



Green marketing: Consumers' Attitudes towards Eco-friendly Products and Purchase Intention in the Fast Moving Consumer Goods (FMCG) sector.

Authors:

Magali Morel

Francis Kwakye

Supervisor: *Peter Hultén*

Student

Umeå School of Business

Spring semester 2012

Master thesis, one-year, 15 hp

Abstract

The research study is on the green marketing but specifically on consumers' attitudes and purchase intention of eco-friendly products. It has been the global concern for the purpose of the preservation of the polluting and degradation of environment. Many studies have been done on the green marketing exploring the importance of the topic and relationship to the attitude and purchasing behavior of the consumers of eco-friendly products. Through the vital information provided by the expertise, competent and experience researchers, companies have understood the importance of green marketing in order to produce eco-friendly products and these provided much rich information for the literature studies of the thesis

The objective of this research was looked into and explored the influencing of the four traditional marketing-mix elements, satisfaction and word of mouth (WOM) on attitude and purchasing intentions of consumers on eco-friendly products specifically fast moving consumer goods (FMCG) or non-durable ones. The purpose of the study was to obtain information from consumers' point of view. Furthermore, one perspective of the study was to look into the comparison of the Swedish and the Non-Swedish their attitudes towards eco-friendly products. A questionnaire provided to obtain the views of the Swedish and others nationalities, how they are influenced by the marketing-mix elements (4P), satisfaction and WOM concerning green attitudes and purchase intention of eco-friendly products. A quantitative approach was adopted for the study by using a questionnaire, one paper version and another online version the total sample was composed of 174 respondents, 81 were collected through internet by using Google.doc surveys and Facebook and 93 by using standard paper questionnaire form. Furthermore, convenient sample was used to collect data so the chosen boundary was Umeå University and its residents.

Our findings indicated that consumers who already bought eco-friendly products and those who are satisfied by these previous purchases were willing to repeat purchases. Indeed satisfaction goes with purchase intention. Furthermore the importance of WOM and Advertising about green products the fact that consumers believe in green claim explain the variance of the purchase intention. Positive attitudes concerning willingness to pay an extra price for green products are also correlated with purchase intention. However we discovered also that positive attitudes towards green products do not always lead to action i.e. purchase of these products. Our findings demonstrated that there were differences in attitudes and purchase intention toward green products between mainly the women and men and between the Swedish and the Non-Swedish.

Keywords: Green marketing, marketing-mix, word of mouth, satisfaction, attitude, consumer intention.

Acknowledgment

This thesis was made in spring 2012, for the marketing department of Umeå School of Business and Economics:

We would like to thank and express our profound gratitude to those who contribute and assist greatly to the completion of this thesis. Most especially, Mr Peter Hultén, his advice, supervision and feedback which contributed positively to the success of the thesis. As our supervisor, his encouragements assisted us to carry out this research study in the right direction. We would like also to say a special thanks to our family and our friends who encouraged us to do our best.

Finally, we acknowledge the assistance of the respondents of our questionnaire who devoted their precious time to answer us which had gone a long way for the completion of the research study. Without them the findings and analysis would not be completed. We thank them for sharing their experience and expertise on this study.

Magali and Francis

Table of Contents

1. Introduction	1
1.1 Background	1
1.2 Problem discussion	2
1.3 Research gap	3
1.4 Purpose of our study	5
1.5 Delimitations	5
1.6 Thesis outline	6
2. Literature review	7
2.1 Comments about the authors	7
2.2 Green Marketing	7
2.3 Marketing-Mix	8
2.3.1 Definition	8
2.3.2 Product	9
2.3.3 Price	10
2.3.4 Promotion	11
2.3.5 Place	12
2.4 Word of Mouth	13
2.5 Satisfaction	14
2.6 Attitudes	15
2.6.1 The Functional theory	15
2.6.2 ABC Model	16
2.7 Purchase Behavior and Green consumer	17
2.7.1 Purchase Behavior	17
2.7.2 Green consumer	18
2.8 Limitations	19
2.9 Model and Hypotheses	19
3. Methodology	21
3.1 Philosophical assumptions	21
3.1.1 Epistemological consideration	21
3.1.2 Ontological consideration	21
3.2 Research approach	22
3.2.1 Deductive approach	22
3.2.2 Quantitative research	23

3.2.3 Criticisms of quantitative research.....	23
3.2.4 Research Design.....	23
3.2.5 Research type.....	24
3.3 Data collection method.....	25
3.3.1 Sampling.....	25
3.3.2 Limitations.....	27
3.3.3 Choice of survey method.....	27
3.4 Factor analysis.....	30
3.5 Quality criteria.....	31
3.5.1 Generalization.....	31
3.5.2 Reliability.....	31
3.5.3 Validity.....	31
3.6 Ethical considerations.....	32
4. Data analysis and findings.....	33
4.1 Demographic findings.....	33
4.2 Quality Measurement.....	34
4.2.1 Independent and ANOVA test.....	34
4.2.2 Simple correlations and new variables.....	39
4.2.3 Cronbach's alpha.....	40
4.2.4 Multiple Regression.....	41
5. Discussion.....	46
5.1 Marketing-mix factors towards green attitudes.....	46
5.1.1 Product.....	46
5.1.2 Price.....	47
5.1.3 Promotion.....	48
5.1.4 Place.....	49
5.2 Word of mouth towards green attitudes.....	50
5.3 Satisfaction towards green attitudes.....	51
5.4 Attitudes and purchase intention.....	52
5.5 Identity of our green consumer.....	54
6. Conclusion and Further Research.....	55
6.1 Practical Implications.....	55
6.2 Limitations.....	56
6.3 Managerial implications.....	56
6.4 Further research.....	57

APPENDIXES:

- Appendix 1 – Questionnaire English version
- Appendix 2 – Questionnaire Swedish version
- Appendix 3 – Frequency tables
- Appendix 4 – Cross tabulations
- Appendix 5 – Means comparison
- Appendix 6 – Independent and paired sample t-test
- Appendix 7 – ANOVA
- Appendix 8 – Correlations
- Appendix 9 - Multiple regression – Normal P-Plot

List of tables

Table 1 - Composition of our sample by gender and by nationality.....	34
Table 2 - Pearson coefficient of our new variables.....	40
Table 3 - Cronbach’s alpha of our new variables.....	41
Table 4 - Multiple Regression- Correlations.....	43
Table 5 - Multiple Regression - Model summary and ANOVA.....	44
Table 6 - Multiple Regression – Coefficients.....	45

List of figures

Figure 1 - Thesis outline.....	6
Figure 2 - Our conceptual model.....	20
Figure 3 - Composition of our sample by age and by status.....	34
Figure 4 – Our revisited model.....	53

List of abbreviations

- AMA: American Marketing Association
- CPG: Consumer Packaged Goods
- FMCG: Fast Moving Consumer Goods
- WOM: Word of Mouth
- ABC: Affect Behavior and Cognition
- SPSS: Statistical Package for the Social Sciences
- EF: Eco-friendly (in the tables/appendixes)

Preface

It is time to think consumer goods from “cradle to cradle” (expression cited in Cradle to Cradle: Remaking the way we may think, McDonough and Braungart, 2002) as instead of from “cradle to graves”.

1. Introduction

The objective of this introduction is to present a general background about green marketing and the reasons which encouraged us to study this topic and our research questions are also outlined.

1.1 Background

« We need things consumed, burned up, worn out, replaced, and discarded at an ever increasing rate » is a Victor Lebow's quotation (an American retail analyst from 1948) cited in *The Green Marketing Manifesto* (Grant, 2007, p. x (10)). This sentence is no longer at issue...

...since about thirty years, environmental concerns such as the global warming and the resource exhaustion have been important issues. Indeed, according to the OECD, in 2050, the world energy demand will be 80% higher than actually, leading to a 50% rise of greenhouse gases emissions.

Due to this realization consumers and companies have started to change their habits. A large-scale quantitative survey made in May 2007 by Vizu Study, showed that 74% of the American thought that global warming is important and more than the half of them (51.9%) think that is extremely important (Grant, 2007, p. 41).

Another study about the European attitudes towards sustainable consumption (based on a sample of 26,500 respondents) made in April 2009 demonstrated that more than 80% of European citizens thought that "a product's impact on the environment is an important element when deciding which products to buy" (Flash Eurobarometer 256 – The Gallup Organisation, 2009).

Green marketing has rose attention due to the environmental deterioration and it becomes a global problem (Kumar, 2011, p. 59). Nowadays, the American Marketing Association (AMA) divides the definition of green marketing in three aspects (marketingpower.com): as "the marketing of products that are presumed to be environmentally safe" (retailing definition) as "the development and marketing of products designed to minimize negative effects on the physical environment or to improve its quality" (social marketing definition) and finally as "the efforts by organizations to produce, promote, package, and reclaim products in a manner that is sensitive or responsive to ecological concerns" (environments definition).

Companies have using green marketing for many reasons such as green policies are profit-making; the business world is more and more implicated in the social responsibilities. Furthermore consumers have been changing of attitudes and due to the government and the competitive pressures it is essential for firms to consider the "green" adjective to marketing strategies (Ghosh, 2010, p.83). According to a press release made by Mintel (organization of food and drink market researches) in November 2010, the consumer packaged goods (CPG) or FMCG sector should follow twelve trends, among these trends some of them concern the environment such as "redefining natural" or "sustainability" such as respect the regulation to

say that a product is natural or not and for example continue to reduce packaging (mintel.com). These trends show that the FMCG sector is going to change and become greener.

An eco-friendly product is supposed to reduce the impact of its consumption on the environment thanks to the use of making-processes, components and recycling techniques which are less harm for the natural environment than those of conventional products (nationalgeographic.com). According to a survey made by the Gallup organization in 2009, around one of fifth of European interviewees think that the action which has the greatest impact on solving environmental problems was “to buy products produced by eco-friendly production” just after “minimizing waste and recycling” action (Flash Eurobarometer 256 – The Gallup Organisation, 2009, p. 7). Furthermore for example in the CPG sector between January 2009 and April 2009 “458 new products hit the market with claims of being eco-friendly” in the United States, compared to 2008, this market is “three times higher in 2009” (corporate-eye.com). Another example in the United States showed that “between 2005 and 2009 green cleaners grew 229%” (marketwire.com). The market of green products is more and more increasing. In this thesis “eco-friendly” as well as “green” products will be used to mention environmental products.

1.2 Problem discussion

The deterioration of the environment led to the adoption and the development of consciousness of consumers’ attitude towards eco-friendly products in order to preserve the planet (Luck et al., 2009, p. 2). They therefore, deem it expedient to take measures towards protecting the environment which has become their personal attitude towards eco-friendly foods (Solomon, 2010, p. 209). Consumers patronize the products and their aims are to make sure the contribution is supporting sustainable environment and contribution the guiding of the climate change (Hartmann & Apaolaza-Ibáñez, 2006, p. 676).

However, it has become global struggling to achieve the purpose of the environmental protection so companies are using various means to persuade the consumers’ segments who are environmentally conscious to change their attitudes from the conventional products towards green products and also satisfy their needs (Kumar, 2011, p. 59).

Some of the previous researchers have emphasized on the four concepts on the “demographics, green lifestyle (Solomon et al 2010, p. 401) green attitudes and green behavioral intentions in the context of the low involvement product category” (Florenthal and Arling, 2011, p.35).

There are many studies about the consumer behavior concerning the environment but most of them are concentrated on one or two marketing-mix elements and they do not make a link with the factors that companies use to make consumers buy green products and their attitudes towards these products. Furthermore, previous findings concerning consumers’ attitudes towards eco-friendly products are conflicting e.g. some studies found that consumers think conventional products have high quality compared to eco-friendly ones but in other studies results show the opposite (Vernekar and Wadhwa, 2011, p.67). In some studies we can find that consumers are willing to pay more for green products and in other studies it is not the case or the extra price has to be low (De Pelsmacker et al., 2009; Pirani and Secondi, 2011; Purohit, 2011; Vernekar et al., 2011).

These findings led us to make up our own opinion about this subject: consumers' attitudes toward green products and purchase behavior. Indeed the aim of this study is to examine factors which influence the purchase of eco-friendly products in a broad way, in order to demonstrate what factors used by companies from the marketing-mix elements (the product, the price, the place and the promotion) have an influence on green purchase behaviors and if some are more important than others. Furthermore other factors which do not depend of the companies but more of the consumer point of view will be examined. These factors are the word of mouth and the satisfaction.

Finally even if previous studies were made as well in industrialized countries as developing ones, we found few Swedish studies about this topic especially concerning the FMCG sector. So we chose as location of researches Umeå city. This city has an international dimension; around 50 languages are spoken in this area (umu.se). Moreover due to the fact that Swedish people are really concerned by environmental issues for example Sweden is one of the first countries among the 27 European countries where consumers are ready to pay more for green products (Pirani and Secondi, 2011, p.69) so we wanted to show if there were differences between Swedish and non-Swedish people.

1.3 Research gap

Many literatures and surveys which examine the consumer behavior cover on different subjects and disciplines and determine the factors influencing the green marketing attitudes towards purchase of the products.

For example the impact of price consciousness, the quality consciousness, the environmental consciousness and the brand loyalty have been studied in a survey made in New-Zealand (Gan et al., 2008, p. 96). But this survey did not take into account other factors such as the promotion of the eco-friendly products or the influence in the purchase decision of word of mouth. Finally, this survey is only focused on the New-Zealand population. Another recent survey made on a sample composed of more than 1,000 American people in February 2012 reveals that only 44% of the respondents trust the environmental claim of firms and 42% of the respondents are discouraged to buy environmental products because they think that the price is superior to that of conventional products (Cone Green Gap Trend Tracker, 2012, p. 1). The purpose of the thesis is to provide an overview of the green marketing related issues and models for the attitude of the consumers towards eco-friendly products especially in the FMCG sector. Some approaches tried to suggest the consumer behavior on green marketing could be explained by investigating consumers' attitudes towards their purchasing behavior (Solomon et al. 2010, p.208-209).

Solomon et al. (2010, p. 208) investigated the consumerism on the "lifestyles of health and sustainability" (LOHAS) on the green consumers impact on the consumer and business market. This is a new segment of the market in which researchers are having a keen interest to cover the areas of their attitude towards environment which lead to their purchasing behavior.

Our purpose is to look into the green marketing in the view of the consumers' attitudes towards purchase of green products. Therefore we will analyze the four marketing mix elements, word of mouth and satisfaction and how they influence the attitudes of the

consumers to make purchases of the FMCG eco-friendly products. This topic is focused on the purchase of green products in the fast moving consumer goods (FMCG) sector also called consumer packaged goods (CPG) sector which are non-durable goods. Products that consumers frequently buy and use immediately such as the food, the health care products; which are mainly sold in retail stores and having a short useful life (business.qandas.com and investorwords.com).

This research could have significant and vital impact on the readers as far as the role of consumer plays in the green marketing on the FMCG research and the safeguarding of the earth from depletion resources. Further, it could reveal which marketing strategies that companies should adopt to understand better consumers' needs in term of green products.

1.4 Purpose of our study

The purpose of conducting the research is to identify the factors used by firms (marketing mix elements) and from consumers (word of mouth and satisfaction) to influence them to purchase eco-friendly products. We will analyze these factors according to the consumers' point of view, which influence them and which lead them to develop attitudes towards the purchase or not of eco-friendly products. The difference models of attitude will be used to analyze the perceptions of the consumers which will link with the other factors.

In a more specific view our research questions can be described as the following:

RQ1: Which factors in the marketing-mix influence consumers to purchase eco-friendly products? Do other factors such as word of mouth and satisfaction play a role? To what extent these factors influence consumers to purchase green products?

RQ2: Do positive attitudes towards eco-friendly products lead to purchase intention?

1.5 Delimitations

This thesis only focuses on few aspects of each factors used by companies that can have an influence on green products' purchase and what are consumers' attitudes towards these products. The researches concentrate on the consumer point of view only as it is often the case in previous studies about green attitudes and purchase behaviors. In our study, we will not focus on durable goods such as electronic ones and cars because the decision making process is more complex and the purchase of these products is not so frequent. The research approach will only be focused on the FMCG sector, on tangible products that consumers regularly buy and which have a short life expectancy. These products will be used in a general way; no particular product will be analyzed. The aim is to focus on attitudes towards FMCG green products but not on a special brand in order to generalize the study.

Different types of products in the FMCG sectors will be analyzed in order to see if there are differences inside the FMCG sector: For example between the consumers' attitude towards green food or green cleaning products. For example products having an important impact on the environment are more purchased such as cleaning products (Chatterjee, 2009, cited in Rahbar and Wahid, 2011, p. 75).

Concerning the data collection, the research approach will be focused on Umeå's population. Indeed Umeå's population is cosmopolitan due also to the fact that many exchange students are present in the two universities of the city. Consequently, differences could be demonstrated between attitudes concerning green purchase behaviors among Swedish and Non-Swedish inhabitants but also concerning students and other Umeå inhabitants.

1.6 Thesis outline

Our research process is composed of six parts. The introduction provides to the reader a background about the topic and our research problem. The literature review will present the secondary data such as articles from scientific journals, books and an overview of the theoretical framework that outline the theories and literature relevant to this study. The next chapter will cover the methodology; where research approach, design and data collection will be presented. Then empirical findings of the quantitative study will be submitted, thus the analysis and the discussion of the research study. Finally conclusion and further researches and recommendations will be outlined (see Figure 1).

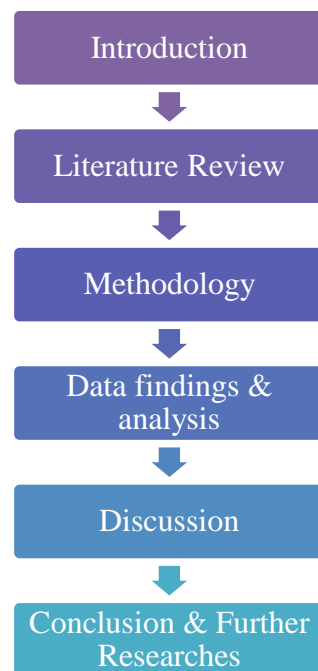


Figure 1 – Thesis outline

Source: Own creation

2. Literature review

The literature review will highlight and elucidate the green marketing in general and some key factors were selected to explain how they influence consumers' attitudes towards the purchase of eco-friendly products. Relevant theories will be linked to the hypothesis stated in this part to realize the positive or negative relationships between them and further explained.

2.1 Comments about the authors

Concerning our knowledge, we followed the same courses at Umeå University we did not know each other before deciding to write this thesis together. We are from two different cultural and academic backgrounds that is fulfilling. Both of us followed marketing courses about consumer behavior, marketing research and advanced market analysis which is an asset to write this thesis. Finally we have been interesting in the current trend concerning the green marketing and the growth of green products market, reasons for that we decided to choose this subject.

2.2 Green Marketing

The negative consequences on the environment due to companies' and human activities have led companies to develop eco-friendly products. Remind that "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (iisd.org). This definition appeared for the first time in 1987, in the Brundtland report also called: Our Common Future. Grant defines sustainability as "the idea that environmental (and ethical) objectives are not incompatible with ongoing economic prosperity" (2007, p. 2). The consumption of eco-friendly products and consumers' attitudes towards these products has led to the development of the green marketing mix "which preserves environmental resources and at the same time deliver value added products and services" (Datta and Ishaswini, 2011, p. 126).

Green marketing term appeared at the end of the 1980's. This concept has been defined by many researchers such as Stanton and Futrell (1987), Mintu and Lozanda (1993) and Polonsky (1994), (cited in Ghosh, 2010, p.83) in a broad sense it is the marketing activities which facilitate exchanges to satisfy consumer needs and wants by minimizing the impact of these activities on the physical environment. According to Chen and Chai (2010, p. 29) green marketing is defined as the activities taken by firms concerned about environmental problems or green problems, by delivering the environmental sound goods or services to create customers' and society's satisfaction. Welford (2000, cited in Chen and Chai, 2010, p.29-30) defined green marketing as "the management process responsible for identifying, anticipating and satisfying the requirements of customers and society in a profitable and sustainable way". Green marketing has been developing because even if the human wants are unlimited the natural and artificial resources are limited (Kumar, 2011, p. 59). Green marketing-mix elements and eco-friendly products are designed and developed as having less harmful for the environment (Chitra 2007, p. 174).

Environmental issues became world known issues when there was much debate cropped up in the 1960s in which Rachel Carson's Silent Spring published and examined critical concern on the sustainable and healthy environment (Marly et al., 2011, p. 329). This publication has

significant importance on the recently concern of the today's issues since the environment has become a challenge for the worldwide leaders (Kumar, 2011, p. 60) and have realized the danger of the environmental degradation and pollution.

Rahbar and Wahid (2011, p. 80) define the green marketing tools as including eco-label, eco-brand and environmental advertisement. The two first elements have importance in the consumers' behavior towards green products. However due to the fact that as we are non-Swedish natives and as we want a sample composed of Swedish and non-Swedish (such as international students) most of them are likely to not recognize a green brand or eco-label as well as the product could be different from that used in their home country. Reason for what we did not take into account specific eco-brands in our survey.

2.3 Marketing-Mix

2.3.1 Definition

According to Kotler and Keller (2009, p. 786) integrated marketing can be defined as “mixing and matching marketing activities to maximize their individual and collective efforts. The Mc Carty classification is the most important basis of marketing (Van Waterschoot and Van den Bulte, 1992, p. 83). This classification also called marketing mix is composed of four elements (the 4P): product, price, promotion and place (Kotler and Keller, 2009, p. 63). Marketing-mix modeling permits marketers to understand in which way they have to invest in the 4P, such as “what strategies they have to elaborate?” “How to allocate resources for each factor?” in order to satisfy customers' expectations (Kotler and 2009, p. 146-146). In our study we want to demonstrate that each of these four elements influences consumers to purchase eco-friendly products via development of attitudes towards these products.

Marketing mix (product, place, price and promotion) has become very vital in the production of eco-friendly products due to the environmental concern of consumers. However, Chitra (2007, p. 174) identified “green marketing mix as product, price, place promotion, process, people and physical distribution”. Chitra (2007, p. 174) summarized, and explained them and the product to produce is to provide healthy consumption, place as the availability of the products and its awareness, price as the value of the product or service produced, the promotion of eco-friendly approach in the utilization resources and awareness of pollution, physical distribution could be involved in the storage and other logistics should temper or harm to the environment Finally, people are the employees and customers should have eco-friendless or eco mindset in the production and consumption in order to achieve green marketing objectives. They are very important elements of marketing to safeguard or preserve the environment due to the process of the eco-products and final consumption.

The Roper organization made a study in 1990 relating marketing mix elements and the non-purchase behavior of green alternatives, they concluded that green alternatives were often functionally not superior compared to conventional ones and expensive. Furthermore “labels claiming that the product was environmental safe were not believable” and “green alternatives were difficult to find” (Vernekar and Wadhwa, 2011, p. 68). So in this study we would like to demonstrate if these ideas have been changing but we will not concentrate on eco-labels.

2.3.2 Product

The product includes “the total bundle of utilities (or benefits) obtained by consumers in the exchange process” (Blackwell et al., 2006, p. 49). The quality of a product, its package, its functionalities, and its design are one of the most important features in the product mix (Van Waterschoot & Van den Bulte, 1992, p 90). In our study we will mainly focus on the product quality and the package of green products.

- *Product quality*

The American Society for Quality Control defines quality as “the totality of features and characteristics of a product or service that bear on its ability to satisfy stated or implied needs” (Kotler, 2009, p. 169). Indeed quality permits to satisfy customers’ expectations. According to Ottman (2002) 42% of people think that “green products don’t work as well as conventional ones” (2011, cited in Verbekar and Wadhwa, p.67).

Furthermore, according to a survey made on 238 students 80% of them declare they “will buy eco-friendly products which are lower in quality in comparison to alternative products” and 74% of them declare concerning their consumer intention that they “would like to purchase those products which are inferior in quality but causing less environmental pollution” however this study showed that consumers are not ready to make a compromise concerning the quality of products that they purchase. Indeed there was a negative relationship with “I never compromise with the environmental value when I go for purchase of domestic products” and the “buying intention of inferiority products” (Purohit, 2011, p.96). However this study was only made on a sample composed of Indian students so it does not represent all the population. Another reason that explains we chose a various sample in term of status.

Consumers are not willing to buy products with lower quality even if their impact on the environment is low, because the alone argument concerning the protection of the environment is not convincing enough to make consumers purchasing low quality green products.

- *Packaging*

During the consumer decision making the five stages are sometimes not followed (“problem recognition, information search, evaluation of alternatives, product choice and outcome”) for example when the consumer buys a product on impulse, his decision is focused on “environmental cues” and it is called the “behavioural influence perspective” in this case the information on packaging has an important role to play because it is the first thing that the consumer sees (Solomon et al., 314-317).

Many retailers such as L’Oréal, Procter and Gamble are investing more and more money in the production of eco-friendly products. For example Procter and Gamble reduced the size of its packaging or some detergents are now more concentrated to save money on the packaging or for example instead of selling toothpaste in a cardboard box marketers sell it just with the tube. (Solomon et al., 2010, p. 211).

Previous studies such as those of Wannimayake and Randiwela (2008, p.13) or Vernekear and Wadhwa (2011, p.71) showed that product and package have an important impact during the purchase decision of green product from the FMCG sector. However these surveys were made

in countries such as Sri Lanka or India so according to cultural differences it can be difficult to generalize.

- Types of eco-friendly products

According to Chatterjee consumers buy eco-friendly products which have a high impact on the environment (2009, cited in Rhabar and Wahid, 2011, p. 75). In a study made on Malaysian consumers in 2010, Rhabar and Wahid demonstrated that these consumers bought more green products such as cleaning products or pesticides they are considered as non-eco-friendly. Furthermore, Chitra showed in a survey made on 60 consumers that among green products such as food, cosmetics, medicines and furniture, most of consumers are “fully aware of eco-friendly food, and “partially aware” of cosmetics and medicine (2007, p.183). However in our study we will focus on green products sold in supermarket such as food, cosmetic/healthcare products cleaning product and others.

The product performance, quality, image and taste are vital to the green consumer especially detergent eco- friendly products because the greenness alone is not adequate to influence the consumer attitude to make purchases. Highlight the benefits gives value to the products and can determine consumer’s choice (Wong et al, 1996, p. 269).

2.3.3 Price

According to the AMA, the price is “the formal ratio that indicates the quantities of money goods or services needed to acquire a given quantity of goods or services (marketingpower.com).

Some of consumers view the price of eco-friendly products as more expensive than the conventional ones (Chang, 2011, p. 20) and others view it not due to the healthy part of the products. The benefits of the products make some of the consumers go extra to pay more for the products. They believe that it will preserve the deterioration of the earth so spending or bearing extra cost is worthy of the cause.

According to a survey made in the 27 European countries on 27,000 respondents (around 1,000 per country) around 75% of the respondents are ready to pay more for green products and the Swedish have one of the highest percentages: 88,8% (Pirani and Secondi, 2011, p. 69). Moreover, another survey made on 238 students demonstrated that 92% of the respondents were also ready to pay more for eco-friendly products. However according to another survey made on a sample of 808 Belgian consumers (students, academic staff and administrators of Ghent University) only 10% of the sample was willing to pay a 27% price premium (De Pelsmacker et al., 2009, p. 363). Even if consumers develop positive attitude toward ethical products, their behavior does not necessarily transform into action i.e. purchase decision. Furthermore Mandese (1991) showed that “emerging green market does not necessarily indicate that consumers would attempt to purchase environmentally friendly products for higher prices (cited in Purohit, 2011, p. 95). Indeed even green consumers are quite price-sensitive. So there is a willingness to pay more for green products but till a level, in our survey we also mention this willingness to pay more but as our sample is composed of

students and other consumers such as employed or unemployed people with different levels of income, our findings could be more generalized to the population.

Price is perceived by consumers as a sign of quality (Kotler and Keller, 2009, p. 421). This belief about the existence of a price-quality relationship is pervasive (Solomon et al., 2010, p. 343) because it is not always true that the more a consumer pays for a product the more it is a good quality product, indeed the price is not the only attribute of a product.

2.3.4 Promotion

According to Kotler and Keller (2009, p. 63) promotion involves “sales promotion, advertising, sales force, public relations and direct marketing”. However in our study we will mainly focus on advertising because our survey deals with attitudes and purchase intentions of green products that consumers can find in a supermarket and we suppose that other elements from promotion such as sales force or public relations have low importance in supermarkets, indeed people do not need much help (sales force) when they shop everyday products.

Advertising is an element from marketing communication mix and can be defined as “any paid form of nonpersonal presentation and promotion of ideas, goods, or services by an identified sponsor” (Kotler and Keller, 2009, p.512). It permits dissemination of information to consumers and creates awareness of products. Promotion involves the means of a “company communicates with its target groups and stakeholders to its product or a company as a whole” (Patrick et al. 2010, p. 3). Consumers are concerned about the promotion of eco-friendly products when they think that it is the preservation or cause deserving to curb the environmental deterioration (Ann et al. 2012 p. 96). For example according to a survey made on 238 students in India, 96% of them agree with the statement: “I will prefer promotion campaign that protect environment” (Purohit, 2011, p. 95). “Green advertising is an advertising that claims the advertised products or services are environmental friendly or that their production process conserves resources and energy” (Chang, 2011, p. 23).

Promotion of eco-friendly products contribute to consumers’ awareness of the green alternatives. These elements help the consumers to know where the environmentally products are. Advertising encourages consumers’ purchase decisions because it develops eco-friendly products’ concern and the willingness to buy is important as well as where to buy it.

Green advertising can be varied in addressing issues from the “environmental issues, environmental friendliness of the products, corporate image campaigns and emphasis on the environmental credential of large companies, to public campaigns promoting environmental responsible behaviors” (Hartmann and Apaolaza-Ibanez, 2009, p.717) Advertising plays essential role in the green marketing. Since advertising is a broad topic on its own we would narrow the research on the consumer’s views and roles advertising play to influence consumers to make purchases of eco-friendly products.

Advertising can place a green product on appeal to differentiate a product from the conventional products. The advertising on appeal on the product can be on emotional that would stress on the aspects of the product on the environmental attributes and functions (Schuhwerk and Lefkoff-Hagius, 1995, p.46). The advertising on the appeal is vital because it would draw the attention on the target consumers to the eco-friendly products. It has the potential to influence the consumers due to the emotional appearance which can result to

action. It can lead to enhance the consumer recognition and recall for identification of the products in the store due to the attention-getting feature of the appeal. Furthermore according to a European report made by the Gallup organization, 30% of the European think that the best way for retailers to promote green products is to give them more information about these products (Flash Eurobarometer, 2009, p.6). There is also an argument that consumers, who are highly involved in the green marketing, are less affected by the advertising appeal which has not effect on their purchasing intention since they have been much more grabbed to the products. However, the green appeal is significantly persuasive on those who are less involved in the environment (Chitra, 2007, p.175). This is the review that the environmental concern consumers do buy the eco-friendly products for the purpose of the environment which are not influenced by the advertising appeal rather the non-green or environment concern needs heavily advertising in order to change their attitude towards them positively.

Advertising of the green products as safe for the environment influences the consumer's attitude to purchase the products, for instance, "more than half of the Americans say that they have purchased a product because the advertising or label indicated that it was environmental safe or biodegradable (Ginsberg and Bloom, 2004 p.84). Advertising cannot influence the consumer's attitude without highlighting the attribute of the green product.

According to other studies, consumers are skeptic concerning Green advertising indeed they generally do not trust the eco-friendly claim, they think that it can be exaggerated. (Chang, 2011, p. 21; Rahbar and Wahid, 2011, p.76). However findings are sometimes contradictory according to Wanninayake and Randiwela (2008, p. 14), in their study more than the half of respondents declared that promotion influences them in their purchase decision of green products. Furthermore Chase and Smith (1992) found that 70% of consumers can "sometimes" be influenced by green claim to purchase eco-friendly products but half of consumers do not pay so much attention to "messages due to excess usage" (cited in Rahbar and Wahid, 2011, p. 76). Another survey made on Malaysian consumers demonstrated that there is no relationship between environmental advertisements and purchase intention of green products (Rahbar and Wahid, 2011, p. 80). Indeed consumers pay attention to green advertisement and that permit them to obtain more information about eco-friendly products but it does not lead to purchase behavior. However this survey only considered 250 Penang's consumers (Malaysia) so findings are not really generalized to consumers from industrialized countries.

2.3.5 Place

This marketing mix element appears when "firms decide the most effective outlets through which to sell their products and how best to get them here" (Blackwell et al, 2006, p.49). Kotler and Keller define the place as including channels, coverage, assortments, location and inventory (2009, p.62). It can also be defined as the process of transporting the product or service to the customer. This involves the availability of the product and transporting them to the selecting wholesalers and retailers (Patrick et al, 2010, p. 3). Furthermore a point of purchase is "the location where the purchase is made" (Kotler and Keller, 2009, p. 788) but there are two levels of point of purchase (POP): macro level include the mall, the city, the market and the micro level include the interior of the store where the display is also called point of sale (POS) (investopedia.com). However in this study assortment and coverage in term of accessibility, availability of green products will only be considered, due to fact that we are interested about FMCG products that consumers can find in supermarkets.

Store display plays significance role in the purchasing behavior of the consumers for recognition of the products through displays of the items in the store. It is the source of the information for the consumers to make a decision to purchase products. As advertising, place can lead to unplanned buying; for example, “a Danish survey indicated that that nine out of ten customers did not plan purchase of at least one-third of the goods they acquired” (Solomon et al, 2010, p. 83). Consumers find products in the store display, leading them to make purchases which were not in the shopping list. This explains also the significance importance of place on recall and recognition in identifying a product in the store. Indeed a display can remind to the consumer a need, a purchase that he/she has to do or just remind something that he/she saw on television (Blackwell et al, 2006, p. 151).

Previous studies mainly focused on eco-friendly places such that most of consumers prefer to make their purchases in non-polluting places (Wanninayake and Randiwela, 2008 and Purohit 2011). Here we will consider the assortment inside the supermarket we do not focus on eco-friendly distribution channels. Our main objective is to show if consumers find easily green products in their supermarket and if they are available. The consumers attitude on the point of purchase and store display are important when consumers are examining the purchasing of the grocery brands, they add extra information to the consumers when processing and ready to make purchases in the store (Anselmsson and Johansson, 2007, p.850). They focused on the Sweden retail market evaluating on the consumer environmentally concern on the grocery brand and others on the corporate social responsibility of retails market how the green consumers evaluate product information and responsibility on the point of purchase to influence consumers attitude before make purchases in the store. This shows the influence of place in the marketing mix elements on consumer attitude on the purchases of the environmentally products.

Placement of the green products in the store can create awareness for green conscious consumers’ to have better options for them to purchase the products. The “awareness and willingness of consumers to purchase the green products in the store differ from one country to another, for instance, Denmark, Sweden and Germany have developed and have matured markets for organic or green food compare with Spain and Portugal” (eurocommerce.com).

2.4 Word of Mouth

The word of mouth (WOM) is “the informal transmission of ideas, comments, opinions, and information between two people, neither one of which is a marketer”. Two subjects are involved in WOM one who “gains information about behaviors and choices”: the receiver and the second who “increases his/her confidence in the personal product or behavior choice by persuading others to do the same” (Blackwell et al., 2006, p. 533).

WOM gives reliable and trustworthy information about products sometimes more than the formal communication. “The more positive information consumers get about a product a product from peers, the more likely they will be to adopt the product”. Furthermore WOM permits to reduce the uncertainty about the choice of a product and also to reassure the consumer he/she makes a good choice. It is an efficient marketing, for instance, “80% of all buying decisions are influenced by someone’s direct recommendations” (Solomon et al. 2010,

402). This shows the vital role of the word of mouth in promoting particular products to the consumers.

WOM has three characteristics, credible, personal and timely, indeed consumers trust more their family and friends than sellers for example, it is often an “intimate dialogue” evoking personal experience and finally it happens when people “want it to and when they are interested” (Kotler and Keller, 2009, p. 529).

However reference groups have a different influence on purchase decision according to the type of product. Indeed according to Bearden and Etzel, the public or private utilization and the fact that products are necessities or luxuries, the influence will be different. For example private necessities such as everyday products have a “weak reference group influence on brand selected” (1982, cited in Solomon et al, 2010, p. 393). Green products are not exception of the WOM promotion to target consumers and influence their attitudes for the purchases of the green products. In our study we wanted to test the hypothesis that the family and friends can influence consumers in their purchase decision of green products.

2.5 Satisfaction

In a marketing view, satisfaction can be linked to brand loyalty which is “a pattern of repeat product purchases accompanied by an underlying positive attitude towards the brand” (Solomon et al., 2010, p 644).

Furthermore the satisfaction is also linked to the product quality. Indeed the best quality of a product is the more satisfied the consumer is (Kotler and Keller, 2009, p. 169). Quality leads to performance and finally to customer satisfaction. Then customers satisfied are more willing to repeat purchases (Zeithaml et al, 1996, cited in Chang and Fong, 2010, p. 2837). According to a survey composed of around 200 respondents in Taiwan, green product quality was positively linked to customer satisfaction and green customer loyalty (Chang and Fong, 2010, p. 2841). However this survey was only focused on specific products and in the island of Taiwan, reason for what we wanted to analyze the satisfaction towards green products in an industrialized country (Sweden) and in a more general way. Nowadays customers are looking for products with high quality and which advocate social and environmental values (Chang and Fong, 2010, p. 2841).

A study made in India in 2007, on a sample composed of 60 respondents shows that the majority of them (58.3%) were satisfied by eco-friendly food products. (Chitra, 2007, p. 184). However this study is limited by the fact that the sample is small so there is a lack of generalization.

The building of the long-term relationship is the purpose of the business to create customers satisfaction which can lead to long-term profitability. “Customer satisfaction has been defined in two basic ways: as either an outcome or as a process” (Yazdannifard and Mercy, 2011, p. 638). They explained that an outcome, satisfying the end state resulting from the consumption experience and process is perceptual evaluative and psychological process that contributes to satisfaction. Their explanation shows vital points like the green products satisfaction in terms of quality, performance of other attributes, and satisfaction with the accessibility or availability of the store, purchase decision experience and pre-purchase experience have positive or negative impact on the consumers in the foreseeable future.

The satisfaction of products enhances repetition afterwards results in brand loyalty. The satisfaction of the consumers green products is paramount because it involves and shows the corporate responsibility of the companies. The society can reject a product due to the unsatisfactory activities of the company environmental friendless so the eco-friendly products as well as the company' marketing strategies should show the pro-environmental. Satisfaction plays important role in the attitude of the consumers towards eco-friendly products because the green marketing definition by some researchers revealed the satisfaction of consumers and society at large as vital, for instance, Welford (2000) (cited in Chen and Chai, 2010, P.29-30) defined green marketing as the management process responsible for identifying, anticipating and satisfying the requirements of customers and society in a profitable and sustainable way. Furthermore, the consumer satisfaction derived from the green purchasing behavior which involves the preference and use of the eco-friendly products and the production of the products are based on the ecological process. Thus the most important aspects of the consumer satisfaction towards the attitude of the eco-friendly products and eventually leading to the purchases of the products are social responsibility of the companies, keeping places clean, avoiding waste and eco-friendly products performance, quality and status (Leonidos et al. 2010, p. 1337) which can enhance purchase repetition.

2.6 Attitudes

In a psychological sense attitude is defined as a “tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly and Chaiken, 1993, p. 1).

In a consumer behavior approach, Solomon et al. (2010, p. 643) defined the attitude as “a lasting, general evaluation of people (including oneself) objects or issues.” The AMA defines it also as “a cognitive process involving positive or negative valences, feelings, or emotions” (marketngpower.com). The attitude is an important part in the study of consumer behavior. Indeed it represents one entire chapter in the Consumer Behaviour: A European perspective book (Solomon et al., 2010, p. 274-307). Many theories have been constructed on the attitudes. As the consumption of green product is a current and relevant subject, many studies have been done about the attitudes towards green products

2.6.1 The Functional theory

In our research study we will also use some elements of the functional theory of attitudes which was firstly developed by Katz. This theory outlines that attitudes “serve a function for the person” and they are “determined by person’s motives” (Solomon et al., 2010, p. 275). Four functions can be identified:

- *The utilitarian function:* This is “related to the basic principles of reward and punishment. People develop positive or negative attitudes towards products or services when they bring them satisfaction or pain (Solomon et al., 2010, p 276).
- *The value-expressive function:* At the opposite of the utilitarian one, this function is related to what the product or service that consumers use “say about them”. Indeed this function is linked with the self-concept of consumer and implies that consumers

do not use products for their own benefits but for what they embody. As Solomon and al. say it is linked with the consumer lifestyle (2010, p 276). For example a teenager will buy a sport brand shirt not because he likes the quality of the product, the features, and the comfort that provide him but just because this product shows that he is trendy.

- *The ego-defensive function:* These attitudes that consumers develop serve to protect them, for example, holding to attitudes that protect your self-image. Some consumers have attitude towards eco-friendly products in order to protect from global warming and be healthy (Solomon et al, p. 208)
- *The knowledge function:* These attitudes that consumers develop serve their need of a world which is formed of order and stability. This allows the individual to have a sense of control and helps to organize and structure our experience.

According to Solomon and al. (2010, p 276), “an attitude can serve more than one function, but in many cases a particular one will be dominant”. The attitude could function in many purposes, for instance, the LOHAS has the motive of using the eco-friendly products benefits on the health which is the utilitarian function and also concern of the preservation of the environment which is linked to the value-expressive. It is the aim of preserving the degradation of the environments leading to the formation of the LOHAS and provide their opinion to the public about the negative consequences of the environmental degradation and wanted the conventional products to be produce in the sustainable way (Solomon et al, 2010, p.208-209).

2.6.2 ABC Model

ABC model of attitudes: the model stresses the interrelationships between knowing, feeling and doing. Highly experienced researchers have in agreement that an attitude has three components of affect, behavior and cognition. The effect category explains as the emotions and feelings of people towards an object, for instance, a product. Behavior relates the actions and intentions of attitude towards an object or product which can be favorable or unfavorable and cognition can be explained as the beliefs a consumer has for the attitude object which be negative or positive (Solomon et al., 2010, p. 277). “The consumers attitudes affect their thoughts and feelings and thus influence behaviour such as purchasing behaviours” (cited, Picket-Baker and Ozaki, 2008, p.282, Ajzen, 2005, p.3). The past experience of the green products could result to positive or negative towards them which could influence the behavior of the consumer whether to purchase the eco-friendly products or not.

Picket-Baker and Ozaki (2008, p.289) examined in their research that environmentally conscious consumers were likely to pick or purchase brands they knew produced by companies whose goods and production method were more “environmentally friendly”. The experience and satisfaction of the green products have great impact on the feeling and action of the consumers’ attitude. For instance LOHAS have more positive attitude towards eco-friendly products, have the belief that the products are healthy (Solomon et al 2009, 208). The explanation of the ABC model by some researchers are linked with our proposed model in which consumer attitude towards an object (eco-friendly products) precisely FMCG.

The experiential hierarchy of effects means that “consumers act on the basis of their emotional reactions. “Although the factors of beliefs and behavior are recognized as playing a part, a consumer’s overall evaluation of an attitude object is considered by many to be the core of an attitude.” (Solomon et al., 2010, p. 279). So according to this perspective “attitudes can be strongly influenced by intangible product attributes such as package design, and by consumers’ reactions to accompanying stimuli such advertising and even the brand name” (Solomon et al., 2010, p. 279).

To functional values Hedonic values can also be included in the consumer decision making process. Let’s remind that hedonic consumption is “the multisensory, fantasy, and emotional aspects of consumers’ interactions with products” (Solomon et al., 2010, p. 647). Hedonic motivations represent for consumers “how the product makes them feel or the fun its use will provide” (Solomon et al., 2010, p. 279). Authors such as Babin et al. (1994) showed that in the consumer purchase behavior hedonic and utilitarian values have importance (not only the utilitarian one). Deli-Gray et al. in their article “Hedonic and functional shopping values in everyday product purchase: Findings from the Indian Study” (2011, p.65-70), demonstrated that hedonic factors play a role in the purchase of everyday products proving that hedonic value is not only associated to the purchase of luxury products. In their study, they chose six products (coffee, detergent, shampoo, orange juice, cellular phone and wrist watches). The results showed that hedonic and emotional feelings have importance during the decision making process but there are both hedonic and utilitarian aspects. However “the functional content scores were the lowest for coffee and shampoo. For example “the hedonic value of the detergents and shampoo was the lowest” (Deli-Gray et al., 2011, p. 69). This study shows that hedonic attitudes are also linked to purchase of everyday products like those which will be studied in the thesis (FMCG products). However this study has some limitations because more than half of the sample was composed of students and the sample is only composed of Indian people. So in this study the importance of hedonic values in the purchase of green products from the FMCG sector will also be considered. This study is different to that of Deli Gray et al. because the selected sample will be more international and composed of a same number of respondents for each age-group then we will focus on green everyday products instead of conventional everyday products.

According to Chang, consumers can have ambivalent attitudes towards eco-friendly products because they make positive and negative evaluations of products. For example consumers like buying green products because they preserve their environment but in the same time that does not mean they are ready to make a compromise on quality and reasonable prices (2011, p. 19). Furthermore according to Schlegelmilch and Diamantopoulos (1996) developing “eco-friendly attitudes represent the most consistent predictor of pro-environmental purchasing behavior” (cited in Pirani and Secondi, 2011, p. 68).

2.7 Purchase Behavior and Green consumer

2.7.1 Purchase Behavior

Purchase intention can be defined as “what consumers think they will buy”. Consumer intentions play an important role in marketing strategies (to implement four P strategies) because they permit companies to evaluate how many products could be produced according to the demand. To predict the purchase intention, companies can interview consumers about

their past behaviors in order to forecast their future behaviors but the products that people bought in the past can be different of those they will buy. Thus another method is to ask consumers what they intend to do (Blackwell et al., 2006, p. 409-410, 742).

However, “measuring what people intend to do may sometimes be less predictive of their future behavior than measuring what they expect to do”. So companies can also use behavioral expectations which represent “the likelihood of performing a behavior”; thus to forecast relevant purchase intentions a time indication can be included the more the time distance is the more purchase behavior can change. Indeed it is easiest for a consumer to predict his/her purchase intention of a product tomorrow or in one month than in five years because behaviors change with time (Blackwell et al., 2006, p. 414-415).

2.7.2 Green consumer

The effective and efficient use of the natural resources and preservation of it has led to consumers' segments to form green consumerism (Solomon, 2010, p. 401). Vernekar and Wadhwa define the green consumer as a person “who adopts environmentally-friendly behaviors and/or who purchases green products over the standard alternatives” (2011, p. 65).

Consumer behavior trends toward eco-friendly attitudes have been increasing. According to a survey made by the Co-operative Bank in the UK, in 1999, 17% of respondents “felt guilty about unethical purchase” and in 2005 there were 44% (Grant, 2007, p. 35). Consumers who have positive attitude towards the environment are more willing to purchase green products (Balderjahn, 1988, p.53). As previously said, however it is also true that even if consumers are concerned about environmental issues; they will not necessarily purchase green products (Mc Eachern and Carrigan, 2010, cited in Solomon et al., 2010, p. 229) as the following studies show it.

In 2007, Chitra made a survey on 60 respondents in India and showed that he could classify respondents in four categories the “aspirants”, “the addicts”, the “adjusters” and the “avoiders”. This survey showed that the majority of the respondents can be categorized as “aspirants”; that means those individuals are aware of environmental issues and want to develop green purchase behaviors (Chitra, 2007, p. 181).

A survey made in 2008 on a convenience sample of 887 Portuguese individuals concluded that we could identify three segments of green consumers (Finisterra do Paço et al., 2009, p.23). “The uncommitted” was the most important segment (36%) mainly composed of young people (18-34 years) having knowledge about environmental issues but with negative positions towards green purchase behaviors. “The green activists” composed of 35% of the sample who are between 25-34 years and 45-54 years have an education level higher than the first segment and high incomes. They buy green products but they are more skeptical concerning the green advertisements' campaigns. Finally the third group identified was composed of 29% of the sample. The age of this sample is higher than the other two segments, they have a lower educational level compared to the others and even if they have negative position towards environmental issues they are activists; that point is paradoxical (Finisterra do Paço et al., 2009, p 23).

Furthermore in their article entitled “Do consumers care about ethics? Willingness to pay for fair-trade coffee” De Pelsmacker et al. (2005, p. 380) showed that 11% of their sample (808 Belgian consumers) could be identified as “Fair-trade lovers” , and 40% as “fair-trade likers” the rest of the sample were composed of “flavor and brand lovers”. Thus the fair trade likers and “aspirants” to purchase green products are a potential market which is sizeable and where green products’ companies should focus on.

The neoclassical view implies that people buy green products only for selfish reasons such as the taste, the superior quality or the fact that green products are healthier than conventional ones. But other studies show that there are selfish and unselfish reasons in green shopping (Thøgersen, 2011, p. 1053). Indeed according to a survey made on 4,000 European inhabitants in four countries (Denmark, Germany, the UK and Italy) more and more consumers purchase green products because that generates benefits for the society and the environment. They “buy these products primarily because they were persuaded by their documented benefits for the environment (unselfish reasons)” (Thøgersen, 2011, p 1070).

2.8 Limitations

Our secondary data come from different academic journals and books of consumer behavior as well as marketing management. We found many studies about attitudes towards eco-friendly products due the currency of this topic. However we met some difficulties to select the articles which were well related to our topic and it was also difficult to summarize our findings because there were some contradictions. Indeed as we previously said, people are sometimes willing to pay more for a green product but in another context it is not relevant and consumers do not want to make compromises concerning the product quality. Finally some studies were made in Asia so due to cultural differences, their results are necessarily not replicable to another country such as Sweden. Finally, even if we found some European studies we did not find one concerning Sweden or at least the green product in the FMCG sector reason for what we chose this topic.

2.9 Model and Hypotheses

Based on these previous theories and findings we have decided to take as inspiration the conceptual model of Wanninayake and Randiwela (2008), reused also in the articles of Purohit (2011, p. 94) but adapted to our research questions. Their conceptual model demonstrates that the four marketing-mix elements: price, product/ package, place and promotion lead to purchase decision (considering also consumer demographics), this model was also used by and Vernekar and Wadhwa (2011, p. 69) demonstrating that elements of Green marketing lead to purchase decision. The study of Wanninayake and Randiwela is based on the consumer attractiveness toward the green products in the FMCG sector, in this thesis we modified their model by including the 4P factors but also other factors such as word of mouth and satisfaction. Furthermore between the 4P and the WOM and satisfaction we include the concept attitude, demonstrating that positive attitudes lead to purchase intention of green products. Demographics factors will obviously take into account but they are not used as “real hypotheses” because first “demographics alone are not sufficient to define and identify the ethical consumer” (De Pelsmacker et al., 2005, p. 366) and the aim of our research is to understand which factors used by companies and if the influence circle of

consumers generate attitudes towards green products and if these attitudes lead to purchase of green products. However in our data collection and analysis, demographic factors such as the gender, the level of income and the nationality will be considered in order to see if there are differences.

So the following hypotheses will be tested:

H1- A significant and positive relationship between 4P factors and attitudes towards green products:

- H1a- A significant and positive relationship exists between Product and attitudes towards green products.
- H1b- A significant and positive relationship exists between Price and attitudes towards green products.
- H1c- A significant and positive relationship exists between Promotion and attitudes towards green products.
- H1d- A significant and positive relationship exists between Place and attitudes towards green products.

H2- A significant and positive relationship exists between Word of Mouth and attitudes towards green products.

H3- A significant and positive relationship exists between Satisfaction and attitudes towards green products.

H4- A significant and positive relationship exists between consumers' attitude towards green products and purchase of green products.

Consequently with the analysis of the previous studies, theories and our previous knowledge from green attitudes and purchase intention we decided to assume the following conceptual model:

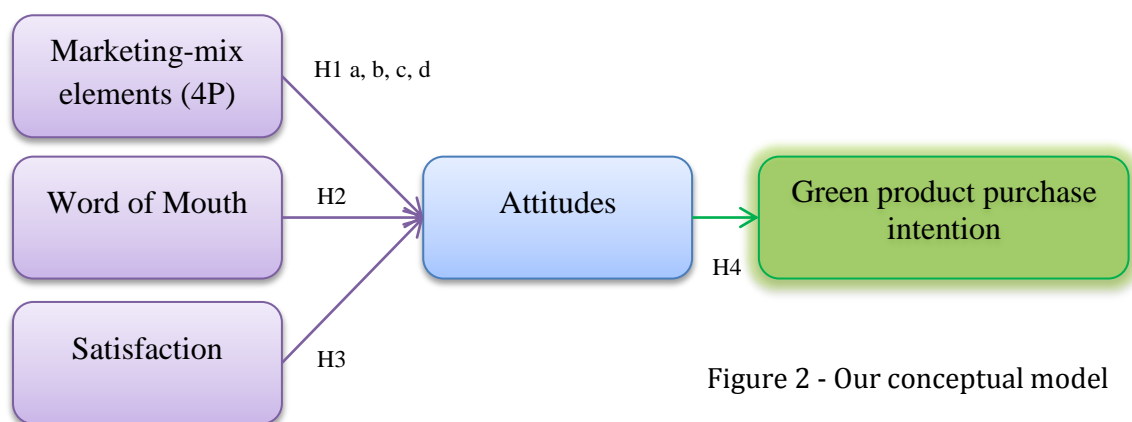


Figure 2 - Our conceptual model

Source: Own creation

3. Methodology

The relevant aspects of the methodology will be highlighted starting from the philosophical assumptions of the research and explain their importance to the authors of this thesis. The method and strategy of collecting the data will be discussed and quality criteria as well. Finally, the ethical consideration will be elucidated for the readers to be aware that a care is taking to avoid plagiarism.

3.1 Philosophical assumptions

Philosophical point of the research will be analyzed to get the idea behind it. The two of it will be explained and connected to the research. They are the Ontology and Epistemology.

3.1.1 Epistemological consideration

It is concerned how the researcher views or considers a valid and perceived knowledge in the boundary of the research (Bryman and Bell, 2011. p 15). It takes the position of the assumption of the knowledge and how could be acquired. The researcher could obtain knowledge from the reading of books, articles and others to get deep and broad knowledge of the subject or topic of the research. The knowledge of the green products will be obtained from articles and book we will read. It opens some philosophical ideas which are positivism and interpretivism (Saunders et al., 2009, p. 112).

Interpretivism stands as opposite of the positivism and the researcher believes that the facts and data gathered and obtained are formulated to suit the research, for example, convenience sample will be used to gather the data due to the accessibility of the respondents and put it on the SPSS software for us to interpret it to suit the research. In the interpretivism, therefore, there has a relationship and dependent factors in which people (social actors) interact and interpret data are influenced by our actions and how people view the world are also influenced (Saunders et al., 2009, p.155-156).

The epistemology sense of the research will base on the positivism since some authors describe it as descriptive type of the philosophical position in research idea (Bryman, 2012, p.27). The purpose on the research will on the generating of the hypothesis to confirm or reject factors on the attitude to the purchasing of the green products. Further on the hypothesis on the four traditional marketing-mix elements on the influence of the consumer attitude on the eco-friendly products will be discussed on the view point of the respondents.

3.1.2 Ontological consideration

It involves the researcher's view or opinion on the natural or nature of the social entities on the organization framework (Bryman & Bell, 2011, p.20). This will be linked to how we will analyze the views of the respondents on the purchases of the eco-friendly products and we will also review some articles and books of the factors companies use to influence consumers to make purchases of the eco-friendly products. There are two points in ontological consideration:

The objectivism explains the existence of the independence of the social actors and in the sense of free from control of the social factors in which the researcher has no control of the factors, this will reveal on the views of the respondents in which we will not have control over the opinions of the factors influence them to purchase eco-friendly products (Bell and Bell, 2011, p.15-16). However, the questionnaire is formulated by us but the answers will not be tempered. Constructivism can be explained that social entities are controlled, revised, reviewed and influenced by the social actors (Bryman & Bell, 2011, p.21-22). It defines also that “social phenomena and their meanings are continually being accomplished by social actors” (people) (Bryman, 2012, p. 33). Bryman (2012) explains that it assists the researchers to understand the natural and social world. This elucidates the interactions or activities of people towards either the destroying or preserving of environment. The research focuses on consumers’ attitudes towards eco-friendly product and it will help the researchers to understand the consumers’ purpose of patronizing such products.

Finally, we chose the objectivism because this is linked to our factors, for example, satisfaction and word of mouth have relationship or not on the attitude of the consumers on eco-friendly products. This will be analyzed on the discussion section after the administration of the questionnaire. It will be derived from the responses of the respondents to determine if these factors exist independently or not on the purchasing behavior of the consumers towards eco-friendly products. We have two alternatives to choose either objectivism or constructivism for the thesis, however, we decided to opt for the objectivism for the purpose that data collected would not be interfered or tempered by the researchers or other external activities.

3.2 Research approach

3.2.1 Deductive approach

The above terms explained could lead the researcher to decide the approach to adopt for the research study. This leads to the approach of two methods which depend on the research, inductive and deductive (Saunders et al 2009, p.124). In the inductive approach the researcher follows the general theory of obtaining and analyzing data (Bryman and Bell, 2011, p.11) and build theories and the findings are emerged (Saunders et al 2009, p.126). In the deductive approach the researcher bases on what is already done and known in the research topic and the necessary theories applied to the topic in order to guide to formulate a hypothesis. This hypothesis is tested in order to be confirmed or rejected for the review (Bryman and Bell, 2011, p.11-12). Hypotheses will be derived from the research questions and model, theory of attitude which leads to the purchases of the eco-friendly products. The research questions and hypotheses will be formulated based on the factors which companies use to influence consumers to make purchases of eco-friendly products in the view of consumers. Some of the factors are the marketing mix, satisfaction and WOM which influence consumers’ attitude finally leading to the behavior (action) if finally there are purchases of the products.

The deductive approach will be the research process of this thesis since there are much more data available for the research topic and for the two authors to test theories. Green marketing or eco-friendly products have researched by many renowned researchers due to the concern of the environmental degradation and deterioration. It is the global issue which has arisen our

interest to study the purchasing behavior of consumers of eco-friendly products. Hypotheses will be tested according to consumers' point of view, how the factors used by the companies influence them to make purchases of green products. The factors will assist the authors to examine the attitude of the consumers (respondents) by using models or theories of attitude to support findings which will lead consumers' action (purchases of the eco-friendly products).

3.2.2 Quantitative research

Quantitative research is "the collection of data that involves larger, more respondent's samples and numerical calculation of results" (Wiid and Diggines, 2009, p. 86). As looking deep to consumer behavior, a quantitative strategy is more suitable to include a large sample size, because it can be analyzed accurately through inferential statistics that will confirm the approval or disapproval of selected hypotheses and the result generated can be real and unbiased. Therefore, the research will go from more general to some specific reasoning and that developed a top down deductive approach (Bryman and Bell, 2011, p.11).

The research will derive some advantages by using the quantitative research design over the qualitative one. It has merits on the validity, reliability, replication and generalization which are valuable for the quality criteria of the thesis (Bryman, 2012, p.170-171 and Shiu et al., 2009, p.173-174). Bryman and Shiu et al. (2012 and 2009) explained the qualitative method has some merits since it is very economical and less time consuming to obtain the data, originality of the data this shows the riches of the data without tempered by the researcher and accuracy of the consumer behavior.

3.2.3 Criticisms of quantitative research

Quantitative research does not make a distinction between the "social world" and "the nature science model" indeed "people interpret the world around them. Then quantitative research is lack of exactitude because people interpret questions from a survey differently. The quantitative research is not connected to real life because respondents are different and do not have the same knowledge about the asked topic so their response can be different of their actual behavior. Finally data analyses of quantitative research "creates a static view of social life that is independent of people's lives" meanings that quantitative research does not consider the everyday life (Bryman and Bell, 2011, p. 167-168). For example according to our mood we can ask to a questionnaire in a different way.

3.2.4 Research Design

There are five types of research designs which are experimental, cross-sectional, longitudinal, case study and comparative designs (Bryman, 2008, p. 35-58). A research design "is the framework for the generation of evidences that are suited both to a certain set of criteria and to the research question in which the investigator is interested" (Bryman and Bell 2007, p 39). The experimental design is rarely used in business research (Bryman and Bell, 2011, p. 45) and here is not relevant for our topic. Due to lack of time and resources we are not using a longitudinal design which would mean that "data are collected on a sample on at least two occasions" (Bryman and Bell, 2011, p.715). A comparative design implies "the comparison of

two or more cases in order to illuminate existing theories” (Bryman and Bell, 2011 p. 713). In our study, we would like to extract a general view of consumers’ attitudes towards green products, for example we are likely to interview international people due to the fact that Umeå is cosmopolitan, but we do not want to make a comparison between Sweden and other countries due to the fact that we will probably have not the same number of respondents (for example more European students) in Sweden and in other countries. So instead of separate nationalities of respondents we will focus only on either the respondent is Swedish or he/she is non-Swedish. Finally another research design is a case study which implies that data are collected on one case such as “a single organization/location/event or a single person” (Bryman and Bell, 2011, p.59-60), however even if we only focus on Umeå city we cannot consider it as a case.

Consequently we have decided that the most relevant research design for our study was a cross-sectional one as we collect “data on more than one case (usually quite a lot more than one) and at a single point in time in order to collect a body of quantitative or quantifiable data in connection with two or more variables” (Bryman and Bell, 2011, p.53)

Indeed in our research study we will collect data on each of the four marketing-mix elements but also on WOM and satisfaction, in order to examine which ones affect attitudes and purchase intention of green products, and to what extent. Furthermore in a cross-sectional design, survey research is used and we will do a questionnaire to collect our data (Bryman and Bell, 2011, p.54). So six cases are considered and inside these cases several variables will be studied to accept or reject our hypotheses.

3.2.5 Research type

Our research design is the way how we collect, process and analyze data and we link to the research type. In this connection we will select a descriptive and explanatory research types. A descriptive research “uses a set of scientific methods and procedures to collect raw data and create data structure that describes the existing characteristics of a defined target population” (Shiu et. al, 2009, p.62). With emphasis on descriptive type, in order to conduct primary data we will have questionnaires on the factors of marketing mix, experience, WOM and consumers’ attitudes towards eco-friendly products which enhance their purchases (action). Models and hypothesis will be tested to link to the factors made mention for our analyses. Explanatory research, stresses on the research to explain the variables (factors) here which influence green attitudes and purchase or not of green products, in order to develop relationship between the variables and the problem (Saunders et al, 2010, P140). For instance, the marketing mix elements would be elucidated to link to attitudes and purchase behavior of eco-friendly products. The explanatory research explains and answers some questions on “why” and this has been included in the questions and been highlighted on the research study.

Shiu et al. (2009, p.62-67) describe the exploratory research as emphasis on obtaining data either secondary or primary using informal method of analyzing them. This research design will be not used in this thesis; it is suitable for new research problem or topic in which has not much information or literature review. However, it has advantages when there is not much information available about the research problem, for instance, it helps to find and gain vivid understanding of the decision problem, and “define or redefine the initial problem, separating

the symptoms variable from the independent and independent factors, crystallize the problem and the objective of the specific information requirements” (Shiu, et al. 2009, p.73). However, it is hard to use the research type to draw final conclusion on the finding of the research.

Causal research on the other hand is defined as “the collection of data that enables the researcher to determine the cause-and –effect relationships between or more decision variables. It has relationship with the independent variables, for example, X has a positive effect on Y, and this can be explained that the impulse buying could depend on the glad music in the store. The promotion of the green products can influence the attitude of the consumers to purchase eco-friendly products. It plays significant role in the attitude of the consumer’s behavior because it helps the researchers to change variables to suit the research. It is however, complicated, expensive and time consuming (Shiu et al. 2009, p.63). This type of research design will not be employed since it is not suitable for the research because the authors are not emphasizing on doing any experiment on the four marketing mix influence the attitude of the consumer towards the purchasing of the eco-friendly products.

So descriptive and explanatory research approaches will be used in this thesis. They are the most appropriate research types or designs suitable for the thesis since a quantitative method will be used to analyze and collect the data. It has the significant impact on the thesis since data are collected on consumers’ attitude, intentions, purchasing behavior and securitizing the four traditional marketing variables on the influence of the consumer attitudes for the purchases of the eco-friendly products on the FMCG sector.

Furthermore, the explanatory research helps in the hypothesis-testing in the cross-sectional study by explaining the outcomes and analysis of the data. For example, explanation will be provided on the Swedish and Non-Swedish attitude towards eco-friendly products specifically stated on the questionnaire on the FMCG. The differences of respondents will be highlighted for the purpose to differentiate their attitudes and purchase intentions and how they influence by the different factors, for example, marketing mix elements impact on the attitude and purchasing intention of respondents on eco-friendly products.

3.3 Data collection method

3.3.1 Sampling

- *Choice of non-probability sample*

As we decided to follow a quantitative approach and consequently to elaborate a social survey, the sampling method used is a key point in the research process (Bryman & Bell, 2011, p. 175).

There exist two types of sampling methods: probability and non-probability samples. The first one is the most appropriate in quantitative research because respondents are selected randomly. Thus researchers have a heterogeneous sample more representative than a non-random sample; and the findings from the sample can be generalized to the population (Bryman & Bell, 2011, p. 185).

However due to lack of time and as this method costs a lot, a non-probability sample, where the respondents are not selected randomly and have not the same chance to be selected, is for our study the most appropriate sampling method (Bryman & Bell, 2011, p. 190, 716).

- *Population*

First step in sampling method is to select the sample in a group of units that is called population (Bryman & Bell, 2011, p 176). As all the people who live in Sweden cannot be interviewed, residents in the city of Umeå have been chosen as our population. Consequently, the sample is a population composed of at least 113,000 inhabitants (umeå.se).

- *Convenience sample*

There are “three main types of non-probability samples: the convenience sample; the snowball sample; and the quota sample” (Bryman and Bell, 2011, p. 190). The snowball sampling permits researchers to contact few people, after that they use the most relevant participants to obtain contacts with other potential participants like a snowball effect (Bryman and Bell, 2011, p. 719). The quota sampling is the selection of a proportionate number of people according to categories selected by researchers (Bryman and Bell, 2011, p. 717).

Shiu et al. (2009, p. 480, p. 726) defined the convenience sampling as a “sampling technique which samples are drawn to the convenience of the researcher” and which is “often used in the early stages of research because it allows a large number of respondents to be interviewed in a short period of time”. As students of Umeå University we have an easy access to this institution, so we have access to a large number of potential respondents. The selection of students and staff of the university is a great opportunity that we cannot miss due to the availability of potential respondents. Furthermore, Umeå University is internationally oriented so we could make comparison with Swedish respondents and respondents from other nationalities.

Moreover the aim of this research is also to emphasize that there are differences among demographics, so inhabitants in Umeå will also be selected in order to demonstrate some differences between students and non-students, those who have an income those who have not. Thus the sample will be more representative of the population and could be more easily generalized.

- *Sample size and Composition of sample*

To reduce the sampling error, the larger the sample is the more the data can be generalized and representative of the population (Bryman & Bell, 2011, p. 187). As a non-probability sample is used, the sample size is “a more or less subjective judgment made by the researcher” (Shiu et al., 2009, p. 462). For our study it will be relevant to be able to obtain a sample of around 200 respondents.

- *Limitation*

In order to make our data generalized and replicable, we will do our best to have an equal number of respondents for each age group, and a sample composed of around half of men and

half of women. However as students, we are likely to interview more students than other people and that can be a limitation.

3.3.2 Limitations

The four traditional marketing mix were used purposely on this thesis to examine the influence of the consumers attitude to make purchases of the eco-friendly product, however, some researchers have extended and added some factors, for instance, people and process as the employees and method of producing the eco-friendly are vital to look into. Furthermore, the answering of questionnaire could also be influenced by the cultural factor since it is an important factor in attitudes towards green products and purchase of these products. However it was not discussed on this thesis but we had just a question on the nationality of the respondents on the questionnaire (such as are you Swedish or not?).

Furthermore, students were used as part of the respondents to look into their attitudes towards eco-friendly products, even though; they have rich experience and knowledge on the eco-friendly products but their “attitude and behavior are not representative of the general population or of many other specified defined target population (Shiu et al, 2009, p.383). Finally, convenient sample was used on this thesis, however, Shiu et al (2009, p. 383) emphasizes that it is not normally guaranteed for representation of the population.

3.3.3 Choice of survey method

- *Self-completion questionnaire*

At the opposite of a structured interview, the self-completion questionnaire is “a questionnaire that the respondent answers without the aid of an interviewer” (Bryman and Bell, 2011, p. 718). Thus the respondents cannot be influenced by the interviewer; their answers should be more objective.

- *Questionnaire Design*

A questionnaire is “a formalized framework consisting of a set of questions and scales designed to generate primary data” (Shiu et al., 2009, p. 329). As said previously a self-completion questionnaire seems to be the best approach for the quantitative method. There are twelve questions separated in six sections.

The first part is the introduction which includes the aim and the topic of the research survey. By following the diagram of the flowerpot approach, the questionnaire is going from general to specific data.

The second section “contains the broadest information requirements” (Shiu et al., 2009, p. 337) and is focused on lifestyle measures by including two general questions about consumption of green products. Indeed the first question asks to the respondent his/her consumption of eco-friendly products in the last three months (we chose this period because it is not so far in the time). The second section uses a single item scale (using a Likert scale,

from 1=the less purchased to 5= the most purchased) to determine which kind of eco-friendly products the respondent purchases and which of these products are the less and the most purchased. As said in the literature review products with high impact on the environment are the most eco-friendly products purchased, so we based our answers on the main products from the FMCG sector that consumers can find in a supermarket and which are eco-friendly: food (they are the most organic and green in supermarkets), health care/cosmetic products, cleaning products (which as conventional ones contain toxic components) and other household products such as bulbs. Most of these products were used in previous studies about eco-friendly products (Chitra, 2007 and Chatterjee, 2009).

The next three sections permit authors to obtain more specific data about factors and attitudes which influence consumers to buy green products. Thus the section 3 is composed of perception measures by using multiple item scales with Likert scales (from 1= ‘Strongly disagree’ to 5= ‘Strongly agree’), there is one question with eight statements which are linked to the four marketing-mix elements. Perception measures are general statements used to determine how the factors from the 4P are important and to what extent they are important in the eyes of respondents. The section 4 deals with the attitudes towards green products by comprising ten questions linking the four marketing-mix element thus the WOM with the attitudes. For example there are two questions dealing with the WOM factor to analyze attitudes towards green products, one evokes the receiver and the second evokes the sender.

According to Solomon et al. (2010, p. 288) “overall attitude may often be composed of consumer’s perception about multiple elements” so multiple-item batteries are relevant to measure these attitudes. The fifth section deals with the consumer intention relating the attitudes towards green products with the consumer purchase decision, there are two questions. To measure the purchase intention of consumers we decided to include in their questionnaire one question about what respondents intend to purchase green product in the next month (Blackwell et al., 2006, p. 410, 414). The first one permits to evaluate the consumer intention of purchasing eco-friendly products in the next month using a single item scale from 1= ‘No, I will not’ to 5= ‘I definitively will’ and the second question is composed of seven statements which will permit us to make a link with some elements of the functional theory of attitudes and the purchase intention of eco-friendly products.

Finally the last section deals with “identification information requirements” (Shiu et al., 2009, p. 337) and is composed of questions about the gender, the age, the nationality (the comparison will only be made with two terms Swedish and Other nationality), the status, and the income and its level as green product are often more expensive than conventional ones in order to make comparisons according to these factors.

- *Types of questions*

As Ian Brace (Research Director at TNS UK) said “A poorly written questionnaire will not provide the data that are required or, worse, will provide data that are incorrect” (Shiu et al., p. 2009, p. 327). For this reason we spent much time on the elaboration of the questionnaire and moreover concerning the design of questions. Indeed a clear and relevant questionnaire permits to obtain more relevant data.

All the questions used are closed; indeed closed questions are easily analyzable, comparable with other answers and permit to save time for the respondent and the interviewer (Bryman & Bell, 2011, p. 250). There are also disadvantages such as lack of spontaneity in the answers’

choice; they can be irrelevant for some respondents who should not know how to classify in a forced-choice question etc. (Bryman and Bell, 2011, p. 252). However, as we made also a Swedish version of our questionnaire it was easiest for we not to include open questions because as non-Swedish natives we could have some difficulties to translate and well interpret them. Indeed for the researchers closed questions are easiest to code and analyze the data.

As said previously to measure attitudes Likert scales will be used because it is one of the best ways to measure that (Bryman and Bell, 2011, p. 253). Likert scales composed of “five scale point descriptors” are used, thus calculation of positive or negative attitudes could be measured by using “the summation of the scores associated with all statements” (Shiu et al., 2009, p. 422). Furthermore multiple-item scales are used to “collect data on several attributes” on green products (Shiu et al., 2009, p. 437) which are formative composite scales. Indeed “several individual scale items are used to measure different parts of the whole object” (Shiu et al., 2009, p. 438) e.g: price, quality, promotion of green products etc.

- *Pretest*

A pretest of the questionnaire was effectuated in order to evaluate the relevance and the understanding of questions. The supervisor of the thesis checked the questionnaire but also two other teachers of Umeå University who are specialized in business and marketing researches. Consequently they are used to make surveys. Furthermore 10 other respondents who correspond to our sample were interviewed to see if the questionnaire has to be modified. After this pretest the term “green product” was replaced by “eco-friendly product” because it was more understandable for respondents, a definition of eco-friendly product was also included in the subheading of the questionnaire facilitating also the meaning of conventional products (non-eco-friendly products). Furthermore we added a question concerning the income because at the beginning there was no “yes/no” question about the income, there was only one question about the level of income. Finally, some questions have been deleted due to redundancy and we specified in the headline of the questionnaire that we focused on eco-friendly products sold in supermarkets.

- *Data collection*

There are three main modes of administration to spread a self-completion questionnaire: supervised, postal and Internet (Bryman and Bell, 2011, p 175). Our data collection lasted seven days and it began on 15 of May and finished on 21th of May. Our choice was concentrated on supervised modes and the Internet. A web survey permits to implement a questionnaire on the internet and invite potential respondents to complete this survey via a website, for our study, we used Google doc which permits to elaborate surveys with multiple choice questions etc. Then this survey was spread on Facebook (the famous social network) via the Facebook page of our buddy group, and we also create an event to spread our survey from 15th of May to 21th of May. The supervised mode was also used by going in different University’s buildings and in different points in Umeå (such as the station, the Umeå library, the MVG mall). We collected 174 valid responses, 81 were collected by using the Internet and 93 by using a written version.

Indeed two versions of the questionnaire were made: one in English and one in Swedish. The English one was used for students and mainly for the non-Swedish ones such as international

students of Umeå University. Indeed English is the official language in 83 countries/regions and spoken in 105 other countries (nationsonline.org). Then there is also a Swedish version for other potential respondents. As non-Swedish natives and in order to have a good translation instead of using translators we asked the Academic Resource Center (at the library of Umeå University) to help us concerning the Swedish translation of the questionnaire. We obtained 49 responses from English written versions and 44 from Swedish ones. After the data collection the Swedish data were put again in English in order to be implemented in SPSS software and to facilitate their coding and analysis.

3.4 Factor analysis

After our data collection we included our findings in IBM SPSS Statistics. Our findings are composed of 174 valid responses.

Rating factors by respondents was really important for our study, for instance, we asked the respondents to rate perception of consumers' attitude towards eco-friendly products on the marketing-mix elements (4P) which could lead the consumers to make purchases of eco-friendly products. The analysis of our different factors will be made by using a multiple regression, which will permit us to evaluate and measure the impact of our different factors (independent variables) on the purchase intention of green products (dependent variable). This method will permit us to test our hypothesis. We would take into consideration, the product, pricing, advertising, place attributes, satisfaction and WOM where statements from our questionnaire will gathered to make more specific variables to evaluate each of our factors.

3.5 Quality criteria

Generalization and two other important quality criteria in quantitative method are the reliability and validity (Bryman & Bell, 2011, p. 158-160).

3.5.1 Generalization

The representation of the data collection was emphasized since convenient sample is not appropriate for the generalization of the data (Shiu et al, 2009, p.692-693). We considered the residents of Umeå in our sample to get their views concerning their attitude towards purchases of eco-friendly products. The sample did not take all the population of the town and students. So totally generalization (Bryman, 2012, p.176) is hard to achieve in this thesis. We tried our best to structure the process of the sample to include workers, students and different ages in order to get a good sample representation.

3.5.2 Reliability

According to Bryman and Bell (2011, p. 158) reliability is “the consistency of a measure of a concept”, it is linked to the stability of the data. In our data analysis we will do our best to calculate the reliability by using the statistical methods such as the Cronbach’s alpha as we are using multiple item measures.

The aim of the reliability as quality criteria is to minimize errors and give stable results of the data collection. We took into consideration that the right sample was selected from the respondents since we wanted to have respondents who earn income and as well as students be included. Furthermore, we chose a structured methodology form to collect and analyze the data on the SPSS software in order to process it correctly and concisely. We obtained also more resources and information from secondary data through articles and books. Most of the articles and books from the Umeå University library data were scrutinized by peer review for the reliability and credibility of them. For us to be sure and prove the reliability of the articles and books we read a lot of the article and books to compare in order to have consistency.

3.5.3 Validity

Validity can be defined as the fact that “a measure of a concept really measures that concept” (Bryman & Bell, 2011, p. 159). As for the reliability we will assure us that our survey is valid by using different statistical measures.

We emphasize much more on the thesis the explanation and understanding of the vital concepts, theories and models, for instance, the function theory of attitude was elucidated enough to link to the attitude of the consumers in their purchasing decision of the eco-friendly products. We linked it to the questionnaire so that the respondents would understand the concepts and theories highlighted. Finally, validity is important in the sense of the pre-test of the questionnaire which was done by some competent and specialized in business studies in marketing to test face validity (Shiu et al., 2009, p.383)

3.6 Ethical considerations

Bryman and Bell (2011, p. 128) use the four main ethical considerations that Diener and Grandall (1978) presented. These ethical principles are *harm to participant*, *lack of informed consent*, *invasion of privacy* and *deception*. The harm to participant can include physical or mental harm, the lack of informed consent refers to the fact that respondents in a survey, observation or interview can lack of information concerning the aim of this study or the identity of the researchers for example. Invasion of privacy means that researchers should not use the data collected from their respondents for another reason than that of the purpose of their research. Deception “occurs when researchers represent their research as something other than what it is” (Bryman & Bell, 2011, p. 136).

All of these principles will be respected in the research method. In the self-completion questionnaire the potential respondents will have all the information concerned the purpose of the study and the identity of authors. Furthermore the answers will be anonymous and the data collected will only be used for the thesis.

Another important ethical point to consider is this thesis will not use plagiarism and will respect the studies made by previous researchers by quoting them according to the rules concerning references put in place by Umeå University from the Harvard System (Thesis manual p 22).

4. Data analysis and findings

In this part, our findings will be analyzed by using different measurements. We will also evaluate the reliability of our finding by using the Cronbach's alpha to demonstrate a consistency between our variables. Furthermore in this study we will assume a level of significance which can be equal to 0.05 or sometime 0.01 with a confidence interval of 95% or 99% (Shiu et al., 2009, p. 538).

4.1 Demographic findings

Our sample is composed of 174 respondents, we have more women than men but the difference is not high, 56,3% of women (98 respondents) and 43,7% of men (76 respondents, see Table 1). Two thirds of our sample is composed of people who are less than 34 years old (composed of both Swedish and Non Swedish respondents), 20,7% are between 35 and 54 years old so we have a minority which is more than 55 years old (less than 5%, more composed of Swedish respondents).

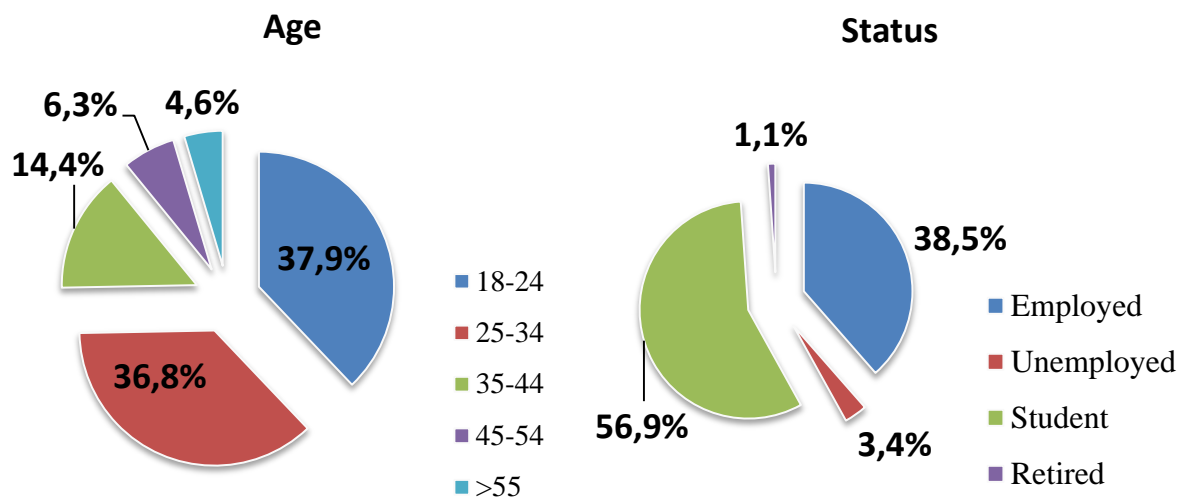
As we predicted more than the half of respondents are students (56,9% i.e. 99 respondents), the second most important group is composed of employed people (38,5% i.e. 67 respondents) and we have a minority of unemployed and retired people (4,5%, only 8 respondents, see Figure 3 and Appendix 3). Concerning the nationality, our result is close to be composed of half of Swedish people (52,3% i.e. 91 respondents) and half of Non-Swedish people (47,7% i.e. 83 respondents), thus we could compare if there are differences in their behavior towards eco-friendly products. We found also, by using the method of cross-tabulation which permits to "treat simultaneously two or more variables" (Shiu et al., 2009, p. 512) that we have almost the same proportion concerning the gender and the nationality of our sample. Indeed we have 59,2% of Swedish women, so 40,8% of Swedish men and 43,4% of Non-Swedish women and 56,6% of Non-Swedish men. Furthermore, 86,6% of employed people are Swedish and 70,7% of students are Non-Swedish (Appendix 4). Consequently, we have to be careful concerning these results, if we made assumptions about these two most important statuses, we should keep in mind that they are not equal in term of nationality.

Most of our sample has an income (65,5%) indeed employed people obviously have an income but also students we found that 44,4% of students have an income, 65,9% of them declare that they have a low income and the rest a middle one so more than one third which is surprising because 65,9% of employed declare they have a middle income and there is not a huge difference between these two groups. So we can say that the level income question can be perceived differently according people. Finally 52,6% of our sample having an income has a middle one and 36% has a low income the rest is composed of high income. We clearly have more students and employed than other people and also the high income is not representative to the true population (See Appendixes 3 and 4).

Table 1- Composition of our sample by gender and by nationality

Gender:		Female	Male
	Valid Percent	56,3%	43,7%
	Frequency	98	76
Nationality:		Swedish	Other
	Valid Percent	52,3%	47,7%
	Frequency	91	83

Figure 3 – Composition of our sample by age and by status



Source: Own creation

4.2 Quality Measurement

The quality measures of the data would be emphasized in this part. The Cronbach's Alpha will be explained in order to show the reliability of the data so the internal consistency will be determined. Pearson coefficient (r) will also be presented to understand the correlation between the selected factors and the purchase intention of the eco-friendly products.

4.2.1 Independent and ANOVA test

For the analysis of each of our factors (marketing-mix elements, WOM and satisfaction we used descriptive statistics but also correlation tables, independent and paired sample Test in order to prove if our comparisons were relevant or not. An independent t-test permits to compare two means with one grouping variable (for example gender) and a variable (for example satisfaction) and to demonstrate if there is a significant difference or not between these means (Shiu et al., 2009, p.541-542) i.e. are men and women have the same satisfaction concerning green products or is one of these two groups is more satisfied than the other? If the significance is above to (generally) 0.05 there is no difference, if it is inferior there is a difference. Furthermore we also used ANOVA or analysis of variance which is a “statistical technique that determines whether two or more means are statistically different from each

other (Shiu et al, 2009, p. 722) for example if there are differences according to the age of respondents, their status and their level of income (low, middle or high), indeed these variables are composed of more than two values so ANOVA was the best option to compare these variables (Shiu et al., 2009, p.722). As we wanted to show if there are differences in consumer behavior and intention between the genders, the age, the nationality or the income. As said previously we consider a level of significance below 0.05 (consequently with confidence interval of 95%, the confidence level permits to “include or measure the true population parameter value”, (Shiu et al., 2009, p. 725)). We will examine the means of variables according to demographics factors as well as the standard deviation.

During our analysis of data we decided to take the most relevant data i.e where we could find differences between our demographics factors to analyze them and data which can be useful for our analysis (See Appendixes 5, 6 and 7). Our data are presented in term of means, let's remind that we used a 5 points Likert-scale from 1 “strongly disagree” to 5 “strongly agree” and where 3 is equal to “undecided”.

Gender:

We discovered that there is a significant difference between the women and men for the following points. Concerning the purchase frequency of green products, the women buy more eco-friendly food (4.33) and healthcare/cosmetics products (2.60) than the men (3.78 and 1.91) which results are not surprising because the women are more willing to do shopping for their house (see Appendix 5). The women (4.41) more agree with the fact that green products are good for the environment than men (4.12). Then they (3.56) are also more ready to pay an extra price for green products than men who are undecided (3.03). The women (3.65) also close to agree to recommend eco-friendly products to their family friends, more than men (3.24) it is also the case concerning the attention that they give to green advertising (women=3.51 and men=3.38). Finally the women (3.63) just like more green products than men (3.17). These results show us that women seem more concerned by green products than men however we did not find differences concerning “healthy” argument of green products or good quality so both women and men agree on these points, that can be surprising because women are sometimes more perceived as more healthy than men but in our study there was no so significant differences with these statements (p value or significance (sig.) just more above 0.05).

Age:

These data are significant at a level where $p < 0.05$. There are significance differences between the ages of our respondents (see Appendix 7). The main differences are between the consumers who are between 18 and 34 years old which is relevant because the majority of our sample is in this age group, only around one quarter of our sample is between 35 years old and more. As for previous demographic groups there is a significant difference concerning the fact that green products have reasonable prices (sig.= 0.002 so well below 0.05) and the willingness to pay an extra price. Indeed concerning the fact that green products have a reasonable price there are significant difference between the group of people who is between 18 and 44 years old, the people who are 35-44 agree more (3.44) than those of 18-34 years old, and their answer is less deviated (0.961) but keep in mind that they are less numerous than the two first age groups.

Concerning the willingness to pay a premium price even if people >55 years do not represent a large percentage of our sample they (4.13) are more willing to pay an extra price than young people (18-34 years old, 3.18 for 18-24 and 3.20 for 25-34). Then the ANOVA table

shows also differences concerning the “attention to eco-friendly advertising”, people who are more than 55 years old (4.13) pay more attention than 18-34 (3.48 for 18-24 and for 25-34 years old: 3.20). We can notice that even there is not a big difference; young people pay more attention to green advertising than 25-34 indeed we can suppose that the young pay more attention to advertising i.e. on TV, on the Internet due to their large use of these media.

Moreover there is also a significant difference (sig.=0.003 so less than 0.05) concerning the fact that people know where the green products are in their supermarkets indeed the group composed of 45-54 years people (4.09) agree more than the young (18-24: 3.09) concerning this statement and there is also a difference between people who are between 35-44 (3.96) and the youngest group (18-24).

Finally concerning the purchase intention the difference between age groups is less significant than for “reasonable price” and “I know where green products”, but it is still significant (sig.= 0.046 so less than 0.05). People who are more than 55 years old (4.63) are clearly more willing to buy green products than those who are between 18 and 24 years (3.73 and sig.=0.013) and between 25 and 34 years old (3.83). There is also a significant difference between the 45-54 age-group (4.45 and the youngest group).

So people who are more than 34 years old tend to more agree to the fact that green products’ prices are correct and they are even ready to pay more for this type of products. Furthermore people who are more than 44 years old will (definitively) purchase green products.

However, as we said previously, these results should be revised by the fact that people who are more than 34 years represent only one quarter of our sample. Furthermore that can also explain the standard deviation which is inferior compared to that of 18-34 years because the last group is more representative (74,7%) in our sample so the responses have more different (consequently, standard deviation often above to 1).

Indeed the 18-24 age group seems less ready to purchase green products than the other groups to their perception of the green products’ price even if they pay attention to green advertising for example they seem more undecided concerning the place of these products in their supermarket.

Nationality:

Comparisons with Swedish and Non Swedish are very important for us because the aim of this study is to show if there are differences or not as Swedish people are often perceived as eco-friendly. There are some significant differences (Appendix 6) between purchase frequency of eco-friendly products concerning the food, cleaning products and other household products between the Swedish and the Non- Swedish, the Swedish buy more these types of product (sig.= between 0.000 and 0.008). For these statements the standard deviation is very for both the Swedish and the Non Swedish between 1,021 and 1,369 so the answers were very various (see Appendix 5).

Furthermore Swedish people agree that green products are good for the environment (4.40) more than the Non-Swedish (4.16). There is also a significance difference concerning the statement that “green products have reasonable prices” (sig. or significance is equal to 0.000 so less than 0.05) indeed Swedish people (3.10) are more undecided to say that prices are reasonable whereas the Non Swedish do not agree (2.51). The standard deviation here is also superior to 1. Concerning the “believe in information on green packaging” the Swedish (3.82) again more agree than the others (3.45). As for women and men the willingness to pay an

extra price for green product is very different between the Swedish (3.64) and other people (2.99), other people are really undecided.

Concerning advertising there is also a significant difference between the two groups of nationalities, as well for the attention as the believe in green claim (sig.= 0.000 so less than 0.005). Concerning the Place, the Swedish also more agree than the others they know and they tend to find more easily green products in their supermarket than the others. Significant difference also concerning the fact that the Swedish pay also more attention to the opinion of their family/friends and they recommend green products to others more than the Non Swedish who are undecided (sig.= between 0.000 and 0.002 so less than 0.05).

There is also another significant with purchase intention, the Swedish are definitively willing to purchase green products (4.42) compared to the others (3.39) indeed responses of the other nationality are more various (standard deviation is equal to 1.257).

Furthermore the significance is close to 0.05 (sig.=0.048) but the Swedish are more undecided concerning the fact that green products give a good image of them whereas the others disagree more (Appendix 6).

Finally there are also significance differences concerning the statement “I want to preserve the earth” the Swedish definitively agree (4.45) compared to the others (4.02). It is also the case for the fact that people ‘just like green products’ and there is also a significant difference concerning previous green product’s satisfaction (4.05 for the Swedish and 3.55 for the Non Swedish with sig.=0.000). These results show us that the Swedish tend to develop more green attitudes than the Non Swedish.

Status:

There are no significance differences concerning the status, by making an ANOVA test we only found two significance differences concerning the “willingness to pay an extra price” (sig.=0.048) and the “previous satisfaction” (sig.=0.012) between groups. However by observing the multiple comparisons table (Appendix 7) we did not find significant difference inside the status. The most close value to the level of significance if we accepted a 0.1 level significance (but it is not the case: $p < 0.05$) should have been between the students and employed people concerning the willingness to pay an extra price.

Income:

We found significance differences between consumers who have an income and those who have not, concerning the purchase frequency of eco-friendly food, consumers who have an income (4.29) clearly buy more green food than others without income (3.70). Then consumers with income think agree more than others concerning the quality of green products and the fact that these products are good for the environment.

It is not surprising also to see differences concerning the price of green products indeed consumers with income (2.95) tend to be more undecided concerning the fact that green products have reasonable prices whereas consumers without income tend to disagree (2.57). Then consumers with income are more willing to pay an extra price (3.5) than others consumers who seem undecided.

Furthermore consumers with income understand well information on green packaging (4.10) and believe in eco-friendly advertising (3.57) which is less the case for consumers without income. So consumers with income (3.54) like more green products than consumers without

income (3.22). Consumers with income pay also more attention to the opinion of their friends and recommend them green products (importance of word of mouth); which is really less the case for consumers who do not have an income.

These consumers are also more satisfied (3.98) and more willing to purchase green products (4.25) compared to consumers without income (purchase intention: 3.30) and finally there is also a significant difference concerning the purchase of green products on unplanned decision (3.74 with income, without income: 3.37), indeed we can suppose that people with an income can permit more to buy green product on unplanned decision whereas the others do not permit them this kind of extra because they perceived the price as higher when we observe the results.

Levels of income:

We did not find significant differences between the levels of income (low, middle and high), indeed when we made an ANOVA for that variable we did not find any significance ($p > 0.05$) so we do not mention it. However this phenomenon can be explained by the fact that most of our respondents are composed of “low and middle income” (see Appendix 4) and we have few people with a middle income; and most of our “low income” are composed of students (among 44,4% of students who have an income, 65,9% have a low income and the rest is middle one) and for most of our “middle income” this variable is composed of employed people (65,7% have a middle income), and we showed previously in the Status section that there were few differences between these two status hence this result.

Findings:

We discovered that there were significant differences between the gender, and the nationality. Indeed women and Swedish people tend to be more eco-friendly than the men and the other people. Significant differences were also obtained concerning the status and the level of income. However these results have to be revised by the fact that 86,6% of employed are Swedish and 70,7% of students are Non-Swedish so the fact that employed people are more willing to pay an extra price for example or are more willing to purchase green products can be explained by the fact that most of them are Swedish and Swedish people tend to be more green than others. So it is one of the limitations of our study that the sample is not so representative to the true population. We did not find also significant differences between level of income because among 44,4% of students who have an income, 65,9% of them declare a low income and among employed people, 65,7% have a middle income so the results are almost the same for status and level of income as our sample is composed of mainly students and employed and low and middle income.

For each of our relevant demographics factors we found mainly differences concerning the price of green products, the advertising the previous satisfaction and the purchase intention.

4.2.2 Simple correlations and new variables

By the previous observations we made on demographics factors and as we wanted to link every marketing-mix elements thus the WOM and the satisfaction to attitudes and also to action that is to say purchase intention of green products:

We gathered some items corresponding to each of our factors to create new variables in order to test our hypotheses.

The reliability of our items i.e. the internal consistency between these items is presented in the Cronbach's alpha table (Table 3), and then we presented also the correlation of each of new variables with the purchase intention of green products (Table 2).

However before creating these variables we used a table of correlations to see if there were some relationships between our items (Appendix 8). The Pearson's coefficient, indicates the measure of these relationships, in a rule of thumb there is a very strong relationship when the Pearson coefficient is between 0.8 and 1 (no relationship between 0.0 and 0.2, weak between 0.21 and 0.40 and moderate between 0.41 and 0.60) however this level of strength of correlation coefficient is not absolute (Shiu et al., 2009, p.555).

From the results of correlations table (Appendix 8) we deduced that the **Product Quality** is composed of four items from our perceptions measures: "Eco-friendly products are healthy", "Have a good quality/performance", "Have a better quality/performance than conventional ones" and finally "Have a good taste and/or smell". Indeed these four items are related together as you can see in Appendix 8 (Pearson Coefficient is comprised between 0.399 and 0.558, sig.= 0.000). Even if the two variables "believe in information on green packaging" and "I understand information on green packaging" were positively correlated ($r= 0.408$) the internal consistency (less than 0.600) was not enough reliable and so was not relevant to create a new variable. So to evaluate our hypotheses H1a we had to just take in account the product quality.

For the promotion (**Advertising**) we included two items "I pay attention to eco-friendly advertising" and "I believe in eco-friendly advertising", indeed there was a positive correlation between these two variables and also a correct reliability ($r=0.579$) (See Table 2 and Appendix 8).

The **Place** is composed of three items "Eco-friendly products are accessible/available in my supermarket", "I know where the eco-friendly displays are located in my supermarket" and "I easily find eco-friendly products in a supermarket", these three items are also positively correlated (r superior to 0.511, and sig.= 0.000) see Appendix 8.

The **WOM** is composed of two items involved the receiver and the sender of the information: "I hear and I pay attention to my friends/family opinion concerning eco-friendly products" ($r= 0.604$ and sig. is equal to 0.000 which indicates a positive relationship).

We also created two variables linked to attitudes the **Espoused Attitude** composed of four items: the two first used for the WOM and the two others used for the advertising variable because this variable evaluates if people pay attention to what surrounds them and the **Value-Expressive Attitude** composed of three items "Eco-friendly products give a good image of me", "I feel trendy when I purchase eco-friendly products" and "If I do not purchase, people could judge me", this variable can both evaluate value-expressive and ego-defensives functions of the functional theory of attitudes: the value-expressive one stating that what consumers' intentions say about them, ego-defensive what people do to protect them. Indeed

these variables are also well correlated, the Pearson’s coefficient is comprised between 0.328 and 0.561 (sig.=0.000).

Furthermore we wanted also to include in our analysis the **purchase frequency of eco-friendly FMCG products**, which is composed of four items: the purchase frequency of “food”, “health care/cosmetic products”, “cleaning products” and “other household products”.

Finally we did not create new variables to evaluate **Price** and **Satisfaction** as we did not find items which were enough correlated between them to be combined. For example we did not find any correlations between “willingness to pay and extra price” and green products have “a reasonable price”. So to evaluate Price we just consider “willingness to pay an extra price” and for Satisfaction: “I was satisfied with most of EF products I bought”.

Table 2 – Pearson correlations of our new variables

		Pearson Correlation With Purchase Intention
Purchase Frequency of eco-friendly FMCG products	Correlation	.553
	Sig. (2-tailed)	.000
Product Quality	Correlation	.331
	Sig. (2-tailed)	.000
Price (“Willingness to pay an extra price”)	Correlation	.509
	Sig. (2-tailed)	.000
Place	Correlation	.263
	Sig. (2-tailed)	.000
Satisfaction (“I was satisfied with eco-friendly products I bought”)	Correlation	.542
	Sig. (2-tailed)	.000
Espoused Attitudes (WOM+ Advertising)	Correlation	.588
	Sig. (2-tailed)	.000
Value-Expressive Attitudes	Correlation	.278
	Sig. (2-tailed)	.000

4.2.3 Cronbach’s alpha

Cronbach’s alpha is “a widely used measurement of the internal consistency of a multi-item scale in which the average of all possible split-half coefficient is taken (Sjiu et al., 2009, p. 726) in other words it permits to measure the internal consistency between different items (from the same scale) in order to see if some items are correlated and can be computed in one variable (Shiu et al., 2009, p. 403). The following table presents the consistency of variables we created for our analysis, as we can see the Cronbach’s alpha are above 0.700 for most of our variables that we want to test, so the reliability between items are enough consistent. However we have some variables that are between 0.600 and 0.700 which can indicate a weak level of internal consistency between the items. We are conscious of this problem of reliability but we will accept this alpha because these variables are very interesting for our

study and to test our hypotheses. But we do not have an alpha below 0.600 which would indicate a low internal consistency (Shiu et al., 2009, p.403).

Table 3 - Cronbach's alpha of our new variables

	Variables:		Cronbach's alpha
<u>Marketing Mix elements</u>	Product Quality	4 Items	0.690
	Advertising	2 Items	0.733
	Place	3 Items	0.683
	Word of Mouth	2 Items	0.753
<u>Attitudes</u>	Espoused Attitude	4 Items	0.771
	Value-Expressive Attitude	3 Items	0.704
	Purchase Frequency of eco-friendly FMCG products	4 Items	0.628

The description of items were previously evoked in 4.2.2 and as we said Price and Satisfaction are not included as they are composed of only one item.

4.2.4 Multiple Regression

The aim of our research we were interested by the factors that can affect the purchase intention of green products, in order to understand which factors have an effect and which have the most important effect on purchase intention we used a multiple regression. This technique is very useful for managers because it permits to see which factors have an influence on a dependent variable (Shiu et al., 2009, p. 583). Multiple regression permits to give us how much of the variance in our dependent variable can be explained by our independent variables (Pallant, 2010 p.156).

Purchase intention was chosen as the dependent variable as our aim is to demonstrate how marketing-mix elements, WOM and finally satisfaction via attitudes lead to action i.e. consumers' intention of purchase eco-friendly products.

A rule of thumb to choose the number of independent variables is the following equation: Number of respondents $> 50 + 8m$ (where m is the number of independent variables), in our study we have a sample of 174 respondents which can be considered as not so fair according to Comrey and Lee (1992, cited in Pallant, 2010, p.156), however as we selected seven independent variables our sample is sufficient ($174 > 136$) because there are at least 15 participants per each variable and it is the case ($15 \times 7 = 105 < 174$).

The correlation with each of the independent variables and the purchase intention was tested by making a Pearson Correlation (Table 2), all of the independent variables which are: the Product Quality, the Price ("willingness to pay an extra price), the Place, the Satisfaction ("I was satisfied with previous eco-friendly products I bought"), the Espoused Attitudes (including WOM and Advertising), the Value-Expressive attitude and the Purchase frequency of eco-friendly FMCG products were significantly correlated with the purchase intention (sig.= 0.000).

We are conscious that Satisfaction and Price are composed for each of only one item that it is not the case with our other independent variables but due to a weak internal consistency (Cronbach's alpha below 0.600) concerning the price with other corresponding variables we kept only one item to represent it. Indeed as we said previously, we wanted to link "reasonable price" to "willingness to pay an extra price" but the correlation between these two variables is weak enough ($r=0.347$ where $\text{sig.}=0.000$).

We verified previously that our variables were not too correlated in order to avoid multicollinearity (which "results in difficulty in estimating separate or independent regression coefficients for the correlated variables" Shiu et al., 2009, p.590).

We observed that the variables with the highest Pearson coefficients (r) are the Espoused Attitude (0.588), the Purchase frequency of eco-friendly FMCG products (0.553), the Satisfaction (0.542), the Price (0.509), then the Product Quality (0.331), the Value-Expressive attitude (0.278) and finally the Place (0.263). So we concluded that each of these variables on their own are correlated (even some are weakly correlated) to purchase intention of eco-friendly products (Table 2).

All of our independent variables have been retained because the correlation between the purchase intention (dependent variable) with each of our independent variables was not too high and convenient (Table 4). Indeed a correlation superior to 0.700 will mean that there will be a bivariate correlation in our analysis (Pallant, 2010, p.158). Furthermore the Tolerance value and the VIF are, as they should be i.e. more than 0.100 for the Tolerance Value and well below than 10 for the VIF for each of our independent variables. The Normal P-Plot shows a regular enough straight and there is no large deviation so it corresponds to normality (Appendix 9). The R Square is equal to 0.568 which means that our model composed of seven variables explains 56.8% of the variance of the purchase intention of green product so it is an acceptable result. However we are conscious that this value can be optimistic in the case of "small" sample compared to the estimation of the true population so it is possible to use the adjusted R Square (here equal to 55%). The significance of this result was demonstrated by looking the ANOVA table, with a level of significance equal to 0.000 (Table 5).

Table 4 Multiple Regression - Correlations

Correlations									
		Purchase intention of EF products	Value-Expressive Attitude	Espoused Attitude	Place	Total product quality and taste	Purchase frequency of green fmcg products	Willingness to pay premium price 10%	I was satisfied with most of EF products bought
Pearson Correlation *	Purchase intention of EF products	1,000							
	Value-Expressive Attitude	,278	1,000						
	Espoused Attitude	,588	,440	1,000					
	Place	,263	,211	,273					
	Product Quality	,331	,121	,395	,079	1,000			
	Purchase Frequency of gree fmcg products	,553	,285	,448	,128	,173	1,000		
	“Willingness to pay premium price 10%”	,509	,285	,447	,146	,313	,353	1,000	
	“I was satisfied with most of EF products bought”	,542	,181	,434	,233	,406	,280	,331	1,000

*For these values sig= 0.000

Table 5- Multiple regression - Model summary and ANOVA

Model Summary				
Model	R	R Square	Adjusted R Square	Std Error of the Estimates
1	.754 ^a	.568	.550	.770

ANOVA ^b						
		Sum of squares	df	Mean Square	F	Sig.
1	Regression	129,556	7	18,508	31,200	.000 ^a
	Residual	98,473	166	.593		
	Total	228,029	173			
Dependent Variable : Purchase intention of EF products						

By observing the Beta value (Table 6) in the coefficient table which indicates to what extent each variable contribute or not to the variance in the purchase intention, we can make a comparison of the factors which contributed the most to the variance of purchase intention. So the Purchase Frequency of eco-friendly FMCG products (Beta=0.370), the Satisfaction (Beta=0.274) and the Espoused Attitude (Beta= 0.236) and the Price (Beta=0.204) with a level of significance equal to 0.000 or 0.001 (so less than 0.01) make a significant contribution to the purchase intention. However the Place (Beta= 0.073 and sig.=0.177), the Product Quality (Beta= 0.010 and sig.= 0.868), the Value-Expressive Attitude are not related to the Purchase Intention (Beta= -0.35 and sig.= 0.546) compared to the other variables due to a high level of significance ($p > 0.1$).

In order to know the contribution of each variable to the total R Square we squared the value in the Part correlation coefficient for each variable ($\text{Part}^2 \times 100 = \% \text{ of contribution}$). The Purchase Frequency of eco-friendly FMCG products explains 6.7% of the variance in the Purchase Intention and the Satisfaction (5.3%), the other five variables explain less than 3%.

Table 6- Multiple regression - Coefficients

Coefficients										
Model		Unstandardized Coefficients		Standardized coefficients	t	Sig.	Correlations		Collinearity Statistics	
		A	Std. Error	Beta			Partial	Part	Tolerance	VIF
1	(Constant)	-,591	,447		-1,324	,187				
	Value-Expressive Attitude	-,055	,090	-,035	-,605	,546	-,047	-,031	,776	1,289
	Espoused Attitude	,326	,096	,236	3,382	,001	,254	,173	,535	1,868
	Place	,101	,075	,073	1,355	,177	,105	,069	,894	1,119
	Product Quality	,019	,111	,010	,167	,868	,013	,009	,754	1,327
	Purchase frequency of green fmcg products	,391	,077	,298	5,079	,000	,367	,259	,756	1,322
	Willingness to pay premium price 10%	,216	,063	,204	3,414	,001	,256	,174	,731	1,368
	I was satisfied with most of EF products bought	,333	,074	,274	4,531	,000	,332	,231	,712	1,405

So our model explains more than the half of the variance of the Purchase Intention (56.8%) and the Purchase Frequency of FMCG green products makes the largest unique contribution, then the Satisfaction and the Espoused Attitude and the Price. Consequently factors which explain the most the consumer's intention of purchase green products are the previous satisfaction; the fact people have already purchased green products but especially the presence of advertising and the importance of WOM (Espoused attitude).

5. Discussion

The various findings will be highlighted in this part and argued well enough to accept or reject the hypotheses. This part will also be linked to the existing literature in order to demonstrate how our researches contribute to the current knowledge about green purchase behaviors.

5.1 Marketing-mix factors towards green attitudes

5.1.1 Product

For this first factor we considered that the product quality was evaluated by four items: green products are healthy; they have a good quality, a good taste and/or smell and a better quality than conventional ones (see Appendix 8). The results of our empirical analysis show consumers think that the Product Quality of eco-friendly products is good (mean= 3.62, from 1: strongly disagree to 5: strongly agree). Respondents have positive attitudes towards these products, they agree concerning the fact that they are good for the environment (it is almost true for the women and the Swedish). But even if the two variables: “good quality/performance” and “better quality/performance than conventional ones” are related (Pearson=0.558 with sig.=0.000) there is a significance difference concerning the fact that respondents have more perception to the good quality of green products than the better quality on conventional ones (sig.=0.000, see Appendix 6).

So we can partially accept our hypothesis H1a, because there is a correlation with the fact that the more people think that green products are good for the environment the more they think that they are healthy (Pearson coefficient= 0.414 see Appendix 8). The healthiness can be linked to utilitarian function of attitudes that if people develop positive attitudes as buying natural products they will be rewarded by better health. Furthermore these results are not so surprising because they confirm what we found in our previous researches that consumers think conventional products are more efficient than eco-friendly ones as e.g conventional products using chemical products so perceived as more efficient than natural ingredients. Indeed our findings go hand in hand with those of a study made in 2002 where 42% of people think that “green products don’t work as well as conventional ones” (Ottman, cited in Verbekar and Wadhwa, 2011, p. 67).

Furthermore when we compared the variable Product Quality to the purchase intention of green products, even if these two variable were correlated (Pearson coefficient= 0.331) we demonstrated in our multiple regression that the Product Quality did not have a significant contribution to the purchase intention of green products.

Consequently according to our previous results consumers do not buy green products for their quality attribute (which is logical because consumers think that conventional products have a better quality) but more for other reasons that we will develop in the next paragraphs. Moreover this fact confirms that people are not ready to make a compromise with quality and environmental feature as Purohit demonstrated it (2011, p.96); indeed in his survey there was a negative relationship between “I never compromise with the environmental value when I go for purchase of domestic products” and the “buying intention of inferiority products”. However for this first factor we mainly concentrate on the Product Quality aspect because the

packaging in term of design did not play an important role as we focus on green products sold in supermarkets in a general way we did not take specific brands and or products as our sample was also composed of Non-Swedish people.

These results show that there are no changes; consumers think green products are good for the environment but not enough efficient compared to conventional ones. Managers should change the perception that consumers have concerning green products, because if green products were perceived as efficient as conventional ones we could suppose that the purchase intention will be higher even if as we said it previously the product quality is not the only reason considered during the consumer purchase decision.

5.1.2 Price

The price is one of the most important factors during the consumer decision making. Most of our sample does not really agree with the fact that green products have reasonable prices; even if the women, the Swedish and people with an income seem to be more undecided (but do not disagree) with the fact that green products are affordable compared to the other groups.

However the majority of our sample is willing to pay extra for green products' price (in our study: +10%); indeed they develop positive attitudes because our sample tends to be undecided or agree but not so disagree (the mean is equal to 3.33). There is a paradox because the more the consumers are ready to pay an extra price the more they should think that this product has a reasonable price, reason for that they should be ready to pay an extra price.

Our results confirm the previous researches made about the willingness to pay an extra price for green products. Indeed as we saw in the literature review, previous studies showed that people think that green products are expensive compared to conventional products (Chang, 2011, p. 20) but in the same time they are ready to pay more for products that have positive effects on the environment. However this result confirms that there are no changes people stay price-sensitive, because this behavior does not necessarily lead to action.

We demonstrated that the willingness to pay an extra was the third factor which has the most contribution to explain the variance of purchase intention.

So we can estimate our H1b can be accepted because people tend to agree to pay an extra for green products.

There are significant differences between our sample indeed people having an income are more willing to make an effort to pay an extra price than people without an income, which is logical. But keep in mind that more than the half of people who have an income are Swedish and we showed in the previous part that Swedish have more positive attitudes towards green products, so we cannot really infer this result to all of the people with incomes. Furthermore, in our study we suggested an extra price of 10% which is not too high, it could be interesting also to know to what extent people are ready to purchase green product until +5% or until +15% for example. Indeed in a previous study made on a sample of 808 Belgian consumers, researchers discovered that only 10% of the sample was ready to pay a 27% price premium (De Pelsmacker et al., 2009, p. 363) so according to the amount of the extra, the results can be very different.

5.1.3 Promotion

Concerning the promotion we only focus on the advertising in a general way as we were interested in green products in the FMCG sector so mainly sold in supermarkets where sales force for example is not as important as in a specialized store. We discovered that people who are more than 55 years old “pay more attention to green advertising” (the mean is equal to 4.13) however this result lacks of generalization because this age group is a minority in our sample (less than 5% of our total sample).

Then we wanted to show if attention given to green claim and belief in green claim were related to purchase intention of green products and if people perceived positively the green advertising. We discovered that our results show significant differences among our sample, for example people having an income tend to pay more attention and they believe in eco-friendly advertising. However we could revise that by the fact that people having an income (65.5% of our sample) in our study are mainly composed of Swedish people (See Appendix 4) so it is also normal that Swedish people pay more attention and believe more in green advertising than the Non-Swedish, indeed we can suppose that the Swedish understand better the content of green advertising as the claim is most of the time in their own language.

We discovered that the new variable Advertising composed of “pay attention” and “believe in eco-friendly advertising was positively related to purchase intention. Indeed advertising is a part of our Espoused Attitude and this attitude is one of the independent variables, used in our multiple regression, which explains the most significance contribution (Beta= 0.236 where sig.=0.001) to the variance of purchase intention. These results are not surprising because previous researches demonstrated that consumers are concerned by green promotion when they think the aim of the advertising is the preservation of their environment (Ann et al., 2012, p.96) and advertising contributes to awareness of products so also to its purchase intention. Then green claim permits to differentiate a product from the conventional one, the emotional aspect plays also a role because the fact that the product will preserve the environment and have eco-friendly attributes appeal to consumers (Schuhwerk and Lefkoff-Hagius, 1995, p. 46) so green advertising influence people to buy green. Indeed hedonic values and emotional feeling play a role in the decision making process (Deli-Gray et al., 2011, p.65-70), so develop positive feelings about green claim plays a role during purchase decision. We highlighted the importance of Belief in the ABC model of attitudes (“believe green advertising”) can generate positive attitude and purchase action.

Remind that a survey made in the USA showed that the half of the American interviewed “purchased a product because the advertising or label indicated that it was environmental safe or biodegradable” (Ginsberg and Bloom, 2004, p. 84). Moreover green appeal is significantly persuasive on people who are less involved in the environment (Chitra, 2007, p.175).

Consequently we can accept our hypothesis H1c which states that there is a significant and positive relationship between promotion (advertising) and attitudes towards green products. The more people have positive attitudes toward green claim the more people are willing to purchase green products. Indeed green advertising permits consumers to create awareness of green products and to understand better the green attributes so there is positive relationship with purchase intention.

Our findings “reject” those of Rahbar and Wahid (2011, p. 80) who did not find a correlation between attention to green claim and purchase intention of green product. However keep in mind that their sample (250 Malaysian consumers) was largest than our sample (174 consumers mainly composed of students and employed people) so it is difficult to generalize our findings to a true population, but also their sample was only composed of Malaysian consumers so their findings cannot be applied generally to the all population so there are differences according cultural aspect.

Thus companies should continue to invest in green claim because the result of our survey shows that advertising matters in the purchase decision process. Advertising also makes the content accessible to their potential consumers. Remind a survey made by the Gallup organization where around one third of the European thinks that to promote green products, retailers should give more information about these products (Flash Eurobarometer, 2009, p.6).

5.1.4 Place

According to the findings and results of the questionnaire there is a difference concerning nationality between the mean value for the Swedish and the Non-Swedish (Appendix 5) where Swedish have higher value. This could be interpreted by the fact that Swedish are more aware of the eco-friendly products availability in the supermarkets, which can be logical because as our survey takes place in Umeå it is normal that Swedish people know better green displays than Non-Swedish as most of this group is composed of Erasmus students so we suppose they know less the green displays in Swedish supermarkets.

Furthermore variables (3 items), which compose Place, have a low Cronbach’s alpha (0.683 so below 0.700 which means reliability) compared to other variables however separately the items “I easily find...” is well correlated with “I know where eco-friendly displays are in my supermarkets and “green products are accessible/available in my supermarket” so the weak correlation is between “accessibility” and “know where green products” are which is not so logical because respondents should answer in the same way to this question as they are almost the same .

There is also a weak correlation with place and purchase intention (Pearson coefficient: 0.263, see Table 3). In the comparison of the correlations of the other variables satisfaction (0.509) and Espoused attitudes (0.542) we can say there is not really a relationship between place and purchase intention.

We did not find any relationship between the variables “I know where green products in my supermarket” and “I buy green products on unplanned decisions” (Pearson coefficient: 0.042 and sig.=0.585 so really above 0.001, see Appendix 8) and yet we should have found a negative relationship between place and purchase on unplanned decision, indeed as we demonstrated in our literature review consumers often buy products that were not on their shopping list (Solomon et al, 2010, p. 83) because they just find them by chance. As Blackwell et al. showed (2006, p. 151) a display can remind to a consumer a need or just something that he/she saw on the television, reason for that the role of point of sales (POS) in supermarket is important. Finally the place creates awareness of green products and here consumers seem to know well where the green products are but this information does not lead to purchase, we can conclude that the Place has a weak influence in the purchase decision. Thus companies should think about how to make these displays more appealing for potential

consumers of green products because as we mention it previously in the literature review, a Danish survey showed that 90% of consumers “did not plan to purchase of at least one-third of the goods they acquired” (Solomon et al., 2010, p. 83). Thus there is a potential to develop displays for green products.

So our hypothesis H1d where there is a significant and positive relationship between place and attitudes towards green products could be partially accepted since some place factors indicate that consumers know well where green products are but there is no relationship with purchase intention.

Consequently after the set of data about what we already know (previous theories and surveys done on this subject) and what we found concerning the first hypothesis H1, our deductive approach leads us to the conclusion that the hypothesis: there is a significant and positive relationship between 4P factors (marketing-mix elements) and attitudes towards green products is partially accepted as we accepted H1b and H1c but H1a and H1d were partially accepted.

5.2 Word of mouth towards green attitudes

Our findings revealed the importance of word of mouth; the WOM has positive effects as we found a relationship with the purchase intention of green products. Indeed our findings showed that word of mouth really matters, in the responses of our questionnaire we found that people pay much attention to the opinion of their family and friends concerning green products as well as they recommend them to others.

We can observe the importance of both receiver and sender; these results confirm what we found in the previous studies and survey done about this topic. As Kotler and Keller mentioned (2009, p. 529) consumers trust more the people who are close to them such as family and friends than a seller in a shop because there is an “intimate dialogue”. Furthermore “80% of all of our buying decisions are influenced by someone’s direct recommendations” Solomon et al. (2010, p.402). The WOM is perceived as source of trust and belief, the fact that a person transmits information about a product to another person (the receiver) helps him/her to buy the product and it especially permits the sender of the information to have confidence that his/her purchase was a good choice by persuading the others to do the same (Blackwell et al., 2006, p.533).

However Bearden and Etzel (1982, cited in Solomon et al., 2010, p. 393) found that, reference groups who use the WOM have more or less influence in the consumer decision making according to the type of product. Indeed private necessities such as everyday products are weakly influenced by reference groups because the WOM is more relevant for durable goods or luxury goods where the impact of the purchase is important. But in our study we discovered the opposite: the WOM matters even for everyday products or non-durable ones such as here for eco-friendly FMCG products. We can suppose that people want to know e.g if these products are really efficient so they ask advice to the peers who already bought them.

Furthermore WOM is linked to our variable espoused attitudes that take also in account advertising. People can pay attention to advertising for eco-friendly products and just forget it but if their influence groups (such as primary and informal groups here the family and friends) exchange, and transmit their opinions about these products (Blackwell et al., 2006, p. 523),

consumers will be more willing to develop different attitudes and maybe purchase these products.

So we can assume our hypothesis H2 that there is significant and positive relationship between word of mouth and attitudes towards green products.

We found also a positive correlation between Espoused Attitudes (WOM and advertising) and purchase intention (Pearson coefficient: 0.588 see Table 3). Not only WOM leads to positive attitudes towards eco-friendly products but also to purchase intention. The more people are exposed to a product the more they can be ready to buy it.

5.3 Satisfaction towards green attitudes

Our findings show that consumers agree with the fact that they were satisfied by green products they bought and we found that satisfaction was positively correlated (even if the Pearson coefficient is low we can accept it, because above 0.2) with most of our statements linked to the quality of green products (0.337), that they have a good taste and or smell (0.323) and that they are good for the environment (0.321, see Appendix 8). Kotler and Keller demonstrated that the more a product is a good quality one the more satisfied the consumer is (2009, p. 169). Yazdannifard and Mercy (2011, p.638) showed that points such as green products' satisfaction in term of quality or performance have positive or negative impact on consumers in the foreseeable future. Indeed previous researches presented in our literature review showed that today people were looking for quality and products with environmental values (Chang and Fong, 2010, p. 2841).

We also discovered that respondents having an income were more satisfied than respondents without income again that is not surprising because people with income are mainly Swedish and they seem to be also more used to purchase green products.

Then we found that satisfaction was positively correlated to purchase intention (Pearson coefficient= 0.542).

We demonstrated that purchase frequency of green FMCG products and satisfaction were the two first factors which explained the most contribution to the variance of purchase intention. These findings are relevant because the more people buy green products and the more they are satisfied about their previous purchases the more they are willing to repeat purchases that can lead to brand loyalty toward green brands. Picket-Baker and Ozaki (2008, p. 282) showed that the past experience of green products can lead to positive or negative attitudes towards them and can lead to purchase or not of these products. Here our findings, even if they cannot be applied generally due to the size of our sample, confirm the previous findings that there is a link between satisfaction and purchase intention of green product. Furthermore if the purchase frequency is high and if you are satisfied by these previous purchases it is logical that the purchase intention in a near future is high because you develop positive attitudes and behavior towards these products so our results confirm what was found in the previous studies and survey about this topic.

So we can accept our hypothesis H3 that assumes that satisfaction and attitudes towards green products are positively related and satisfaction towards green products leads also to purchase intention of these products.

5.4 Attitudes and purchase intention

Our survey shows that the value-expressive function from the functional theory of attitudes does not matter in the purchase intention of green products (see point 4.2.4 about the multiple regression analysis). Indeed people do not buy green products for self-esteem reasons such as “I feel trendy when I buy this type of product” or “if I do not people could judge me” so people do not buy green product because they want to show to others that they are trendy or other. Our value-expressive variable can also be also linked to ego defensive function, such as people do not buy green products to protect from others (For example “If I do not purchase green products people could judge me” does not play a role in the purchase decision).

Besides we demonstrated that the product quality has not an important role also. Indeed most of our sample agrees with the fact that green products are fairly good in term of quality but compared to the quality of conventional products the last have the best one. So we suppose that consumers tend to buy green products for other reasons than their quality, they buy them because they are good for the environment. Thus this result confirms Thøgersen’s findings that consumers’ intentions are more unselfish, such as preserve the earth and there are not only selfish reasons (2011, p 1070).

So according to our survey we can suppose that functions such as those of functional theory of attitudes (Value-expressive and ego-defensive) do not play an important role in the purchase intention of green products.

Indeed concepts such as knowledge, believe used in the ABC model of attitudes matter in the purchase intention of green products. We demonstrated that people were really influenced (in their purchase decision) by the fact that they understand and believe the green claims and the information on green packaging. Even if the last statement is also true for the Swedish which is relevant due to the fact that our survey took place in their own country so they are likely to understand better information on these products than the Non-Swedish for example the Swedish eco labels. Furthermore we also reveal the importance of WOM, people believe and trust green attributes due to the fact that people are exposed to them (ex: green advertising) or that their friends or family transmit some information make them perceive the importance of green products. So WOM and advertising permit consumers to be espoused to green products, then consumer pay attention, he/she understands the benefits that products can bring him/her (Blackwell et al., 2006, p.77) and finally it can lead to purchase decision as that seems to be according to our results. Finally Schlegelmilch and Diamantopoulos (1996, cited in Pirani and Secondi, 2011, p. 68) showed that “eco-friendly attitudes represent the most consistent predictor of pro-environmental purchasing behavior”.

In addition we emphasized the importance of previous satisfaction, satisfaction leads to repetitive purchase; it is also linked to the purchase frequency of green FMCG products because if consumers are satisfied once that means consumers are likely to buy again green products. Moreover even if people think that green products do not really have a reasonable price they are still willing to pay an extra price for these products, as we said previously we discovered a positive relationship between this willingness and purchase intention (see Appendix 8).

Consequently by the previous results and previous discussion we can confirm previous studies (Balderjahn, 1988, p. 53) that consumers having positive attitudes towards the environment are more willing to purchase eco-friendly products.

However we cannot fully accept our H4 because people have enough positive attitudes towards green product quality but it is not a reason who explains the purchase intention, furthermore another marketing-mix element: Place does not have an important role in the purchase intention of green products. Then our results confirm also Chang's findings (2011, p. 19) that consumers can have ambivalent attitudes as they make positive and negative evaluations of eco-friendly products, people want to safeguard the environment but in the same time they do not seem to be ready to make a compromise between quality and reasonable prices. Indeed as we said previously our sample does not think green products have reasonable price and are more efficient than conventional ones.

Furthermore Mc Eachern and Carrigan's findings confirm also that positive green attitudes do not lead necessarily to purchase of green products (2010, cited in Solomon et al., 2010, p. 229).

From the findings of our study we can revisit our model which highlights the most important factors permitting to increase the purchase intention of green products. Factors (boldfaces) such as the advertising, the word of mouth highlight the importance of the terms: believe and knowledge in the ABC model, and highlight also the importance of espoused attitude. Whereas other factors such as quality and place have less importance as people perceive green products as only fairly-good compared to conventional products for example.

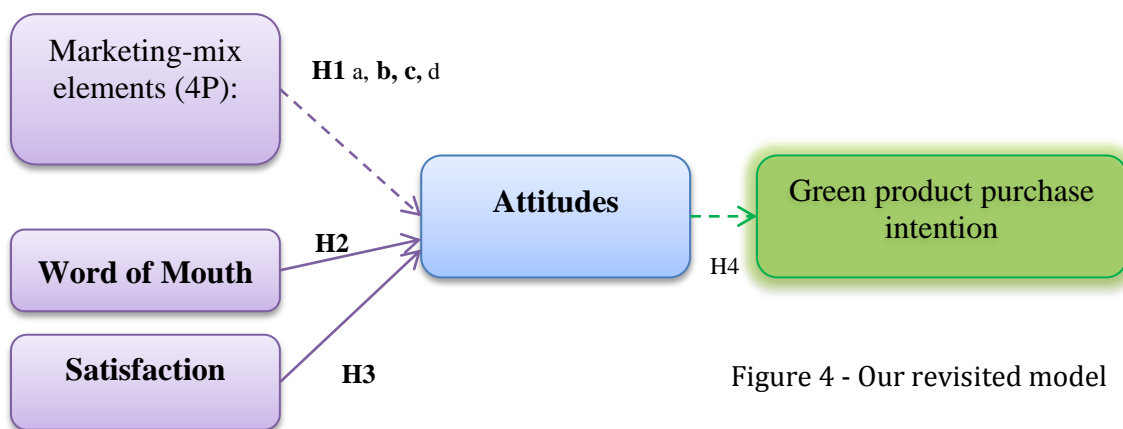


Figure 4 - Our revisited model

Source: Own creation

Thus our findings confirm more or less the previous researches and studies made about attitudes towards green products and their purchase intention introduced in our literature review. Let's take again some facts such as people are willing to pay extra for green products, we found a positive correlation with the purchase intention in theory it is true but in practice we do not know if they would buy green products with a higher price as most of our sample think that prices are already not so reasonable compared to conventional ones (Chang, 2011, p.20). Our study brings something new to the current knowledge concerning e.g the WOM does also matter to buy everyday products (here green products sold in supermarkets) at the opposite of what Bearden and Etzel said that the WOM was mainly used for purchase of luxury products (1982, cited in Solomon et al., 2010, p. 393).

5.5 Identity of our green consumer

Eco-friendly attitudes have been increasing, let's remind an English survey (Grant, 2007, p. 35) in 2005 44% of the sample interviewed "felt guilty about unethical purchase" compared to only 17% in 1999. However this acknowledgment, these attitudes' changes do not lead inevitably to purchase of eco-friendly products as we showed in our study.

Indeed according to our study, the consumers that we could qualify as green consumers or green activists (Finisterra do Paço et al., 2009, p. 23) tend to be women and Swedish, having an income because as we demonstrated in the "Data analysis and findings" part they tend to develop more positive attitudes towards green products than other people. However we moderate this acknowledgment, although the difference is not so important, we have more women than men and also more Swedish women than Non-Swedish and more Non-Swedish men (see Appendix 3 and 4). Furthermore we discovered that people with an income develop also more positive green attitudes such as they are more willing to pay an extra price compared to the others, and their purchase intention of eco-friendly products is also higher. People having more than 45 years tend also to be greener than the other age groups but due to the weak representation of this group in our sample; these findings cannot be applied generally to the true population. Then the majority of our sample with an income is composed of Swedish (73.7% of people who have an income are Swedish) so we cannot really say if it is the fact that they have an income or if it is the fact that they are Swedish who lead them to develop favorable attitudes and purchase intention towards green products.

Consequently we consider our findings can be applied generally for young people i.e. who are less than 34 years old and who are employed or students as these demographics factors represent the majority of our sample. To qualify these consumers and their attitudes towards eco-friendly products we could take again some notions used in previous researches about this topic such as: "aspirants" (Chitra, 2007, p. 181) but also "uncommitted" (Finisterra do Paço et al., 2009, p.23). Indeed most of our sample agrees with the fact that green products are good for the environment, they want to develop green purchase behaviors ("aspirants") but they mainly think that conventional products have a better quality and tend to be cheaper than green ones. Thus people are aware of green products' benefits for the environment but they seem undecided ("uncommitted" also) to definitively buy them and change their attitudes even if the purchase intention is enough high, so companies should change the perception of green products by developing more green strategies.

6. Conclusion and Further Research

This last part will provide answers to our research questions but also if the aim of our research study is achieved and materialized. Furthermore, as well practical and managerial implications as limitation of our research will be presented.

6.1 Practical Implications

Satisfaction showed a great influence among all of the factors that indicated that marketing managers should concern with the superior value of the eco-friendly products. Consumers have strong emphasis on the end-value of the products in order to repeat purchases. Satisfaction has impact on the attitude and purchase decision of other nationalities and Swedish so managers should seek the views of the customers for the purpose of producing eco-friendly products tally with the consumers' demand. The results of the satisfaction of the consumers would lead to increase in sales, market shares and brand loyalty. Many scholar agreed consumers are concerned on the satisfaction of the products and activities of the companies not harm to the environment (Leonidos et al. 2010, p 1337)

The product attributes in general have little influence on the attitudes and purchase intention of green products, which is surprising, but that could be due to the fact that some of the consumers buy eco-friendly products for the purpose of preserving the earth such as unselfish reasons (Solomon et al., 2010, p. 208). However, the product quality should not be overlooked since consumers relate price with quality (Kotler and Keller, 2009, p. 421) when making purchasing decision, and consumers research not only green products claiming environmental values but also products with high quality (Chang and Fong, 2010, p. 2841), because consumers are not ready to make a compromise on quality just for the benefits green attributes and for the moment green products seem still have less quality than conventional ones as our findings and previous researches demonstrated it.

Come back to our research questions which are the aim of our research study:

RQ1: Which factors in the marketing-mix influence consumers to purchase eco-friendly products? Do other factors such as word of mouth and satisfaction play a role? To what extent these factors influence consumers to purchase green products?

We demonstrated the importance of satisfaction, advertising and WOM by the introduction of the espoused attitude variable which measures the believe and attention that people pay around them (as well opinion of friend as green claims) so we can conclude as factors controlled by companies as factor here the WOM (as well the receiver as the sender of information) controlled by consumers have importance in development of purchase intention of eco-friendly products. The most important factors among the marketing-mix elements are the price and promotion (even here it was reduced to advertising), and we saw that product and place have a low impact but it is a good reason for companies to fix that. Finally satisfaction and WOM were also the most important factors to explain the contribution to the variance of purchase intention.

RQ2: Do positive attitudes towards eco-friendly products lead to purchase intention?

The discussion answers also to this second research question, we discovered that positive attitudes towards green products can lead to purchase intention but it is not always true as we saw with the two marketing-mix elements product quality (even we only consider the product quality to define the product element) and the place. These results confirm also the previous researches made on this subject as we mentioned it in the literature review, the fact that people are concerned about the environment does not lead necessarily to action.

6.2 Limitations

Concerning our data collection and analysis, we faced to some difficulties because we realized that our sample was likely too small (174 respondents) to obtain more relevant data that generated a lack of reliability. Indeed few of our variables had a lack of internal consistency (Cronbach's Alpha never reaches 0.800 for example). So our study cannot be so generalized to a large population even if concerning the nationality we obtained around half of Swedish and half of Non-Swedish which was interesting to make comparisons. Furthermore our sample was mainly composed of young people between 18-34 years so our findings are valuable for this age group but not for people who are more than 34 years. However it should have been interesting to have more unemployed and retired people to observe if there are differences with employed people for example. Then we had also many students (as we predicted) and employed people so as for the age group our findings are more generalized for these two statuses. Furthermore, Umeå University and its residents were the delimitations of the study so our findings and outcomes from data could be different if the study was made in another city or country due to the cultural influence towards eco-friendly attitude and purchase intention. It should have been also interested to have for example the point of view of supermarkets concerning their strategies to sell green products.

6.3 Managerial implications

Our study shows that consumers really seem influenced by previous satisfaction, advertising and word of mouth communication. So managers should maintain eco-friendly promotion campaigns but also develop more green displays in supermarkets in order to create intention because we saw that for example people with income buy more products on unplanned decisions than people without income.

We demonstrated that the word of mouth and the advertising (the espoused attitude) play an important role in the purchase intention. We demonstrated that the young people (18-24 years) pay much attention to green claim so managers could target them because there are the consumers of tomorrow. The satisfaction and word of mouth give the marketing managers information feedback of the performance of products so the satisfaction and word of mouth findings will go a long way to help marketing managers to make suitable and superior eco-friendly products according to the information from the consumers.

Managers need also to make green packaging understandable because the more people get knowledge about green products the more they can believe the green claims and we saw that

people who have more knowledge concerning eco-friendly advertising are more willing to purchase green products.

Furthermore place and product quality should not be neglected, managers should also make efforts on place because even if in our study we did not find a negative relationship between “purchase on unplanned decision” and “I know where green products are in my supermarket” (no relationship) which should have been logical because the less you know where green product are the more you buy them on unplanned decisions. Managers should work on green displays and maybe make them more attractive in order to target consumers because especially for everyday products unplanned decisions plays an important role when consumers go to supermarket many products that were not on their shopping list are finally purchased. Let’s remind this result from “a Danish survey indicated that nine out of ten customers did not plan purchase of at least one-third of the goods they acquired” (Solomon et al, 2010, p. 83). So our study can assist marketing managers in particular to plan the appropriate marketing strategies on marketing mix elements to satisfy the potential target and as well as making profit and preserve the deterioration of the environment.

6.4 Further research

In another study it could be interesting to combine quantitative research with qualitative one, by organizing a triangulation: interview some FMCG companies proposing eco-friendly products and conventional ones in order to understand what strategies they put in place according to the different types of products. Make observations in supermarkets to see how consumers act towards green products could permit FMCG managers to improve their strategies. Put in place better point of sales; improve the quality of product etc. In another survey integrate more specific products could be also interesting and other demographics concerning the level of education for example. Furthermore, further study on the durable and non-durable eco-friendly products could be paramount with the comparison of conventional products would assist the managers to obtain the views of the consumers on these two different categories of product types. Indeed the consumer decision making is different when people are willing to buy a durable and when they are willing to buy a non-durable such as clothes or even a car because the impact on the purchase is not the same and maybe for these products we can suppose that value-expressive function has an important impact for example for clothes and even for cars but other factors play also different roles such as the product or the price.

REFERENCES

Articles

Ann, K. Amir, G. and Luc, W. (2012). "Go Green! Should Environmental Messages Be So Assertive?". *Journal of Marketing*. Vol 46, pp. 95-102.

Anselmsson and Johansson (2007) corporate social responsibility and the positioning of grocery brands, *International Journal of Retail & Distribution Management*, Vol.35 No.10, pp. 835-866.

Babin, B. J., & Babin, L. (2001). "Seeing something different: A model of schema typically, consumer affect, purchase intentions and perceived shopping value". *Journal of Business Research*. 54 pp. 89-96.

Balderjahn, I. (1988). "Personality variables and environmental attitudes as predictors of ecologically responsible consumption patterns". *Journal of Business Research*. 17 pp. 51 – 56.

Chang, C. (2011). "Feeling ambivalent about going green – Implication For Green Advertising Processing". *Journal of Advertising*. Winter 2011.Vol. 40, Iss 4 pp 19-31.

Chang, N.J and Fong, C.M (2010). "Green product quality, green corporate image, green customer satisfaction, and green customer loyalty". *African Journal of Business Management*. October 2010.Vol.4 (13), pp.2836-2844.

Chen, T. B. and Chai,L. T (2010), Attitude towards the environment and green products: consumer perspective, *management science and engineering* vol.4, No 2, pp. 27-39 .

Chitra, K. (April-September 2007). In search of the Green Consumers: A perceptual Study. *Journal of Services Research*. Volume 7, Number 1 pp. 173-191.

Cone communications "Consumers still purchasing, but may not be "buying" companies' environmental claims". *Trend Tracker* (2012) pp.1-7.

Datta, S. K., and Ishaswini (2011) Pro-environmental Concern Influencing Green Buying: A Study on Indian Consumers, *International Journal of Business and management* Vol.6 No.6 pp. 124-133.

Deli-Gray, Z., Gillpatrick, T., Marusic, M., Pantelic, D. and Kuruvilla, S.J (October 2010 – March 2011). "Hedonic and Functional Shopping Values and Everyday Product Purchase: Findings from the Indian Study". *International Journal of Business Insights & Transformation* .Vol. 4, Issue 1, pp. 65-70.

- Finisterra do Paço, A.M, Lino Barata Raposo, M. & Leal Filho, W. (2009). "Identify the green consumer: a segmentation study". *Journal of Targeting, Measurement and Analysis for Marketing*. 17, pp. 17-25.
- Florenthal, B. and Arling, P. A (2011). "Do green lifestyle consumers appreciate low involvement green products?". *Marketing Management Journal*, Vol.21, Issue 2. pp35-45.
- Gan C., Wee H.Y., Ozanne L.& Kao T. (2008) "Consumer's purchasing behavior towards green products in New Zealand". *Innovative Marketing*, Vol. 4, issue 1 pp. 93-102.
- Ghosh, M. (2010) "Green Marketing – A changing concept in changing time." *BVIMR Management Edge*, Vol.4, no. 1 pp. 82-92.
- Ginsberg, J. M and Bloom P.N.(2004), Choosing the Right Green Marketing Strategy, Massachusetts Institute of Technology (MIT), *Sloan management Review* pp. 79-84
- Hartmann, P. & Apaolaza Ibáñez, V. (2006) "Green Value Added". *Marketing Intelligence and Planning*. Vol 24 Iss:7 pp. 673-680.
- Hartmann, P. and Apaolaza-Ibanez, V. (2009). "Green Advertising revisited". *International Journal of Advertising*. Vol .28 No 4, pp.715-739.
- Kumar, P. D. (December 2010) "Green Marketing: A Start to Environmental Safety." *Advances in Management*, Vol. 4, no. 12 pp. 59-61.
- Leonidos, L.C., Leonidou, C.N. and Kvasova O (2010), Antecedents and outcomes of consumer environmentally friendly attitudes and behaviour, *Journal of Marketing Management*, Vol. 26 Nos. 13-14, 1319-1344.
- Marly, B. R., Levy, M. and Martinex J. (2011). The public Health Implications of consumers' Environmental Concern and Their Willingness to pay for an Eco-Friendly product. *Journal of Consumer Affairs*. Vol.45, No2, pp. 329-343.
- Picket-Baker, J. and Ozaki R. (2008). "Pro-environmental products: Marketing influence on consumer purchase decision". *Journal of Consumer Marketing*, Vol. 25 Iss: 5, pp.281-293.
- Pirani, E. and Secondi, L. (2011). "Eco-Friendly Attitudes: What European Citizens Say and What They Do". *Int. Journal of Environ. Res.*, N0 5, ISSN 1735-6865, pp.67-84.
- Polonsky, M. J. (November 1994). « An Introduction to Green Marketing. » *Electronic Green Journal* 1, no. 2, pp.44-53.
- Princen, T. (2008). "Notes on the Theorizing of Global Environmental Politics", *Global Environmental Politics* Vol.8 no1 pp.1-5.
- Rahbar E. and Wahid N. A., (2011) "Investigation of green marketing tools' effect on consumers' purchase behavior". *Business Strategy Series*, Vol. 12 Iss: 2, pp.73 – 83.

Schuhwerk, M.E., and Lefkoff-Hagius, R. (1995). "Green or Non-Green? Does Type of Appeal Matter when Advertising a Green Product?". *Journal of Advertising* Vol. XXIV, No 2. p. 45-54.

Thøgersen, J. (2011) "Green Shopping: For Selfish Reasons or the Common Good?". *American Behavioral Scientist*. 55 (8) pp.1052-1076.

Unknown authors. (2009) . "Europeans' attitudes towards the issue of sustainable consumption and production". *Flash Eurobarometer Series* no. 256. pp 1-86.

Van Waterschoot, W. & Van den Bulte, C. (October 1992). The 4P Classification of the Marketing Mix Revisited. *Journal of Marketing* Vol. 56. pp. 83-93.

Vernekar, S.S, and Wadhwa, P. (2011). Green Consumption An Empirical Study of Consumers Attitudes and Perception regarding Eco-Friendly FMCG Products, with special reference to Delhi and NCR Region. *Opinion*. Vol 1, N0 1, December 2011. pp.64-74.

Wong, v., Turner W. and Stonement (1996), Marketing Strategies and Marketing Prospects for Environmentally-Friendly Consumers Products, *British Journal of Management*, Vol.7, pp. 263-281.

Conference paper

Luck, Edwina, M. & Ginanti, A. (2009). "Mapping Consumer's attitudes for future sustainable". *Marketing Australian and New Zealand Marketing Academic*. AANZMAC 2009. pp. 1-8.

Wannimayake, W.M.C.B. and Randiwela, P. (2008) "Consumer attractiveness towards Green Products of FMCG sector: An empirical study" Oxford Business and Economics Conference Program pp.1-19 june 22-24.

Yazdannifard R. and Mercy, I. E (2011). "The Impact of Green Marketing on Customer satisfaction and Environmental safety". *International Conference on Computer Communication and Management*, Vol.5 pp.637-641.

Books

Blackwell, R.D., Miniard, P.W. and Engel J.F (2006). *Consumer Behavior*. 10th edition. Mason: Thomson Higher Education.

Bryman A. (2008). *Social Research Method*. 3rd Edition. New York. Oxford: University Press Inc.

Bryman, A. (2012). *Social Research Method*. 4th Edition. New York. Oxford: University Press Inc.

Bryman, A. and Bell, E. (2007). *Business Research Methods*. 2nd Edition. New York. Oxford: University Press Inc.

Bryman, A. and Bell, E. (2011). *Business Research Methods*. 3rd Edition. New York. Oxford: University Press Inc.

Comrey, A.L., and Lee, H. B. (1992). *A first course in factor analysis* (2nd ed.). Hillsdale, NJ: Erlbaum.

De Pelsmacker, P., Geuens M. & Den Bergh J. (2010). *Marketing communication: A European Perspective*. 4th Edition.

Eagly and Chaiken (1993). *The Psychology of Attitudes*, Fort Worth, TX: Harcourt Brace Jovanovich.

Grant, J. (2007). *The Green Marketing Manifesto*. 1st edition. Chichester: John Wiley & Sons, Ltd.

Kotler, P. & Keller, K.L (2009). *Marketing Management*. 13th edition. New Jersey: Pearson/Prentice-Hall.

McDonough, W. and Braungart, M. (2002). *Cradle to Cradle: Remaking the way we make things*. North Point Press.

Pallant, J. (2010). *SPSS Survival Manual: A step by step guide to data analysis using SPSS*. 4th Edition. Berkshire: McGraw-Hill Education.

Saunders, M., Lewis, P. and Thornhill, A. (2009). *Research Methods for Business Student*. 5th Edition. Essex. England: Pearson Education Limited.

Shiu, E., Hair, J., Bush, R., and Ortinau, D (2009). *Marketing Research*. European Edition. London: McGraw-Hill Higher Edition.

Solomon, M. R., G. Bamossy, S. Askegaard, and M. K. Hogg (2010). *Consumer Behaviour: A European Perspective*. 4th edition. New York: Prentice Hall.

Wiid. J. and Diggins .C (2009). *Marketing Research*. Cape Town: Juta and Company.

Electronic Sources

American Marketing Association, AMA website
<<http://www.marketingpower.com/layouts/Dictionary.aspx?dLetter=G>> [Retrieved 2012-03-30]

<<http://business.qandas.com/general-business/what-is-fmcg.html>> [Retrieved 2012-03-30]

Corporate eye

<<http://corporate-eye.com/blog/2009/06/eco-friendly-packaged-goods-are-hot-hot>> [Retrieved 2012-05-10]

<<http://www.eurocommerce.com>> [Retrieved: 05 04 2012]

Unknown author, (2010), Marketing and effective communication Retail Forum for sustainability, No 3

National geographic website

<<http://greenliving.nationalgeographic.com/ecofriendly-mean-2415.html>> [Retrieved 2012-03-30]

<<http://www.iisd.org/sd/>> [Retrieved 2012-03-30]

<<http://www.investopedia.com/terms/p/pointofpurchase1.asp#axzz1vcytn4IS>> [Retrieved 05 15 2012]

<http://www.investorwords.com/6597/non_durable_good.html> [Retrieved 2012-03-30]

<<http://www.marketwire.com/press-release/us-market-green-household-cleaning-products-enters-forefront-consumer-consciousness-1265177.htm>> [Retrieved 2012-05-10]

Mintel

<<http://www.mintel.com/press-centre/press-releases/619/mintel-reveals-consumer-packaged-goods-trends-for-2011>> [Retrieved 2012-05-10]

<http://www.nationsonline.org/oneworld/most_spoken_languages.htm> [Retrieved 05 04 2012]

Organisation for Economic Co-operation and Development, OECD website

<http://www.oecd.org/document/34/0,3746,en_21571361_44315115_49897570_1_1_1_1,00.html>

[Retrieved 2012-03-30]

<<http://www.Umeå.se/mer/otherlanguages/inenglish/Umeåshistory.4.1255481e123d7d67aaa800010669.html>> [Retrieved: 04 30 2012]

<<http://www.eurocommerce.com>> [Retrieved: 05 04 2012]

Unknown author, (2010), Marketing and effective communication Retail Forum for sustainability, No 3

APPENDIXES

Appendix 1 – Questionnaire English version

Attitudes and purchase behavior towards eco-friendly products sold in your supermarket

Thank you for taking the time to complete this questionnaire. All the responses will be anonymous and only used for the purpose of our thesis. Please read all the questions carefully. This questionnaire is about **eco-friendly products** (which cause minimal or no harm to the environment) **that you can find in your supermarket**. By conventional products we mean products which are not eco-friendly. It will not take more than 5 minutes to fill these questions.

Section 1: Lifestyle measures

In the first section a number of questions are given about your consumption of eco-friendly products.

1. How often did you buy eco-friendly products in the last 3 months?

- Once a week or more often At least once a month Less than once a month

2. What type of eco-friendly products did you purchase in the last 3 months?

Listed below is a set of eco-friendly products that you can find in your supermarket. Using a scale from 1 to 5, with **5** being '*The most purchased*' and **1** being '*The less purchased*', please indicate the extent to which you purchased these products. Circle only one number for each question.

	The less purchased				The most purchased
Food	1	2	3	4	5
Health care/ cosmetic products	1	2	3	4	5
Cleaning products	1	2	3	4	5
Other household products (e.g: bulbs etc)	1	2	3	4	5

Section 2: Perception measures

Listed below is a set of factors that can be used to describe eco-friendly products. Using a scale from 1 to 5, with **5** being '*Strongly Agree*' and **1** being '*Strongly Disagree*', please indicate the extent to which you agree or disagree with these statements. Circle only one number for each question.

3. To what extent do you agree or disagree with the following statements about the eco-friendly products:

Eco-friendly products:	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
------------------------	-------------------	----------	-----------	-------	----------------

1. Are good for the environment	1	2	3	4	5
2. Are healthy	1	2	3	4	5
3. Have a good quality/performance	1	2	3	4	5
4. Have a better quality/performance than conventional products	1	2	3	4	5
5. Have a good taste and/or good smell	1	2	3	4	5
6. Have reasonable price	1	2	3	4	5
7. Are well promoted	1	2	3	4	5
8. Are accessible/available in the supermarket	1	2	3	4	5

Section 3: Attitude measures

4. To what extent do you agree or disagree with the following statements about the eco-friendly products.

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. I appreciate the package/design of eco-friendly product	1	2	3	4	5
2. I understand the information on eco-friendly packaging	1	2	3	4	5
3. I believe in the information on eco-friendly packaging	1	2	3	4	5
4. I am willing to pay a premium price for an eco-friendly product (e.g +10%)	1	2	3	4	5
5. I pay attention to eco-friendly advertising	1	2	3	4	5
6. I believe in the eco-friendly advertising	1	2	3	4	5
7. I know where the eco-friendly displays are located in my supermarket	1	2	3	4	5
8. I easily find eco-friendly products in a supermarket	1	2	3	4	5
9. I hear and I pay attention to my friends/family opinion concerning eco-friendly product	1	2	3	4	5
10. I recommend eco-friendly products to my friends/family	1	2	3	4	5

Section 4: Consumer intentions

Listed below is a set of statements about reasons to purchase eco-friendly products. Using a scale from 1 to 5, with 5 being '**Strongly Agree**' and 1 being '**Strongly Disagree**', please indicate the extent to which you agree or disagree with these statements. Circle only one number for each question.

5. Will you purchase eco-friendly products in the next month?

No, I will not 1 2 3 4 I definitely will 5

6. Why would you purchase ECO-FRIENDLY PRODUCTS? Because:

	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1. They give a good image of me	1	2	3	4	5
2. I want to preserve the earth	1	2	3	4	5
3. I just like eco-friendly products	1	2	3	4	5
4. I feel trendy/fashionable when I purchase eco-friendly products	1	2	3	4	5
5. If I do NOT purchase, people could judge me	1	2	3	4	5
6. I purchase eco-friendly products on unplanned decision in a supermarket	1	2	3	4	5
7. I was satisfied with most of eco-friendly products I bought	1	2	3	4	5

Section 5: Demographics

Please fill in the box that classifies you best.

7. Gender

Female Male

8. Your age:

- 18-24
- 25-34
- 35-44
- 45- 54
- >55

9. Nationality:

- Swedish
- Other

10. Status:

- Employed
- Unemployed
- Student
- Retired

11. Do you have an income?

- Yes
- No

12. If yes, which level?

- Low-income
- Middle-income
- High-income

Thank you for your cooperation! Magali & Francis 😊

Appendix 2 – Questionnaire Swedish version

Attyder och köp beteende mot miljövänliga produkter som säljs i din mataffär

Tack för att du tar dig tid att fylla i denna enkät. Alla svar kommer att vara anonyma och används endast för vår tes. Läs alla frågor noggrant. Denna enkät handlar om miljövänliga produkter (som orsakar minimal eller ingen skada på miljön) **som du kan hitta i din mataffär**. Med konventionella produkter menar vi produkter som inte är miljövänliga. Det tar endast 5 minuter att besvara dessa frågor.

Avsnitt 1: Livsstilsåtgärder

I det första avsnittet ges ett antal frågor om din konsumtion av miljövänliga produkter.

3. Hur ofta har du köpt miljövänliga produkter under **de senaste 3 månaderna?**

En gång i veckan eller oftare Minst en gång i månaden Mindre än en gång i månaden

4. Vilken **typ av miljövänliga produkter** har du köpt under **de senaste 3 månaderna?**

Nedan är en uppsättning miljövänliga. Med hjälp av en skala från 1 till 5, där **5 är 'Den mest köpta'** och **1 är 'Den minst köpta'**. Ange i vilken utsträckning du har köpt dessa produkter. Ringa endast in ett nummer för varje fråga.

	Den minst köpta				Den mest köpta
Mat	1	2	3	4	5
Hälso-och sjukvård/kosmetika produkter	1	2	3	4	5
Rengöringsmedel	1	2	3	4	5
Andra hushållsprodukter (t.ex. glödlampor etc)	1	2	3	4	5

Avsnitt 2: Påverkansfaktorer

Nedan är en uppsättning faktorer som kan användas för att beskriva miljövänliga produkter. Med hjälp av en skala från 1 till 5, där **5 är 'Instämmer helt'** och **1 är 'Instämmer inte alls'**. Ska du ange i vilken utsträckning du håller med eller inte håller med dessa uttalanden. Ringa endast in ett nummer för varje fråga.

3. I vilken utsträckning instämmer du i följande påståenden om **miljövänliga produkter**:

Miljövänliga produkter:	Instämmer inte alls	Instämmer inte	Vet ej	Instämmer	Instämmer helt
1. Är bra för miljön	1	2	3	4	5
2. Är hälsosamma	1	2	3	4	5
3. Har bra kvalitet/god prestanda	1	2	3	4	5
4. Har en bättre kvalitet/prestanda än konventionella produkter	1	2	3	4	5
5. Har en bra smak och/eller god doft	1	2	3	4	5
6. Har rimligt pris	1	2	3	4	5
7. Är väl marknadsförda	1	2	3	4	5
8. Finns i utbudet och är praktiskt tillgängliga i snabbköpet	1	2	3	4	5

Avsnitt 3: Attyder

4. I vilken utsträckning instämmer du i följande påståenden om miljövänliga produkter?

	Instämmer inte alls	Instämmer inte	Vet ej	Instämmer	Instämmer helt
1. Jag uppskattar förpackningen/utformningen av miljövänliga produkter	1	2	3	4	5
2. Jag förstår informationen på miljövänliga förpackningar	1	2	3	4	5
3. Jag tror på informationen på miljövänliga förpackningar	1	2	3	4	5
4. Jag är villig att betala ett högre pris för en miljövänlig produkt (t.ex. +10%)	1	2	3	4	5
5. Jag uppmärksammar på miljövänliga reklam	1	2	3	4	5
6. Jag tror på reklam för miljövänliga produkter	1	2	3	4	5
7. Jag vet var jag kan hitta miljövänliga produkter i affären	1	2	3	4	5
8. Jag tycker att det är miljövänliga produkter i affären	1	2	3	4	5
9. Jag lyssnar på vad vänner och familj tycker miljövänliga produkter	1	2	3	4	5
10. Jag rekommenderar miljövänliga produkter till mina vänner och familj	1	2	3	4	5

Avsnitt 4: Avsikter

Nedan är en uppsättning påståenden om skäl att köpa miljövänliga produkter. Med hjälp av en skala från 1 till 5, där 5 är '**Instämmer helt**' och 1 är '**Instämmer inte alls**'. Ska du ange i vilken utsträckning du håller med eller inte håller med dessa uttalanden. Ringa endast in ett nummer för varje fråga.

5. Kommer du att köpa miljövänliga produkter nästa månad?

Absolut inte
1 2 3 4 Ja definitivt
5

6. Varför skulle du köpa miljövänliga produkter?

	Instämmer inte alls	Instämmer inte	Vet ej	Instämmer	Instäm mer helt
1. De ger en bra bild av mig	1	2	3	4	5
2. Jag vill bevara jorden	1	2	3	4	5
3. Jag gillar miljövänliga produkter helt enkelt	1	2	3	4	5
4. Jag känner mig trendig när jag köper miljövänliga produkter	1	2	3	4	5
5. Om jag inte köper, kan folk döma mig	1	2	3	4	5
6. Jag köper miljövänliga	1	2	3	4	5

spontant i affären utan att ha planerat det					
7. Jag är nöjd med de flesta av miljövänliga produkter som jag köpt tidigare	1	2	3	4	5

Avsnitt 5: Demografi

Välj det alternativ som klassificerar bäst.

13. Kön

Kvinna Man

14. Din ålder

- 18 till 24
- 25 till 34
- 35 till 44
- 45 till 54
- >55

15. Nationalitet

- Svensk
- Annan

16. Status

- Arbetar
- Arbetslös
- Student
- Pensionerad

17. Har du en inkomst?

- Ja
- Nej

18. Om ja, vilken nivå?

- Låg inkomst
- Medelinkomst
- Hög inkomst

Tack för din medverkan! Magali och Francis 😊

Appendix 3 – Frequency tables

Gender					
Gender		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	98	56,3	56,3	56,3
	Male	76	43,7	43,7	100,0
	Total	174	100,0	100,0	

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24	66	37,9	37,9	37,9
	25-34	64	36,8	36,8	74,7
	35-44	25	14,4	14,4	89,1
	45-54	11	6,3	6,3	95,4
	>55	8	4,6	4,6	100,0
	Total	174	100,0	100,0	

Nationality		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Swedish	91	52,3	52,3	52,3
	Other	83	47,7	47,7	100,0
	Total	174	100,0	100,0	

Status		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed	67	38,5	38,5	38,5
	Unemployed	6	3,4	3,4	42,0
	Student	99	56,9	56,9	98,9
	Retired	2	1,1	1,1	100,0
	Total	174	100,0	100,0	

Appendix 4 - Crosstabulations

Gender * Nationality Crosstab					
			Nationality		Total
			Swedish	Other	
Gender	Female	Count	58	40	98
		% within Gender	59,2%	40,8%	100,0%
		% of Total	33,3%	23,0%	56,3%
	Male	Count	33	43	76
		% within Gender	43,4%	56,6%	100,0%
		% of Total	19,0%	24,7%	43,7%

Status * Nationality Crosstab					
			Nationality		Total
			Swedish	Other	
Status*	Employed	Count	58	9	67
		% within Status	86,6%	13,4%	100,0%
		% of Total	33,3%	5,2%	38,5%
	Student	Count	29	70	99
		% within Status	29,3%	70,7%	100,0%
		% of Total	16,7%	40,2%	56,9%

*We only keep “employed” and “students” as they represent the majority of our sample.

Income * Nationality Crosstab					
			Nationality		Total
			Swedish	Other	
Income	Yes	Count	84	30	114
		% within Income	73,7%	26,3%	100,0%
		% of Total	48,3%	17,2%	65,5%
	No	Count	7	53	60
		% within Income	11,7%	88,3%	100,0%
		% of Total	4,0%	30,5%	34,5%

Status * Income Crosstab					
			x7.5-- Income		Total
			Yes	No	
Status	Employed	Count	67	0	67
		% within Status	100,0%	0,0%	100,0%
		% of Total	38,5%	0,0%	38,5%
	Student	Count	44	55	99
		% within Status	44,4%	55,6%	100,0%

% of Total	25,3%	31,6%	56,9%
------------	-------	-------	-------

Status * Income Level Crosstab						
		x7.6-- Income Level			Total	
		Low income	Middle income	High income		
Status	Employed	<u>Count</u>	11	44	12	67
		<u>% within Status</u>	16,4%	65,7%	17,9%	100,0%
		<u>% of Total</u>	9,6%	38,6%	10,5%	58,8%
	Student	<u>Count</u>	29	15	0	44
		<u>% within Status</u>	65,9%	34,1%	0,0%	100,0%
		<u>% of Total</u>	25,4%	13,2%	0,0%	38,6%

*We only keep “employed” and “student”, as “unemployed” and “retired” people represent a minority of our sample.

Appendix 5 - Means comparison

Gender	Gender	Mean	Std. Deviation
Purchase Frequency of EF (eco-friendly) food	Female	4,33	1,101
	Male	3,78	1,302
Purchase Frequency of EF health/care cosmetics products	Female	2,60	1,306
	Male	1,91	1,180
Good for the environment	Female	4,41	,623
	Male	4,12	,816
I pay attention to EF advertising	Female	3,63	1,009
	Male	3,25	1,097
I recommend EF to friends/family	Female	3,65	1,046
	Male	3,24	1,165
Purchase intention of EF products	Female	4,10	1,030
	Male	3,70	1,255
I want to preserve the earth	Female	4,65	2,890
	Male	4,11	,842
I just like EF products	Female	3,63	,935
	Male	3,17	1,088
Healthy	Female	3,92	0,858
	Male	3,68	0,820
Good quality/performance	Male	3,78	0,780
	Female	3,55	0,755

Age		Mean	Std. Deviation
Reasonable price	18-24	2,59	1,081
	25-34	2,67	1,085
	35-44	3,44	,961
	45-54	3,45	,820
	>55	3,00	,926
	Total	2,82	1,086
Willingness to pay premium price 10%	18-24	3,18	1,189
	25-34	3,20	1,026
	35-44	3,52	1,005
	45-54	3,91	,701
	>55	4,13	,641

	Total	3,33	1,081
I pay attention to EF advertising	18-24	3,48	1,070
	25-34	3,20	1,115
	35-44	3,64	,995
	45-54	4,00	,775
	>55	4,13	,354
	Total	3,47	1,062
I know where EF displays in supermarket	18-24	3,09	1,237
	25-34	3,47	,992
	35-44	3,96	,978
	45-54	4,09	,539
	>55	3,25	1,165
	Total	3,43	1,119
Purchase intention of EF products	18-24	3,73	1,272
	25-34	3,83	1,189
	35-44	4,24	,831
	45-54	4,45	,522
	>55	4,63	,518
	Total	3,93	1,148

Nationality		Mean	Std.
			Deviation
Purchase frequency of EF food	Swedish	4,32	1,021
	Other	3,83	1,369
Purchase frequency of EF cleaning products	Swedish	2,92	1,327
	Other	2,23	1,203
Purchase frequency of EF other household products	Swedish	2,77	1,203
	Other	2,14	1,251
Good for the environment	Swedish	4,40	,697
	Other	4,16	,740
Reasonable price	Swedish	3,10	1,012
	Other	2,51	1,086
I believe in the information on EF package	Swedish	3,82	,877
	Other	3,45	,914
Willingness to pay premium price 10%	Swedish	3,64	,983
	Other	2,99	1,088
I pay attention to EF advertising	Swedish	3,76	,993
	Other	3,14	1,049
I believe in the EF advertising	Swedish	3,71	,934
	Other	3,17	1,034
I know where EF displays in supermarket	Swedish	3,69	1,102
	Other	3,13	1,068

I easily find EF prod in supermarket	Swedish	3,65	,970
	Other	3,27	1,094
I hear/pay attention to friends/family opinion about EF	Swedish	3,79	,995
	Other	3,27	1,190
I recommend EF to friends/family	Swedish	3,87	1,013
	Other	3,04	1,064
Purchase intention of EF products	Swedish	4,42	,761
	Other	3,39	1,257
Give a good image of me	Swedish	2,96	1,192
	Other	2,61	1,034
I want to preserve the earth	Swedish	4,45	,671
	Other	4,02	,883
I just like EF products	Swedish	3,69	1,040
	Other	3,14	,939
I was satisfied with most of EF products bought	Swedish	4,05	,794
	Other	3,55	1,027

Income		Mean	Std. Deviation
Purchase frequency of EF food	Yes	4,29	1,111
	No	3,70	1,331
Good for the environment	Yes	4,38	,657
	No	4,10	,817
Good quality/Performance	Yes	3,78	,784
	No	3,48	,725
Reasonable price	Yes	2,95	1,104
	No	2,57	1,015
I understand information on EF package	Yes	4,10	,665
	No	3,82	,892
Willingness to pay premium price 10%	Yes	3,50	1,015
	No	3,00	1,135
I believe in the EF advertising	Yes	3,57	,977
	No	3,23	1,064
I know where EF displays in supermarket	Yes	3,56	1,105
	No	3,17	1,107
I hear/pay attention to friends/family opinion about EF	Yes	3,74	,996
	No	3,17	1,251
I recommend EF to friends/family	Yes	3,67	,984
	No	3,10	1,258
Purchase intention	Yes	4,25	0,850

	No	3,30	1,339
I want to preserve the earth	Yes	4,61	2,689
	No	4,05	,891
I just like EF products	Yes	3,54	1,049
	No	3,22	,958
Purchase of EF products on unplanned decision	Yes	3,74	1,031
	No	3,37	1,207
I was satisfied with most of EF products bought	Yes	3,98	,798
	No	3,50	1,112

Appendix 6 - Independent and paired samples T-test

Gender

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Purchase frequency of EF food	Equal variances assumed	4,691	,032	3,018	172	,003	,550	,182	,190	,910
	Equal variances not assumed			2,955	146,394	,004	,550	,186	,182	,918
Purchase frequency of EF healthcare/cosmetics products	Equal variances assumed	4,889	,028	3,626	172	,000	,694	,191	,316	1,072
	Equal variances not assumed			3,673	167,996	,000	,694	,189	,321	1,067
Good for the environment	Equal variances assumed	,327	,568	2,656	172	,009	,290	,109	,074	,505
	Equal variances not assumed			2,569	136,593	,011	,290	,113	,067	,513
I pay attention to EF advertising	Equal variances assumed	2,086	,150	2,388	172	,018	,383	,160	,066	,699
	Equal variances not assumed			2,363	154,344	,019	,383	,162	,063	,703

I recommend EF to friends/family	Equal variances assumed	1,353	,246	2,477	172	,014	,416	,168	,084	,748
	Equal variances not assumed			2,443	152,177	,016	,416	,170	,080	,753
Purchase intention of EF products	Equal variances assumed	6,672	,011	2,336	172	,021	,405	,173	,063	,747
	Equal variances not assumed			2,279	143,607	,024	,405	,178	,054	,756
I want to preserve the earth	Equal variances assumed	1,180	,279	2,064	172	,041	,252	,122	,011	,493
	Equal variances not assumed			2,038	153,008	,043	,252	,124	,008	,496
I just like EF products	Equal variances assumed	1,481	,225	3,006	172	,003	,462	,154	,159	,765
	Equal variances not assumed			2,949	147,969	,004	,462	,157	,152	,771
Healthy	Equal variances assumed	,409	,524	1,821	172	,070	,234	,129	-,020	,488
	Equal variances not assumed			1,831	164,628	,069	,234	,128	-,018	,487
Good quality/Performance	Equal variances assumed	,225	,636	1,895	172	,060	,223	,118	-,009	,455
	Equal variances not assumed			1,903	163,778	,059	,223	,117	-,008	,454

Nationality

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Purchase frequency of EF food	Equal variances assumed	10,959	,001	2,677	172	,008	,487	,182	,128	,847
	Equal variances not assumed			2,642	150,899	,009	,487	,184	,123	,852
Purchase frequency of EF cleaning products	Equal variances assumed	,366	,546	3,603	172	,000	,694	,193	,314	1,074
	Equal variances not assumed			3,619	171,995	,000	,694	,192	,316	1,073
Purchase frequency of EF other household products	Equal variances assumed	,463	,497	3,358	172	,001	,625	,186	,257	,992
	Equal variances not assumed			3,351	169,068	,001	,625	,186	,257	,993
Good for the environment	Equal variances assumed	,210	,647	2,192	172	,030	,239	,109	,024	,454
	Equal variances not assumed			2,186	168,095	,030	,239	,109	,023	,455
Reasonable price	Equal variances assumed	,797	,373	3,728	172	,000	,593	,159	,279	,907

	Equal variances not assumed			3,716	167,534	,000	,593	,160	,278	,908
I believe in the information on EF package	Equal variances assumed	,568	,452	2,786	172	,006	,378	,136	,110	,646
	Equal variances not assumed			2,781	168,964	,006	,378	,136	,110	,647
Willingness to pay premium price 10%	Equal variances assumed	,733	,393	4,137	172	,000	,649	,157	,340	,959
	Equal variances not assumed			4,117	165,861	,000	,649	,158	,338	,961
I pay attention to EF advertising	Equal variances assumed	4,538	,035	3,964	172	,000	,614	,155	,308	,919
	Equal variances not assumed			3,954	168,326	,000	,614	,155	,307	,920
I believe in the EF advertising	Equal variances assumed	1,365	,244	3,657	172	,000	,546	,149	,251	,840
	Equal variances not assumed			3,640	165,834	,000	,546	,150	,250	,842
I know where EF displays in supermarket	Equal variances assumed	,535	,466	3,395	172	,001	,560	,165	,234	,885
	Equal variances not assumed			3,400	171,364	,001	,560	,165	,235	,885
I easily find EF prod in supermarket	Equal variances assumed	3,116	,079	2,449	172	,015	,383	,157	,074	,692

	Equal variances not assumed			2,435	164,649	,016	,383	,157	,073	,694
I hear/pay attention to friends/family opinion about EF	Equal variances assumed	6,437	,012	3,174	172	,002	,526	,166	,199	,853
	Equal variances not assumed			3,148	160,424	,002	,526	,167	,196	,856
I recommend EF to friends/family	Equal variances assumed	,279	,598	5,281	172	,000	,832	,158	,521	1,143
	Equal variances not assumed			5,269	168,624	,000	,832	,158	,520	1,144
Purchase intention of EF products	Equal variances assumed	25,926	,000	6,614	172	,000	1,032	,156	,724	1,340
	Equal variances not assumed			6,473	132,475	,000	1,032	,159	,717	1,347
Give a good image of me	Equal variances assumed	1,678	,197	2,011	172	,046	,342	,170	,006	,677
	Equal variances not assumed			2,024	171,583	,045	,342	,169	,008	,675
I want to preserve the earth	Equal variances assumed	,002	,969	3,605	172	,000	,426	,118	,193	,660
	Equal variances not assumed			3,561	152,559	,000	,426	,120	,190	,663
I just like EF products	Equal variances assumed	,467	,495	3,634	172	,000	,548	,151	,250	,845

	Equal variances not assumed			3,651	171,983	,000	,548	,150	,252	,844
I was satisfied with most of EF products bought	Equal variances assumed	12,171	,001	3,615	172	,000	,501	,139	,227	,774
	Equal variances not assumed			3,573	154,042	,000	,501	,140	,224	,778

Income

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Purchase frequency of EF food	Equal variances assumed	5,023	,026	3,103	172	,002	,589	,190	,214	,964
	Equal variances not assumed			2,934	102,935	,004	,589	,201	,191	,988
Good for the environment	Equal variances assumed	,938	,334	2,427	172	,016	,277	,114	,052	,503
	Equal variances not assumed			2,270	99,937	,025	,277	,122	,035	,520
Good quality/Performance	Equal variances assumed	,026	,873	2,439	172	,016	,297	,122	,057	,538

	Equal variances not assumed			2,500	128,650	,014	,297	,119	,062	,533
Reasonable price	Equal variances assumed	,381	,538	2,222	172	,028	,381	,171	,043	,719
	Equal variances not assumed			2,281	129,224	,024	,381	,167	,051	,711
I understand information on EF package	Equal variances assumed	6,001	,015	2,337	172	,021	,280	,120	,044	,516
	Equal variances not assumed			2,137	94,299	,035	,280	,131	,020	,540
Willingness to pay premium price 10%	Equal variances assumed	,185	,668	2,963	172	,003	,500	,169	,167	,833
	Equal variances not assumed			2,862	109,071	,005	,500	,175	,154	,846
I believe in the EF advertising	Equal variances assumed	,945	,332	2,096	172	,038	,337	,161	,020	,654
	Equal variances not assumed			2,041	111,594	,044	,337	,165	,010	,664
I know where EF displays in supermarket	Equal variances assumed	,331	,566	2,238	172	,027	,395	,176	,047	,743
	Equal variances not assumed			2,237	119,904	,027	,395	,176	,045	,744
I recommend EF to friends/family	Equal variances assumed	4,471	,036	3,273	172	,001	,567	,173	,225	,908

	Equal variances not assumed			3,035	97,781	,003	,567	,187	,196	,937
Purchase intention of EF products	Equal variances assumed	29,282	,000	5,660	172	,000	,954	,169	,622	1,287
	Equal variances not assumed			4,923	83,563	,000	,954	,194	,569	1,340
I want to preserve the earth	Equal variances assumed	,013	,910	2,372	172	,019	,301	,127	,050	,551
	Equal variances not assumed			2,240	102,605	,027	,301	,134	,034	,567
I just like EF products	Equal variances assumed	,955	,330	2,014	172	,046	,327	,162	,007	,648
	Equal variances not assumed			2,071	129,876	,040	,327	,158	,015	,640
Purchase of EF products on unplanned decision	Equal variances assumed	5,095	,025	2,121	172	,035	,370	,175	,026	,715
	Equal variances not assumed			2,020	104,942	,046	,370	,183	,007	,734
I was satisfied with most of EF products bought	Equal variances assumed	17,647	,000	3,295	172	,001	,482	,146	,193	,771
	Equal variances not assumed			2,980	91,780	,004	,482	,162	,161	,804

Paired Sample T test

Paired Samples Statistics			
		Mean	Std. deviation
Pair 1	Good quality/Performance	3,68	,775
	Better quality/performance than conventional ones	3,39	,916

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error	95 per cent Confidence Interval of the Difference				
					Inférieure	Supérieure			
Pair 1	Good quality/Performance Better quality/performance than conventional ones	,293	,805	,061	,173	,414	4,804	173	,000

Appendix 7 - ANOVA

ANOVA - Age

ANOVA						
AGE		Sum of Squares	df	Mean Square	F	Sig.
Reasonable price	Between Groups	19,164	4	4,791	4,378	,002
	Within Groups	184,951	169	1,094		
	Total	204,115	173			
Willingness to pay premium price 10%	Between Groups	12,126	4	3,031	2,694	,033
	Within Groups	190,202	169	1,125		
	Total	202,328	173			
I pay attention to EF advertising	Between Groups	11,814	4	2,953	2,720	,031
	Within Groups	183,479	169	1,086		
	Total	195,293	173			
I know where EF displays in supermarket	Between Groups	19,768	4	4,942	4,245	,003
	Within Groups	196,761	169	1,164		
	Total	216,529	173			
Purchase intention of EF product	Between Groups	12,666	4	3,167	2,485	,046
	Within Groups	215,363	169	1,274		
	Total	228,029	173			

Multi comparison					
Tahame Dependent Variable	(I) x7.2-- Age	(J) x7.2-- Age	Mean Difference (I-J)	Std. Error	Sig.
Reasonable price	35-44	18-24	,849*	,234	,007
		25-34	,768*	,235	,020
Willingness to pay premium price 10%	>55	18-24	,943*	,270	,036
		25-34	,922*	,260	,040
I pay attention to EF Advertising	>55	18-24	,640*	,182	,015
		25-34	,922*	,187	,000
I know where EF displays in supermarket	35-44	18-24	,869*	,248	,009
	45-54	18-24	1,000*	,223	,001
Purchase intention of EF products	45-54	18-24	,727*	,222	,024
	>55	18-24	,898*	,241	,013
		25-34	,797*	,236	,032

Sig:p<0,05

ANOVA – Status

Descriptive statistics

		Mean	Std. Deviation
Willingness to pay premium price 10%	Employed	3,55	,942
	Unemployed	3,00	1,673
	Student	3,17	1,107
	Retired	4,50	,707
	Total	3,33	1,081
I was satisfied with most of EF products bought	Employed	4,00	,798
	Unemployed	2,83	1,472
	Student	3,74	,965
	Retired	4,50	,707
	Total	3,82	,944

ANOVA						
		Sum of Squares	df	Mean Square	F	Sig.
Willingness to pay premium price 10%	Between Groups	9,180	3	3,060	2,693	,048
	Within Groups	193,148	170	1,136		
	Total	202,328	173			
I was satisfied with most of EF products bought	Between Groups	9,610	3	3,203	3,768	,012
	Within Groups	144,505	170	,850		
	Total	154,115	173			

Multiple comparisons

Tahame

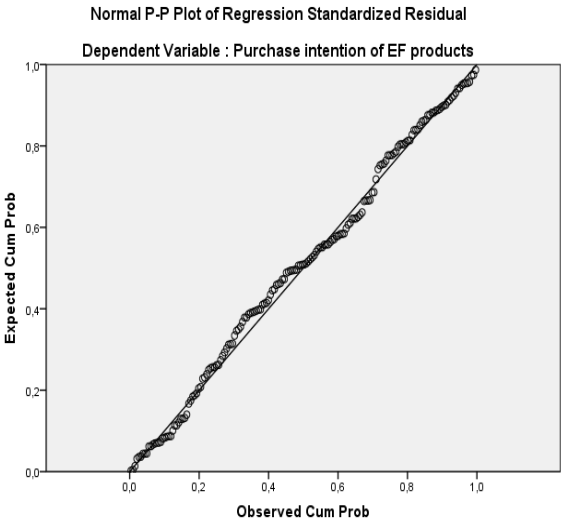
Dependent Variable	(I) Status	(J) Status	Mean Difference (I-J)	Standard Error	Sig.
Willingness to pay premium price 10%	Employed	Unemployed	,552	,693	,975
		Student	,381	,160	,107
		Retired	-,948	,513	,879
		Student	1,328	,512	,767
Sig. p<0.05					

Appendix 8 - Correlations

Combination of items (green products)	Pearson Coefficient*
“Healthy” + “Good for the environment”	0.414
“Good quality” + “Better quality”	0.558
“Good quality” + “Good taste”	0.399
“Believe in”+ “Understand” eco-friendly packaging	0.408
“Reasonable price” + “Willingness to pay”	0.347
“Believe in” /”Attention to eco-friendly advertising”	0.579
“Find easily green product” + “accessible in my supermarket”	0.516
“Find easily” + “know where green products are in my supermarket”	0.511
“Recommend to friends” + “Pay attention green advertising”	0.526
“Recommend to friends” + “Believe green advertising”	0.457
“Recommend to friends” + “pay attention to their opinion for green products”	0.604
“I want to preserve the earth” + Purchase intention	0.439
“I feel trendy...” + “Green product give a good image of me”	0.484
“Green product give a good image of me” + “If I do not purchase green product people could judge me”	0.328
“I feel trendy...” + “If I do not purchase green product people could judge me”	0.521
“Purchase on unplanned decision” + “I know where green products are in my supermarket” (sig.= 0.585)	0.042
“I was satisfied with most of green products I bought” + “Good for the environment”	0.321
“I was satisfied with most of green products I bought”+ “Good quality”	0.337
“I was satisfied with most of green products I bought”+ “Good taste and/or smell”	0.323

* Significance for all variables sig= 0.000

Appendix 9 – Multiple Regression - Normal P-Plot





Umeå School of Business
Umeå University
SE-901 87 Umeå, Sweden
www.usbe.umu.se