freshness in taste is seen as a bonus attribute, as good taste in itself (not necessarily better taste) is the vital criteria for a positive attitude. Danish statistics (2013) has revealed that 17% of Danes regard freshness as the biggest influence

on their choice of food purchase, whereas 14% state that the taste is the highest ranking factor. Thus, freshness and taste are amongst the most important purchase criteria in the minds of the Danish consumers, (Landbrug og Fødevarer, 2013).

"The taste is slightly poorer than the other, so I don't really get the sense that it is ecological" (Par 14).

This statement points towards a strong connection between taste attributes and sense of ecological value. As a 'true skeptic', Par 14 displayed a general distrust in the benefits of ecology based in its taste. This indicates that general skepticism in itself may stem from a perceived difference between conventional and EM, further indicating that some consumers demand visible differences in order to develop positive attitudes towards ecology.

In relation to quality, 4 participants (Par 3, 7, 8 & 13) believed EM to be superior to CM. A total of 6 participants (Par 5, 9, 10, 11, 12 & 15) did not perceive any differences between the ecological and the CM. No specific comments regarding the quality of EM were indicated, however, it may be assumed that taste and quality is seen as a joint concept in the mind of the consumer since they are often being considered as a joint entity. Based on this, it can therefore be assumed that when consumers ranked taste attributes of EM, it was with the quality in mind as well, as the taste and quality most often are linked together.

Findings from a case study indicate that lack of improved taste and quality benefits was the second main reason for not engaging in EM purchase, (Hill & Lynchehaun, 2002). From this it may be supposed that if customers cannot detect any improved taste or quality attribute in the EM, it may prove difficult to make them purchase it. Based on this finding, and in relation to the primary data collected, it may be assumed that an overall negative perception of the product attributes of EM will steer the overall attitude to EM in a negative way. This may prevent some of the participants from *moving* from the level of 'concern' to the level of 'ecological attitude' in the framework.

6.1.5 From 'concern' to 'ecological attitude'

From what the interviews indicated, some of the participants may already have reached the level of 'ecological attitude' prior to the program. This is not possible to investigate at this stage, however, what the interviews *did* reveal, was that a total of 14 participants increased their perception of benefits towards either animal welfare, the environment or personal health in the period between the 1st and 2nd interview. This number indicates a positive correlation between frequent consumption and perception of benefits. For some, it may have been the prior familiarity with the product that nurtured the positive attitude. For those with no prior experience, mere consumption and realization of perceived benefits combined with the

notion of a sense of 'greener self' could be assumed to be the weighing factor, fostering the positive change in attitude.

The most notable change was in relation to perception of health benefits where a total of 13 participants had an increase in attitude. It can be assumed that these numbers prove that despite what consumers have perceived of personal health benefits prior to the study, repetitive consumption can spike a cognitive perception of personal health benefits. This increase can be assumed to have a positive influence on the participants' intentions to purchase EM on a more frequent basis as health has been proven to be the most vital predictor of ecological attitudes, (Magnusson, 2005).

Based on the attitudes and perception of benefits and attributes shown by the participants it can be concluded that 11 out of 15 participants were able to reach the level of 'ecological attitude'. 4 participants did not manage to develop a positive ecological attitude; Par 1, 4, 6 and 14. This was concluded based on 3 reasons in accordance with the criteria for the 1st *move* from the analytical framework:

- Neither of them managed to create any distinct connection between personal health and EM and 2 of them were skeptic concerning their benefits for the environment.
- All of them had negative issues concerning either quality or taste of the ecological product.
- 3 of them *did* perceive animal welfare benefits of EM; however, this was not deemed sufficient evidence that they had developed a positive ecological attitude that could possibly result in ecological behavior, as general product characteristics were still perceived negatively.

These reasons were seen as sufficient evidence that a positive ecological attitude towards EM was not created prior to or during the course of the study. In conclusion, 3 of these participants only managed to connect a limited amount of concern with the purchase of EM, thus only reaching the 'concern' step. Par 14 could not make any connection. Based on their characteristics, the author can assume that their skepticism towards the product benefits was not improved by the repeated consumption of the product. Assumedly, this skepticism could have been influenced by a larger inflow of information concerning ecology and its benefits which was needed in order to convince these 4 participants of the benefits of EM. Thus, it can be concluded that the most influential CIF that prevented 4 participants from developing positive attitudes in relation to health and environmental benefits was skepticism on the grounds of lack of knowledge or misinterpreted information creating expectations that could not possibly be redeemed.

6.2 Part 2 – Ecological decision and beyond

For assessing whether or not the participants had reached the level of 'ecological decision', factors such as their intention to continue purchasing EM after the conclusion of the program as well as their perception of value for money were considered along with CIFs that proved the biggest influencers in preventing continued EM purchase. For this part of the analysis, only the 11 participants who were concluded to *move* to the level of ecological attitude were considered for the next *move*.

For this part of the analysis, the participants have been divided into 3 groups as described in the presentation of results; the 'early accepters', the 'late accepters' and the 'decliners'.

The 3 groups of participants will be analyzed in turn below:

6.2.1 The early accepters

The 'early accepters' consist of 3 participants (Par 2, 5 and 7). Par 2 and 5 belong to the 'refusers' group, and Par 7 was a 'curious'. Par 5 and 7 both based their attitude on all 3 parts (animal welfare, environment and health) whereas Par 2 was only agreeing with benefits for animal welfare and health.

Mutual for all 3 was the prior experience with the product that can only be assumed to have had a positive influence on the early decision to continue the ecological purchase after the program. Furthermore, all 3 of them increased their concern score during the program which can further be assumed to have indicated a positive correlation between consumption of EM and an overall sustainable attitude. The most significant change was that both Par 2 and 5 slightly increased their purchase of food products branded with the "keyhole". This increase could indicate a slight attitude change for more health benefits through the consumption of food products which may have been sparked by the early decision to continue the ecological purchase. Based on this evidence, it may be concluded that a positive attitude towards one group of ecological food products may result in a slightly higher awareness of other products that are branded as being more healthy than others.

Concerning value for money both Par 2 and Par 5 increased their perception. This change could indicate that at the stage of the 1st interview, general skepticism was still seen as a rather large obstacle (but not a hindrance) in comparison to the personal benefits. Nevertheless, at the completion of the program the participants showed that something had changed their perception, resulting in a better perception of balance between price and value, which ultimately could have resulted in the final decision to continue the ecological purchase. When asked about it, they responded:

"I understand that ecology is more expensive, but it is a fine line. Some ecological products are grotesquely expensive; others are like 10-20 % more expensive. Percentage-wise, the milk is quite expensive, but not so much in Kroner, so it does not make a big difference", (Par 2).

"It seems pretty fair, all things considered. In general, ecology is more expensive but I don't think it is that bad. It all depends on what good you think it will do", (Par 5)

These 2 participants had initially stopped purchasing EM for reasons not investigated in this study, however, all points towards them having dealt with the CIFs that hindered the continued purchase in the past and found motivation through the program to resume the purchase of EM. This can indicate that the past behavior of purchasing EM was not buried deeply, and was allowed to be re-instigated during the study. Duhigg (2012) states that a habit is never forgotten, but merely buried, (Duhigg, 2012), and so, a newly found motivational factor may have initiated the past behavior in the mind of the participants.
Par 7, the last of the early accepters (whose concern score is lower than that of the other 2 participants) is assumed to be an excellent example of the 'green consumer'; a relatively young mother with a steady income and a strong attitude towards ecological products. She was originally profiled as 'curious' due to her seemingly low concern score. Nevertheless, her other characteristics (good income, relatively young age and a child living at home) as well as her beliefs in the benefits for both animals, environmental and personal health can be argued to make her a strong ecological purchaser.

It may be concluded based on these findings that for people to be motivated to purchase ecological products at an early stage, it is necessary for them to find some cognitive motivational value in the product. This could be in the shape of perceived benefits or preferred product characteristics. For these consumers, motivation was assumedly found at the homefront as a positive consequence of desiring family health and having an annual income that would allow it. Par 5 and 7 both had children at home, and Par 3 and 5 were in the high-end scale of annual income. Based on their concern changes in relation to healthier food products and their existing belief in ecological products, it can therefore be argued that the biggest positive CIF was a home-grown motivation for a healthier lifestyle combined with a prior purchase experience. This finding is supported by Hjelmar (2001) stating that the classical ecological consumer is a relatively young mother, (Hjelmar, 2011). Thus, families with children are more likely to engage in ecological purchase in a desire to provide the healthiest foods possible for their children and to improve overall family health.

6.2.2 The late accepters

The group of 'late accepters' contains the 3 participants who after the initial 10 purchases of EM did not intend to continue the purchase at the conclusion of the study. However, at the final interview,

approximately 5 weeks later, they had changed their minds. At the first response it would appear that more than the price was influencing the consumers' decision based on their 'no' response to whether or not they intended to continue the purchase if the price of milk remained at its current stage (and not more expensive). However, during the course of the study, their purchase intentions changed.
The group of 'late accepters' consists of Par 9, 12 and 13. Par 9 was profiled as 'curious', Par 12 as a 'refuser' and Par 13 as a 'value skeptic'. The fact that 2 of them had had prior experience with EM points towards a positive development being made during the program where it can be assumed that the participants experienced the perceived benefits that prevented the continuous ecological consumption in the past.

In one aspect, their concern score did not reveal any changes, apart from Par 12 engaging in more recycling and a slight increase in the purchase of food products marked as 'wholegrain'. Neither Par 9 nor 13 changed any of their answers in relation to concern. This lack of change points towards a negative relationship between ecological attitude towards milk and a general desire to benefit the environment and own personal health. What is noteworthy, however, is the fact that all 3 increased their agreement to the health benefits of EM. This increase leads to the assumption that perceived health benefits leading to actual purchase behavior can be cultivated through consumption and familiarity with an ecological product. This change further indicates that for both consumers with prior experience and people with no experience in purchasing EM, cognitive benefits are perceivable to a certain extent and may ultimately result in an overall positive attitude towards ecology.

All 3 participants agreed to a lesser extent that the value of the EM was worth the money they had to pay for it. These answers support the theory that a positive development and attitude towards ecology and its benefits can be ignited through frequent consumption. However, as has been the case most often, this attitude and behavior development is more likely to take place in consumers who have had prior experience with the EM.

It is evident from research that a distinct relationship between past behavior and intention to purchase exists. Duhigg (2012) describes it as a buried habitual behavior that can re-surface when presented with the right cuing mechanism of the right reward to trigger the motivational response, (Duhigg, 2012). Ajzen views the role of past behavior as a strong indicator for future behavior (but does not refer to the possible time gap between past behavior and resurfaced behavior), (Ajzen, The Theory of Planned Behavior, 1991). Regardless of the perspective, it is clear that a positive relationship exists between the past behavior and current intention. However, no research outlining any relationship between frequency of purchase and intention to continue has been found, nevertheless, following the logic of the habit loop and the theory of

habit formation by Duhigg, this behavior displayed by the participants indicated a strong habitual behavior in the making. Based on the positive increase in attitudes and perception of benefits as stated by the 'accepters' and the fact that 5 out of 6 of the 'accepters' had prior experience with EM support these research theories in proving that past behavior has a high influence on future behavior. Further, as was evident based on the positive increase in attitude and perception of benefits, the element of repeated consumption has acted as an important influence in the decision to continue the ecological purchase.

Based on the findings from the 'accepters' it may be concluded that for the participants of this particular study, the strongest CIF that motivated the decision to continue the purchase habit was the cognitive development in the belief that drinking EM was beneficial to your personal health.
This result is congruent with most literature deeming concern for personal health as the biggest motivator for consumers to engage in ecological purchase, (Welsch & Kühling, 2009; Magnusson, 2005).

6.2.3 The decliners

This group contains Par 3, 8, 10, 11 and 15. Amongst them are 2 'refusers', one 'true skeptic', one 'value skeptic' and one 'curious'.
All 5 of the 'decliners' increased in concern score during the course of the study. The most noticeable change occurred in relation to health issues. Par 3, 8, 10 and 11 slightly changed their frequency to purchasing products branded with the 'keyhole', furthermore, Par 8 and 11 slightly increased their frequency of purchasing food products carrying the 'wholegrain' mark, and Par 15 increased his frequency in exercise. This change indicates that a positive attitude to health related product may be sparked through the frequent purchase of EM.

As previously stated, literature indicates a positive correlation between perceived health benefits and ecological purchase. However, the primary data collected from the current study indicate an increase in health related activities whilst participants actively decline to continue the ecological purchase. This developed attitude can be explained in 2 ways; either, the participants have become more aware of health-related issues due do the frequent consumption of a milk that is portrayed as being healthier than its conventional substitute; or, information concerning health benefits has been reflected on.
Furthermore, motivation for more frequent purchase of health-branded products could have arisen from personal demographics. Par 3 & 11 had relatively high levels of income compared to the others (250.001-300.000 DKK) indicating an ability to pay the higher prices for health-branded products. These 2 participants had the strongest attitude towards the benefits of ecology, believing in the benefit for both animal welfare, personal health and the environment. Par 3 & 8 had children at home which further could have initiated the healthier behavior. Lastly, Par 3, 8 & 11 had had prior experience with the consumption

of EM, which could also have had a positive influence on the decision to engage in more healthy consumption.
Par 15 changed behavior in 4 different areas; recycling, waste, energy use and exercise and was the participant with the highest recorded change in concern score during the program (from -2 to +3, a difference of 5 points). This change in behavior further underlines that frequent consumption of certain health-branded products may spark interest in other sustainable actions and behaviors. However, the fact that this high change was only displayed in one out of 15 participants suggests that no generalized conclusions to this correlation can be made.

Despite the positive increases in concern score and the positive attitudes displayed by the 'decliners' they still chose *not* to continue the purchase of EM after the program finished.
After the 8 weeks Par 3, 11 and 15 could not perceive any value for the additional expense when they purchased the EM. This is partly due to Par 3 perceiving the EM to be slightly too expensive and most likely combined with the fact that despite his belief in the EM, he is quite satisfied with the milk he used to purchase. This finding is supported by his final statement on the decision:

"Really, I'm happy with the milk we normally buy, so I'm not sure it's worth it" (Par 3).

Based on this statement it can be concluded that for this particular 'refuser', it was the lack of added value from the premise that he was quite satisfied with the CM combined with the added expense that proved the biggest CIFs, not the skepticism in the benefits of the product, but mere satisfaction with familiarity.
For Par 11 there was also a distinct lack of value from the product for the added price along with the lack of improved taste and quality in the EM.

"It has to taste healthier if it has to costs that much more. I mean, there has to be a better proof that it is in fact healthier" (Par 11).

Thus, for this 'curious', skepticism concerning the product characteristics along with the slightly too expensive price for the product proved to be the biggest CIFs.

Par 15 stated that:

"It has to get cheaper, otherwise, I will only buy it when it's on sale" (Par 15).

For a 'true skeptic', this particular participant managed to change perception of benefits in relation to animal welfare and health benefits, yet he did not manage to perceive any health benefits. After 8 weeks he could not perceive any value for the added expense of the EM. This may be due to the lack of perceived

difference in taste and quality from the EM as opposed to the CM. Thus, it may be concluded that the biggest CIF for this participant was skepticism concerning health benefits and characteristic value leading to unwillingness to pay the price premium for the ecological product.
Par 8 and 10 were the only 'decliners' to perceive any value for money from EM, and in both cases this realization was displayed at the final interview.
For Par 8, this may be due to the lack of belief in animal welfare and the late realization of cognitive health benefits of the EM. Furthermore, in relation to taste, she could not perceive any differences. When asked for reasons to not continue the purchase she replied:

"It just doesn't taste better than regular milk, so I will not continue drinking it" (Par 8).

During the course of the program, this 'refuser's' reason for refusing the product in the first place became evident; it was the lack of superior product characteristics, a preference for the familiar, and assumedly the higher prices that proved the biggest CIFs. It may therefore be assumed that the CIF's that prevented continued purchase in the past has resurfaced during the program and remain as a negative influence to future purchase behavior. Thus, despite the increase in perception of health benefits, the lack of visible difference and the continued skepticism prevented her 'ecological decision'.
For Par 10, her refusal to continue the behavior can assumedly be due to the fact that she perceived the product characteristics as slightly disappointing whilst disagreeing with any environmental benefits of EM. Furthermore, she did not perceive any health benefits of the EM before the final interview, indicating an overall skepticism during most of the 8 weeks. Lastly, she too perceived the price for the EM to be too expensive. When asked about whether she intended to continue, she said:

"I will have to be honest and say no. It needs to be cheaper. Quite simply. But still, I think there are many that will not buy it" (Par 10)

Her group profile indicated from the start that she was skeptical about the cognitive value of the EM, and her answers to the questionnaire and her final statement has proved that the biggest CIFs that influenced her decision to reject the continued consumption of EM stemmed from skepticism concerning cognitive benefits and overall value leading to unwillingness to pay the higher price for the ecological product. Par 6 supported the views held by Par 10 in saying that:

"First of all, it has to be cheaper, second, it has to work, I mean, I have to know if what I buy and spend more money on is actually a better product" (Par 6).

This statement links skepticism with lack of information concerning product attributes leading to assumptions that a strong skepticism towards the EM leads to a general unwillingness to engage in purchase.

For the most parts, a high level of skepticism was indicated in all 5 decliners with no perception of value from the EM. Par 3 & 11 despite strong attitudes still found the price too high in relation to the perceived value. This perception of benefits yet unwillingness to continue purchase indicates that despite a positive ecological attitude, the higher price proved a too influential CIF to overcome, assumedly because these participants' values and principles in relation to price were too deeply rooted to be directed by attitude. Par 4 & 15 had medium attitudes, and despite the fact that both of them increased their concern score during the program (both mainly on environmental actions) they could not connect any value for money with their repeated purchase of EM. Finally, Par 6 and 14 both had the lowest attitudes out of all participants, and it therefore comes as no surprise that neither could perceive any value for the added expense nor were they willing to pay the price premium for the ecological product. Based on these findings it can be concluded that skepticism as a negative CIF is the most damaging of the CIFs in the way it prevents attitude development, perception of benefits and eventually willingness to pay. However, a concluding CIF willingness to pay ranks highly with the majority of the 'decliners', with skepticism stemming from a lack of perceived visible and intangible benefits assumedly caused by a general lack of information as a strong runner up. This finding is congruent with a research paper by Lockie et al. (2004) who found, that the respondents' attitude to the price premium they would be willing to pay was negatively perceived. The majority (80.3%-92.1%) named their premium price below 20% above the normal price rate, (Lockie, Lyons, Lawrence, & Grice, 2004).

Based on the above mentioned indicators for CIFs for the decliners of the ecological decision it can be concluded that willingness to pay as a direct result of lack of perceived value from the ecological product combined with a high level of skepticism concerning the perceived health benefits of EM proved to be the most negatively influencing factors that prevented this group of 5 decliners from reaching the level of 'ecological decision'

In overall conclusion to the *move* from 'ecological attitude' to 'ecological decision' it was found that a total of 6 participants (Par 2, 5, 7, 9, 12 & 13 – the early and late accepters) managed to develop a sufficient ecological attitude and a cognitive perception of health benefits that assisted as positive CIFs to make the *move* to ecological attitude a possibility. However, time will tell if these participants have developed a sufficient amount of attitude and perception of value to sustain an ecological behavior in the long run.

6.3 Part 3 – Habit creation

This part of the analysis is solely centered on the habitual behavior that was created in the participants during the 8 weeks of the program.

The 3 questions concerning 'cue', 'action' and 'sense of reward' will be analyzed along with the number of purchases each individual has performed. Leaving out the aspects of concern and attitude it is assumed that the consumers' habit creation could have been developed based on a number of factors:

- The cognitive strength of the 'cue'
- The habitual behavior (with a limited number of mis-actions)
- The cognitive strength of the reward

These influencers of habitual behavior will be analyzed in turn below:

6.3.1 Strength of the cue

The change in behavior as a consequence of the repeated purchase was mirrored in the strength of the presented cue; the situational context (the need for milk combined with the desire for the reward).

By the time the 1st round of interviews were held (after 10 purchases) 11 participants still had to consciously remind themselves to purchase a different milk than they were used to, indicating that at this time, the strength of the cue was not sufficient to guide purchase behavior. After the completion of the program, this number had decreased to 4 participants. This guides the assumption that during the 8 weeks of continuous purchase, an automatic response of the ecological behavior was initiated by the presentation of the cue and for the consumers this meant a limited amount of conscious control to the action.

4 participants did not need to remind themselves at all during the study and had thus no trouble remembering to purchase the EM, however, it is vital to mention that these 4 had had previous experience in purchasing EM. It is therefore highly possible that the cue motivated a prior automatic response that may have only been guided by the expectation of the reward in the first few purchases.

Further 4 participants still needed to consciously remind themselves of the ecological behavior after the given 8 weeks. Due to this it can be assumed that no automatic response had been triggered by the action due to underlying attitudes not allowing for the reward to be cognitively desirable. As the analysis revealed, 3 out of these 4 participants only made it to the ecological attitude stage of the analytical framework and chose not to continue the ecological purchase. However, the last participant (Par 12) was counted amongst those who successfully evolved an ecological decision despite having to constantly remind himself of the change in behavior. This could be a cause of his strong belief in both animal welfare benefits as well as

personal health benefits from consuming the EM combined with a desire to act sustainably. It is therefore possible to assume that a more fluent automatic response to the cue will develop in time.

In conclusion, at the completion of the program, 11 participants (Par 1, 2, 3, 5, 7, 8, 9, 10, 11, 13 & 15) found the cuing mechanism sufficiently strong for engaging in ecological purchase. It is assumed that these 11 participants have completed the first process of the habitual creation; the desired response to the cueing mechanism. This initiation of the habit loop could have been motivated by the expectation of the rewards they would receive upon completion of the program, or as direct intention to purchase based on their attitude. Regardless of which it can be concluded that these 11 participants had initiated the habit loop.

6.3.2 The action

As stated in the literature review, there are certain influential factors that may disrupt any habitual behavior not firmly rooted within the unconscious mind of the consumer, (Wood & Neal, 2009).
In relation to the 'action' 6 out of the 15 participants underwent the 8 weeks without purchasing the CM in Rema 1000 (it is unknown whether a CM purchase was performed elsewhere). This indicates a dedication to the program, possibly driven by the positive perception of the reward or the participants' own motivation to act sustainably. The remaining participants bought the CM at least once during the program; 4 of these made mis-actions both prior to and after the 1st interview. Because of the continuous happenings of mis-actions, it may be assumed that this group of participants did not manage to let the cuing mechanism guide their behavior as they were too easily disrupted. One reason for this could be the lack of drive from the expected reward or the lack of internal motivation.
The most frequent reason given for the conventional purchase was inattentiveness towards the action. Since most of the mis-actions occurred in the period leading up to the 1st interview it can be assumed that the conventional purchase behavior was still not replaced entirely by the new ecological behavior. According to Wood and Neal (2009) one of the most frequent reasons for habit disruption was distraction from the current train of thought from the cue to the action, (Wood & Neal, 2009). This factor was evident in this group of consumers who neglected the purchase of EM due to distractedness. The fact that mere distractedness may prevent a consumer from purchasing the EM he or she was intending to purchase indicates a week habit formation at this stage. The results suggest that neither the strength of the cue nor the cognitive intention to purchase the EM were sufficiently influencing the behavior in the crucial moment.
The 2nd most frequent reason for conventional purchase in this study was time pressure; 4 of the participants found themselves purchasing the CM under stress or time pressure at least once during the

program. Behavior disruption due to stress or time pressure is also one of the most influential factors put forward by Wood and Neal (2009). This correlation further indicates that positive attitude and intention to purchase may not be sufficient to guide purchase behavior, (Wood & Neal, 2009).

2 participants neglected the ecological purchase on at least one occasion during the program due to the realization of the added expense they faced in purchasing the EM as opposed to the CM, and their action was controlled by the unwillingness to pay. Since price was named one of the most influential CIFs on purchase behavior it can be argued that despite intention and developed attitude, these 2 participants faced CIFs that were highly rooted in cognitive value and principle that it could not easily be overcome, despite the intention. Consequently, these 2 (Par 1 and 6) never managed to reach the ecological decision stage due to their negative CIFs.

Finally, one participant neglected ecological purchase due to the fact that he had forgotten his bonus card. This behavior indicates a highly negative attitude towards the product in being unwilling to purchase it without getting the followed bonus from the purchase. It was clear that this participant (Par 14) only remained in the program due to the expectations of the bonus gift at the completion. Consequently, Par 14 remained firmly grounded on the ecological attitude level of the analytical framework. Disruption of a behavior is not seen as a proof in itself that a habit cannot be formed, however, it indicates that the cuing mechanism, the expected reward of the action or the internal motivation creating intention to purchase are not sufficient for triggering a certain response. In this case, added motivational factors such as concern, perception of benefits etc. may prove to be the decisive factors that determine the eventual creation of an ecological consumption habit.

As for the 11 participants that reacted positively to the cueing mechanism, only one of the participants (Par 1) performed mis-actions both prior to and after the the 1st interview. After the interview, this participant performed 2 mis-actions, both due to him being under time pressure. This answer leads the author to assume that a sufficient habit formation has not been initiated at this stage since the old habit re-emerged when the participant was under time pressure (despite his intention to purchase the EM). It is possible that a habitual behavior may be strengthened in time, however, for this study, it can be concluded that this participant did not manage to form an ecological behavior in the given time frame. As for the remaining 10 participants (Par 2, 3, 5, 7, 8, 9, 10, 11, 13 & 15) who responded positively to the cueing mechanism, none of them performed any mis-actions between the 1st and 2nd interview round. Based on the fact that none of them were disrupted in their behavior points to a strong desire to continue the ecological purchase, either due to the expectation of the reward or because of their internal motivation and a desire for the ecological purchase.

6.3.3 Strength of the reward

In order to conclude on a successful habit formation it was essential that the participants had developed some cognitive perception of value in the reward for the product; a reward that would be desired sufficiently to carry out the action of the ecological purchase repeatedly.

A total of 6 participants changed their perception of value of the cognitive reward from 'disagree' to 'agree' during the course of the 8 weeks. This suggests a positive response to the habit loop which is essentially guided by the desire for the reward. 5 participants firmly stated that they did not sense any cognitive reward in the product, which suggests that for these, the reward was not sufficient to guide purchase behavior. Essentially, none of these 5 participants expressed intention to continue the behavior, which can therefore be assumed to be related to the lack of desire for the physical (as well as cognitive rewards) of the purchase. Another reason for this decision could the CIFs that proved too influential to result in continuous purchase behavior.

As rewards are highly subjective it was seen vital that the participants who were concluded to have developed a successful habitual behavior would have acquired a sense of cognitive value from the product they purchased in order to keep the habit loop continuously 'looping' by desiring the expected outcome. The remaining 4 participants had found the purchase rewarding by the 1st interview, and these 4 chose to continue the behavior after completing the program. These answers suggest a strong expectation for the reward which could be either the desire to claim the reward through the bonus card or to reach the cognitive reward based on their own attitude from the purchase.

All participants who 'agreed to a lesser extent' with feeling a sense of reward in bringing home EM only answered 'agree to a lesser extent'. None agreed to a larger extent. These answers may predict that the cognitive rewards may not be strong enough to maintain the habit loop. By only feeling a minor sense of reward, it can be assumed that the consumers are still open to other alternatives that will bring them higher rewards in the end. This could for instance be saving money by purchasing a less expensive milk or changing brand. Strength in attitude may in time influence the strength of the reward and thus create the desire to perform the ecological purchase.

As for the 10 participants who were deemed eligible for having successfully initiated a habitual behavior to ecological purchase (based on their positive reaction to the cueing mechanism and their undisrupted performance of the desired action) 2 of them (Par 10 & 11) stated that they did not perceive any reward in bringing home an EM in comparison to a CM. This declaration of lack of perceived reward indicates that the participants did not perceive the necessary value for their additional expense. This could be due to their attitudes not being sufficient to guide the desired purchase behavior. Both Par 10 and 11 increased their perception of health benefits from EM during the course of the study, however, it may be assumed that

their overall perception of the benefits were not adequate compared to the additional price they had to pay for the EM. This assumption is supported by the fact that both of these participants regarded the EM as being slightly too expensive. It may thus be concluded that unwillingness to pay was the strongest CIF that prevented a further development of an ecological habitual behavior for these 2 participants.
As for the remaining 8 participants (Par 2, 3, 5, 7, 8, 9, 13 & 15) who were deemed eligible. They all perceived a reward in bringing home an EM and for this reason, it may be assumed that the habit loop can be sustained and re-spun by the presentation of the cueing mechanism. Based on these above contemplations, it can be concluded that these 8 participants successfully developed an ecological habit during the 8 weeks of the study.

6.3.4 Habitual formation

Based on the strength of the cue, the number of mis-actions and cognitive strength of the reward it was concluded above that a total of 8 participants managed to create an ecological habit during the 8 weeks of the program. As it were, only 5 of these expressed intention to continue the purchase (Par 2, 5, 7, 9 and 13). This indicates that even the customers most eligible for ecological habit creation may be hindered by CIFs; Par 3 and 8 both refused continuous purchase due to lack of value from the product and its characteristics. Par 15 was essentially unwilling to pay the additional price for the EM based on skepticism and lack of perceived value.
Par 12 (despite intention to continue the ecological purchase behavior) did not display evidence of a habitual formation at this point in time. It can be argued, however, that his perceived benefits and sense of value are sufficient for maintaining the ecological purchase decision, and the habitual behavior may be developed in time.
In relation to the number of purchases, 4 out of the 5 who chose to continue the habit had a total purchase count of minimum 20 purchases of EM, and 3 of them had reached all 25 purchases. The last one (Par 7) only had 19 purchases. This suggests that the number of purchases may have had a positive influence on the decision to continue the ecological consumption. Based on this, it can be argued that a high level of consumption results in sense of familiarity with the product which may have fostered the positive ecological behavior.
Out of the participants who refused the future purchase, 3 had a total purchase number lower than 20, and 6 were in the range of 21-24. These numbers suggest in contradiction to the numbers stated above that the purchase count does not positively influence the desire to continue purchase. However, it may be argued that the total number of purchases may have a positive influence but that certain CIFs proved too influential to sustain ecological purchase behavior.

As conclusive evidence to habitual behavior, 4 out of the 5 participants who intended to continue the purchase mentioned 'habit' in their open-ended interviews as one of the reasons they chose to continue the ecological purchase. 3 of these directly stated that looking for the EM and purchasing it had become a habit. One of the participants stated:

"It has become a bit of a habit, finding it in the dairy section, so it would be a shame to stop now" (Par 9).

Others directly connected the newly developed habit to the fresher taste. Par 13 stated:

"Now I have gotten used to the taste and used to choosing that [the EM] *when I shop for milk"* (Par 13).

This shows that without any indication of habit formation during the course of the study and without additional provided information on ecology or EM, some of the participants were able to form their own conscious (or unconscious) habitual behavior based on repeated purchase of EM. A further motivational factor could have sprung from the expectation of the reward from the purchase or their perception of self-development.

Thus, in conclusion, a habitual change in consumer purchase behavior was successfully proven in 8 of the 15 participants from the program. This change was based on their total number of purchases and their expectation of the rewards cognitively perceived by the benefits and value in purchasing EM. However, it is assumed that this status of changed behavior is still in its initial phases. Time and frequent repetition along with a sustained (or increased) cognitive perception of benefits and value from the EM will assist in maintaining the behavior and in time create a strong habit. For now, only 6 of the 8 participants have chosen to continue the ecological purchase behavior.

Chapter 7
Conclusion

During the course of the writing process, the author investigated 3 essential areas: ecological attitude, shifting behavior and CIFs as either motivators or barriers.
Following the logic of the analytical framework it was proved that positive attitude towards EM can be created and/or developed through repeated consumption. 11 out of the 15 participants managed to develop a positive ecological attitude during the 8 weeks of the program; thus only 4 remained at the 'concern' level, not displaying any positive ecological attitude. It was concluded that the main CIFs preventing the development of a positive ecological attitude were lack of perceived benefits, stemming from a lack of visible differences between the ecological and the CM. Furthermore, a general skepticism concerning health attributes was evident from the participants' answers, and alongside skepticism came an unwillingness to pay the additional expense for the ecological product.
This conclusion is in congruence with present literature in the consumer behavior field listing perceived health benefits from ecological foods as the main indicator for ecological purchase and may thus be seen as a hindrance if no health benefits are perceived, (Magnusson, Arvola, & Hursti, 2001).

Out of the 11 that developed an ecological attitude, 6 *moved* further to the level of 'ecological decision'. For the 5 that did not *move*, it was evident that the main CIFs preventing the *move* were overall unwillingness to pay the additional expense due to lack of perceived cognitive value from EM. This lack of value was concluded to be caused by a general lack of perceived benefits from health and environmental attributes as well as product characteristics resulted in the unwillingness to pay amongst this group of participants. The fact that willingness to pay proved to be the strongest CIF to overcome is in accordance with recent research stating that the majority of Danish consumers are unwilling to pay for ecological products, (Center for Bioetik of Risikovurdering, 2011).
For the 5 participants who *did* develop an 'ecological decision' it became apparent that the most motivational CIFs were the perceived health benefits (as is congruent with most literature on the subject of ecological motivators, (Magnusson, 2005; Magnusson, Arvola, & Hursti, 2001; Magnusson et al. 2003). Secondly, a sense of reward stemming from perceived value benefits drove the participants to decide on continuous purchase of EM.

In relation to habitual behavior creation, it was concluded based on the participants' answers that an ecological habit towards consumption of EM was developed in no less than 8 of the 15 participants. In

relation to Duhigg's 'habit loop', the expectation of the rewards kept the habitual behavior 'looping' which, during the course of the program, created the desired automatic response to the cuing mechanism in these 8 participants. This habit creation was purely based on the participants' cognitive sense of reward and the intrinsic motivations they developed during the program as the participants were not provided with any additional information by the author concerning ecology and its benefits.
In conclusion, the analytical framework based on attitude development towards ecological products combined with the theory of the habit loop proved to be a strong analytical tool for determining attitude growth and behavior change based on repeated ecological purchase.

7.1 Expectations

Concluding on the expectations drawn up prior to the analysis, the results now stand clear.
As predicted, the 'true skeptics' proved to be the hardest consumers to develop an ecological attitude. None of the 'true skeptics' developed enough positive attitude to sustain an ecological decision.
Out of the 'value skeptics', it was predicted that habitual behavior would be difficult to create based on the fact that there was no prior experience of EM in this group. From the analysis it was concluded that only 1 (out of 3) managed to develop an ecological decision and display evidence of an ecological habit formation despite no prior experience. The other 2 faced heavy barriers from lack of perceived value and benefits. Thus, the expectations remain true to the fact that no prior experience creates barriers to habitual behavior.
The 'curious' group showed more positive improvement, as was in accordance with the expectations: 3 out of 4 managed to develop an ecological attitude out of which 2 further developed an ecological decision. This happened despite the low concern score for the group and was proved to be triggered by perceived health benefits and growing sense of value. It was expected that ecological attitude could be created, and the further *move* for 2 of the 'curious' further prove a positive attitude development for this group.
The group of the 'refusers' provided the most positive results. It was predicted that this group would be the easiest to turn towards ecological decisions and the analysis revealed that despite refusing continuous ecological purchase in the past, 3 out of 5 'refusers' managed to develop a strong sense of perceived value and health benefits from EM. 4 out of 5 showed positive habit formation, however, for 2 of them, the CIFs presented as lack of perceived value and benefits proved too difficult to overcome.

In conclusion, the group characteristics and predictions made were in congruence with the analytical findings based on the collected data from the 1st and 2nd round of interviews.

7.2 Modified analytical framework:

Based on the conclusions from the study, it was seen as necessary to modify the analytical framework to encompass the new findings:

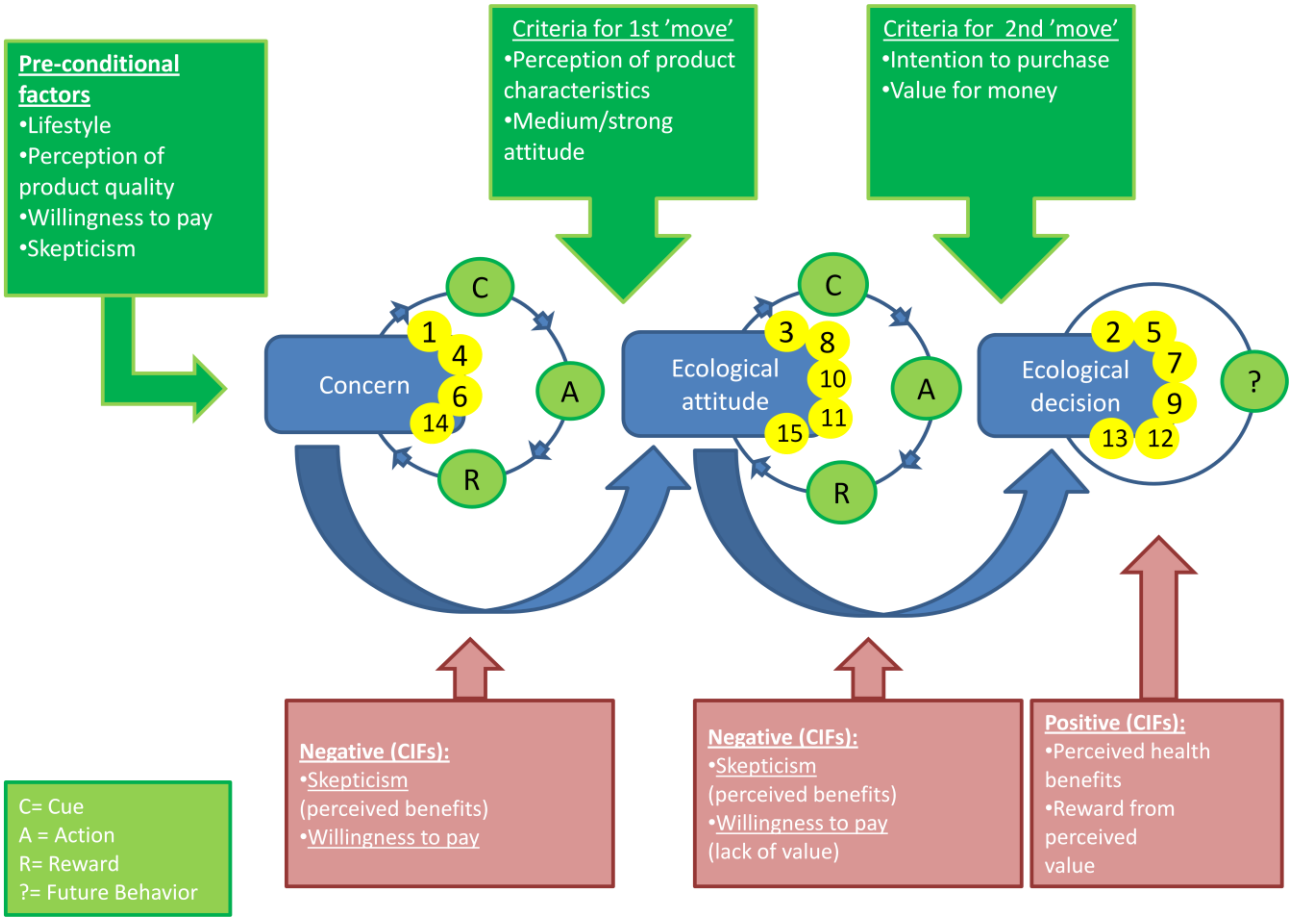

Figure 9 Modified analytical framework

Source: (Toustrup, 2013e)

The modified framework depicts all 15 participants at the respective steps they reached during the course of the program as well as the concluded CIFs for each of the *moves* between levels.

Based on the conclusions for the first *move,* the most influential CIFs that hindered ecological attitude proved to be skepticism based on a lack of perceived benefits from EM and an underlying unwillingness to pay for EM in the long run.

Exploring the CIFs preventing the second *move* revealed that again, skepticism due to lack of perceived benefits resulted in overall unwillingness to pay for EM. The further analysis of this step indicated that the unwillingness to pay was caused by a lack of perceived value from the added expense of the EM.

For the participants who reached the 'ecological decision' it became evident that the main CIF's influencing

the positive development was caused by growing perception of health benefits and thus a higher reward from perception of value.

Repetition (stated as a CIF in the proposed framework) was not deemed as a very influential factor as most of the participants continued the purchase of EM during the 8 weeks, and only their collected number of purchases indicated that a few participants had negative perceptions towards the repeated purchase.

This modified framework stands as an alpha-tested model for developing positive attitudes towards ecological products based on continued purchase behavior. However, further investigations are necessary before the findings from the conclusions can be generalized.

Chapter 8

Reflection and further research

This paper has presented one possible method of investigating the changes in consumer attitudes and behaviors in relation to ecological food products as a consequence of repeated purchase and the unconscious initiation of a habitual behavior. Other routes and scenarios based on other frameworks and types of research may yield different results.

After concluding on the present findings from this study, a number of questions surfaced: is this theory applicable to other ecological food groups apart from dairy? Would a more correct sample of the Danish population generate different results? How can this niche be further investigated in order to make generalized assumptions about Danish attitudes towards ecological food products and the unconscious creation of ecological habits based on repeated ecological purchase? In order to attempt to answer these questions, further research should focus on:

- How the attitudes would develop after a longer trial period of repeated ecological purchase.
- What sub-elements of skepticism create the strongest barriers and what role society and the government can play in providing more consumer information on the benefits of ecology.
- How adding information to the participants during the study can affect attitudes and behaviors.
- Whether or not the basic theory of the analytical framework could be applicable to products other than ecological.

Further investigation into the possibilities for ecological habitual creation based on attitude and behavior development may be the first step towards making ecological purchase behavior a part of social practice that will benefit animal welfare, environmental protection and society as a whole.

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Appendix

Appendix

Figure A – The screening survey

Coding	

Hej, må jeg stille dig et par spørgsmål angående den mælk, du køber?
Vi skal til at starte et kundeprogram, der handler om kunders valg af mælk. Har du noget imod, at jeg stiller dig et par spørgsmål? Det tager kun 5-7 min.

Nr.	Spørgsmål	Svar	Kriterier
1	I hvor mange forskellige butikker køber du mælk?		Max 2
2	Hvor mange gange om ugen køber du mælk?		Min 3
3	Hvilke typer køber du?		Ikke Økologisk

Godkendt?	JA	NEJ

Har du prøvet en af vores økologiske mælk?

Ja Nej

Deltager?	JA	NEJ

Figure B – The bonus card

Kære kunde, tak fordi du vil deltage i Rema 1000 Ølstykkes kundeprogram. Vis venligst dette kort ved kassen hver eneste gang du køber økologisk mælk.

Vi gør opmærksom på, at der max. kan registreres 1 køb per dag.
Efter dine første 10 køb giver vi en gratis bonusgave i form vareprøver fra butikkens økologiske sortiment til en værdi af ca. 50 kr. Vi vil i den forbindelse gerne have mulighed for at stille dig nogle spørgsmål til forløbet inden du starter dit næste bonuskort.

Efter programforløbet er slut i uge 24 giver vi en 'bonusgave' i form af et gavekort til Rema 1000 til en værdi af 100 kr. Vi vil i den forbindelse gerne have mulighed for at stille dig nogle afsluttende spørgsmål.

Henvend dig venligst til Julie i butikken og vis dette kort når du indleder dit tiende køb.

Har du spørgsmål eller kommentarer til forløbet er du velkomment til at kontakte Julie på mail: julie@stroem-toustrup.dk

Endnu engang tak for din deltagelse.

Coding	

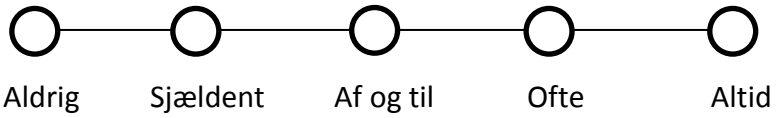
Købs-nr.	Antal økologiske mælk	Dato	initialer
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Figure C Interview 1

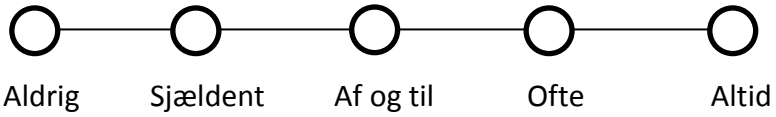
Profil:

Sæt venligst kryds i den cirkel der passer bedst på dig.

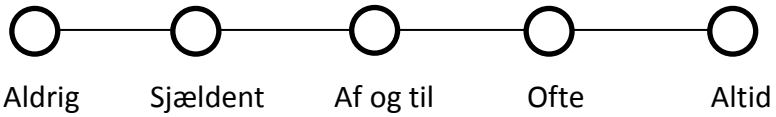
Jeg tager cyklen eller det offentlige på arbejde



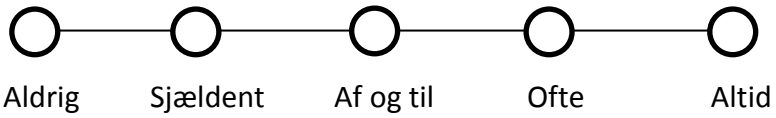
Jeg genbruger mine indkøbsposer når jeg handler ind



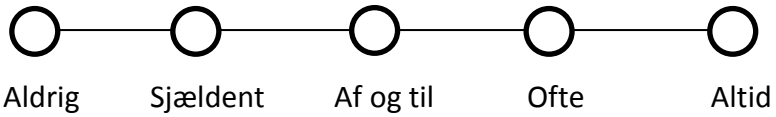
Jeg køber kun de madvarer jeg ved bliver spist



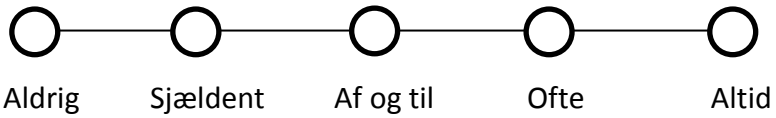
Jeg bruger el-spare-pærer derhjemme



Jeg køber varer der er sundhedsmærket med 'Nøglehullet'



Jeg køber varer der er sundhedsmærket med 'Fuldkornsmærket'



Jeg dyrker motion af minimum 30 minutters varighed 2 gange om ugen

Økologi

Køber du konsekvent økologisk frugt og grønt i stedet for konventionel frugt og grønt?

Ja ☐ Hvorfor?

(sæt gerne flere krydser)

Jeg tror det er sundere	☐
Jeg tror det gavner miljøet	☐
Jeg synes det smager bedre	☐
Jeg tror kvaliteten er bedre	☐
Jeg synes man bør købe økologi	☐
Andet	☐

_____

Nej ☐ Hvorfor ikke?

(Sæt gerne flere krydser)

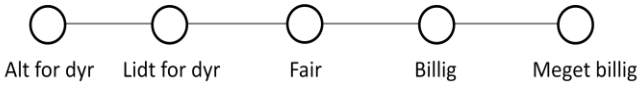
Det er for dyrt	☐
Jeg tror ikke det er sundere	☐
Jeg tror ikke det er bedre for miljøet	☐
Jeg tror ikke det smager bedre	☐
Jeg tror ikke kvaliteten er bedre	☐
Andet	☐

_____

Økologisk mælk

Hvordan synes du økologisk mælk smager?

Hvad synes du om prisen på økologisk mælk?

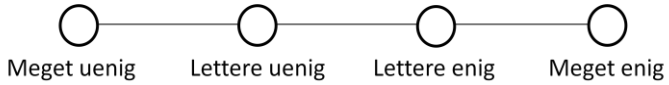


Hvis prisen på økologisk mælk forbliver på det stadie den er nu, vil du så fortsætte med at købe økologisk mælk efter dette program slutter i uge 24?

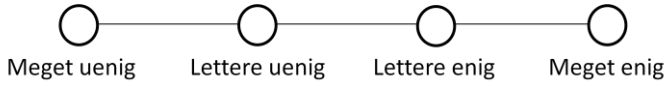
Ja ☐ Nej ☐

Hvad mener du om økologisk mælk?

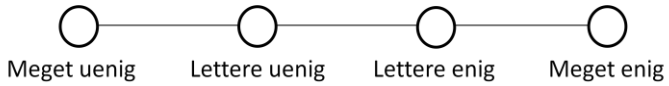
Jeg tror økologisk mælk er bedre for miljøet end konventionel mælk



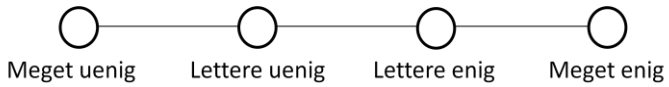
Jeg tror økologisk mælk er bedre for dyrevelfærd end konventionel mælk



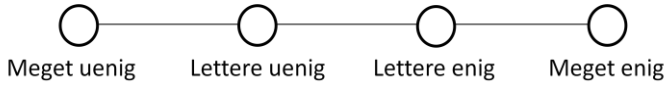
Jeg tror økologisk mælk er bedre for mit helbred end konventionel mælk



Jeg synes jeg får mere for pengene når jeg køber økologisk mælk



Jeg føler en personlig gevinst ved at komme hjem med en økologisk mælk frem for en konventionel mælk



Tak for det.

Her til sidst har jeg lige et par sidste spørgsmål:

Hvad synes du helt personligt om fordelene ved økologisk mælk?

Skal du huske dig selv på at du skal købe en bestemt mælk når du handler?

Ja ☐ Nej ☐

Siden programmet startede i uge 16, har der været situationer hvor du har købt den konventionelle mælk i stedet for den økologiske?

Ja ☐ Nej ☐

Hvor mange gange er det sket?

Hvad var årsagen til det?

Stres ☐

Tidspres ☐

Uopmærksomhed ☐

Glemte det ☐

Pris ☐

Udsolgt ☐

Glemt kort ☐

Figure D - Interview 2

karakteristik

Hvilken aldersgruppe tilhører du?

<20 ☐
21-30 ☐
31-40 ☐
41-50 ☐
51-60 ☐
>60 ☐

Bor du alene?

Ja ☐ Nej ☐

Har du børn?

Ja ☐ Nej ☐

Udeboende? ☐
Hjemmeboende? ☐

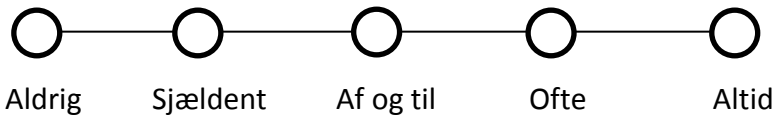
Hvad er din årlige indkomst?

<200.000 ☐
200.001-250.000 ☐
250.001-300.000 ☐
300.001-350.000 ☐
350.001-400.000 ☐
>400.000 ☐

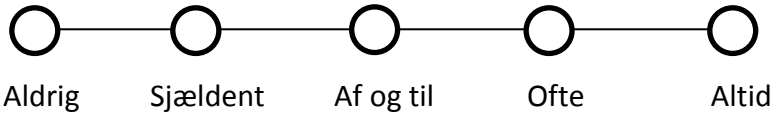
Profil:

Sæt venligst kryds i den cirkel der passer bedst på dig.

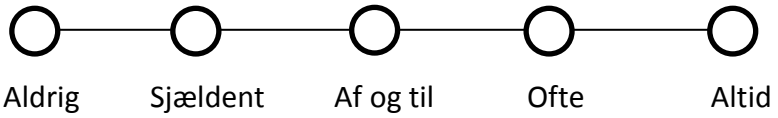
Jeg tager cyklen eller det offentlige på arbejde



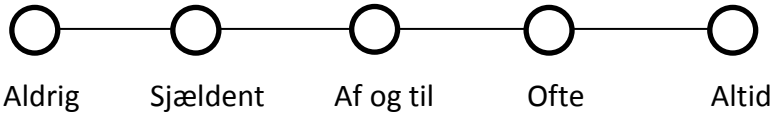
Jeg genbruger mine indkøbsposer når jeg handler ind



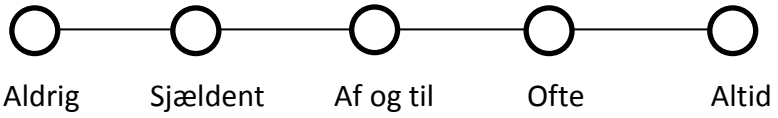
Jeg køber kun de madvarer jeg ved bliver spist



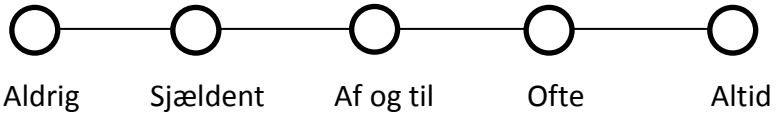
Jeg bruger el-spare-pærer derhjemme



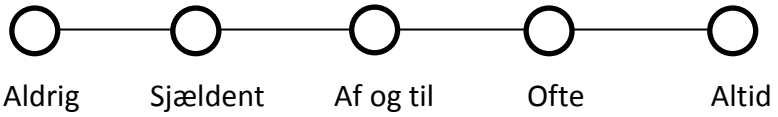
Jeg køber varer der er sundhedsmærket med 'Nøglehullet'



Jeg køber varer der er sundhedsmærket med 'Fuldkornsmærket'

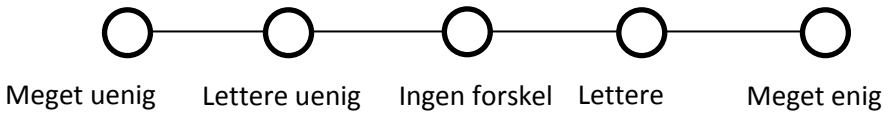


Jeg dyrker motion af minimum 30 minutters varighed 2 gange om ugen

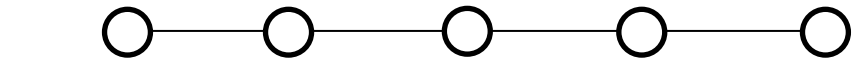


Økologisk mælk:

Jeg synes økologisk mælk smager bedre end konventionel mælk



Jeg synes kvaliteten af økologisk mælk er bedre end konventionel mælk



Jeg tror økologisk mælk er bedre for miljøet end konventionel mælk

Jeg tror økologisk mælk er bedre for dyrevelfærd end konventionel mælk

Jeg tror økologisk mælk er bedre for mit helbred end konventionel mælk

Jeg synes jeg får mere for pengene når jeg køber økologisk mælk

Jeg føler en personlig gevinst ved at komme hjem med en økologisk mælk frem for en konventionel mælk

Tak for det.

Her til sidst har jeg lige et par sidste spørgsmål:

Efter de her 8 uger, hvad er så din generelle mening om Økologi?

Hvad synes du helt personligt om fordelene ved økologisk mælk?

Hvad mener du om prisen på økologisk mælk i forhold til hvad du får for pengene?

Har du skulle huske dig selv på at købe en bestemt mælk når du handler?

Ja ☐ Nej ☐

Siden sidste interview, har der været situationer hvor du har købt den konventionelle mælk i stedet for den økologiske?

Ja ☐ Nej ☐

Hvor mange gange er det sket?

Hvad var årsagen til det?

Stres ☐

Tidspres ☐

Uopmærksomhed ☐

Glemte det ☐

Pris ☐

☐

Udsolgt

Glemt kort ☐

Andet? ☐

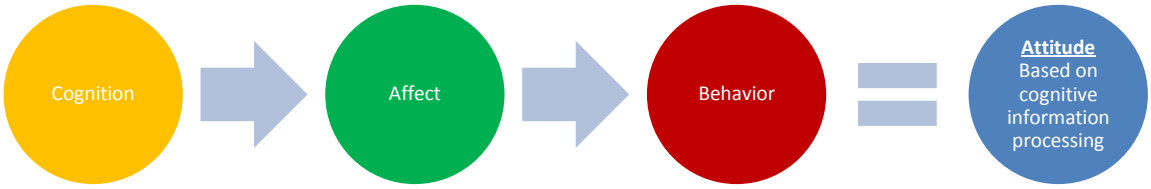
Har du tænkt dig at fortsætte med at købe økologisk mælk nu hvor vi afslutter programmet?

Ja ☐ - Hvorfor? Nej ☐ - Hvad skal det til for at du vil fortsætte?

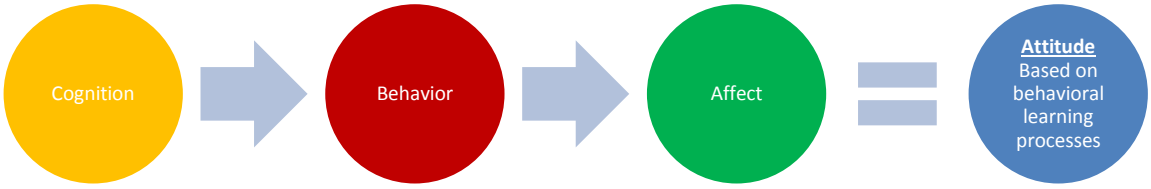
Mange tak for din deltagelse.

Figure E - The ABC model of attitudes

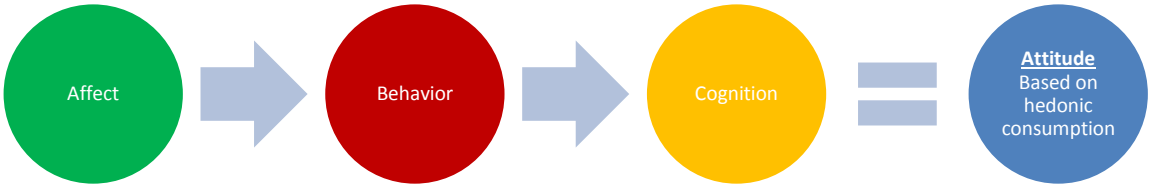
Three hierarchies for attitudes:



When attitudes are based on cognitive information processing it indicates a relationship in which cognitive perception guides the emotion towards a product that influences the consumer's behavior. The attitude is thus created based on prejudiced perceptions of information, and not the actual behavior.



In opposition to the model above, this attitude is formed based on a behavioral learning process in which personal perception directly influences the behavior. Only after the behavior has been performed does the consumer evaluate his feelings towards it, thus creating an either positive or negative attitude based directly on behavior.



This final arrangement of the components indicates an attitude based on a pleasurable consumption in which personal emotion guides the purchase behavior. This kind of attitude is based on the desire to experience pleasure and happiness through consumption.

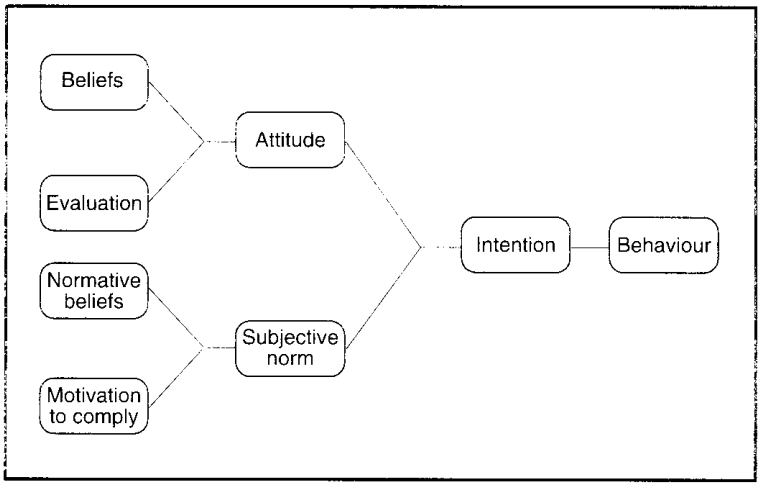
Source: (Solomon et al. 2010) p. 277

Figure F – Functional theory of attitudes

Function:	Explanation:
Utilitarian function	This function is related to the fundamental principle of reward vs. punishment. Consumers are likely to develop a positive attitude to an object if the purchase or usage of said object fulfills a goal or awards a reward. However, if the object does not yield any positive outcome the consumer tends to form a negative attitude towards it.
Value expressive function	This function supports the statement 'we are what we buy', insinuating that people tend to develop positive attitudes to objects that describes or reflects their character and personality, and not because the product itself is beneficial.
Ego-defensive function	These attitudes are formed as protection schemes against either external threats (e.g. purchasing pre-made food, indicating one cannot cook) or internal feelings.
Knowledge function	These types of attitudes are constructed based on a dire need for order, meaning and structure. This attitude mostly presents itself when consumers are faced with new alternative options that need evaluation and therefore knowledge concerning the product before the final decision can be made.

Source (Solomon et al. 2010)

Figure G - Theory of reasoned action



Source: (Ajzen, The Theory of Planned Behavior, 1991)

Figure H - 10 reasons to purchase ecology

1. *You get foods without remains of Xenobiotics.*

   This is a toxic pesticide used by non-ecological farmers to get rid of weed, vermin and fungi.

2. *You get food with more taste.*

   Ecological vegetables contain in general more nutrition and taste. They also contain less water per kilo than non-ecological vegetables.

3. *You get clean products without artificial 'make-up'*

   Products branded with the Ø-mark are not made up of artificial colors or sweeteners.

4. *Ecological animals have better conditions.*

   The animal welfare is better in the ecological agriculture.

5. *Ecology benefits the ground water.*

   Ecological farmers do not use pesticides that may leak into the ground water.

6. *Ecology preserves a rich and clean environment.*

   The natural environment is richer and cleaner in ecological areas.

7. *Natural food is good sense.*

   The ultimate goal in ecological manufacturing is healthy and hardy animals and crops.

8. *'No thanks' to genetically engineered food.*

   In ecological manufacturing, genetic engineering is neither used for human food nor animal feed.

9. *The Ø-brand stands for thorough control.*

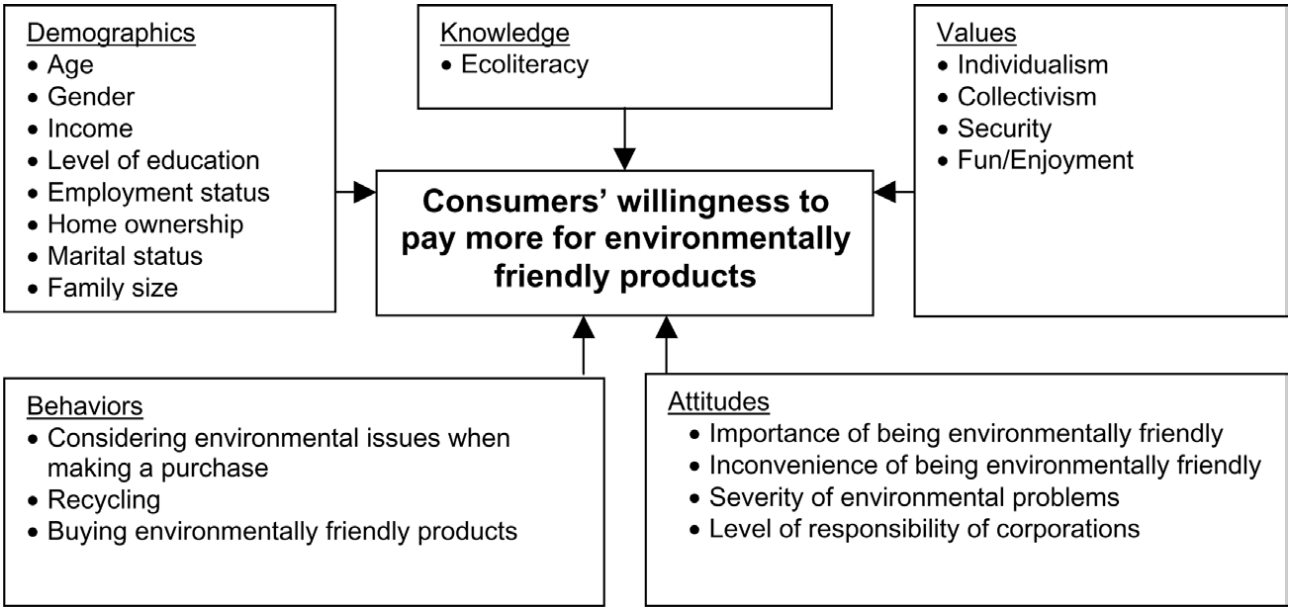
   The Danish red Ø-brand and EU's logo of ecology is your guaranty for ecological quality.

10. *Ecology benefits the developing countries.*

    A string of international investigations shows that ecological methods can help poor farmers in Africa, Asia and South America to produce more food and earn more money.

Source: (Økologisk Landsforening, 2013)

Figure I - Consumers' willingness to pay more for environmentally friendly products framework



Source: (Laroche, Bergeron, & Barbaro-Forleo, 2001)

Figure J - Participant characteristics and profiles

Par 1

- Male
- Age: 41-50
- Lives with partner
- No children living at home
- Annual income: 250.001-300.000KR
- ***Profile: Hardcore skeptical (A)***
- ***Total number of purchases = 19***

Par 2

- Female
- Age: 41-50
- Living with partner
- No children living at home
- Annual income: 300.001-350.000KR
- ***Profile: Refuser (D)***
- ***Total number of purchases = 25***

Par 3

- Male
- Age: 31-40
- Living with partner
- 2 children living at home
- Annual income: 250.001-300.000KR
- ***Profile: Refuser (D)***
- ***Total number of purchases = 24***

Par 4

- Female
- Age: 31-40
- Lives with partner
- 2 children living at home
- Annual income: 250.001-300.000KR
- ***Profile: Curious (C)***

- ***Total number of purchases = 23***

Par 5

- Male
- Age: 31-40
- Living with partner
- 1 child living at home
- Annual income: 250.001-300.000KR
- ***Profile: Refuser (D)***
- ***Total number of purchases = 20***

Par 6

- Male
- Age: 31-40
- Lives alone
- No children
- Annual income: 200.001-250.000KR
- ***Profile: Value skeptical (B)***
- ***Total number of purchases = 16***

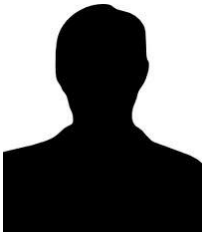
Par 7

- Female
- Age: 31-40
- Lives with partner
- 1 child living at home
- Annual income: 200.001-250.000KR
- ***Profile: Curious (C)***
- ***Total number of purchases = 19***

Par 8

- Female
- Age: 21-30
- Lives with partner
- 1 child living at home
- Annual income: 200.001-250.000
- ***Profile: Refuser (D)***
- ***Total number of purchases = 22***

Par 9



- Male
- Age: 41-50
- Lives with partner
- 3 children living at home
- Annual income: 250.001-300.000KR
- ***Profile: Curious (C)***
- ***Total number of purchases = 25***

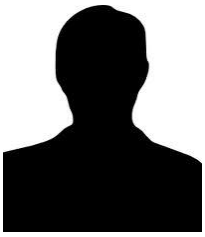
Par 10

- Female
- Age: 51-60
- Lives with partner
- No children living at home
- Annual income: 200.001-250.000
- ***Profile: Value skeptical (B)***
- ***Total number of purchases = 24***

Par 11

- Female
- Age: 21-30
- Lives with partner
- No children
- Annual income: 250.001-300.000KR
- ***Profile: Curious (C)***
- ***Total number of purchases = 23***

Par 12



- Male
- Age: 21-30
- Lives with partner
- No children
- Annual income: 200.001-250.000KR
- ***Profile: Refuser (D)***
- ***Total number of purchases = 22***

Par 13

- Female
- Age: 21-30
- Lives with partner
- 1 child living at home
- Annual income: 250.001-300.000KR
- ***Profile: Value skeptical (B)***
- ***Total number of purchases = 25***

Par 14

- Male
- Age: 41-50
- Lives with partner
- No children living at home
- Annual income: 250.001-300.000KR
- ***Profile: Hardcore skeptical (A)***
- ***Total number of purchases = 15***

Par 15

- Male
- Age: >60
- Lives with partner
- No children living at home
- Annual income: <200.000KR
- ***Profile: Hardcore skeptical (A)***
- ***Total number of purchases = 21***

Figure K – Presentation of results

Table 1 - Profiles:

Profiles			
Participants:	***Concern Score***	***Prior Experience With EM?***	***Profile***
1	-7	NO	HARDCORE SKEPTICAL
2	2	YES	REFUSER
3	8	YES	REFUSER
4	-2	YES	CURIOUS
5	1	YES	REFUSER
6	3	NO	VALUE SKEPTICAL
7	-8	YES	CURIOUS
8	2	YES	REFUSER
9	-5	YES	CURIOUS
10	4	NO	VALUE SKEPTICAL
11	-7	YES	CURIOUS
12	5	YES	REFUSER
13	0	NO	VALUE SKEPTICAL
14	-2	NO	HARDCORE SKEPTICAL
15	-2	NO	HARDCORE SKEPTICAL

This table indicates the concern score obtained in the 1st interview with the participants. The concern score is based on the participants' answers to questions concerning their actions in relation to environmental concern (choice of transport, recycle, waste and energy) and concern for personal health (healthy food and exercise). *For a more detailed outline of participants answers, please see attachment 1*.

From this table it is noticeable that the concern score is in the range of-8 to +8 with no outliers at either extreme. This was expected since few consumers are to be found at the two extremes. The number of participants with a negative concern score was 7, with an average of -4,7; while the number of participants with positive concern scores reached 8, with an average of 3,1.

A total of 9 participants had had prior experience with EM whilst a total of 6 participants had never purchased EM before the beginning of the study.

From the concern scores and prior experience, the participants were divided into four profile groups. These groups are: the hardcore skeptical (group A); the value skeptical (group B), the curious (group C); and the refusers (group D).

A total of 3 participants were taken to be 'hardcore skeptics' (group A), and another 3 participants were identified as belonging to group B, the 'value skepticals'.

4 participants belonged to group C, 'the curious', whilst the remaining 5 participants were concluded to belong to group D, 'the neglectors'.

The most referenced profile amongst the participants was group D, 'the refusers' and the least applicable were groups A, 'the Hardcore skeptics' and B 'the value skeptics'.

Table 1a - Concern score change

Concern Score Change			
Participants:	***Cocnern Score***	***Prior Experience With EM?***	***Score Change From 1st to 2nd Interview***
1	-7	NO	3
2	2	YES	4
3	8	YES	1
4	-2	YES	3
5	1	YES	1
6	3	NO	4
7	-8	YES	1
8	2	YES	4
9	-5	YES	0
10	4	NO	2
11	-7	YES	4
12	5	YES	2
13	0	NO	0
14	-2	NO	4
15	-2	NO	5

This table highlights the score changes that were observed during the 2nd interview with the participants. A total of 13 participants had changed one or more answers to the questions, all of them for a more positive score, an average of 2,5 points had increased per participant during the 8 week study period.

A total of 18 points was increased on the environmental concern score (transport (+2), recycling (+8), waste (+3) and energy consumption (+5). *For a detailed illustration of the participants' answers regarding environmental profiles please see attachment 1*.

Furthermore, a total of 19 points were increased on the health concerns score (food health 'keyhole' and 'wholegrain' (+15), exercise (+4).

2 participants did not change any behaviors relating to these questions as concluded by their answers.

Table 2 - Attitude

Attitude	**Deltagere**														
Spørgsmål/svar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Køber du konsekvent økologisk frugt og grønt i stedet for konventionelt frugt og grønt?															
JA		x													
Jeg tror det er sundere		x													
Jeg tror det gavner miljøet															
Jeg tror det smager bedre															
Jeg tror kvaliteten er bedre		x													
Jeg synes man bør købe økologi		x													
NEJ	x		x	x	x	x	x	x	x	x	x	x	x	x	X
Det er for dyrt	x				x	x	x		x	x	x	x	x	x	X

Jeg tror ikke det er sundere				x						x				x	
Jeg tror ikke det er bedre for miljøet	x			x						x				x	
Jeg tror ikke det smager bedre				x		x		x		x	x			x	X
Jeg tror ikke kvaliteten er bedre	x			x				x	x			x		x	
Profile Group	A	D	D	C	D	B	C	D	C	B	C	D	B	A	A

This table presents the results from the 1st interview regarding the participants' attitude towards ecological foods. When asked whether or not they consistently purchased ecological fruits and vegetables, only 1 participant answered 'yes', (Par 2).

5 reasons for lack of purchase were listed as options; too expensive, skeptical about it being healthier, skepticism concerning environmental benefits, taste and quality. The question was open, letting the participants chose more than one option.

A total of 11 participants stated that they did not purchase ecological fruits and vegetables consistently due to it being more expensive as opposed to conventional fruits and vegetables, 3 said they did not believe it was healthier than the conventional fruits and vegetables and 4 was skeptical about environmental benefits of purchasing ecological fruits and vegetables.

Regarding the taste, 7 participants answered that they did not think the ecological taste was better than the conventional and 6 participants doubted the quality was better.

What is noticeable for this particular question (and will be specifically analyzed) was what the participants *did not* answer. Thus, if the participants did not tick the box labeled 'I do not believe it s better for the environment', it can safely be assumed that they *do* believe that ecological fruits and vegetables are better for the environment than conventional fruits and vegetables.

Thus, 3 participants did not state the added expense of ecology was the reason they did not purchase it. 12 participants *did* believe ecological fruits and vegetables to be healthier and 10 *did* believe it was better for the environment. 7 participants indicated that it was *not* because of the taste that they did not buy it consistently and 9 answered that it was *not* due to the quality.

The most common reason for not purchasing ecological fruits and vegetables was the added expense and the attribute the participants ranked highest in the ecological fruits and vegetables was the belief that it was healthier.

Table 3 - Perception

Mening	**Deltagere**														
Spørgsmål/svar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Hvordan synes du økologisk mælk smager?															
Meget ringe															
Ringe														x	
Fint	x	x			x	x	x				x	x	x		
Rigtig godt			x	x				x	x	X					x
Hvad synes du om prisen på økologisk mælk?															
Alt for dyr	x								x			x			
Lidt for dyr			x	x	x	x		x		X	x		x	x	x
Fair		x					x								
Billig															
Meget billig															
Jeg synes økologisk mælk smager bedre end konventionel mælk															
Meget uenig														x	
Lettere uenig										X					
Ingen forskel	x			x	x	x		x			x				x
Lettere enig		x	x				x					x	x		
Meget enig									x						
Jeg synes kvaliteten af økologisk mælk er bedre end konventionel mælk															
Meget uenig														x	

Lettere uenig	x	x		x		x									
Ingen forskel					x				x	X	x	x			X
Lettere enig			x				x	x							
Meget enig													x		
Profile group	A	D	D	C	D	B	C	D	C	B	C	D	B	A	A

This table illustrates the answers given by the participants regarding their perception of EM and its various benefits. The participants answered questions on taste, price and quality.
Regarding the taste of EM, one of the participants found the taste slightly poor. 8 answered the taste was 'fine' and the remaining 6 deemed it to be really good. When asked about the price, 3 participants thought it to be much too expensive. The majority, 10 participants, believed it to be only slightly too expensive while the remaining 2 thought the price was fair. None of the participants perceived the price of the EM as being 'cheap'.

For the questions concerning taste and quality of EM in relation to CM, the participants were asked to answer their level of agreement ranging from highly agree to highly disagree.
6 participants agreed to a lesser or larger extent that the taste of EM exceeded the taste of CM. 2 stated that they did not agree that it tasted better and finally, 7 could not perceive any difference in taste between the two products.
When questioned about their perception of quality, 4 stated that they agreed to a lesser or larger extent that the quality of the EM exceeded the quality of the CM. A total of 5 did not believe the ecological quality was better and finally, 6 did not perceive any difference between the qualities of the two products.

Table 4 - Perception of EM

Mening om økologisk mælk	**Interview 1**	**Interview 2**	**Difference**
Spørgsmål **Jeg tror økologisk mælk er bedre for miljøet end konventionel mælk**	Antal svar	Antal svar	
Meget uenig	2	1	-1
Lettere uenig	9	5	-4

Lettere enig	4	9	5
Meget enig			
Jeg tror økologisk mælk er bedre for dyrevelfærd end konventionel mælk			
Meget uenig			
Lettere uenig	4	2	-2
Lettere enig	11	12	1
Meget enig		1	1
Jeg tror økologisk mælk er bedre for mit helbred end konventionel mælk			
Meget uenig	2		-2
Lettere uenig	9	4	-5
Lettere enig	4	7	3
Meget enig		4	4
Jeg synes jeg får mere for pengene når jeg køber økologisk mælk			
Meget uenig	4	1	-3
Lettere uenig	8	6	-2
Lettere enig	3	7	4
Meget enig		1	1

Interview 1

The questions illustrated in this table concerned the participants' perception of EM in regards to environmental benefits, animal welfare, health benefits and value. All questions were rated according to level of agreement, ranging from highly agree to highly disagree. It was not possible to choose a 'neutral'. *For a more detailed outline of the answers from the participants, please see attachment 2.*

When asked about the environmental benefits of EM, 4 participants agreed to lesser extent that they perceived EM to be more beneficial for the environment as opposed to CM. 11 participants did not agree that EM was more environmentally friendly than CM. None of the participants agreed to a larger extent with the statement.

In relation to animal welfare, 11 participants agreed to a lesser extent that EM was more animal-friendly than CM whereas 4 participants did not agree that EM was better for the animals. None of the participants

agreed to larger extent with the statement.

When being posed the question regarding health benefits, a total of 4 participants agreed to a lesser extent that EM was more health beneficial than CM and the remaining 11 participants disagreed to a larger or lesser extent that EM was more beneficial to personal health. None of the participants agreed with the statement to a larger extent.

The last question concerned whether or not participants perceived to get more value for their money when they purchased EM. To this question, 3 participants agreed to a lesser extent, whereas 12 disagreed to perceive any more value for the price premium they had to pay. None of the participants agreed to a larger extent with the statement concerning value for money.

Changes to perception of EM (interview 2)

The two columns on the right highlights the changes to perception of EM as it changed between the 1st and the 2nd interview.

The largest change was observed in the question concerning perception of health, where 7 participants changed their perception from 'disagree' to 'agree'. The second most noticeable change was the question regarding environmental benefits where a total of 5 participants changed their perception from 'disagree' to 'agree'. The other question with a positive change of 5 from 'disagree' to 'agree' was regarding value for money.

The final question related to animal welfare showed a positive increase of 2 levels of agreement.

Only 1 participants (Par 6) did not change any of his perceptions during the course of the study. No participants answered an agreement level below their previous answer.

Table 5 - Habit creation

Vanedannelse	Interview 1	Interview 2	Difference
Spørgsmål	Antal svar	Antal svar	
Skal du huske dig selv på at du skal købe en bestemt mælk når du handler?			
Ja	11	4	-7
Nej	4	11	7
Siden programmet startede i uge 16/siden sidste interview har der været situationer hvor du har købt den konventionelle mælk i stedet for den økologiske?			

Nej	6	11	5
Ja - Hvor mange gange? - Hvad var årsagen?	14	6	-8
Tidspres/stres	3	2	-1
Uopmærksomhed	6	3	-3
Pris	3	1	-2
Udsolgt situation			
Glemt bonuskort	1	1	
Andet?			
Jeg føler en personlig gevinst ved at komme hjem med en økologisk mælk frem for en konventionel mælk			
Meget uenig	3	1	-2
Lettere uenig	8	4	-4
Lettere enig	4	10	6
Meget enig			

For a more detailed illustration of the answers given by each participant to these questions, please see appendix attachment 3.

Interview 1

The group of questions illustrated in this table concerned the possible habit creation during the course of the study. The participants were asked questions related to the cue mechanism, the action (or missed action) and the reward, all connected to habit creation.

When asked about whether or not the participants had to continuously remind themselves to purchase a specific milk when they were out shopping a total of 4 participants answered 'no' and the remaining 11 'yes'.

The next questioned concerned whether they had at some point during the weeks from initiating the program to the first interview bough the CM instead of the EM to which 6 participants answered 'no' and 9 'yes' (A total of 14 mis-actions were stated). When asked about the reasons for purchasing the CM as opposed to the EM, the answered were varied. 3 of the mis-actions were caused by stress or time pressure, another 6 was due to inattentiveness to what they were purchasing at the time, a total of 3 mis-actions were due to having a change of heart when confronted with the price at the purchase, finally, 1 mis-action

were taken because one participant had forgotten his bonus card.
The final question to the habit creation concerned whether or not the participants felt a certain reward en bringing home EM as opposed to CM. The participants were asked to state their level of agreement ranging from highly agree to highly disagree. There was no 'neutral' option available.
4 participants stated that they agreed to a lesser extent in feeling a personal reward when they purchased EM. None of the participants agreed to a larger extent with the statement. 11 participants disagreed with the statement.

Changes to habit creation (interview 2)

This table illustrates the changes in relation to the cue, action and reward mechanism of the habit creation between the 1st and 2nd interview. When asked about remembering to purchase the specific milk, 11 participants answered that they no longer needed a reminder thus adding 7 more participants to this reaction to the cue mechanism. A total number of 4 participants did not answer differently in their 2nd interview and no participants who answered 'yes' in the first interview answered 'no' in the 2nd.
The question concerning action or mis-action revealed mis-action occurred a mere 6 times between interview 1 and 2, making it 8 less than in the first interview. The reasons for the mis-action showed that inattentiveness was still the most frequent (despite that fact that the number had lowered from 6 to 3), 2 mis-actions occurred due to stress or time pressure (down from 3), and 1 mis-action was performed due to the price (down from 3) and the final mis-action occurred as the participant had forgotten his bonus card and therefore chose to not perform the purchase.

When asked about their perception of personal reward, a total of 6 participants had changed their perception from 'disagree' to 'agree' to feeling a personal reward by purchasing ecology. 5 participants remained in the in the category of disagreement, whilst 4 participants had been in agreement since the 1st interview.

Table 6 - The future

Økologisk beslutning	Deltagere														
Spørgsmål/svar	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Interview 1															

Hvis prisen på økologisk mælk forbliver på det stadie den er nu, vil du så fortsætte med at købe økologisk mælk efter programmet slutter i uge 24?															
Ja		x			x		x								
Nej	x		x	x		x		x	x	X	x	x	x	x	x
Interview 2															
Fortsætter du med at købe økologisk mælk nu hvor programmet bliver afsluttet?															
Ja		x			x		x		x			x	x		
Nej	x		x	x		x		x		x	x			x	x
Profile group	**A**	**D**	**D**	**C**	**D**	**B**	**C**	**D**	**C**	**B**	**C**	**D**	**B**	**A**	**A**

In the first interview, participants were asked whether or not they intended to continue the purchase of EM after the program ended in week 24. In this last week, the participants were asked again.

The first question revealed that a total of 3 participants intended to purchase milk if the prices remained at their current stage. 12 participants had no intention of continuing the purchase.
When asked again in week 24, 3 participants had changed their answer for the positive and 9 still remained unchanged.
At its closure, a total of 6 participants will continue the purchase of EM whilst the remaining 9 re-direct their purchase towards the CM.

Figure L – Transcripts

	Interview 1
Deltagere:	Q: Hvad synes du helt personligt om fordelene ved økologisk mælk?
Par 1	”Det er jo ikke fordi man umiddelbart kan *se* at mælken er sundere når man hælder den op” ”Mælk bliver jo ikke sundere bare fordi køerne er gladere”
Par 2	”Jeg synes der har været så meget skandale-medie omkring det. Alt det der med at økologisk mælk også kom i de andre kartoner eller hvad det var. Der var bare for meget drama omkring det til at vi gad fortsætte med at købe det” ”Jeg var aldrig helt sikker på om det økologiske produkt jeg nu købte også *var* økologisk. Der er ikke den store kvalitetsforskel som der er i f.eks. frugt, så man kunne ikke helt vide sig sikker”
Par 3	”Det ved jeg ikke altså, mange siger det er sundere, men jeg ved ikke rigtig”
Par 4	”Jeg tror ikke det er så sundt som alle siger, jeg kan personligt ikke mærke nogen forskel” ”Den eneste fordel jeg lige umiddelbart kan se er at der er lidt friskere end det andet mælk man kan købe”
Par 5	”Jeg synes ikke rigtig der er nogle virkelig gemmetrængende forskelle. Den er lidt friskere i smagen, synes jeg, men måske er det bare fordi den bliver lavet lidt anderledes”
Par 6	”Jeg må ærligt indrømme at jeg har svært ved at se hvad det skal gøre godt for” ”Jeg synes ikke rigtig jeg kan se nogle fordele som kunde – men arla tjener sikkert gode penge på det”.
Par 7	”Der er noget med at der ikke er nær så mange tilsætningsstoffer i som i almindelig mælk, og det kan da kun være sundt”

Par 8	”Det smager bare af mælk, jeg synes ikke rigtig der er nogen forskel” ”Den eneste umiddelbare forskel er at det smager en smule friskere end andet mælk”
Par 9	”Et eller andet sted MÅ det jo være sundere og sikkert også bedre for dyrene og for naturen, det siger alle jo, men behøver det virkelig at være så dyrt?”
Par 10	”Altså, helt konkret ligner det jo bare almindelig mælk” ”Der er ikke den store forskel”
Par 11	”Det smager fuldstændig som almindelig mælk, jeg kan ikke rigtig mærke nogen forskel” ”Det skal nok passe at det er sundere for et eller andet, men det er ikke noget der kan smages”
Par 12	”Smagen er fint nok, men kvaliteten hænger lidt. Den virker mere vandet end almindelig mælk, men med en bedre smag, giver det mening?”
Par 13	”Tja, man kan jo godt se at det muligvis er sundere for os og bedre for dyrene, så jeg tror egentlig bare det er prisen det holder os tilbage”
Par 14	”Jeg ved ikke rigtig om man skal tro på det er så meget bedre end almindelig mælk” ”Jeg synes man hører så meget om at ’uha’ nu skal vi alle være sunde og økologiske, men så burde de også bare sætte priserne længere ned så alle kan være med”
Par 15	”Det smager jo godt, men det gør almindelig mælk jo også, og det koster den halve pris” ”Det er måske rigtig nok at den er sundere i længden, men jeg har bare ikke råd til den”
	# Interview 2
	## Q: Efter 8 uger, hvad er så din generelle mening om økologi?
Par 1	”Jeg tror som helhed at økologi sikkert er sundere end de almindelige alternativer, men det er jo fordi de ikke er sprøjtet med alt muligt og tilsat alt muligt”
Par 2	”Der er nogle varer vi køber fast som er økologiske, såsom frugt og til dels grøntsager,

	men det er mest for at undgå alle de der sprøjtemidler” ”Jeg tror på økologi, men jeg vil vide hvad jeg betaler for”
Par 3	”Jeg kan godt sådan føle mig lidt ’presset’ til at købe det nogen gange, mere fordi det popper op alle steder, men jeg gør det bare ikke rigtig” ”Et eller andet sted bør man jo nok købe det, men jeg er bare ikke kommet dertil endnu, tror jeg”
Par 4	”Jeg kan godt forstå hvorfor nogen køber det i den tro at det er bedre, men jeg ved bare ikke om man kan tro på at det virkelig er så meget sundere. Det er jo ikke fordi at almindelige varer er skadelige, de er bare ikke NÆR så sunde som økologiske varer siges at være”
Par 5	”Det er jo et fint alternativ, men det er jo ikke fordi andre ikke-økologiske-madvarer er direkte usunde, men økologi er bare lige niveau sundere” ”Så altså, selvfølgelig er det sundt, men det er det andet jo også”
Par 6	”Jeg kan ikke se hvorfor det skal være så dyrt”. ”Jeg har ikke tænkt mig at bruge så mange penge på madvarer bare fordi de er dyrket lidt anderledes”
Par 7	”Jeg synes tit jeg skaber de bedste intentioner om at handle økologisk, jeg kan godt se mig selv om en ’grøn kunde’, men når jeg så kommer ned og ser priserne tænker jeg sådan lidt ’av’, det er altså noget der kan mærkes på budgettet” ”Men altså, jeg tror generelt på at økologi er sundere for os end almindelige varer, især friske varer som frugt og grøntsager og kød og mælk”
Par 8	”Jeg vil gerne vide mig sikker på at hvis jeg endelig køber et økologisk produkt, så skal det også bare være godt, men med mælken kan jeg godt være lidt i tvivl” ”Man kan mærke på æbler om de er sprøjtede eller ej, men mælken smager bare og ligner almindelig mælk”
Par 9	”Jeg vil rigtig gerne give mine børn det bedste og sundeste, men det er bare ikke altid

	pengene er til det. Jeg er begyndt at lægge mere mærke til andre der køber økologisk mælk og kan godt forstå hvorfor det måske er smartere. Det er jo noget vi drikker en del af derhjemme"
Par 10	"Jeg synes stadig man som kunde mangler en eller anden form for bevis på at det faktisk er bedre, både for naturen, for køerne og for mig. Er det ikke det økologi handler om? Det kan godt være at nogen siger det er sundere og nogen siger noget andet, men man har stadig ikke hørt om nogen der blev syge af IKKE at købe økologisk mælk, så, jeg ved ikke rigtig hvad jeg skal mene om det"
Par 11	"Jeg synes tit det er de økologiske varer der bliver dårlige først, så de må jo have en meget kortere holdbarhed, så ved jeg bare ikke om jeg virkelig vil betale mere for dem"
Par 12	"Det er jo sikkert et spørgsmål om tid før samfundet ser ned på alle dem der ikke køber økologisk, men indtil da tror jeg gerne mange kunder vil stille lidt højere kvalitetskrav" "Vi vil gerne have bedre kvalitet for vores ekstra penge"
Par 13	"Jeg tror til dels godt på at det er sundere, det er jo bevist at økologiske grøntsager ikke er sprøjtede og den slags, så ja, jeg tror det er sundere"
Par 14	[Om fordele for miljøet] "Der er da måske noget om snakken, men det er ikke noget jeg sådan rigtig har undersøgt" [Om sundhedsfordele] "Jeg synes ikke jeg ved nok om det til at gøre det det til en livsstil"
Par 15	"Min datter køber det fast til hendes børn, så der skal der nok være noget om snakken"
	Q: Hvad synes du helt personligt om fordelene ved økologisk mælk?
Par 1	"Jeg synes ikke der er den helt store forskel i smagen, men den er da sikkert godt for et eller andet" "Alle medier og reklamer opfordrer jo en til at købe økologisk, og jeg kan da også se at det økologiske vareudvalg er blevet større, det er bare ikke noget jeg har tænkt så meget over"

Par 2	”Det smager faktisk bedre end jeg husker det, eller måske skal man bare skifte mærke” ”Jeg ved ikke rigtig om det gør den store forskel, men generelt er økologi jo sundere end alt det andet og man kan jo altid håbe at man bliver sundere og lever længere af økologi, men intet er bevist endnu, tror jeg. Ellers ville flere mennesker nok købe det”
Par 3	”Det smager anderledes end almindelig mælk, eller også tror man det bare fordi det er noget andet end hvad man plejer at købe” ”Jeg tror ikke jeg ville kunne identificere den i en blindtest”
Par 4	”Det er lidt friskere i smag og konsistens end almindelig mælk, men det er ikke prisen værd bare for 1 dags mere friskhed”
Par 5	”Jeg synes ikke der er nogle deciderede mærkbare forskelle, udover at man føler sig som et lidt bedre menneske ved at købe økologisk” ”Vi er skam også begyndt at holde mere udkig efter tilbud på økologiske frugter og grøntsager, bare fordi det nu er så nemt at få fat på, og så kan man jo lige så godt hvis det alligevel ikke koster særlig meget mere end de andre varer”
Par 6	”Altså, jeg føler mig ikke sundere efter de her uger, så det kan vel ikke virke så godt”
Par 7	”Jeg synes jeg føler mig lidt som et bedre menneske ved at købe det. Jeg begynder så småt at se lidt ned på kunder som ikke gør det. Jeg kan godt lide den person jeg er når jeg handler økologisk, det giver mig en form for tilfredshed. Også at vide at jeg køber det sundeste til min datter”
Par 8	”Jeg ved ikke rigtig om jeg skal tro på det. Med andre varer såsom frugter, der kan man ofte se at der er tale om et økologisk produkt. De er tit mindre eller knap så farverige, men tit smager de også anderledes, ikke nødvendigvis bedre, bare anderledes, men det synes jeg ikke mælken gør”
Par 9	”Det smager jo meget bedre. Det er friskere og hvis man bare holder lidt øje og køber stort ind på tilbud så er det heller ikke så dyrt” ”Ungerne har allerede fået et forhold til det røde Ø mærke, så de praler med ovre i skolen at vi køber økologisk mælk derhjemme”

Par 10	”Jeg mangler lidt at se nogle direkte fordele ” ”Jeg synes ikke rigtig man kan mærke nogen forskel og der er intet bevis på at nogen får det bedre af at jeg bruger flere penge”
Par 11	”Det smager lidt friskere end almindelig mælk, men ikke nok til at jeg gider betale så meget for det” ”Det er da fint nok at køerne har det bedre, men det gavner bare ikke rigtig mig”
Par 12	”Jeg synes smagen er bedre og hvis det så også er sundere er det jo fint nok”
Par 13	”På lang sigt er det sikkert den bedre løsning, men her og nu synes jeg godt det kan mærkes lidt på pengepungen” ”Jeg læste lidt om det for nogle uger siden, og det de siger om at det er sundere og kan forhindre visse kræftformer, det tænker man jo over.” ”Man bliver sådan lidt… Urolig, forstår du mig? Man bliver næsten bange for ikke at gøre det”
Par 14	”Smagen er lidt ringere end den gamle, så jeg synes ikke rigtig jeg kan *mærke* at den er økologisk”
Par 15	”Det er da sagtens noget man kan vænne sig til, hvis man kan lære at vende øjnene væk fra prisen eller bare nøjes med at købe det når det er på tilbud” ”Det smager jo fint, og det er tit lidt friskere end almindelig mælk” ”Men jeg har dog stadig lidt svært ved at se de måder det gavner miljøet på. Noget mælk kommer i poser, det er måske bedre end karton, men det jeg køber er stadig i karton”
	Q: Hvad mener du om prisen på økologisk mælk i forhold til hvad du får for pengene?
Par 1	”Den er jo noget dyrere end den anden, og det er jo ikke fordi jeg er så villig til at bruge flere penge, men der kan da godt være noget om at den er sundere. Jeg ved bare ikke for hvad”

Par 2	”Jeg kan godt forstå at økologi er dyrere, men det er en hårfin grænse. Nogle økologiske produkter er grotesk dyre, andre er de der små 10-20% dyrere. Mælken er en del dyrere i procenter, men ikke så meget i kroner, så alt i alt gør det ikke den store forskel”
Par 3	”Det er jo noget dyrere, men hvis det virkelig også er sundere, så er det jo fair nok” ”Det ville også være billigere at leve af de billigste ovn-fritter, men det er sundere at leve af friske grøntsager, så pris og sundhed hænger nogen gange sammen på den måde”
Par 4	”Jeg synes ikke rigtig prisen matcher produktet, SÅ meget bedre smager det ikke og SÅ meget friskere er det ikke, så jeg kan ikke rigtig se hvad jeg betaler så mange ekstra penge for”
Par 5	”Den er vel fair nok alt taget i betragtning” ”Økologi er generelt dyrere, men jeg synes da ikke det er så slemt, det afhænger af hvad man tror det er godt for”
Par 6	”Det er for dyrt, især fordi det ikke smager bedre” ”Jeg kan ikke se hvor de ekstra penge skal passe ind”
Par 7	”Uha, jeg synes stadig den er slem, men så slemt er det jo altså heller ikke, ikke krone-mæssigt i hvert fald, men man skal nok bare lade være med at tænke i procenter”
Par 8	”Dyrt, det smager jo bare af det samme, så et eller andet sted føler jeg mig bare lidt snydt fordi jeg ikke kan smage at det faktisk er en økologisk mælk jeg har købt”
Par 9	”Et eller andet sted er prisen vel dybest set meget fair. Det er jo også dyrere at lave økologiske varer generelt så hvorfor ikke mælken, det er måske 10-20 kr. mere om ugen, max, så det er jo ikke noget der vælter økonomien derhjemme, men det er nok mere princippet i at det skal være så dyrt det hele”
Par 10	”Hvis jeg nu vidste mere om hvad det skulle være godt for, helt præcist, så måske. Men jeg synes stadig det er meget dyrt. Jeg ved godt det kun er et par kroner mere, men for alt det mælk man køber på en uge, så løber det op”
Par 11	”Jeg synes slet ikke det er det værd fordi det jo bare smager af mælk”

	”Der er ingen wow faktor der gør at jeg hellere vil købe det”
Par 12	”Det koster da klart lidt mere, men smagen er også bedre og friskheden er, så det er jo også det man betaler for”
Par 13	”Det er jo noget dyrere, men også bedre, så prisen er vel fair til en vis grad” Selvfølgelig ser jeg helst det bliver billigere, men SÅ slemt synes jeg nu heller ikke det er”
Par 14	”Jeg synes det er noget dyrt sprøjt, mere fordi det ikke smager anderledes and alt muligt andet mælk”
Par 15	”Prisen er helt klart det der gør at jeg ikke gider købe det. Også selvom det andet er udsolgt” ”Det kan bare ikke være rigtigt at det skal være så dyrt hvis det er det regeringen gerne vil ha os til at købe” ”Jeg har i hvert fald ikke råd til at købe for meget af den slags”
	Q: Fortsætter du med at købe økologisk mælk nu hvor vi afslutter programmet? (Ja – hvorfor?)/(Nej – Hvad skal der til for at du fortsætter?)
Par 1	”Nej” ”Jeg kan ikke rigtig se hvorfor” ”Jeg har der fint med den mælk jeg plejer at købe, så den tror jeg bare jeg fortsætter med”
Par 2	”Ja, det tror jeg faktisk nok jeg gør” ”Vi har jo været på øko-mælk før, men gik væk fra der mens der var alle de der skandaler, men man kan hurtigt vænne sig til friskheden og smagen igen” ”Og så føler man sig bare bedre og sundere af at se økologi i køleskabet”
Par 3	”Måske, men dybest set er jeg glad nok for den mælk vi plejer at købe, så jeg ved ikke

	rigtig om det er det værd” ”Jeg tror bare jeg er lidt for meget vanedyr, hvis jeg ikke konsekvent husker mig selv på det så køber jeg den nok ikke”
Par 4	”Nej” ”Jeg kunne måske finde på at købe det på tilbud, men ikke fast, og sikkert kun fordi andre gør det” ”Jamen det skulle være billigere og jeg skulle vide mere om præcis hvordan det gavner”
Par 5	”Ja, nu er det jo gået lidt sport i det derhjemme, så mor og søn er opsat på at blive lidt mere øko-kunder”
Par 6	”Nej” ”Jamen, for det første skal det være billigere. For det andet skal det jo virke, altså, jeg mener, jeg skal vide at det jeg køber og bruger flere penge på er et bedre produkt”
Par 7	”Ja” ”Nu er jeg jo alligevel godt i gang. Pigen derhjemme har vænnet sig til det, manden kan også godt lide det, så jeg kunne godt finde på at fortsætte. Det er jo ikke fordi vi har følt os ekstra fattige de sidste par måneder på grund af mælken, så hvorfor ikke give det en chance”
Par 8	”Nej, det tror jeg ikke” ”Det smager bare ikke bedre end almindelig mælk, så jeg gider ikke blive ved med at drikke det”
Par 9	”Jo, det tror jeg måske nok jeg gør” ”Jeg skal i hvert fald gøre mit bedste. Nu er man jo så småt kommet ind i en vane med at finde den i mælkekøleren, så det ville være en skam at stoppe nu, men det kunne da være sjovt at lave en blindtest derhjemme for at se om de virkelig kunne smage forskel”
Par 10	”Nej”

	”Jeg må være ærlig og sige nej” ”Det skal blive billigere, helt simpelt, men stadig tror jeg der er mange der ikke vil købe det”
Par 11	”Nej” ”Det skal bare smage sundere hvis det skal koste så meget mere. Altså, der skal være at større bevis på at det rent faktisk er sundere
Par 12	”Ja, men pga. af smagen, ikke kvaliteten” ”Jeg tror da på at det er lidt sundere i længden og så smager den bare lidt bedre, til gengæld er kvaliteten knap så god, men man er nok bare for vant til det andet”
Par 13	”Ja, det kunne jeg godt finde på” ”Nu har jeg jo vænnet mig lidt til smagen og vant til at det er den jeg skal tage når jeg handler mælk, så jeg tror da jeg fortsætter. Lige indtil de sætter priserne op igen selvfølgelig. Så køber jeg den nok kun når den kommer på tilbud”
Par 14	”Nej, det vil jeg ikke” ”Jeg synes let og enkelt ikke det er det værd”
Par 15	”Næh, det tror jeg ikke” ”På den anden side, så har jeg jo vænnet mig til smagen, så nu ved jeg ikke hvad jeg siger til at begynde at drikke den gamle mælk igen” ”Den skal i hvert fald blive billigere, ellers køber jeg den kun når den er på tilbud”

Figure M – Attachment 1

Attachment 1		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
	Profiler																														
Spørgsmål	Svar/score																														
		1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
Q1a	**Jeg tager cyklen eller det offentlige på arbejde**																														
	Aldrig /-2	-2	-2							-2	-2							-2	-2			-2	-2					-2	-2		
	Sjældent /-1							-1						-1	-1					-1											
	Af og til / 0			0	0				0												0					0	0				
	Ofte / +1					1	1									1	1														
	Altid /+2											2	2											2	2					2	2
Q1b	**Jeg genbruger mine indkøbsposer når jeg handler ind**																														
	Aldrig /-2	-2																												-2	
	Sjældent /-1											-1		-1								-1		-1				-1			
	Af og til / 0		0										0		0														0		0
	Ofte / +1							1	1							1	1	1	1	1	1			1		1	1				

	Altid /+2			2	2	2	2			2	2													2							
Q1c	**Jeg køber kun de madvarer jeg ved bliver spist**																														
	Aldrig /-2																														
	Sjældent /-1																											-1			
	Af og til / 0						0			0																				0	
	Ofte / +1	1	1	1				1			1			1	1	1	1			1		1	1	1		1	1	1	1		
	Altid /+2				2	2	2			2	2			2	2					2	2										
Q1d	**Jeg bruger el-spare-pære derhjemme**																														
	Aldrig /-2													-2	-2																
	Sjældent /-1	-1		-1	-1											-1	-1	-1				-1	-1	-1					-1		
	Af og til / 0		0					0								0											0			0	
	Ofte / +1								1	1	1	1	1					1	1					1	1		1				
	Altid /+2					2	2																								
Q1e	**Jeg køber varer der er sundhedsmærket med 'Nøglehullet'**																														
	Aldrig /-2	-2	-2											-2	-2					-2											
	Sjældent /-1					-		-	-	-							-	-							-1	-					

						1		1	1	1							1	1								1											
	Af og til / 0			0			0				0	0				0				0				0						0	0						
	Ofte / +1				1								1				1				1				1	1							1	1			
	Altid /+2																																				
Q1f	**Jeg køber varer der er sundhedsmærket med 'Fuldkornsmærket'**																																				
	Aldrig /-2													-2	-2			-2	-2			-2															
	Sjældent /-1	-1	-1					-1	-1	-1	-1																-1	-1			-1	-1					
	Af og til / 0			0		0	0					0				0							0	0				0									
	Ofte / +1				1								1				1		1	1					1				1								
	Altid /+2																																				
Q1g	**Jeg dyrker motion a minimum 30 minutters varighed 2 gange om ugen**																																				
	Aldrig /-2													-2	-2																						
	Sjældent /-1																	-1	-1								-1	-1									
	Af og til / 0	0	0	0			0	0	0	0	0					0			0	0	0	0					0		0							
	Ofte / +1				1							1	1				1						1	1					1		1						

	Altid /+2			2 2												
Score	Total Score=															
INTERVIEW 1		-7	2	8	-2	1	3	-8	2	-5	4	-7	5	0	-2	-2
INTERVIEW 2		-4	6	9	1	2	7	-7	6	-5	6	-3	7	0	2	3
DIFFERENCE		3	4	1	3	1	4	1	4	0	2	4	2	0	4	5
Q	Har du før købt økologisk mælk?															
	Ja		x	x	x	x		x	x	x		X	x			
	Nej	x					x				x			x	x	x
Profil:																
Group A	The True Skeptic	x													x	x
Group B	The Value Skeptic						x				x			x		
Group C	The Curious				x			x		x		X				
Group D	The Refuser		x	x		x			x				x			

Figure N – Attachment 2

Attachment 2 **CIF'S**																														
SPØRGSMÅL	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
Jeg tror økologisk mælk er bedre for miljøet end konventionel mælk																														
Meget uenig											x	x															x			
Lettere uenig	x		x	x	x		x		x										x	x	X		x	x				x	x	x
Lettere enig		x				x		x		x			x	x	x	x	x	x				x			x	x				
Meget enig																														
Jeg tror økologisk mælk er bedre for dyrevelfærd end konventionel mælk																														
Meget uenig																														
Lettere uenig							x								x	x											x	x	x	
Lettere enig	x	x	x	x	x	x		x	x	x	x	x	x	x			x		x	x	X	x	x	x	x	x				x
Meget enig																		x												
Jeg tror økologisk mælk er bedre for mit helbred end konventionel mælk																														
Meget uenig	x																										x			
Lettere uenig		x	x		x		x	x	x		x	x			x				x		X							x	x	

Lettere enig				x		x				x			x			x	x			x		x	x		x					x
Meget enig														x				x						x		x				
Jeg synes jeg får mere for pengene når jeg køber økologisk mælk																														
Meget uenig	x										x	x															x		x	
Lettere uenig			x		x	x	x	x	x						x				x		X	x						x		x
Lettere enig		x		x						x			x	x		x	x			x			x	x	x	x				
Meget enig																		x												
Environmental profile group	A		D		D		C		D		B		C		D		C		B		C		D		B		A		A	

Figure O – Attachment 3

Attachment 3																														
Vanedannelse																														
Spørgsmål																														
Skal du huske dig selv på at du skal købe en bestemt mælk når du handler?	1		2		3		4		5		6		7		8		9		10		11		12		13		14		15	
Ja	x						x	x	x		x	x			x				x		X		x	x	x		x	x	x	
Nej		x	x	x	x	x				x			x	x		x	x	x		x		x			x				x
Siden programmet startede i uge 16/siden sidste interview har der været situationer hvor du har købt den konventionelle mælk i stedet for den økologiske?																														
Nej			x	x		x		x		x			x	x		x	x	x	x	x		x			x	x			x	x
Ja - Hvor mange gange? - Hvad var årsagen?	1	2			1		2		2		3	2			2						1		1	1			1	1		
Tidspres/stres		x			x						x				x															
Uopmærksomhed	x						x		2						x						X		x	x						
Pris	x										x	x																		
Udsolgt situation																														

Glemt bonuskort																											x	x				
Andet?																																
Jeg føler en personlig gevinst ved at komme hjem med en økologisk mælk frem for en konventionel mælk																																
Meget uenig	x										x	x							x													
Lettere uenig					x		x	x	x						x		x			x	X	x					x	x	x		
Lettere enig		x	x	x		x				x			x	x		x		x					x	x	x	x				x	
Meget enig																																
Antal køb i alt:	**19**		**25**		**24**		**23**		**20**		**16**		**19**		**22**		**25**		**24**		**23**		**22**		**25**		**15**		**21**			
ENVIRONMENTAL PROFILE	**A**		**D**		**D**		**C**		**D**		**B**		**C**		**D**		**C**		**B**		**C**		**D**		**B**		**A**		**A**			