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According to Swedish citizens

- Sweden has the Safest and Best Food in the World

-Really?

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Thesis, Advanced level (Master degree), 15hp
Business and Administration

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ABSTRACT

Title: According to Swedish Citizens – Sweden has the Safest and Best food in the world – Really?
Level: Thesis for Master's Degree in Business Administration
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Aim: The aim of this thesis is to fill the research gap on whether there are differences in how Swedish consumers remember publicized scandals in regards to the Country of Origin (COO), focusing on age, gender and time. Furthermore, this paper will also aim to look at how different scandals have affected the consumers trust based on whether foreign food scandals have a higher impact.

Methodology: Since this thesis tested different relationships a deductive approach was taken with a conclusive research design. Quantitative data was collected via a VAS-scale questionnaire to 187 individuals via random sampling at train stations which had a response rate of 75,9%. By using SPSS, the primary data was analyzed via a Correlation and Factor analysis in accordance with scientific articles from within the fields of Purchasing Decision theory, the COO and Consumer Memory. A semi-open telephone interview with an expert from within the food industry was conducted as additional explanations to the findings were needed.

Result & Conclusions: It was found that Swedish consumers remembered scandals differently depending on origin, and were according to themselves more affected by the foreign scandals. Gender did not have a preference depending on the COO of the product and consumer memory while age did. It was also found that *trusting* food was the essential theme throughout the empirical findings where the Swedish consumers valued cues such as food quality and food safety. This played a significant role on impacting the consumer's long-term memory. Three different types of trust was found and divided by their characteristics; High-level-involvement products, the COO of the product or the company which the scandal was involved with, and finally, the size, positioning and equity of the brand involved.

Business implications: Media can be seen as a key source of spreading negative publicity regarding scandals. It is therefore extra important for companies to act

immediately, especially if they have any of the three characteristics of trust since it influences the consumer's long-term memory in a negative way. These three characteristics combined could have strong more negative impact on the companies, where there is a risk of losing potential & current business partners, decreased brand equity & image and risk of facing legal aspects. This can be very costly both financially and time-wise which ultimately could lead to a negative turnover.

Research Implications: future research is suggested to study why the results in this thesis differ from the other scientific findings when it comes to gender. Also suggested is that studies should be conducted similar to this, but based on specific types of food products since this thesis only studied food in general. Furthermore, studies comparing the effect of the consumer memory in regards to food scandals based on different companies are also suggested.

Key words: Country of Origin, Scandals, Memory, Trust, Purchasing behavior.

Foreword

First and foremost, we would like to thank our supervisor the University of Gävle - Jonas Kågström, for his tremendous knowledge, enthusiasm, dedication and patience. Without your fantastic support we would never had been able to complete our thesis in the way we did. We are uttermost grateful to have had the privilege to have you as our supervisor since we have learnt so much along the way.

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Benny Berggren and Mai Nasser Fouda,
May, 2013, Gävle, Sweden

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Abbreviations

CA - Cronbach's Alpha

CFA - Confirmatory Factor Analysis

CI - Confidence Interval

COO - Country of Origin

COOE - Country of Origin Effect

i.e. – that is

EFA - Exploratory Factor Analysis

EU - European Union

KMO - Kaiser-Mayer-Olkin

MLA - Maximum Likelihood Analysis

PCC - Pearson's Correlation Coefficient

SPSS - Statistical Package for the Social Sciences

TV - Television

VAS - Visual Analog Scale

WOM - Word-of-Mouth

1. Introduction

This chapter first presents the background to this thesis. We then proceed to discuss the problem, followed by the purpose of this study. Finally this chapter concludes by discussing the limitations this thesis.

1.1 Background

Along with the air we breathe, food is one of the most fundamental basic needs of life for us to exist. Humans eat a great variety of food including; meat, fish, vegetables, corn, pasta, potatoes etc. Of course, there are different preferences in tastes for various reasons. These reasons could have to do with factors such as; allergies, health, moral issues and religion. This makes it important to keep the food labeled on packaging clear, so that the customer will know what (s)he is going to get when making purchases at the supermarket.

Before the consumers purchase a product, they evaluate it. The consumers evaluate things like the attributes of the brand, what needs the product or service fulfills and which brand does the customer want to choose. The basic decision making process is as follows;

Analyzing → Evaluating → Selecting → Implementing in Purchase

(May-Plumlee& Little, 2006, pp. 58-59)

This process also applies to services and not just products. But from here on; only food products are discussed in this report. As for preferences and purchasing decisions, there are at least two other contributing factors to this process. When the customer is deciding on what to purchase, the origin of the product can be a crucial factor in the decision making process. Some products are being perceived as better as or more attractive than equal products. This could have to do with factors such as brand image, or the origin of the product. A wristwatch manufactured in Switzerland, sold to the same price as a similar wristwatch being manufactured in Mongolia, might be perceived as superior and more attractive to buy compared to the Mongolian wristwatch. According to a recent Swedish attitude survey;

Swedish consumers aged 20-69, favored Swedish food products and had a more negative attitude towards foreign breeders and food products (Bergström, 2012). This means the country of origin of the meat is an important cue for consumers who are purchasing the meat.

Due to the ever growing internationalization, globalization and technological progresses, an increase in competition from foreign companies is stronger than ever when it comes to producing cheap products. A lot of companies compete with the price and/or in the quality of the products. Due to the fierce competition within the meat industry, a snowballing productivity has resulted in producers increasing the number of animals in their facilities, without changing the facility itself (Chaaban, 2009).

In January 2013, media across Europe uncovered a large meat scandal which affected the European meat companies severely. Meat was being exported from Romania to various companies around Europe, and was being labeled as 100 per cent beef only. However, British authorities discovered traces of horse DNA in some of the food products. This led to a further investigation which discovered; up to 100 per cent of the actual meat was horse meat and not beef as labeled. However, it was not just England who had been affected. Many of the European countries were affected as well. (BBC, 2013)

The horse meat itself is not dangerous for consumers to eat, but for some people, eating horsemeat might be considered as a taboo. This is to be classified as an outright scandal (Ohlsson, 2011). Also there is a risk, if the proceedings are not followed according to the regulations when slaughtering the horses, that the meat might get contaminated with hazardous substances such as Phenylbutazone. The side-effects of this can in worst cases lead to, kidney damage, oral lesions, and internal hemorrhage (Slv, 2013). Companies around Europe who were affected by this scandal have had to withdraw all their products from the shelves in the supermarkets (BBC, 2013).

According to a recent article written by Chaaban (2009); since social media are reporting every move, thought or word, it should be considered to act with great care for the companies. Scandals about

specific brands and products can easily spread and reach large groups of people. Due to this, it is never to be perceived as an advantage, neither for the brand nor the customer (Chaaban, 2009). Due to all the reporting from media about the horse meat scandal, the damage done was now a fact. According to journalist Kristina Thulin on Swedish TV 4 morning news, broadcasted on March 7, 2013, meat sales have dropped by 8 per cent during the last month in Sweden. (Thulin, 2013)

It is evident that the consumers' decision has been greatly affected when purchasing meat in a negative way, especially if the meat was domestically produced or has been produced outside of Sweden. It would be interesting to see if the damage is permanent, or if customers will forget about the scandal over time no matter of the origin?

Consumer memory is also an essential factor when it comes to deciding what to buy and what not to buy. Depending on whether the person has perceived a product being advertised as either positive or negative, that person will get favorable or negative associations towards that advertisement or brand. The same process can be applied on scandals. (Praxmarer & Gierl, 2009, p. 507) Our memory is an active crucial process where the information is acquired, stored and then later used for the decision-making. It plays a very crucial role in the choices of the consumer. Product related sources such as Word-of-Mouth (WOM), advertising and stimuli are greatly dependent on the information which is built up in the consumer's memory towards a specific product. (Bettman, 1979, p. 37)

But memories tend to vanish over time. According to a statement made by Elisabeth Qvarford, who works with market communications at Svenskt Kött; Consumers tend to forget about food scandals within a month after the last broadcast (TV 4 News, 2013). Another similar article about Consumer Memory and scandals supports Qvarford's statements by discussing how the media a few years back reported, about findings of acrylamide in potato chips sold at the supermarkets. But despite sales dropping, this was just a temporary effect, soon after sales were back to normal. (Ljung, 2013)

1.2 Problem

In mid to late 1990's, the foreign Belgian Blue bull species was introduced to the Swedish meat market when a farmer tried to import it. However it was hit with a huge controversy since the bull was genetically manipulated and modified by certain steroids. This manipulation was done solely with the purpose to grow smaller inner organs to grow faster with more meat per bull for the companies. As for the quality of the meat compared to the meat from steroid free bull, there were no differences. However, the media reported frequently on how Belgian Blue was morally wrong to eat as it was something that was genetically manipulated and stated that we the people did not know the side effects of eating meat like this. It was one thing that the bull was allowed in other countries around Europe, but the general opinion in Sweden was that this kind of meat was not wanted. Due to this, importing of this species was forbidden by Swedish authorities. Then, in 1999, EU supreme-court rendered Sweden for breach of EU legislation for banning breeding Belgian Blue in Sweden. This made it inevitable for the Belgian Blue to be imported into Sweden. Soon after the EU Supreme-court's ruling, the Belgian blue was discretely introduced to the Swedish market. In 2006, it was estimated that between 500 and 1000 calves annually were born with genes from the Belgian Blue. (Svd, 2006)

There is reason to believe that the risk of getting sick or dying from food poisoning has decreased today than in earlier years. This is because there is more control and regulation when it comes to food products today. However, with health threats related to food being in the spotlight, the risk could still be seen as great today. In a Swedish survey from 1988 up to 60% said that risk related to food was higher today than twenty years ago (Berg, 2004). Despite strict regulations and the previous scandals, there still exist health-threats regarding food products in the market which unfortunately increases by time.

According to Krisztina Dörnyei and Gyulavári (2012), where they quoted authors Lehota (2001), Hofmeister (2007) and Simon (2009); claimed that the consumers' perspectives and attitudes towards food safety can vary widely. Some consumers are relaxed and confident

while other consumers are worried and tense. However, despite the existence of the relaxed consumers, food scandals should still be avoided. Scandals such as the Mad Cow Disease, which occurred in England, caused the consumers' trust to be shattered. (Dörnyei & Gyulavári, 2012, p. 3)

The consumers who are exposed to advertising, translated these messages according to their own associations, or by reflecting on previous experiences or imaginations (Calder & Strenthal, 1980 p. 173). According to Keller (1993), from the consumer's point of view, the brands are the associations about a specific object which is held in the person's memory. In other words, the knowledge of a brand is created from pieces of information which is collected by the consumer (1993, p. 5). In the basic process sequence of information uptake; information passes from the sensory organs to the appropriate sensory store which is anticipated to be short lived. In other words, the information ~~of~~ which the consumer receives is shortly lived and soon forgotten unless it is brought back to attention (Bettman, 1979 p. 37).

As late as 2010, columnist for Swedish newspaper Sanna Lundell mentioned the Belgian Blue once in a column she wrote (Lundell, 2010). On the discussion forum Flashback.org, conversations were still going about Belgian Blue (Flashback, 2011). Since this is a frequently visited forum, with over 750.000 registered members ~~with~~ which has a great variety of topics to discuss, we typed in the words "*Belgian+Blue*" in their search engine and got 324 hits for this topic dating back to 2011 (Flashback, 2013). Since the Belgian Blue figured in media back in 2000, it seems to us that the memory of this foreign monster bull never seems to vanish from the Swedish people's minds. Since all countries have different production standards, USA for example has their standards, Sweden has their standards. This is why the information about the Country of Origin (COO) can be perceived as a very effective way for the buyers to differentiate the standard of the products when deciding what to buy.

Of course consumers have other dimensions when they put judgment on a product. The quality of the product is a deciding factor when the customer is considering purchasing the product. The quality

cannot be decided solely by a customer, this means that the consumer is relying on information from a third party, such as authorities or the producers. The quality factor is an essential thing when the consumer is deciding whether to buy or not. (Hoffman, 2000, pp. 211-212)

This brings us to the problems/questions raised for this thesis.

- Could this mean that the consumer memory varies depending on the origin of the scandal?
- Since earlier studies indicated differences in gender and age which could be linked to the COO, would this suggest that these are additional factors to take into consideration, when a research is conducted in regards of the consumer memory based on the COO?
- Could it also be that that Swedish consumers' tend to remember scandals from other countries better than scandals of domestically produced products due to the COO?
- Are Swedish consumers biased toward the food produced in Sweden? If so, we believe this could have a long-term effect on companies importing certain food after being involved in a scandal related to the food, which we believe could affect their turnover and decrease their competitive advantage.

1.3 Purpose & Aim

The purpose of this study is to determine whether there are differences to how Swedish consumers remember publicized scandals regarding the country of origin, focusing on age, gender and time. For example, do females remember foreign scandals more vividly than men?

Also, this study takes a look at the level of impact which the scandals have had on the consumers' trust from a theoretical standpoint. Do the scandals from foreign produced food companies have a higher impact on the Swedish consumer purchasing behavior, than food scandals from where the food as produced in Sweden? Meaning, the aim of this thesis is to find out if the levels of trust depend on the Country of Origin of the scandal?

Another question that we answered is whether age and gender have an influence on how much the consumers felt they had been affected?

Furthermore, this thesis also tries to answer the question of whether Swedish consumers are sensitive and thus affected by the Country of Origin Effect when purchasing food.

Some of these arguments are backed-up in earlier studies by Hoffman (2000). He came to the conclusion that Swedish people in general are affected by the Country of Origin effect when buying fresh meat. Furthermore, in that study, it was shown that when men evaluated the safety and the quality of the meat, they used the COO as an indicator of quality to a lesser degree than women. (2000, p. 225)

1.4 Limitations

As mentioned above, this study only focuses on how Swedish customers perceive and remember scandals concerning imported food, compared to how they perceive and remember scandals which are domestically produced. This study therefore does not include any empirical interviews with food companies. Only one expert was interviewed in regards to consumer memory. The questions that the expert answered are both of quantitative and qualitative nature. Focus is mainly from the Swedish consumers' perspective. The consumers were asked to participate in a semi open questionnaire via random structured sampling.

The opinions and memories of people living in other countries are not taken into consideration. Nor has research been conducted or speculated on regarding this topic. This thesis generalized specifically on food products involved in scandals not any specific genre of food such as seafood.

This study also generalized on how Swedish consumers perceive food in regards to Sweden versus other countries. No regards have been taken to perceptions of specific countries. The questionnaire was not aimed towards any specific target group (population) within Sweden other than the general public aged 18 and up, due to food being consumed by all. It might be hinted in this study that factors

other than age and gender may play a part in how consumers perceive products from different countries. Those factors will not be brought up for discussion.

We will not take into consideration for discussion, whether or not gender plays a part concerning the customers' frequency of purchasing food products for the household. To just include a single study might be insufficient when drawing the final conclusions. A more global perspective and how companies can take leverage from this is the perceived outcome.

Since our analysis includes both a factor and correlation analysis where we have many variables, there are too many variables to discuss. Therefore we chose to only discuss the most important ones with which we could draw linkage to the aim of this thesis. Throughout this thesis, the words consumer, customer, and people are mentioned, these words are used synonyms to each other.

1.4.1 Target group

The target group of this study is for people who are in the field of marketing and students who are studying their Masters' degree in Business and Administration (MBA). Therefore, we expect the reader to be familiar with certain terminology, theories regarding marketing and consumer behavior. This means that at times throughout this report, no deeper explanation regarding names and terminology, other than the Purchasing decision, Country of Origin and the Consumer Memory theories are given.

1.5 Our Assumptions & Pre-understanding

Our main pre-understanding was that scandals receive different coverage in media, and no scandal is identical to the other scandal. This makes it difficult to compare and measure one scandal to another, because scandals can impact on people differently.

Furthermore, we also believed that Swedish customers partly base their purchasing decisions with help from their memory of the earlier food scandals. However, we also believe that generally speaking, consumers remember scandals differently based on the origin of the food.

In regards to this, we also believed that females are more cautious of purchasing food from other countries than men and have a better remembrance of earlier food scandals. We also believe that age plays a part where the younger generation is more laid back and do not remember scandals to the same extent as older people.

2. Theoretical Framework

The first part of this chapter presents earlier research and how we searched scientific articles and journals for Purchasing Decision theory, Country of Origin Effect and Consumer Memory. The second part takes a deeper look into these theories where we use the main authors' literature and models along with supporting articles. Some of the main authors we found were Kotler and Keller, Lin and Chen for Purchasing Decision Theory. Bilkey, Nes and Hoffman were some of the main authors of the COO. Hoyer and MacInns are the main authors in the Consumer Memory theories.

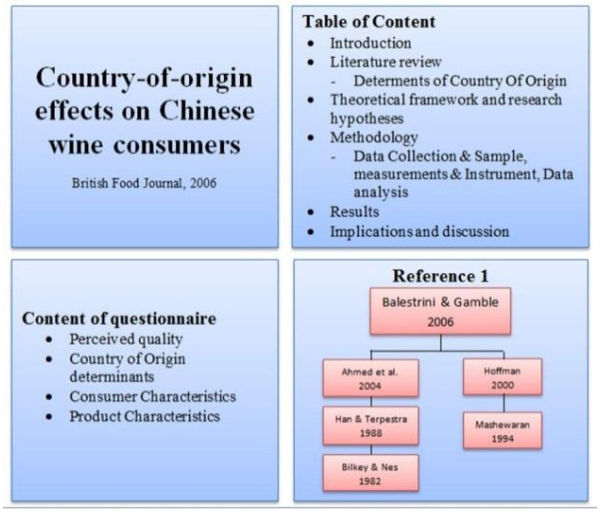
Since there is a lack of articles and journals which link together purchasing decision theories, the Country of Origin Effect (COOE) and Consumer Memory, it appears this area of research is one of the first of its kind. Because of this we had to search for each theory separately and then try to link them all together. At certain points we had to make assumptions in order to link between these theories in order to answer our research problems/questions.

Data and information has been collected using key authors: Kotler and Keller, Lin and Chen concerning Consumer Purchasing decision theories. This literature was collected from journals through the Emerald database. The total number of journals found under the chosen subject of "Consumer purchasing decision" was 11360 hits. However, we narrowed it down to the most applicable journal according to our work. In these findings we found the previous mentioned key authors of this theory. Since the Country of Origin can be a part of a consumers' purchasing decision, this naturally led us toward the next theory.

The concept of the COOE took off in the 1960's when Schooler (1965) and Dichter (1962, p. 116), pioneers within the field conducted research on products regarding the importance of the COO. After their studies, throughout the years, hundreds of similar researches and studies have been conducted regarding the importance of the role a certain country plays for a product when being sold. When we searched for suitable and applicable journals and articles of the

country of origin effect, we typed in the words "Country of Origin effect" on March 2nd 2013, on sites like Google scholar and the emerald database. We got over 276.000 hits regarding the matter on Google scholar, and 3826 hits on the Emerald site. Since there were so many hits on the respective search engines, this needed to be narrowed down in order to give this report causal density. We did this by summarizing the articles we had read by constructing power-point-slides. The following figure exemplifies how we summarized the articles and journals. In order to see the full size, please go to the appendix section.

Figure 1: Summarized Power-Point-Presentation of the available literature



(Source: Authors)

This gave us greater assurance to find the main authors of the field. We also did a check up on the references in order to get better knowledge from other authors. The majority of researches from the COOE were about consumers' decisions when purchasing products and services.

The majority of recently published journals regarding purchasing decision and COO articles, focused mostly on people's willingness to pay extra for having a preferred product from a particular country. Also, brand equity was another frequently used topic we encountered. Authors Hu, Li, Xie & Zhou (2008) and Balestrini & Gamble (2006) conducted research about Chinese customers' behavior when purchasing wine based on the COO and brand equity. Kaynak and

Kara (2002) focused their research on attitudes and perceptions of foreign products, depending on what country the product came from by using a Likert scale questionnaire. Khan and Bamber (2007) also used a Likert scale type questionnaire to conduct research. But they wrote about market entry and the importance of COO. They identified four components when consumers value a product, one of them being the image of the Country of Origin.

In recent studies regarding the Country of Origin, purchasing decision and food, Umberger, Dillon, Feuz, Calkins and Sitz (2003) discuss how labeling affects the consumer perceptions, when deciding what product to buy and to what price. Piron (2000) investigated how the Country of Origin differs from the intentions of purchasing necessity vs. luxury and private vs. public products. Another previous study on the COOE showed that consumers used the product-country images as a reflective shortcut when trying to reach the product specifically when the information about the product is limited (Erickson, Johansson & Chao, 1984, p. 249).

When searching for articles regarding the *Purchasing Decision theory,* we conducted it under the same procedures as we did when finding relevant articles concerning the Purchasing Decision and COO theories. By just typing in the words "*Consumer memory*" on the Emerald and Google scholar search engines, we got 1270 and 3620 hits on the respective search engine. This was also narrowed down in order to find the main authors in this field which fitted our study best. We did some check-ups on their references in order to get a better knowledge of other authors. Studies and research on Consumer memory can be traced back to Waugh and Norman (1965).

We found that a great majority of studies touched subjects on how the consumer memory, post experience, was affected by the effects of advertising. We had the same procedure when searching for relevant journals of the Consumer memory, as we had when we searched for articles to the COO and the purchasing decision theory. This enabled us to find key authors in the field which suited us best. Braun (1999) wrote about how the information in advertising affects the consumer via the reconstructive memory process. He came to the conclusion that

consumers may believe that they had the same experience as was shown in the advertisement. Research conducted by Braun-Latour, Latour and Loftus (2006), contradicts the myth that;

> *"The best possible way to make people forget about scandals is to stop communicating about it*" (Braun-Latour et al. 2006)

Instead they focused on post-crisis brand repair and how consumers are affected. In the appendix section you can find what type of words we typed-in on different search-engines such as Google Scholar and the Emerald Database, in order to find relevant articles and journals.

2.1 Purchasing Decision Theory

The buying behavior of customers is more or less recurrent especially when it comes to products such as food. The purchasing cycle of such products is usually short and done on a regular basis. When consumers decide to make a buying decision, there are several factors which are taken into consideration such as mood of the customer and brand preference etc.

Based on past research it was pointed out that the product's origin is one of the significant factors that was considered when differentiating between products and making decisions. This applies to both global and local product sales, it is also important to know the origin of the food as it creates the image of the country. The importance of that image is a factor that affects the consumer's buying intentions and decisions. (Vukasovic, 2010, p. 126)

Philip Kotler plays an important role in the marketing field, his books and writings have been translated in more than 25 different languages (Cunningham, 2003, p. 152). This shows that his books are reliable and that he provides applicable information in the marketing field.

Inspired by Kotler and Keller's (2006) five-stage model of consumer behavior, we created our own model describing the five main steps which the consumers go through when purchasing products since it is the most accurate model based on our findings.

The five steps are illustrated in the figure below.

Figure 2: Inspired by Kotler's Five-stage model of consumer behavior

(Source: Kotler & Keller, 2006, p. 191)

The main force behind the buying process is the recognition of a need by consumers. Problem recognition is the source which the buying process starts with. The second step of the consumer buying process is the information search which is when consumers need information to aid in their purchasing or consuming decision (Solomon, 1997, p. 250). In this step the consumers summarize the information wherever they can find knowledge about the product they need. Furthermore, not only do consumers start reading and investigating about the product needed via different sources, they also start comparing them with alternative products and evaluate which product satisfies the needs more (McQuarrie & Muson, 1992, p. 251).

Next up, is the Consumer Purchasing Decision theory. In this stage consumers have already collected all the data needed and compared it with substitute products to evaluate their options. When the product is an everyday item, it involves less decisions and deliberation when making a purchase (Kotler & Keller, 2006, p. 197). For example: when buying bread consumers do not give much time and thought in their purchase decision. Lastly, the post-purchase-behavior which is significant as it measures the satisfaction or dissatisfaction towards the product. The purchase experience also affects the future behavior of the consumer. Depending on the level of satisfaction that consumers experience towards a product, the likelihood of them repurchasing that

product again is greater if the experience was positive. (Kotler and Keller, 2006, p. 198)

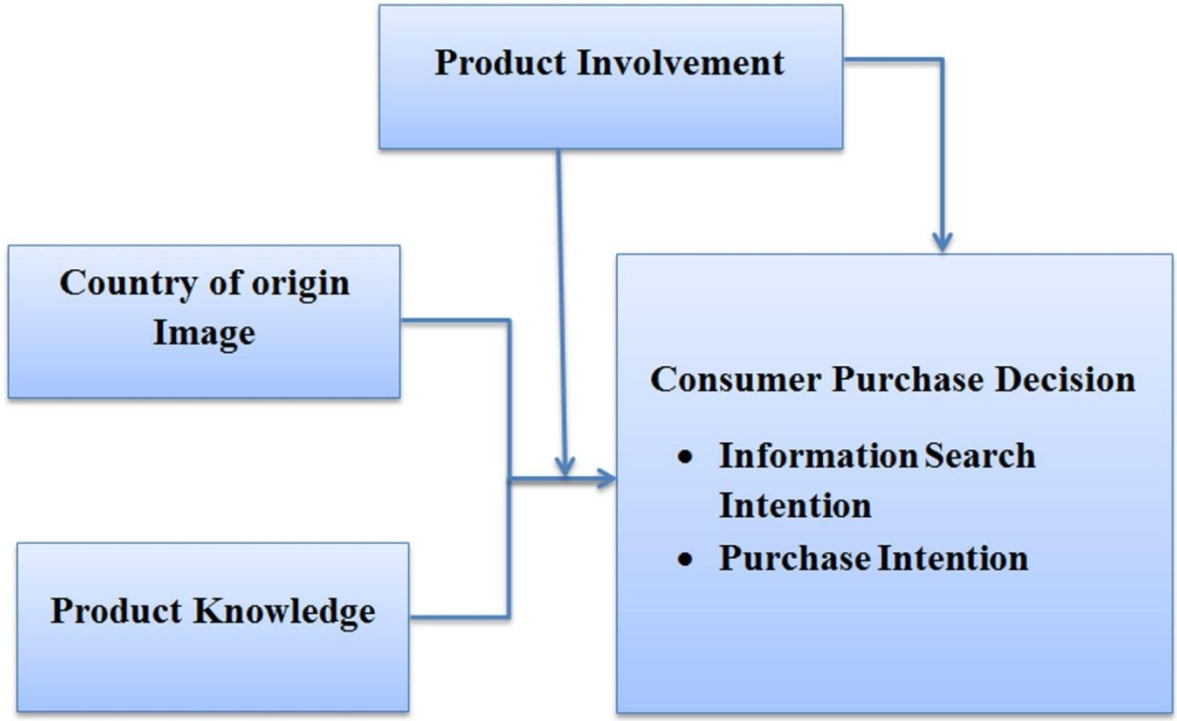
The location of a manufacture is no longer counted as a reference of information when purchasing a product; instead consumers have/hold more stress towards the country of origin (Hsieh, 1994 p. 251). A research done by Lin and Chen (2006) concluded that there was an important link between the Country of Origins image and the Consumers' purchasing decision. They also stressed the significance of supplying product information to the customers. Moreover, in Lin and Chen's article, they found that Han (1990), Papadopoulos and Heslop (1993) had stated that, country image has an effect on the consumer's purchasing decision. Furthermore, the authors also found that Lee (1999) and Tseng (2001) assured that the COO brand does have an influence on the product or service and the purchasing intention of customers. Consequently, the COO brand and its country image acts as a very important influential factor when a consumer makes a decision that could affect their preference level, purchasing intention and information search intention. (Lin & Chen, 2006, p. 253)

Based on a test conducted by Lin and Chen (2006), they reached several conclusions. Their results showed that there existed a positive relation between the COO and product involvement where the consumers purchasing decision concerning food products such as rice did not require as much product involvement compared to other food products such as meat.

In addition, there is a great significance for the information about the product that is collected by consumers. The Country of Origin image is also affected by the level of product involvement. Lin and Chen (2006) stressed that the importance of the level of product information had a direct influence in the consumer purchasing decision, and how much thought and consideration the customer put into a product before purchasing it.

As can be seen in the following Conceptual structure model, these conclusions were illustrated in a way which shows the link between the image of the country, purchasing decision process and effect of the information about the product towards customers. (Lin & Chen, 2006 p. 260)

Figure 3: Conceptual Structure Model



(Lin & Chen, 2006, p. 253)

When purchasing a product, the customer needs a quality cue or indicator in order to be able to make an evaluation on how much trust can be given to the product (Hoffman, 2000, p 213). The Country of Origin can be one of these evaluation cues as well as quality indicators which can determine a customer's level of trust (Slovic & Slovic, 2000, p. 643).

2.2 The Country of Origin Effect

One of the oldest concerns of the international marketers is how the "Foreignness" of the product will affect consumers in different countries. The COOE is an incident when a consumer identifies and distinguishes a product from different countries of origin (Agrawal & Kamakura, 1999, p. 127).

The Country of Origin Effect is defined as:

> *"Overall perception consumers form of products from a particular country, based on their prior perceptions of the country's production and marketing strengths and weaknesses"* (Roth & Romeo, 1992, p. 480)

According to Bilkey and Nes (1982), the COO has indeed a great influence on the perception of the buyer. They suggested that consumers put more focus on quality judgments than putting focus on the extrinsic cues (the considerations that are associated with the goods). This suggests that the COO has a stronger influence on the perceived quality rather than how the products look. (1982, p. 94)

Earlier studies conducted by Hoffman (2000), came to the conclusion that Swedish people in general are affected by the Country of Origin effect when buying fresh meat. Furthermore on a gender related topic. Hoffman (2000) showed in his study that when men evaluated the safety and the quality of the meat, they used the Country of Origin as an indicator of quality to a lesser degree than what women did. (Hoffman, 2000, p. 225)

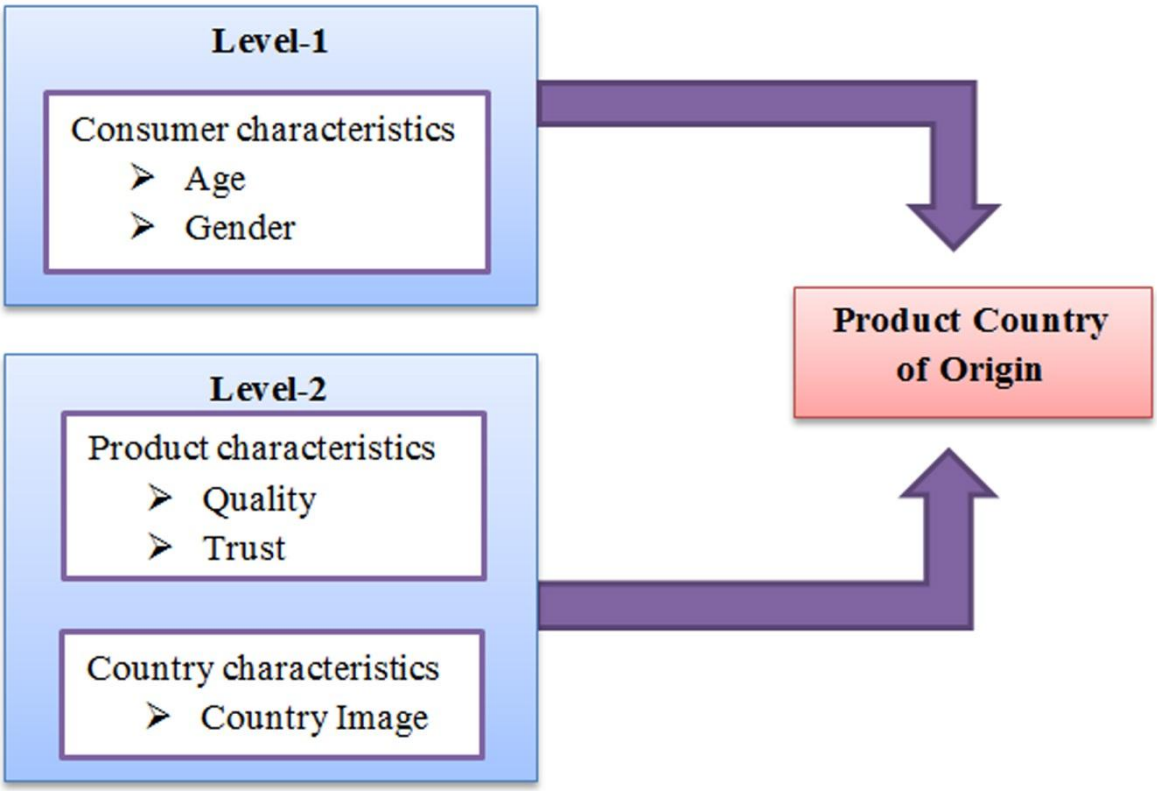
2.3 Determinants of COOE

There are many different factors that determine the COOE. Earlier studies about the COO tended to focus on just one major determinant. However, Martín and Cerviño (2011) presented a 2-level determinant model of recognizing the brand recognition. The two essential determinants were *Consumer characteristics* in Level-1 and in Level-2; *Product category characteristics* and *Country Characteristics* (Country Image). (Martín & Cerviño (2011, p. 537)

The determinants of the Country of Origin can be a great help for brand managers, as it enables them to use the variables in a more favorable way to ensure customers have a positive association toward their brand (Martín & Cerviño (2011, p. 531).

First an illustration is given on the determinants of the Country of Origin. Then each determinant is discussed separately.

Figure 4: Integrate Framework of COO determinants



(Martín & Cerviño, 2011, p. 538)

Since we were trying to connect the consumer memory to the COO, our main discussion will be about the *country image*. However, there will also be a discussion about *Product Category* characteristics (Foreign food) and finally *Consumer* characteristics (Gender and age). Since this thesis is about food in general, the product category focuses on food only. Furthermore, age and gender are the two most often researched demographic variables in the COO-field. Because of this, it was natural for us to incorporate this into the consumer Characteristics part. Due to this, we believed these two variables were of importance

to include in this report. This is why these variables have been taken into consideration, analyzed and discussed.

2.3.1 Country Image

Schooler (1965) found out that products and goods, which were completely identical in every aspect and feature, except from where they originated, made consumers favor one product over another (1965, p. 364). The image a certain country has in the eyes of the consumers is often transferred to products coming from that specific country. The perceived characteristics of the country are thus applied on the product by the consumer. (Nagashima, 1970, p. 68)

Products and brands which come from countries that have a more positive image, are more popularly perceived or are more well-known and have a more positive COO and vice versa (Martín & Cerviño, 2011, p. 541)

Examples of favorable associations consumers have towards products from different countries are that; Italians produce fashionable clothes while high quality watches are produced in Switzerland. Bilkey and Nes (1982) identified that buyers can perceive products negatively or positively depending on where the product has been manufactured (1982, p. 94). This clearly indicates the impact that the COO has and that it can be used as a strong tool when marketing products, as it gives a clearer indication of the perceived quality of a certain product (Maheswaran, 1994, p. 358).

Multiple studies indicate that people in general prefer products produced within their own country (Han & Terpstra, 1988, p. 235). Furthermore, according to Balestrini and Gamble (2006) consumers mainly use extrinsic cues when evaluating the quality of wine, making the COO a more significant cue than the price factor (2006, p. 396). Hong and Wyer (1989) clearly stated that the COO can signal more than just quality. It can also give signals of emotional and/or symbolic meanings to the consumers (1989, p. 175). Fournier (1998) and Botschten & Hemetsberger (1998) have identified attributes such as national identity and memories concerning earlier experiences. These

attributes can be linked to the COO (Fournier, 1998, p. 363 and Botschen & Hemetsberger, 1998, p. 157).

One can ask what the Country of Origin on the macro- and micro levels means. Simply put, on the micro level, it means something that describes a service or product produced and the image associated with it. The macro level refers to a country's image. As found, the majority of research regarding the COO was either about micro- or macro level. But sometimes research was made by including both of these variables. This report mainly focuses on the product, in this case food, which is on micro level.

2.3.2. Product Category Characteristics

As mentioned earlier, certain products are associated with certain COO. According to Martín and Cerviño (2011), by being a perceived dominant COO means that a specific foreign produced product outperforms other identical domestically produced products. The product is generally perceived by the customer as originating from a country which has a more deeply inherited tradition of producing these products, therefore the product is perceived as having a better design, quality and frequency of usage. (2011, p. 540).

The same authors argue that the COO can be used as a positive cue when customers are making their judgments about that product. This cue can possibly be applied to whole product categories and not just single products. Examples for this are electronic products being produced in Japan, and good quality pasta coming from Italy. (Martín & Cerviño, 2011, p. 540)

According to Martín and Cerviño (2011), there are different levels of involvement in the purchasing decision. This involvement varies greatly depending on the product. For example, with a higher risk of being sick when eating a certain food product such as old meat, or depending on how expensive the product are such as purchasing a new car, the more rational the purchaser behavior is going to be. The consumer will most likely put more attention to the product when deciding to buy and evaluate it with possible substitutions. This means

that depending on the product, there are different perceived risks and certain safety characteristics to consider. (2011, pp. 540-541)

Despite Sweden being a member of the European Union (EU), there are still many different production standards throughout the whole EU (Hoffman, 2000, p. 211). Since Sweden entered EU, manufacturers, media and politicians have to a greater degree focused on reporting on any shortcomings from foreign food being imported into Sweden. Swedish media and food companies heavily promoted Swedish meat over foreign meat, claiming that the foreign standards were below the Swedish ones, by marketing the Swedish-meat-model as superior to other European producers (Hoffman, 2000, p. 212). The Swedish-meat-model involves three main features which focus on food safety when promoted by the Swedish meat producers. They are:

- A unique stricter control of salmonella which does not exist in the rest of the EU.
- Enforcement of rules which prohibits Swedish meat producers from using antibiotics when feeding their animals.
- Making consumers put a lot more emphasis toward the welfare of the animals, compared to the other countries of the European Union.

(Hoffman, 2000, p. 213)

In the same article, Hoffman came to the conclusion that; due to the rules of salmonella control and prohibition of feeding animals antibiotics, there was a stronger indication that the Swedish attitude in general, holds a greater respect for food safety (2000, p. 223). This suggests that the strongest characteristic which is focused on by the Swedish consumers is the quality of the food safety. Therefore quality characteristics are important to include in the model.

As previously mentioned, Swedish marketers stressed that, trusting the product is an essential factor. Swedish citizens are led to believe that Swedish meat is more trustworthy than foreign meat. Therefore, not just *quality* should be taken into consideration as a determinant, but *trust* as well.

2.3.3. Gender and Age Variables in the COO

Bilkey and Nes (1982) discuss whether demographic variables play a part on how a person evaluates foreign products. They claim that Tongberg (1972) and Schooler (1965) came to the conclusion that older people put stronger emphasis on whether the product is foreign or not, while Wang (1978) claimed to have found no effect whatsoever. Furthermore, Dornoff et al. (1974) and Schooler (1965) argued that females rated domestic products more favorably than men, while Dornoff et al. (1974) claimed that products made in more developed countries had no effect on gender when it came to evaluating products. (1982, p. 91)

Hoffman (2000) however, claims that brand awareness can be directly related to age. He claims that younger consumers are more inexperienced with brands (2000, p. 211). Because of this, there is a great possibility that the younger customers are more sensitive to purchasing foreign products. The age of the consumer also plays an important factor since older people have more experience. (Martín & Cerviño, 2011, pp. 538-539)

In further support to Dornoff et al. (1974) and Schooler (1971), Hoffman (2000) also claims that Swedish women in general are using the COO as an indicator on whether the quality of the meat is good or not (2000, p. 222). Due to this, we think these are two variables of importance to include in this report when conducting the research. This is why these variables will be taken into consideration, analyzed and discussed. As a conclusion to the COO part, there is a clear linkage of the COO to both products and brands (Aaker, 1991, pp. 128–129) where there might be a possibility that age and gender play a big part in how consumers perceive different products.

2.4 Consumer Memory

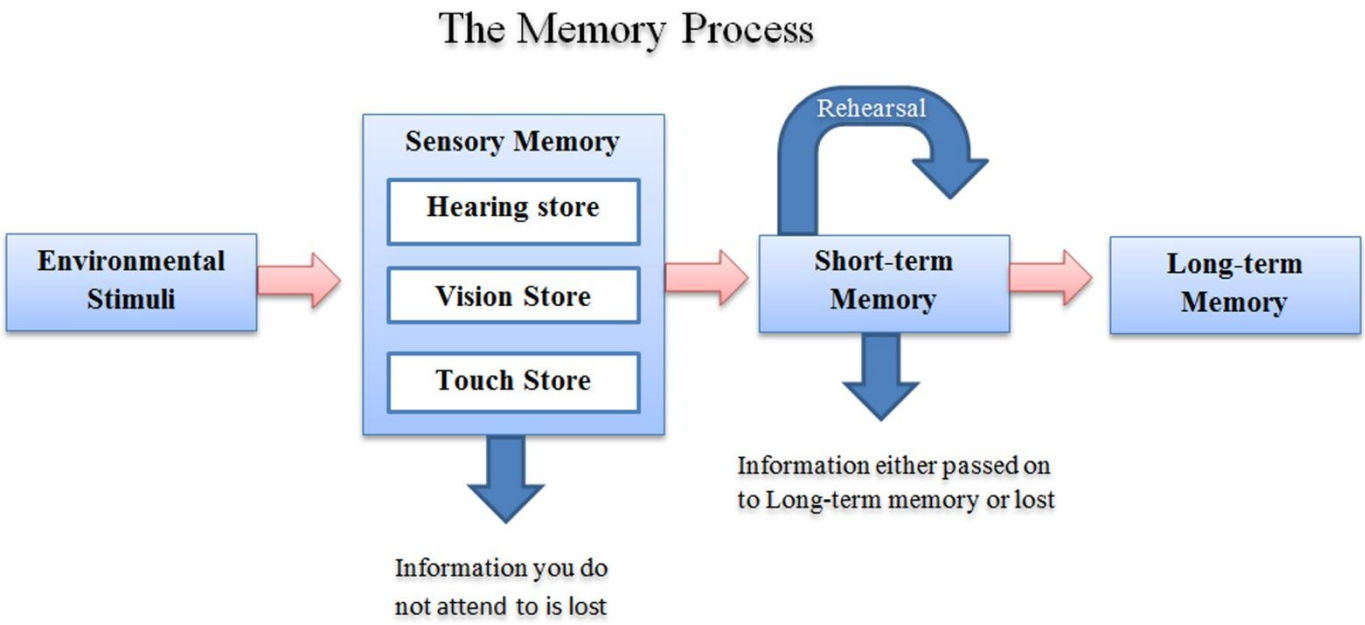
The consumer memory includes information about the brand, product, service, company, price, product features and experiences related to them. The information consumers store in their memory is gathered from different sources such as: marketing communications, media,

WOM and personal experiences (Hoyer & MacInnis, 2009 p. 171). In short Hoyer and MacInnis describe Consumer memory as:

> *"A broad personal archive of knowledge about products, shopping and consumption experiences"* (2009, p. 171)

According to Hoyer and MacInnis (2009), there are three types of memory that can be stored in a consumers mind; *Sensory- Short-term-* and *Long-term* memory (2009, p. 171). The type of memory which the information is stored in depends on the amount of the information received and the nature of the information received (Kotler & Keller, 2006 p. 189). The more the individual thinks about the information received the stronger associations it creates in the memory which causes it to be stored in the long-term memory over time (Kotler & Keller, 2006 p. 189). Below, an illustration is given in order to make the memory process easier for the reader to understand.

Figure 5: The Memory Process



(Source: Authors)

First, the sensory memory is the shortest type of memory. It is made up of a wide variety of different kinds of information, some spatial and some categorical (Irvine, 2011, p. 160). The information which is stored in the sensory memory is stored in its actual sensory form,

meaning that it is stored much in the same way that it is received (Hoyer & MacInnis, 2009 p. 173). For instance, hearing a word said by a person with a high tone will be stored as it was said and not as the word itself. So, the sensory memory is where the person retrieves memory through their five senses. Information is received and stored in the sensory memory where it lasts less than a second, and then it is sent to the short-term memory. Hoyer and MacInnis (2009) explained the short-term memory as a specific part of the memory, where he or she understands and converts the ingoing information (2009 p. 173).

Unlike the sensory memory, the information in the Short-term memory contains the reproduction of an object. For example: the word apple will be retrieved as a picture of an apple in the consumers mind. The short-term memory is limited in storage space where it can only hold a certain amount at any given time (Hoyer & MacInnis, 2009 p. 174). For example: it is more likely to remember three chores that must be done on a person's list than remembering 10 chores. In addition, the short-term memory is also considered a short lived memory unless information is transferred to the next type of memory, the long-term memory.

As for the long-term memory theoretically speaking, it should be everlasting. However for long-term memory to last for a long time it has to be recalled from time to time, otherwise it will slowly fade (McLeod, 2010). The long-term memory contains all the knowledge and happenings that an individual undergoes throughout their life. The long-term memory is considered as a more permanent storage compared to the sensory- and short-term memory. (Kotler & Keller, 2006 p. 187)

According to research conducted by Baumeister, Bratslavsky and Finkenauer (2001), negative information tends to last for a much longer period of time, and affects the decision making of the individual compared to non-negative information (Baumeister, et al. 2001 p. 889). In other words, "*the bad is stronger than the good*", this means that the negative information has greater influence and ability to dominate a customers purchasing intentions (Miller, 2010, p. 889). Therefore any negative experience, negative word-of-mouth (WOM)

or scandal will be remembered for a considerable time by the consumers.

Researchers have concluded that individuals pay attention and notice negative information for longer periods of time and process it more deeply. This also impacts on their decision making compared to non-negative information when deciding to make a purchase (Baumeister, et al. 2001). Moreover, not only do customers have a long-term memory for negative information, but there are a significant number of consumers switching purchasing behavior as a result of service or product failure (Keaveney, 1995, p. 543).

Pratto and John (1991) who supports Baumeister et al. (2001), came to the conclusion that people were less likely to recall the positive traits, and more likely to recall the negative ones that they had been exposed to. This indicates that negative traits and negative information are stronger memory wise, impacting on the individual's memory far more than positive traits (Pratto & John, 1991, p. 888). As for gender, the memory among females and males differ based on several past researches and studies conducted. Research conducted by Huang (1993) which tested the memory with respect to genders among high school Students, exposed the link between gender and memory. The study showed that females generally outperformed males in verbal memory and word knowledge. (Huang, 1993 p. 6)

However regarding the numerical working memory which refers recalling numerical figures, it was shown through a research that men had a higher capacity than the women (Bell, Willson, Wilman, Dave and Silverstone, 2006 p. 535). Furthermore, Dewhurst, Anderson and Knott showed that there was a significant difference in recalling negative information where the females were said to recall more negative information compared to men (Dewhurst et al. 2012 p. 69). This means that women tend to remember negative information such as scandals more so than men. Consequently consumers are greatly affected when exposed to negative information such as scandals about products compared to positive information. These scandals are not easily forgotten and are stored for a considerable time in the consumers' memory.

Many previous researches were done on the relation between memory and age. However, there is a general agreement due to the natural process of ageing that the memory starts to decline in terms of recalling. Also as people get older they do not recall information as easily as they did when they were younger (Hoyer & Verhaeghen, 2006, p. 1699). A recent study done by Old and Naveh-Benjamin (2008), they stated that older people have a noticeable memory deficit in the details, associative information than for the content or item (2008, p. 1700).

Meaning that as people age, their ability to remember details declines more compared to remembering the item or object itself. In addition, another research conducted in information processing and memory, reveals that when it comes to memory tests, older adults achieve lower grades than the young ones (Cole & Houston, 1987 p. 265). The past researches show that as age increase the person's ability to remember declines, especially when it comes to remembering details.

3. Methodology

This chapter discusses ontology and epistemology. Before moving on to discuss the type of approach this study was conducted from. Furthermore, this chapter introduces population, data collection and samples. Also how the data was measured, with what instrument and how the data from the survey was analyzed is discussed along with the usage of the anchoring effect. Finally a short introduction to SPSS is presented before the last part of this chapter, where there is a discussion about the terms: validity, reliability and generalization.

When an author is writing a scientific journal, report or paper, it should include what types of methods and methodologies (s)he uses. In addition to this, the author should also include a discussion on why specific choices were made. In order to give an explanation regarding this, the researcher's thoughts concerning reliability has to be included. Different questions were taken into consideration as it allows for an explanation and justification of the epistemological take to be given. Such questions could for example be "Why should the presented results be perceived as serious?" or "How will a reader of this report be able to understand the results being presented?" (Crotty, 1998, p. 2) Bryman & Bell (2007) and Nilsson (2005) not only write about the epistemological consideration, but they also talk the ontological consideration as well. Questions concerning ontology (what is), is all about the social entities, character or nature. (2005, p. 33) The following chapter explains the approaches of ontology and epistemology which is relevant to this thesis and hence why its contradictions were not described.

3.1 Ontology &Epistemology

The Epistemology can be divided into three subcategories;

- Subjectivist epistemology
- Constructivist epistemology
- Objectivist epistemology

The subcategory of epistemology which is called constructivism which means that reality cannot exist without thoughts and ideas,

basically meaning that ideas are designed socially. The epistemology part which is called subjective can be explained as having no existing interaction between object and subject. The subject is more powerful which means that it forces the object. (Cowlishaw, 2001) Finally, Objectivist epistemology can be explained as human knowledge to be objective. People are affected by the reality of nature, and not to the ideas certain people might have (Williams, 2008, p. 79).

This report takes both a constructivist and objectivist approach, meaning that we agreed that the actual context of reality regarding the research had to be taken into consideration, which due to this was perceived as a constructive element. On the other hand, we also agreed that reality objectiveness does exist. The approach of epistemology is helping to question the actual reality of this report. The most frequently used approaches are interpretivism and positivism (Bryman & Bell, 2007, p. 16). The Interpretivist approach argues the fact that the social sciences are very differently perceived when comparing to natural sciences. Positivism on the other hand argues that the theory should be creating different hypotheses, which should be able to be tested in the actual study. Those hypotheses should in turn lead to several explanations. Bryman and Bell (2007) argue that knowledge is based on science and facts, which are objectively undertaken. This basically means that the interpretivist perspective is trying to understand the behavior of humans, while the positivist approach will try to explain the behavior of them. (2007, pp. 16–18)

The aim of this paper was to see if there were any differences in consumer memory in regards to the COO based on different scandals. We tried explaining how the COO and Consumer memory theories could be applied when conducting a survey. Because of this, this reports approach is to be considered as a positivistic perspective. Thus, we described this as a soft perspective of positivism, since we tried to *explain* the COO and Consumer memory in a generalized way. Another reason for choosing the positivistic is that all the relevant articles we read clearly had a positivistic take on the relevant topic. This was done by collecting any information regarding earlier experiences from the consumers. Hence, this means that we have to

try and *understanding* what consumers think in order to try and understand the whole context.

As for the Ontology, it discusses the actual nature of being and reality. It deals with such questions as “What is the meaning of being?” and “Social reality, does it really exist?” Because of this, two different approaches can be taken into consideration, constructivism and objectivism. Constructivists have the mindset that ontology does not exist, while objectivists tend to support the idea that ontology does exist. From a constructionist’s point of view, the researcher tries to identify a specific version of the reality; this means that that their findings are not to be perceived as definitive (Bryman & Bell, 2007, pp. 22–23).

Furthermore, Bryman and Bell (2007) believe that reality is just composed by individual assumptions (2007, pp. 22–23). We however, do not completely agree with any of these two approaches, since our views lean more towards the constructivist view because we believe that social reality does exist, and the individual perspectives are not dependent on it.

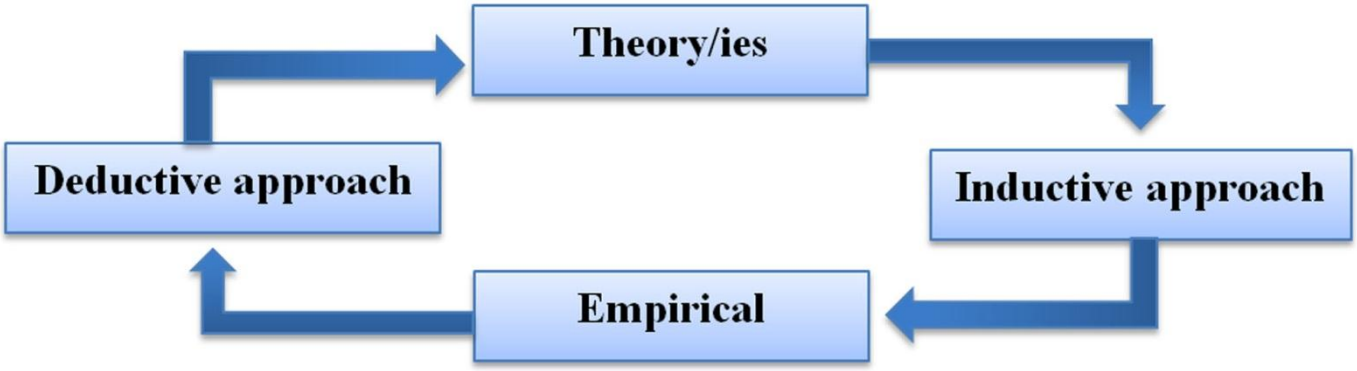
3.2 Approach

In order for knowledge to be as truthful as possible, the researcher or scientist has to use theories which strengthen that knowledge. The variables which are included when building these theories are usually data and information concerning the part or reality which can be studied. This is called empiricism.

There are three different types of relationships between the empiric part and the theories. These approaches are *Induction*, *Deduction* and *Abduction*. They describe the different paths a scientist can take when trying to explain the relationships between the empirical findings and the theories. An *Inductive approach* means that the scientist first conducts studies on how his hypotheses or ideas are working in reality. Then the researcher goes back to existing theories, and compares his findings with the theories. The conclusion when having an inductive reasoning is reached via examples. A *Deductive approach* is when a researcher or scientist based on existing theories

is trying to apply them to his or her own hypotheses. The hypotheses are then brought into experiments in the "real world", where the scientists try to see if the theories and their hypotheses are consistent. This means that if all the existing premises are in fact true, then there are clear terms of which a deductive approach has been followed by. The conclusion becomes true in accordance to the hypotheses. (Eriksson & Finn, 2011, p. 83)

Figure 6: Scientific Approaches



(Capaldi & Proctor, 2008, p. 625)

The third approach is called an *Abductive approach*. It differs from both the inductive- and the deductive approaches, because when conducting an *Abductive* approach, researchers are being able to generate new testable hypotheses. *Abduction* is a reasoning approach of which the scientist chooses the hypotheses that best explains the conclusion. (Capaldi & Proctor 2008 pp. 620-621)

The Abduction approach is not as commonly used as the other two approaches. Therefore it will not be further discussed since it is not relevant to this study.

Ali and Birley (1999) presented different stages of induction and deduction in an article they wrote (Ali & Birley, 1999, p. 104). The table on the next page is presented in order to give the reader a clearer overview of the two different approaches, but also given our approach as well.

Table 1: Comparing the purist versions of the deductive, the inductive and our approaches

Stage	Purist Deductive	Purist Deductive	Our Approach
1.	Develop theoretical framework	Area of enquiry identified – but no theoretical framework	We identified a research gap – How scandals possibly could affect the Consumer Behavior and Consumer Memory, which became the aim and purpose of this thesis
2.	Variables identified for relevant constructs	Respondents identify constructs and explain the relationship between them	Our identified variables were Consumer memory and Purchasing Decision Behavior which led to identifying the construct - the COO
3.	Instrument development	Broad themes for discussion identified	We developed a questionnaire with the help of VAS scale and anchoring effect based on the existing theories
4.	Respondents give answers to specific question	Respondents discuss general themes of interest	We went to train stations handing out the questionnaires in randomized order to the respondents
5.	Answers analyzed in terms of prior theoretical framework	Researcher develops theory on a purely inductive basis	We analyzed the answers based on the theoretical framework with the help of a Factor and a Correlation analysis
6.	*Outcome* Theory tested according to whether hypotheses are accepted or rejected	*Outcome* Theory developed	*Outcome* The tested theories of Purchasing Decision Behavior, COO and Consumer Memory answered the questions of the aim and purpose

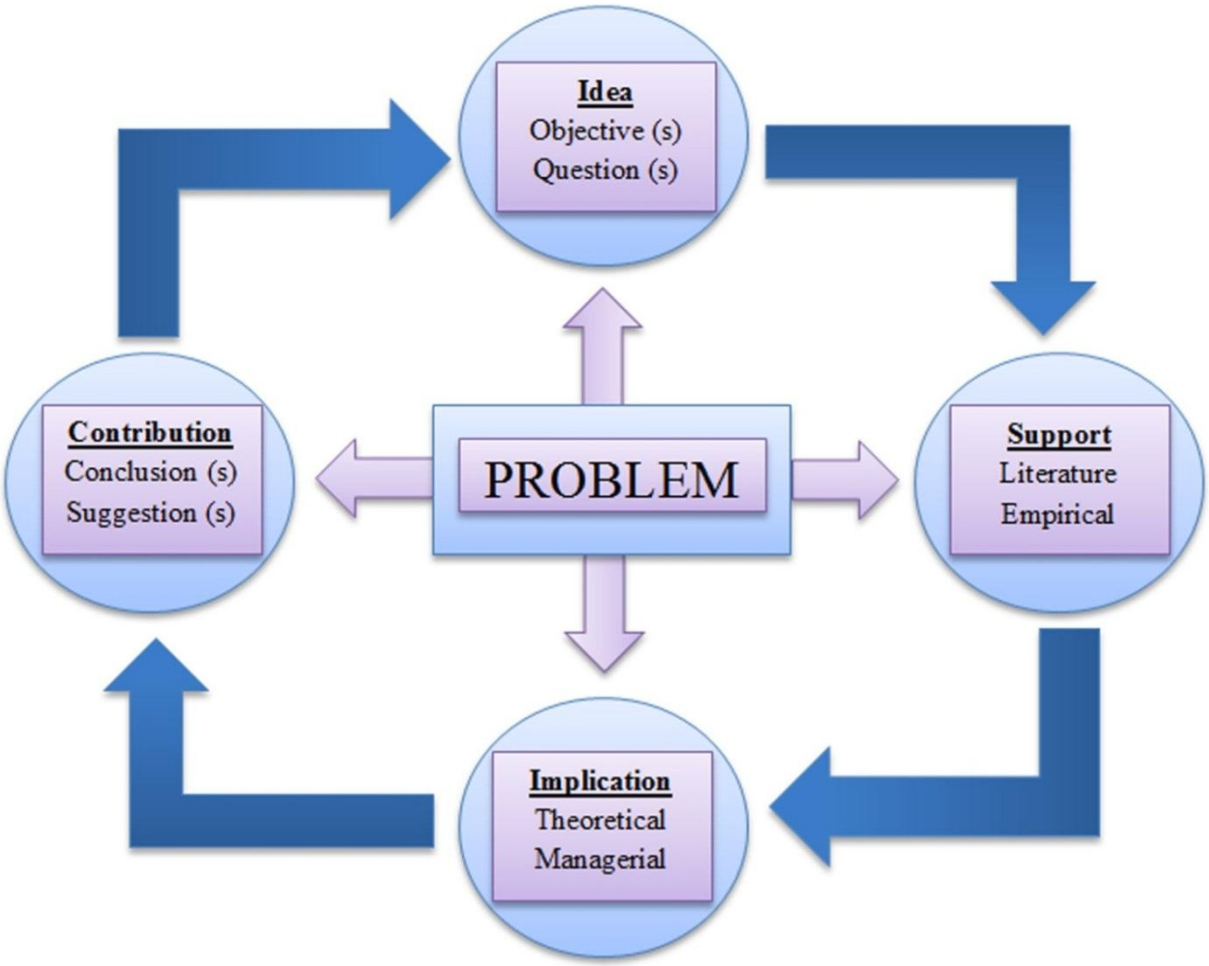
(Ali & Birley, 1999, p. 106)

According to Svensson (2009), the research process when having a deductive approach can be described as a four element clockwise process. It all starts with a problem or an idea where it underpins the whole deductive procedure. The four different elements which are deductive are as follows (Svensson, 2009 p. 192):

I. The Idea
II. Support
III. Implications
IV. Contributions

Usually the whole process of research starts with an idea. The idea is then developed and made clear via the objective of research. Afterwards, one or more questions are being put together. These questions are supposed to help fulfill menting the research objective. This is initially made on research literature, which is being followed by a collection of empirical data. The implications of these findings are to some capacity articulated and are either of managerial or theoretical issues. Lastly, the contribution section of the actual process is being outlined. The researcher normally draws conclusions from the findings and usually makes suggestions for future research. This leads to the actual research process starting all over again - making the circle complete. (Svensson, 2009 p. 192) An illustration is here given in order to give an easy overview of the whole process.

Figure 7: Research process - The Deductive Approach



(Svensson, 2009, p. 192)

However, this approach was also criticized by Svensson. He claims that the deductive approach might not always be the best way to conduct research; by following the approach too strictly it can end up being counter-productive in the final outcome of the whole process, causing expected outcome to change. (2009, p. 192)

This study has been conducted from a deductive approach since we based our questions and survey on existing theories. In accordance with Svensson's (2009) four step clockwise process, we first had an idea of consumers' memory of food scandals based on the COO which led to certain questions raised (Step I). We then tried to find supporting and explaining literature (via scientific articles involving the COO, Consumer Memory and Purchasing decision Behavior) and primary data (Respondents filling out the questionnaire) (Step II).We proceeded to analyze the empirical findings with the help of SPSS in order to come up with theoretical implications based on the theoretical framework (Step III). After this was done, we came up with a conclusion and suggestions for future studies (Step IV). Because of these four steps taken, there is no doubt that we used a purist deductive approach.

As illustrated earlier in Table 1, our approach included six stages of the deductive approach. This means we first identified a research gap on how scandals could affect the Consumer Behavior and Consumer Memory, which became the aim and purpose for this study.

Second, the identified variables were Consumer memory and Purchasing Decision Behavior which led us to identifying the construct - the COO.

Third, we then proceeded to develop a questionnaire with the help of the VAS scale and the anchoring effect based on the existing theories. Fourth, we collected empirical data at two train stations by handing out the questionnaires in randomized order to the respondents.

Fifth, with the help of the statistical program SPSS, we conducted a Factor and a Correlation analysis, where based on the theoretical

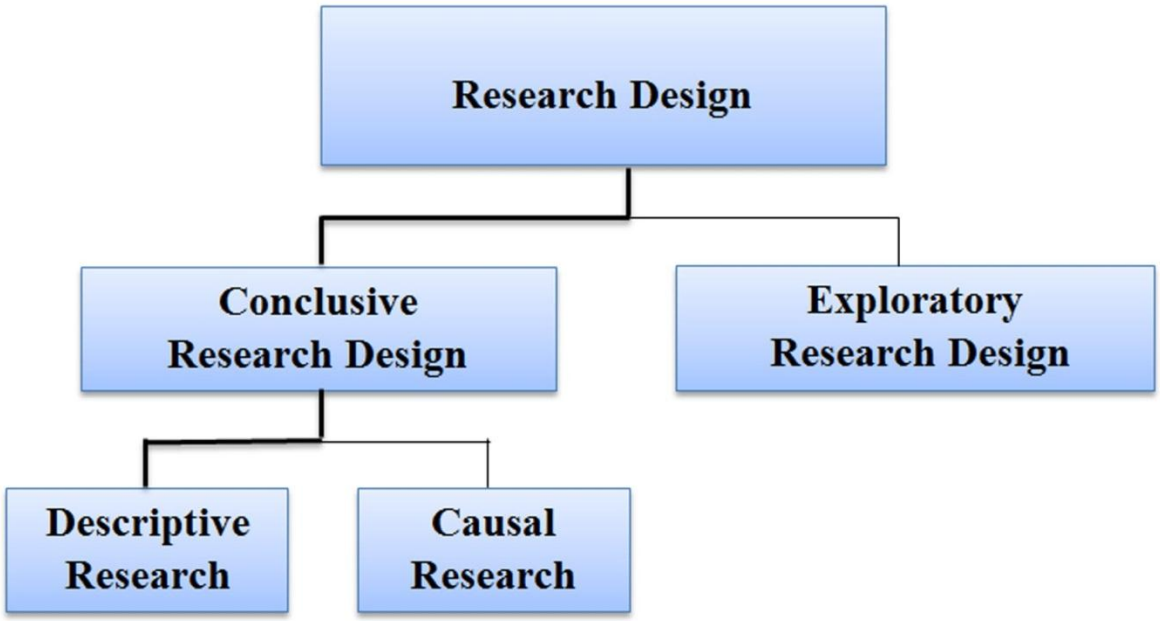
framework we analyzed the data trying to answer the questions raised in chapter 1.

Sixth, the outcome was that the theories we tested resulted in answering the aim and purpose of this thesis, which in turn culminated in business implications and suggestions for future research, which meant we were back to Svensson's (2009) first step.

3.3 Research Design

According to Malhotra (2007), there are two different types of research, conclusive- and exploratory research. Despite this study including a minor interview, our main focus was on the consumers. Therefore this thesis was conducted via a conclusive research, due to it being more structured and formal than the exploratory research. It is possible to divide up the conclusive research further into either causal or descriptive research. Since a descriptive research design is the most common way to collect data when conducting research about marketing, we collected our primary data via a questionnaire. This means that we chose to design this thesis via the descriptive research. (Malhotra, 2007, p. 79)

Figure 8: Designing Research



(Malhotra, 2007, p. 79)

We developed our survey from a quantitative perspective. This meant that the questions in our questionnaire needed to be in a fixed order. Our respondents first had to fill out questions of demographic importance. This was followed by a Visual Analog Scale (VAS), where the respondent had to mark on the line how much they remembered a certain scandal. In general, respondents answer questionnaires by mail, electronically or in person (Kim, 1995). In this thesis, the data collected from the respondents was conducted via a random structured sampling in person. Random Structured Sampling and the VAS method will be closer explained under chapter 3.5.

3.4 Data Collection Population and Sample

The data collected in this study consists of both primary- and secondary data. The primary data came from the survey and the interview, and is presented in the empirical chapter. As for the secondary data, it consists of scientific journals, articles, books and other web-pages that we considered relevant to the topic and problem. These are mainly presented in the theoretical framework chapter. The findings of the primary data were then analyzed and discussed in regards to the theoretical framework and problem. This was conducted in order to come up with a conclusion to the questions raised. This study includes both quantitative- and qualitative research. Quantitative research is referred to methods which can be measured and cued via numbers while qualitative research is methods which are more subjective (Eliasson 2010, p. 21).

In order to collect information and data via quantitative research, a survey in the shape of a questionnaire is recommended (Eliasson 2010, pp. 28-29). Surveys are a cheap way to get access to primary data from a population. Questionnaires are also able to be answered pretty quickly, which gives the respondent the opportunity to answer it in one sitting (Eliasson 2010, p. 29). This technique is strongly supported by many authors within the marketing field. Authors like Bilkey & Nes (1982) and Hoffman (2000) collected their respective primary data via a survey which was conducted via a random digit-calling procedure. The data was later analyzed statistically based on

attitudes. The questionnaire Hoffman (2000) used is available in Andersson and Hoffmann (1997).

According to Krosnick and Alwen (1987), in order to reach optimal results in questionnaires, questions are suggested to go in randomized order. Because the questions later on in the questionnaire thus have an equal risk of being overlooked which ultimately increases the reliability. However, this can be time consuming to both construct and analyze the data if it is not conducted electronically. Because of this, it is not recommended when handing out questionnaires in paper-form. (1987, pp. 206-208)

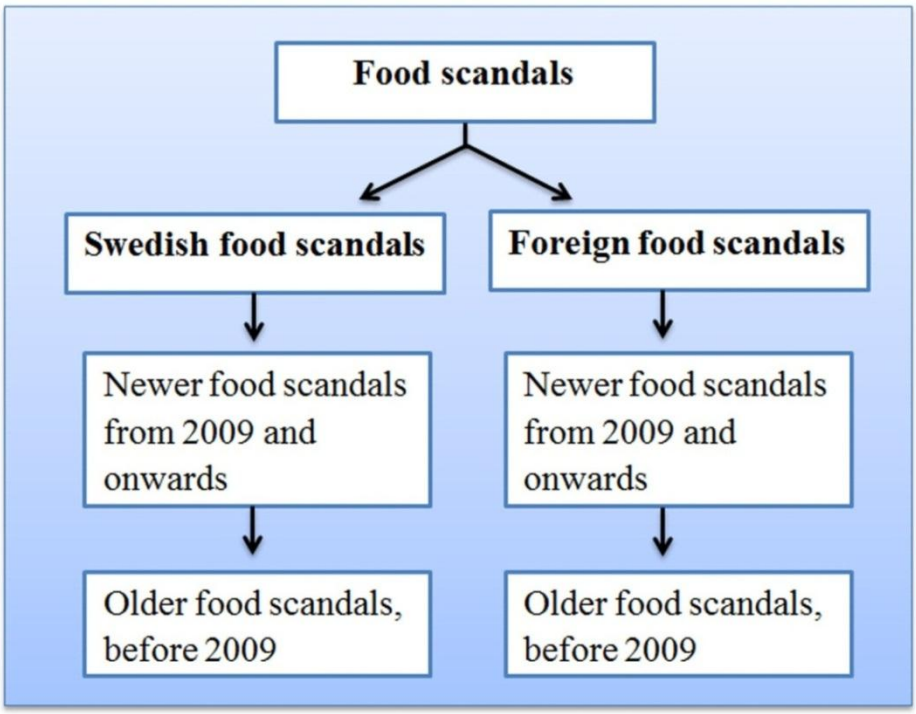
Before we went out in the field and gathered the data, we did a pre-test study in order to get assurance that the respondents understood the questions accurately. The data from the respondents was applied to the population of this thesis. Population means the group of people from which the study gets its empirical data from and the researcher bases his/her discussion on (Trost 2012, p. 25). The population in this study represents all the Swedish citizens living in Sweden from the age of 18 and older. However as it is very difficult, if not impossible, to ask the entire population due to time, money and resource constraints, the method we used to collect the primary data was via random structured sampling.

Collecting data via sampling means that the scientist is focusing to collect the primary data from just a small part of the total population. The sample is then applied and generalized on the total population. The data can either be collected via random sampling or non-random sampling (Trost, 2012, p. 29). To get random respondents from the targeted population, we used an interval method that was fixed. Saunders, Lewis and Thornhill (2003) argue that this is a well-accepted and appropriate method when conducting research like this thesis (Balestrini and Gamble, 2006, p. 402). By using this method, it made it easier for us to control the field, but also made it simpler to construct and implement as well. (Cooper & Schindler, 2003, p 124)

In order to find relevant scandals to use in our study, we asked 30 respondents in a pre-study to write down five different scandals each related to food they remembered.

When this was done, we divided the scandals in four different categories (illustrated below). Of all the scandals which were mentioned in the pre-study, we used the answers which were mentioned most frequently in each category. We decided to classify all scandals which took place before 2011 as old and scandals taking place from 2011 until 2013 as new. We continued to divide these scandals further into two more categories; food scandals taking place in Sweden with the food being produced in Sweden and food scandals taking place in Sweden where the food was produced abroad. We used four different Swedish food scandals and as many foreign food scandals. Of these eight scandals we chose two old and two new scandals, making it a total of two scandals per category.

Figure 9: Dividing Scandals



(Created by Authors)

In the matrix below, the scandals used in our questionnaire are shown in their respective category.

Table 2: The Scandals

	New Scandals	Old Scandals
Swedish produced food scandals affecting Sweden	2013 - Finding worms in Findus food 2012 - ICA Changing best-before-date on Cheese	2002 - Acrylamide in crisps 2007 - ICA Changing best-before-date on meat
Foreign produced food scandals affecting Sweden	2013 - Horsemeat scandal in Europe and Sweden 2012 - Filet of Pork sold as Filet of beef	1995 - Belgian Blue Monster Bull 2001 - The Mad Cow Disease

(Created by Authors)

Furthermore, we included one fictional "test question" which was question- number 12. The purpose for this was to analyze the degree of truthfulness of the respondents. This may seem unethical, but immediately after filling out the questionnaire, the respondents were informed of about the fictitious question.

Before we commenced with the main study, we conducted a pilot-study, where we approached 15 respondents with the questionnaire. The reason for this was, as mentioned in chapter 3.9, to locate any possible questions which may have been confusing or not clear enough for the respondent. The only issue that emerged from that group was that it appeared to be not clear to the respondent that (s)he was supposed to mark an X on the Visual Analog Scale (VAS). This was immediately changed and clarified, so that the respondents in our main study would not face unclear questions which would have affected the answers and ultimately our analysis.

As for the data collection, we approached every fifth person we met at Gävle and Borlänge train stations. We asked them to fill out the questionnaire. If the potential respondent declined, we then let another four more people pass until we approached the next possible respondent. Every form of randomization leads to greater validity. The reason for choosing train stations over other locations such as town centers; was because people are less likely to be stressed in this

particular environment. At train stations, people have more time for filling out a questionnaire, whilst waiting for the train to depart or arrive. While people in the central parts of town are more likely to be on the go and be more stressed, this would increase the chances of their response to the questionnaire as being less sincere. This would have led to a decrease in the overall validity of this study. In order to insure a wider cross-section of respondents, we collected the data at different times during the day and during different days. By doing this, the danger of encountering hidden periodicities was reduced. If this was an exploratory research, 100 respondents are deemed to be enough. But since we are conducting more of a theory developing research, we wanted to be extra sure to have sufficient respondents. This meant that we had 142 respondents filling out our questionnaire. Any respondents declining to participate in the questionnaire were perceived as a fall out, and therefore were not included when analyzing. The fallout consisted of 45 people, making it a total of 187 respondents approached. This meant that the response rate was 75,9%.

As for the conducted interview, we chose to include it in our thesis in order to get direct expertise opinions, with which we could include into our discussion when analyzing the empirical data. The interview consisted of only semi-open questions regarding the topics of Scandals linked to consumer memory, COO and demographical factors. This interview was conducted via a recorded telephone interview due to distance related issues. All questions asked can be found under the appendix section. The summary of the interview can be found in chapter 4.1. The reason for choosing to conduct the interview with Elisabet Qvarford after the factor and Correlation analyses was to be able to ask questions regarding the empirical findings. Her opinion therefore adds more depth to the discussion in both of the analysis since she has many years of academic and work related expertise on food and food scandals.

3.5 Instrument and Measures

Existing studies like Hoffman (2000) used multiple variables such as gender and income in his research, where used some of these variables. However, since there were so many variables used and

researched, we only focused on gender and age demographics. All of the demographic variables used by the other authors can be found in the appendix section. We mainly used the most recurring variables as well as the ones we found most applicable to our subject. Other examples than Hoffman who used the demographic variables age and gender in their research on consumer memory or the Country of Origin are Tongberg (1972), Schooler (1971), Wang (1978) and Dornoff et al. (1974). (Bilkey & Nes, 1982, p. 91)

3.5.1 Visual Analog Scale

According to Lingjærde and Føreland (1998), using a Visual Analog Scale (VAS) as a measuring scale on how respondents remember or feel towards certain things is a good way to conduct research in order to get high levels of reliability (1998, p. 391). In recent years, the VAS has been praised but has also received its fair share of criticism. The most common critique according to Parkin and Devlin (2003), is that there is a lack of theoretical foundation in the VAS, meaning that the different values presented in the VAS are not based by choice (2003, p. 4). Some scientists even go so far as to claim that VAS is not suitable for measuring value functions. However, Parkin and Devlin claim that the VAS, despite the criticism has important advantages over other research techniques like the Likert scale when it comes to paired comparisons and magnitude estimation. (2003, p. 4)

As our study is one of the first of its kind, meaning there have been no earlier studies conducted about consumer memory, based on scandals and the COO. It was difficult for us to find a suitable measurement instrument. Surveys regarding pain and traumatic experiences often include a VAS, when measuring how much the respondent remembers a certain pain or a traumatic event they have experienced (Langley & Sheppard, 1984, p 146). We originally thought of using a Likert scale in our survey, since it is also considered as a good measuring tool. The Likert scale has been used by several researchers within the marketing field. An example of this is Gurhan-Canli & Maheswaran (2000), but since a VAS can be seen as a better choice by the above mentioned authors, we chose to include the VAS in our questionnaire.

Albaum (1997) claims in his journal that using any type of scale in a questionnaire could result in three different systematic errors;

- Respondents could have a tendency to respond too extreme.
- Respondents could have a tendency to not wanting to give extreme responses.
- Respondents could have a tendency to respond to the answers in a similar way to each question. (1997, p. 334)

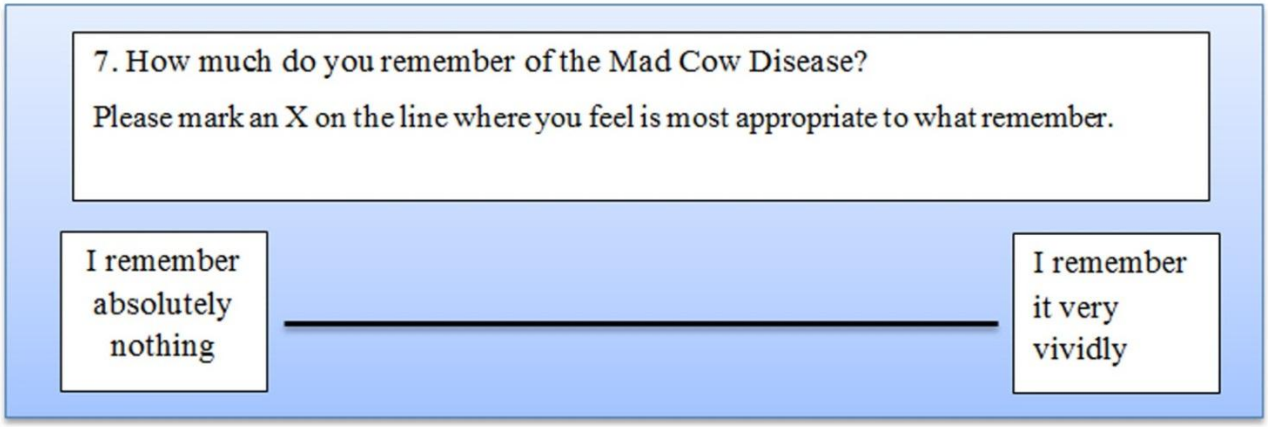
Due to the fact that we wanted to be able to measure the self-estimated memory of our respondents effectively, and since authors like Parkin and Devlin (2003) suggest using VAS as an effective measuring tool when conducting estimations and comparisons. We decided the VAS was the most suitable instrument for this thesis. The VAS is a measurement instrument which is consisting of two different anchors and a vertical line that goes between them. The purpose of using VAS was to try to measure characteristics, attitudes and the level of memory a respondent has of a scandal. (Gould, 2001, p. 706)

Usually the VAS consists of a line that is of 10 cm in length. At each side of the line there are two anchors. These anchors can be either illustrated in words, or pictures. The respondent marks an X on the line where they felt was most in accordance to their mood, or perception. In order to analyze the VAS score for each individual, the line was then measured in millimeters, from left to right. (Reips & Funke, 2008, p. 700)

Because of this, we then had a scale of one hundred possible answers since the lines in our questionnaire were ten centimeters long which was easy analyzed in the SPSS.

An illustration is here given in order to give the reader an easier overview of what the VAS is.

Figure 10: Exemplified VAS-Scale



(Source: Authors)

3.5.2 The Anchoring Effect

The Anchoring effect is a psychological term, which describes common human tendencies of strongly trusting a given attribute or information were one or more decisions are to be made. In short it means that anchoring is a certain method that scientists can use when conducting interviews. The reason for this is because, by using the Anchoring effect, scientists can be more certain on what direction the respondent is leaning towards when answering. The person who is about to answer a specific question is letting him- or herself subconsciously, be affected by the given conditions and words in the question (Brewer & Chapman, 2002, p. 65 and Science Daily, 2012).

One of the first people to write about the Anchoring Effect was a gentlemen named Heinz back in the 1950's. His researched touched on how the anchoring effect can affect peoples' judgment on lifted weight based on his respondents' judgments and their memory. A decade later Volkmann and Engen (1961) wrote about three different types of anchoring effects in regards to the absolute judgment of character. According to Nizami (2011), who has built parts of her research based on both Heinz and Volkmann & Engen (2011), anchors can be used for judgments when isolated stimuli should be able to

stand out in people's memory (2011, p. 101). This means that when researchers are studying about peoples' judgments and memory, the anchoring effect is an effective instrument to use in order to get higher levels of reliability. Therefore, since this thesis partly conducts research about consumers' memory, this is relevant information to include in this research. Another reason we chose to include the Anchoring effect in the questionnaire, was because we wanted the answers to be clearer, so the respondents different viewpoints would be easier for us to analyze.

In order to show how we constructed the questions with the help from the Anchoring effect, an illustrative example is provided. As can be seen in the first example, the question is shown how it can be asked without the usage of the Anchoring effect. Then, the same question is illustrated again, but this time with the help of the Anchoring Effect.

Example 1, No Anchoring effect

1. Please put a mark on the line where you feel is most appropriate to how much you trust foreign produced food sold in Sweden.

Do not trust _____ **Trust**

Example 2, contains Anchoring effect

1. Please put a mark on the line where you feel is most appropriate to how much you trust foreign produced food sold in Sweden.

Have no trust whatsoever _____ **Have absolute trust to 100%**

As you can see, the words used in the question with the Anchoring Effect are more strongly used, which makes the respondent take a clearer viewpoint on how (s)he felt about a certain issue.

3.6 Statistical Instruments

Under consultation with our supervisor Jonas Kågström, development of a correlation and factor analysis was conducted. The motive was to develop analytical methods in a proper way in which Mr. Kågström assisted with his knowledge of the methods.

When working with quantitative empirical data, using statistics is an effective way since it makes analyzing easy and simple. After all the answers from our respondents had been collected, we presented and analyzed these variables, both individually and separately via the SPSS program. In order to analyze two or more variables at the same time trying to find any potential correlations, Eliasson (2010) recommends conducting a correlation analysis in order to discover any potential relationship. (2010, pp. 91-92)

We also chose to include a factor analysis with help from the SPSS software program. SPSS enables us to conduct a factor analysis statistically in order to categorize new factors. A factor analysis is a method used in statistics with which the aim is to reveal any possible hidden variables which can cause noticeable variables to co-vary. If a variable is removed from the variance, it will reveal if it was part of the solution, due to the fact that only factors with a shared variance will appear in the final solution. If a factor has moderate communalities and is not correlated, it is possible to produce values of variance which are inflated by the components. (Costello & Osborne, 2005, p. 2)

3.6.1 Bivariate Correlation Analysis

According to Dancey and Reidy (2011), a correlation analysis enables researchers to see how different variables covariance, where the purpose is to discover any meaningful relationships between different variables (2011, p. 170). This means that a Correlation is used to describe if there is a linear relationship between two or more variables. A correlation can answer questions such as; is there a relationship between a person's weight level and that person's health? Furthermore, it can also answer and describe if there is a relationship between the spread of moose's in a country and the hunting interests

for moose's? The greatest degree of correlation is either plus (+) 1 or minus (-) 1.

Basically, this means that the correlation value is somewhere between these figures. If the correlation between two or more variables are zero (0), this shows us that there is no relation between the variables whatsoever, and is therefore not correlated. (Lövås, 2006, pp. 142-143)

- A correlation which has received a negative (-) number, describes the levels in one variable as being higher, while the other variable has received lower levels. This can be exemplified by; high levels of human weight are negatively correlated to low levels of health.
- If the correlation which has a number that is positive (+), this means that high levels in one variable somehow is connected to high levels in the other variable. An example for this can be, the higher amount of beaches in a given country, the higher levels of shark attacks are reported. (Lövås, 2006, p. 144)

Another important term to describe is the CI, better known as a Confidence Interval. A Confidence Interval is an interval that estimates the population. The CI is used to get an indication if there is any reliability to the specific variables estimated. The higher levels reached in the confidence interval, the higher reliability. If the CI levels are 95 per cent or 99 per cent between the variables, this means that there is a 95 respectively 99 per cent certainty that there is a correlation between the variables in question. CI's that are less than 95 per cent are not significant since the certainty of a relationship is lower. These were not taken into consideration when discussing and analyzing in later chapters. (Lövås, 2006, p. 224-225)

In the correlation matrixes which are presented in chapter 4 and in the appendix, sometime a star (*) or two stars (**) are shown after a number. One star indicates that there is a CI that is 95 per cent certain a correlation between the variables exists. For example, if the significance levels are -0,055*, this means that the researcher with a 95 per cent certainty can say there is no significant correlation

between the variables. However if there are two stars, for example the levels showed 0,88**, this means that the researcher with a 99 per cent's certainty can say that there is a very strong positive relationship between the variables. (Lövås, 2006, pp. 224-225)

The letter (capital) *N*, which is shown in the correlation matrix, represents the total population in the study, while the letter (case) *n* represents the sample of the population.

Compared to a normal Correlation analysis, a bivariate correlation analysis analyzes the relationship or co-variation between two variables (Djurfeldt, Larsson & Stjärnhagen, 2003, p. 143). One of the tools used when calculating the correlations are Pearson's Correlation Coefficient (PCC). The correlations are measuring ranking orders or how different variables are related. The PCC can be explained as a measurement of linear association. This means that variables can be related perfectly. However, if there is no linear regression, the PCC is not appropriate when conducting statistical measurements. (IBM, 2013)

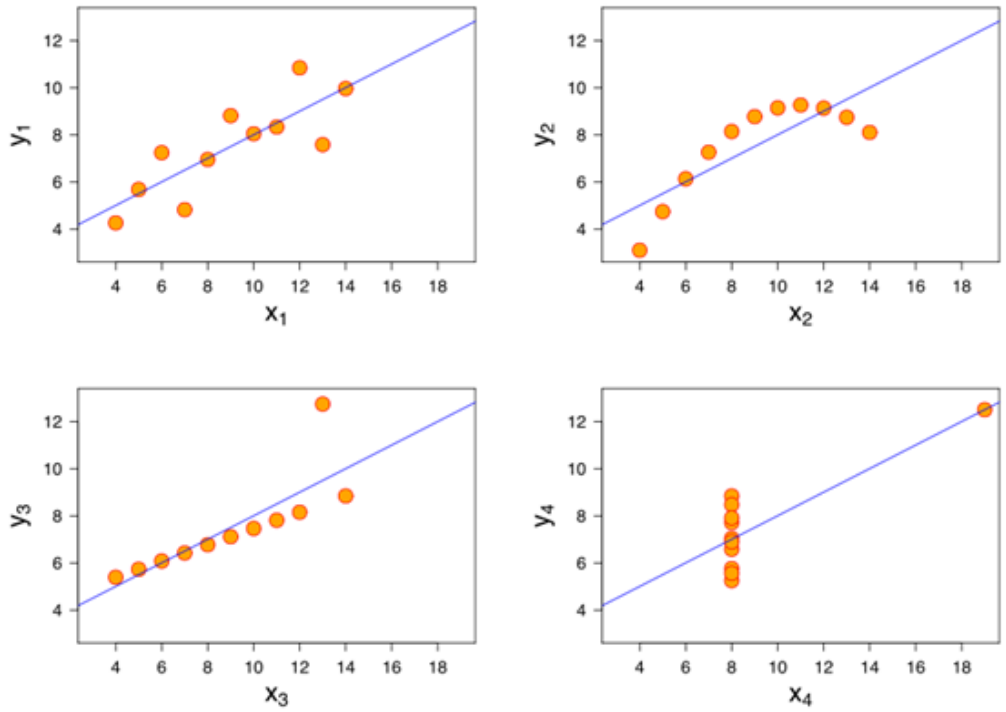
Bivariate data measures two different variables for an individual. An example of when a bivariate correlation analysis is conducted is when a scientist wants to know if a certain amount of pizza per month is somehow related to that persons' density of fat. Another example could be if a certain type of food scandal affects a person's consumer behavior. (Sullivan, 2012, p. 190)

Since we have bivariate correlations analyzed and discussed in chapter 4, we needed to double-check these variables so we would not encounter any chi-square problems. With a Chi-square problem we refer to see if there were any non-linear regressions despite the strong correlations. (Andrews, 1988, pp. 1419-1421) After doing the Chi-test, we found that all variables indeed had of linear regression. Examples that we indeed had linear regression are given in chapter below. However, the Chi-squared test is basically a variation of the PCC test (Pearson Chi-Square, 2011a and 2011b).

As seen in the Graph 1 on next page, there are four different graphs which shows different types of regression. Only the top left graph has

an acceptable linear regression and is therefore the only one which can be used when doing a bivariate correlation analysis which ensured us of further external validity.

Graph 1: Examples of regressions



(Source: Authors)

3.6.2 Factor Analysis

The purpose of a factor analysis is to reduce the surveys variables by putting them into components. These components represent different factors of the variables which correlates the strongest with each other. (Pallant, 2010, p. 180) There are two types of factor analysis – *Exploratory Factor Analysis* (EFA) and a *Confirmatory Factor Analysis* (CFA)

According to Albright and Park (2009), a CFA is perceived as a more complex approach than the EFA. The CFA is driven by testing a hypothesis or theory. By using CFA it enables the possibility to apply relevant constrictions on the factor model. This approach also enables scientists to test a certain hypothesis regarding a certain factor structure. (2009, p. 3)

An EFA on the other hand, is where researchers like to test one or more hypothesis explicitly or by exploring different patterns in certain data. When using EFA, every factor is expected to affect all variables observed. Also when using EFA, all common factors are either correlated to some degree or not. (Albright & Park, 2009, p. 2)

A factor analysis of the exploratory kind (EFA) is a globally accepted and known technique in social sciences. It is a complex process of many steps where the purpose is to identify any possible complex inter-relationships between items in a group and single items which are part of a unified notion. The scientist then proceeds to make assumptions based on the different relationships between the given factors. Because of this the exploratory factor analysis has few definitive guidelines with many options, but the whole procedure is complex. (Costello & Osborne, 2005, pp. 1-3)

Many popular statistical software programs are using this method among them is the SPSS program. According to Malhotra (2007), the SPSS program is largely used when conducting marketing research (2007, p. 29), which is why we decided to use this program when we analyzed our empirical data. Unlike the CFA, EFA calculates different factor scores and is more data driven while CFA is theory driven (Albright & Park, 2009, pp. 3-4), which is the main reason we chose to use the EFA in this thesis. Before the EFA was conducted, we tested the reliability of our data. This measurement is called the *Chronbach's Alpha* (CA). We reached a value of 0,828 in our study which is shown below from a transcript of the SPSS.

Table 3: Cronbach's Alpha

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,828	,811	23

(Source: SPSS)

According to Tavakol and Dennick (2011), the CA should be between 0.7 and 0.95 in order to be perceived as a valid number, where 1 is the maximum (2011, p. 54). If the CA number received is low, it can be due to a low number of questions and too many heterogeneous variables.

Since an acceptable number was reached, we proceeded to conduct more advanced statistical analyses. From the factor analysis we got a *Kaiser-Mayer-Olkin* (KMO) value of 0,775. An acceptable KMO number should be at least 0.6 in order to be as reliable as possible or is else unacceptable (Pallant, 2001, p. 153)

Table 4: KMO and Barlett's Test

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,775
Bartlett's Test of Sphericity	Approx. Chi-Square	1128,663
	df	231
	Sig.	,000

(Source: SPSS)

In order to guarantee that the reliability and validity (see 3.9) were sufficient, both the CA and the KMO measurements were taken.

By implementing a factor analysis, it provides a measure of total variance explained where the SPSS chooses factors, the proportion of these factors are the degree of explanation of all data. The SPSS software then found out how many factors which were appropriate, and chose five factors which explained 63,5 per cent of all empirical data. The problematic part in this step is to find a reasonable amount of factors which are manageable and still have a satisfactory high cumulative degree of explanation. The five factors are manageable and at the same time the degree of explanation are almost 65 per cent which is considered to be sufficient.

In the *Rotated Component matrix* which can be found on page 64, it concludes all of the data from within a matrix with the help of SPSS. This matrix was then used to try to read and interpret the results. The

vertical axis shows the questions from the questionnaire and is ranked after how strong the contributing factors to the overall coefficient of determination are. In each cell of the matrix is a value between -1 and 1, this indicates how much the issue correlates to the specific factor allowing us to then analyze the results. Under the recommendation from supervisor Mr. Kågström, we used the Maximum Likelihood Analysis method (MLA) in the Factor Analysis.

3.7 Validity, Reliability & Generalizability

The term validity is referring to a measuring-instrument's capacity to actually measure what it is supposed to measure. What is being measured in accordance to what the survey measures? For example, does the weight scale measure humans in kilograms or tons? This makes it essential to collect data that is relevant to the problem of the research (Larsen 2009, p. 40-41). There are two different aspects of validity that need to be separated, *internal validity* and *external validity*. *Internal validity* can be explained as the validity of statements with a study, for example how certain are the conclusions made in regards to the results. *External validity* is the correlation between the readings obtained from the use of an operational definition. An example of this is the questions in an interview. (Campbell, 1986, pp. 71-72 and Eriksson & Finn, 2011, p. 60-61)

The questionnaire used in this thesis was made by a framework which had already been used with great success in previous studies. Since our findings were clear, the internal validity is given. To help increase the internal validity, when formulating questions, we used earlier highly acceptable methods from other similar studies. Furthermore, before we started handing out the questionnaire, we did a pilot-study with a test-group in order to expose any limitations or confusing aspects regarding the questions, which ensured us that we would reach a greater internal validity. As for the external validity, since no other studies have been conducted in this specific subject, the external validity can be questioned. However since we applied our answers to the total Swedish population, by choosing to approach every fifth person we met as a possible respondent at the train stations

in both Gävle and Borlänge, this ensured us with a high external validity.

Reliability basically means that a measuring instrument must provide reliable and precise answers. An example on this is when creating a questionnaire. It is important to include precise answering categories. To include categories such as *often* or *rarely* in the answers is not ideal, as there might be a significant difference in what people perceives as often or rarely. In order to achieve high reliability, means that scientists can conduct research about the same subject repeatedly, but always end up with the same answer. (Larsen 2009, pp. 41-42 and Wilson, 1995, findings section) If a result in a research is zero (0), this means that it is very reliable. There are three different forms of reliability which can be tested;

- as internal consistency reliability
- as alternative-forms reliability
- as test-retest reliability

(Malhotra, 2007, p. 284)

As for the internal consistency reliability, it identifies the reliability of the data collected via summarizing the items in the survey. The alpha coefficients of Cronbach are suggested to be used when testing the items. Those coefficients vary between zero (0) and one (1). Data which reaches the levels of 0,6 or higher, are perceived as having an internal consistency reliability that is satisfying. When it comes to alternative forms of reliability, the respondents have to answer the questionnaire twice.

However, the respondents will also have to fill out another form of the questionnaire compared to the previous one. As for the test-retest reliability, the test is conducted twice. Concerning the surrounding conditions they have to be as alike and similar as possible for both of the tests. Otherwise this will give inaccurate information regarding the results. (Malhotra, 2007, p. 284) Regarding the term generalizability, this refers to the extent a surveys results will deliver findings that are generalizable to the population. The result is only generalizable if two surveys with similar or equal measuring instruments reach the same

result (Malhotra, 2007, pp. 287–288). Since this thesis is focusing on two different factors, the COO and Consumer memory in relation to scandals, the Retrieved quantitative research delivered enough data by including the 142 respondents. This means from a statistical point of view, it is ok to generalize our findings on our population. Since the results can be generalized due to the quantity of respondents, generalizability is thus confirmed in this study.

3.8 Critique to the methodology

As stated earlier; by not having the questions in randomized order, this could have led to a decreased effect on the external validity of the responses. Since respondents tend to be bored with long questionnaires, causing them to in some cases just randomly fill out the questions without any meaning, optimal results were difficult to get. But this method was not possible to conduct due to being too time-consuming which would have affected the quality of the rest of this thesis and which was not recommended by other researchers. (Krosnick & Alwen, 1987, pp. 206-208)

We believe it would have been interesting to include a deeper qualitative interview with each and every one of the respondents, rather than having a quantitative questionnaire with closed questions, since we believe it could have provided more interesting and deeper responses. However, we felt it was not practically feasible time-wise, with the result that we opted out qualitative studies completely.

Other factors we believe that could have been considered are discussed in chapter 3.5.1, where we wrote that there are three different psychological errors that may occur when a respondent responds to a questionnaire containing any type of scale (Albaum, 1997, p. 334)

4. Results and Discussion

In this chapter, our empirical findings are presented, discussed, explained and linked to the theories presented in Chapter 2. The purpose with this analysis was to be able to give explanations to the results we found. First, this chapter presents a summarized interview with an expert within the field of food. Then the empirical findings are presented in general terms. This is then followed by a factor analysis and then the conclusion with a correlation analysis.

This chapter first presents the summarized interview with Elisabet Qvarford, since at certain points throughout this chapter it has been explained with help from the interview. After the interview, some general mean and std. deviation values applied to the population have been given. Which also includes demographic variables, on how much the general remembrances of the scandals were, and also the general self-estimated affect from the scandals as well. Trust is also discussed in general terms applied to the population. One of the main purposes for including the *trust* factor in the presentation, are that it is discussed throughout this chapter and in the conclusions.

After the second part, a factor analysis was conducted where the empirical data was presented in five different groups. After the factor analysis, the empirical findings were presented with the help of a correlation analysis, where the most significant and important correlations were presented. Since the four mentioned subchapters are presenting the empirical findings but at the same time are discussing, analyzing and linking them to theories; sometimes there will be very similar and almost repetitive discussions in both the factor and correlation analysis. But this is necessary since there might be small but noticeable differences, which will be added in the conclusion.

Furthermore, even the referencing from earlier subchapters to later subchapters will be done. For example, it can be written in chapter 4.3.2 that findings from the correlation analysis in chapter 4.4.4 claimed certain things. Therefore the readers are encouraged to read the entire chapter in order to get a better picture of the findings.

4.1 Summarized Interview

Elisabet Qvarford has worked for Svenskt Kött since 2012 as a market communicator. Svenskt Kött (Swedish meat) is an organization which actively communicates and informs about Swedish pork, beef and lamb and the benefits of Swedish livestock. The Swedish Meat Organization is along with Farmers' Federation (Lantbrukarnas Riksförbund, LRF) and retail chains an initiator of Swedish-meat brand labeling. Over 130 Swedish livestock companies are working with Svenskt Kött by using their voluntary origin-labeling scheme. According to Elisabet Qvarford, over 70 per cent of the Swedish consumers recognized the labeling from Svenskt Kött, which is a good indication that it is a well-known and remembered label.

Her job as a market communicator involves working with a wide variety of segments and tasks. Some of which include; informing the press regarding certain topics such as food scandals, frequently figures on Twitter, writing opinionated articles in newspapers and working as a project manager for the Chef of the year competition in Sweden (Årets Kock Sverige).

Elisabet Qvarford was raised on a farm with her first real job being a Swedish meat producer with the company Scan. She got a background as a journalist for four years, which has provided her with additional knowledge about publicity, for her most recent profession and experience within the field of marketing and food, she has worked as a market developer within The Swedish Farmer’s Association.

According to Qvarford, food scandals usually tend to stick out particularly in the mind of the consumer and affect their purchasing behavior up to month after media have stopped reporting about the scandal. This information is based on hearsay from food chains within the field.

Qvarford believed that depending on the origin of the scandal, customers tend to remember each scandal differently. One reason for this might be that Swedish customers perceive Swedish meat as being of better quality; therefore making them more likely to recall foreign scandals. She also believed that there are differences in how well

consumers remember and are sensitive to different scandals based on age and gender. She also felt that females are more sensitive than men. Mainly due to the fact that there are a greater number of females doing the grocery shopping compared to men. Furthermore, for females, food is linked to health and that they are more aware and perhaps more health conscious, also since women are feeding their children more than men. This contributes to that women are being more sensitive towards scandals and remembering them more frequently. As for age, she believed that older people tend to remember scandals more, as they have been raised differently compared to the youth of today, with the younger generation are used to a being exposed more frequently to different types of media. The younger generation also has easier access to look up the accuracy of the information more, which enables them to be more selective in what they read. Regarding the question on what she thought was the reason why so many people tended to remember the Belgian Blue scandal and the Mad Cow Disease. She believed that it could have to do with that back in the late 1980's, Sweden adopted new stricter laws regarding animal and livestock treatment called Lex Lindgren.

Lex Lindgren is an animal protection law which was manifested in Sweden in 1988 by the initiative of the famous Swedish children's book author Astrid Lindgren. Astrid Lindgren was famous for her involvement in animal rights issues. (Stenberg, 2009)

Qvarford continued by saying that since Astrid Lindgren is a much loved person by the Swedish population, this law made people grows even more of a stronger emotional bond toward animal rights. A few years later, Sweden joined the European Union (EU) which caused Swedish media and the Swedish population to have concerns with whether they had to adopt the less strict animal laws. This, in conjunction with fewer media sources at the time could be a contributing factor to people remembering these scandals. One reason why the consumers most likely remembered the ICA scandal more vividly where they had changed the best-before-date, Qvarford believed it had to do with broken trust. ICA is a dominating Brand on the Swedish market which signals that their products to be of higher quality, where trust is an important factor with their customers. So

when the scandal occurred at ICA, people felt betrayed due to the trust they had. If the scandal had of happened with Lidl for example, which is a global German food chain which also figures in Sweden. She thought that the Swedish consumers would not have put so much thought behind the Scandals since it was of German origin, with little trust toward the Lidl brand itself. Overall, the Swedish consumers tend to trust Swedish food over foreign food, but Qvarford stressed that this notion is not uncommon abroad either. Sweden ranks pretty low compared to countries like France who are considered to have a strong "food nationalism". In general Swedish people are open to trying new food trends which causes Sweden to be a bit of a testing ground for companies, before entering their product into other countries. However, she feels that Swedish people are quite sensitive to certain products like meat.

The general feel towards Swedish food by the Swedish consumers is that they trust their food and trust is important to them. However, despite being open minded, Swedish consumers could be selective when it comes to foreign food depending on the product. However in the end it is the price that matters the most to the customer, she stressed out that there is a big difference on what consumers think and what they actually do. Despite Swedish consumers being more favorable towards Swedish food in general, when it comes down to the actual purchasing in the supermarket, price is the most deciding factor. Most people are generally not willing to purchase Swedish food with a much higher price difference depending on what type of food it is.

When asked if people tend to remember food scandals more than other scandals; Qvarford responded by saying that it depends on the person in question and what is most relevant to him/her at the time. For example, if it is a woman with a newborn child, it is likely that she is more sensitive to any scandals concerning baby food and baby items. However the scandals that tend to rile up people the most in general are food scandals and scandals concerning pharmaceuticals since they are everyday items which affect us all.

Furthermore, she also believed that media can be perceived as being biased to a certain degree when it comes to reporting on foreign food versus domestic food.

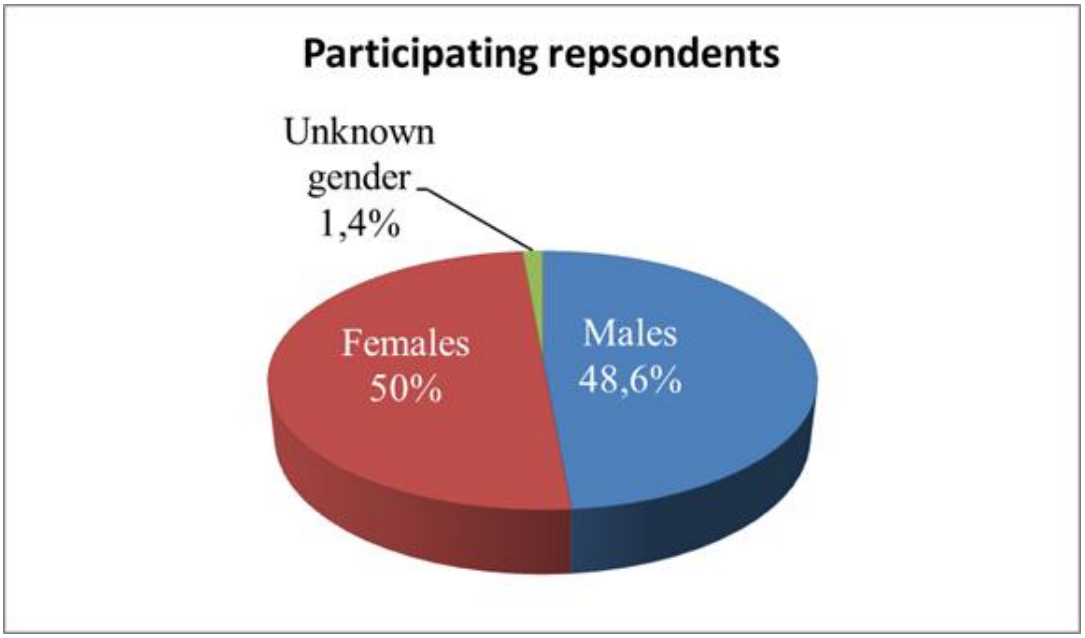
The biggest contributing factor regarding on how much consumers remember from scandals, depends on how good the company is who are handling the situation.

(E. Qvarford, personal communication, May 15, 2013)

4.2 Demographic Data and Variables

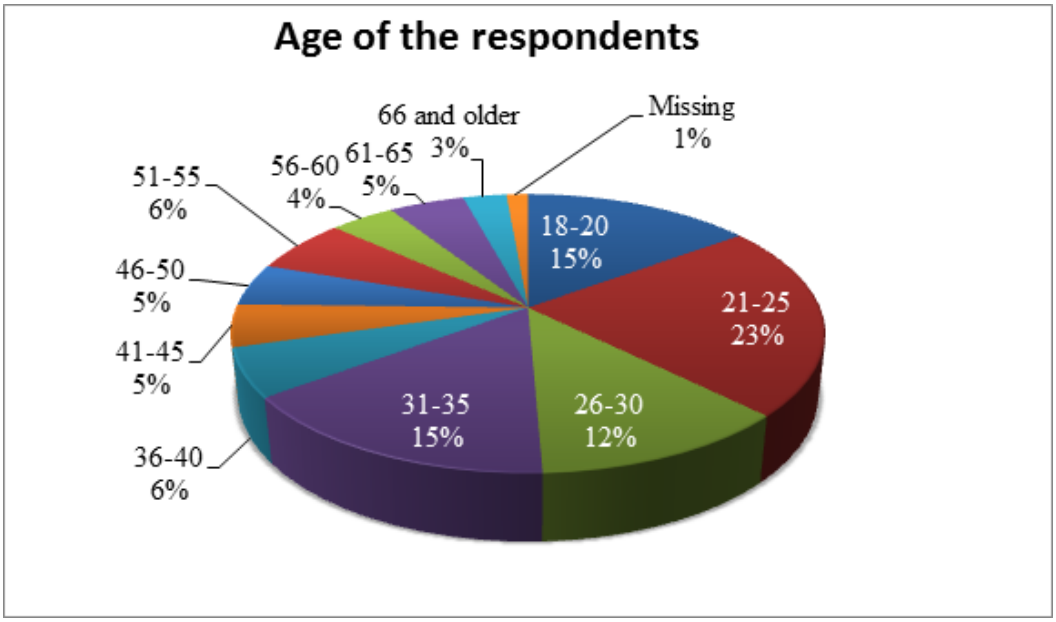
The respondents in our questionnaires were 50 per cent females (n=71) and 48,6 per cent males (n=69). The remaining 1,4 per cent of the respondents failed to answer the gender question (n=2). The ages ranged from 18 to 76 where the mean age was 34,5 years and the standard deviation (Std. Deviation) was 14,79 years. The most frequent age was 18 where 14 of the respondents were this age. The respondents represented 10 per cent of our population. More specific data can be found in the appendix.

Diagram 1: Gender of the respondents



(Source: SPSS & Authors)

Diagram 2: Age of the Respondents



(Source: SPSS & Authors)

4.2.1 General Trust of Food

As presented in table 5, generally applied to our population, when it comes to for trusting food from different origins, it is clear that Swedish people favored Swedish food over foreign produced food and food products with no country of origin labeled on them.

Table 5: General Trust of food

	Trusting Foreign food	Trusting Swedish food	Trusting Unknown food
N Valid	140	142	139
Missing	2	0	3
Mean	45,0357	69,5423	33,2590
Median	47,0000	75,0000	30,0000
Std. Deviation	24,48532	21,12262	23,94842
Minimum	2,00	15,00	1,00
Maximum	98,00	100,00	99,00
Sum	6305,00	9875,00	4623,00

(Source: SPSS)

The applied mean value for the Swedish population on trusting Swedish food was 69,5 per cent on the VAS, while the levels of trust for foreign food sold in Sweden was only 45 per cent. However, the lowest levels of trust clearly applied with food which had no origin specified. The mean value was only 33,3 per cent among the respondents. Considering the maximum number is 100, these are rather low levels of trust. This came as no surprise to us since our presumptions were that Swedish consumers indeed favored Swedish food. This was also in accordance to Bilkey & Nes (1982), Han & Terpstra's (1988) and Hoffman (2000) who all respectively claimed that Swedes favor their domestic food and have a greater level of mistrust towards the foreign food due to perceived differences in quality (See 2.2, 2.3.2 and 2.3.3).

Furthermore, as we wrote about Mahesewaran (1994) in chapter 2.3.1, the COO can signal the perceived quality of a certain product. Therefore, we believe that the COOE was an important factor to be considered for companies and marketers, who in turn can use this in order to get a competitive advantage since price is not always the most important factor.

The findings indicated that consumers are in fact willing to pay premium price in order to get Swedish produced food, especially with meat products since the origin of the country gives indications of perceived quality and safety (see 2.3.2). It is clear that the COOE can be an important factor in the purchasing decision process. Furthermore, the interview in this thesis clearly supported our findings as it clearly stated that Swedish consumers trusted and favored domestic food more than they trusted and favored foreign or unknown origin food.

4.2.2 General Remembrance and Affectiveness of Scandals

Below two matrixes are presented which show both the mean value and the Std. Deviation value on the VAS from our respondent's answers. The answers in the first table (6) were in regards of how much the respondents claimed to have remembered the different

scandals. Table 7 shows how much they claimed to have been affected by the different scandals in regards to their consumer behavior.

Table 6: Mean & Std. Deviation on remembrance of Scandals

How much did the consumers remember of the different scandals	Mean No.	Std. Deviation	Year		
Horse meat Scandal	**68,8**	32,9	2013	New	Foreign
ICA Change best-before-date on meat	**62**	34,3	2007	Old	Swedish
Filet of Pork instead of Filet of beef	**59**	36,2	2012	New	Foreign
Mad Cow Disease	**54,6**	30,1	2001	Old	Foreign
Belgian Blue	**45,9**	36,4	1995	Old	Foreign
Acrylamide in Crisps	**34**	35,5	2002	Old	Swedish
FAKE QUESTION	**25,4**	29,2	N/A	N/A	N/A
ICA Change best-before-date on Cheese	**21,3**	29,3	2012	New	Swedish
Worms in Findus food	**20**	27,5	2013	New	Swedish

(Source: SPSS)

Table 7: Mean & Std. Deviation of respondents self-estimated affect by the Scandals

How much did the consumers got affected by the different scandals	Mean No.	Std. Deviation	Year		
Mad Cow Disease	**32,1**	29,0	2013	New	Foreign
ICA Change Best-before-date on meat	**29,7**	27,7	2007	Old	Swedish
Horse meat Scandal	**29,3**	28,9	2012	New	Foreign
Filet of Pork instead of Filet of beef	**27,6**	31,2	2001	Old	Foreign
Belgian Blue	**23,5**	29,3	1995	Old	Foreign
Acrylamide in Crisps	**19,5**	27,4	2002	Old	Swedish
FAKE QUESTION	**16,7**	25,4	N/A	N/A	N/A
Worms in Findus food	**15,9**	26,7	2012	New	Swedish
ICA Change best-before-date on Cheese	**11,8**	19,4	2013	New	Swedish

(Source: SPSS)

As can be seen in table 6, the foreign Horse Meat scandal is the most well-remembered scandal, where the respondents in general, claimed to remember 68,8 per cent from the scandal were the Std. deviation was 33,2. However we believe that this is no coincidence since this scandal is a very recent one - of big proportions – which is still figuring in the media as of writing. Noticeably, four of the top five remembered scandals were of foreign origin. Scandals which have similar results can be found in table 7. This gives a clear indication that people in general tend to remember foreign scandals better and are more affected by them, despite whether the scandals

being old or new. We believe that this can be linked to authors Balestrini and Gamble (2006), where they claimed that people are putting extrinsic cues such as the COO based on the image a certain country has when evaluating the quality of a product (see 2.3.1). Therefore, after a scandal with foreign food has occurred, people are more likely to be careful when purchasing foreign food compared to Swedish thinking it is safer. Because of this we clearly see a red line where the COO is the common factor. According to table 6, one reason the horse meat scandal can be justified as scoring the highest mean (68,8) compared to the other scandals, could be because it was a scandal which had recently occurred, it was foreign and has had a lot of media coverage. This makes the Horse meat scandal most likely to be in the top of the mind among respondents when thinking of recent food scandals.

The ICA best-before-date change question scored the second highest mean despite being considered as old in both table 6 and 7. In our opinion it could have to do with the fact that the company is a strong brand with strong brand equity within Sweden. Especially since the ICA Company figures frequently on primetime television with their commercials, this helps to keep them fresh in the minds of the respondents. We also think that another reason why the ICA best-before-date meat scandal ranked so high could have something to do with that the Swedish consumers are being more sensitive and selective when it comes to meat. Due to this sensitivity concerning meat products, and ICA being a strong brand, this scandal has also ranked high up on the list. Due to this we argue that it is not just the COOE which plays an important part on how much people trusted and have been affected by a scandal, it also has to do with what type of product it was, as well as the brand equity of the company and how much the consumers trusted the brand. This was partly confirmed by the findings of Hoffman (2000) in chapter 2.3.2 and Qvarford (see 4.1) where they claimed that Swedish consumers were sensitive and selective when it came to meat. We also presented in the same chapter that Martín and Cerviño (2011) came to the conclusion, that with higher risk products, people were more rational in their purchasing behavior. Therefore since we believed that meat is perceived as a

higher risk product, any scandal regarding meat in combination with a big brand causing it, can impact greatly on the consumer. Judging by the results; the information from scandals such as these are stored in the long-term memory for quite some time due to the airing of commercials. This keeps it fresh in the consumers mind.

Surprisingly people claimed in general to be the most affected by the Mad Cow Disease, a scandal which has not figured frequently in media for nearly 12 years. Our perception on this is that since the general population has remembered this scandal to a degree of 54,6 and has ranked it in at no. #4 in table 6, one plausible answer could be that it is just a well-known word people associate with meat, and for the same reasons given earlier by Hoffman (2000) and Qvarford (see 4.1.), that Swedish consumers are just very picky when it comes to purchasing meat. However since these are old scandals, this actually contradicts Elisabet Qvarford's other statement that consumers tend to forget about the scandal approximately one month after it has been reported the last time (see 4.1). Despite the consumers claiming to have been affected by the scandals in regards to their purchasing behavior, Qvarford had clearly stressed that price was the most deciding factor generally speaking when purchasing food. Despite that the consumers claimed to have been affected by the scandals, there is a big difference between what a person says and what a person actually does (see 4.1). It must be mentioned that the authors strongly support Qvarford's statement regarding this.

4.3 Factor Analysis

Both the KMO and the Bartlett´s test were measured to examine if the empirical data collected were sufficient in order to conduct a reliable EFA. As mentioned earlier (see 3.8.2), in order to present reliable and acceptable data, the result of the KMO test should be at least 0,600 when conducting a factor analysis. Since the KMO of our empiric data was 0,775, this facilitated our possibilities to conduct the factor analysis since the reliability was sufficient.

After we had done the EFA, the SPSS program categorized all our variables into five component groups, according to what correlated the most, the degree of explanation we got was 63.5 per cent. This was a

measure of how much the five components could explain the total result from the analysis. This means for example that if we in some capacity to affect or alter the questions in the Affected group, which had a total variance explained of 31,3 per cent. This would mean that the whole analysis would be changed with 31,1 per cent.

However, we would like to mention that it is possible to adjust the table, thus giving us more components to analyze. This would increase the degree of explanation. Since we argued that it was already sufficient enough by having a cumulative 63.5 per cent as the degree of explanation, we chose to exclude further components. The complete Total Variance Explained Table can be found in the appendix.

Table 8: Total Variance Explained

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,888	31,308	31,308	2,723	12,377	12,377
2	2,578	11,718	43,025	4,928	22,401	34,778
3	2,070	9,410	52,436	2,019	9,176	43,954
4	1,359	6,177	58,612	1,372	6,237	50,191
5	1,068	4,853	63,465	,874	3,971	54,162

Extraction Method: Maximum Likelihood.

(Source: SPSS)

The matrix below is a *Rotated Component Matrix* and it shows the results we got from the EFA. As can be seen, factor No. 1 has the highest level of explanation (31,308 per cent), while factor No. 2 has the second highest level of explanation (11,718 per cent) and so on. All five factors were named in accordance to their similarities which makes the discussion easier for the reader to follow.

Due to the fact that the factor analysis found below is only showing inter-correlations which have a higher number than 0,3 we agreed with our supervisor that no conclusions can be drawn upon with lower numbers than that.

Table 9: Rotated Component Matrix

Rotated Factor Matrix

	Factor				
	1	2	3	4	5
BelgianBlueAffect	,801				
MadCowAffect	,779				
HorsemeatAffect	,622				
PorkBeefAffect	,465				
WormsAffect	,406				
PorkBeef		,701			
BelgianBlue		,649			
MadCow		,641			
Acrylamide		,547			
Age		,531			
Horsemeat		,501			
ICABestdateMeat		,487			
FAKE			,851		
FAKEAffect	,384		,775		
Worms	,383		,486		
AcrylamideAffect	,328		,363		
Foreign				-,981	
Unknown				-,545	
Swedish				-,501	
ICACheese					,727
ICACheeseAffect	,331				,726
ICABestdateAffect	,396				,405

Extraction Method: Maximum Likelihood.

Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 7 iterations.

(Source: SPSS)

4.3.1 Component 1 - The Affected group

The first and most powerful component in the factor analysis had a total variance explained of 31,3 per cent. This group was named the "Affected group" since all five variables correlating, were linked to how much the respondents claimed to have gotten affected by the different food scandals. As the analysis shows, these variables correlated very strongly with each other. This means that if the consumer claimed to have been badly affected by the *Belgian Blue scandal*, it is very likely that they were also strongly affected by the *Mad Cow Disease*, the *Horse meat scandals* and so on. Since people in general have less trust for foreign food compared to Swedish food which was presented in 4.2, we thought there was no coincidence that these factors correlated strongly, especially the top three variables where the levels of correlation ranged between 0,622 and 0,802. Because of this, we suggest that these findings can be directly linked to Martìn and Cerviño's (2011) findings (see 2.3.2) where they claimed that the COO can be used as a cue on products which affects the respondent's consumer behavior. This is also in accordance to Hoffman's article (2000), where he wrote that Swedes prefer Swedish food over foreign, and that media, manufacturers and politicians have focused to report more on foreign shortcomings (see 2.3.2). Also, Elisabet Qvarford support Hoffman's claims that media to a certain degree are biased towards domestic food favoring it as being of a more superior quality (see 4.1).

Because of this, food being produced outside Sweden receives a more negative *image*. 80 per cent of the variables in the "Affected group" are foreign scandals. Only one Swedish scandal was included in this group, and that was the worm scandal which ranked last in this group. We considered it was most likely that the respondents may have believed that, despite Findus being a Swedish company, the respondents may have thought that the actual meat in Findus products were of either unknown or of foreign origin. This would explain why this variable was included in the "Affected group". Therefore, the people who remembered different scandals such as the *Belgian blue* and the *Mad Cow Disease* thought they were more affected in their consumer behavior by the foreign scandals. This would assume that

country image is an important factor for both new and old scandals since we believed that people most likely perceived foreign foods as being of lower quality just because it comes from abroad. This also indicates that for those who remembered the scandals were actually more affected by the foreign produced food scandals. Furthermore, since three out of the five scandals were old and originated from abroad, this would imply that these scandals are stored in the long-term memory of the consumers which can be supported by to Baumeister (2001) in chapter 2.4 where it he claimed that negative associations and encounters are more likely to be stored in the long-term memory.

In the correlation analysis (see 4.4.1), it was found that; *Age* positively correlated with both the *Mad Cow Disease* and *Belgian Blue scandal*. This as mentioned gives a strong indication that the older the people are, the more they tend to remember foreign scandals. We believed that this would in turn impact on their *trust* to foreign scandals more negatively. This also goes hand in hand with Bilkey and Nes (1982), where they claim that older people put stronger emphasis on the product whether it is domestic or not (see 2.3.3). However in the same chapter Hoffman (2000) claimed the opposite - that there is a great possibility that younger people are more sensitive to foreign products. Regardless of this, the conclusion from the "Affected group" was that the COO greatly affects people no matter how old the scandals were, based on the age of the person, how much trust the person has for products from a specific country and the *country image*.

Therefore, the determinants of the COOE framework (see 2.3) are proven as an important part in the purchasing decision process (see 2.1). As stated before by Lin and Chen (2006) despite the age and gender of the consumer, factors such as COOE, trust and the information the consumers are exposed to influences their purchasing decision (see 2.1). This means that the respondents' purchasing decision in our case were affected by both the COOE and the negative information they were exposed to. Furthermore, the common denominator in this group are that all scandals are meat scandals, because of this Lin and Chen's (2006) findings are important to draw

linkage to (see 2.1). They found that purchasing meat requires a high level of product involvement, when deciding to make a purchase or not, since meat is a product which focuses a lot on extrinsic cues such as quality.

We discussed that *age*, along with *trust* and *country image* all contribute to framework of the COO determinants, and have all had an effect on people's consumer purchasing decisions. One thing that was not taken into consideration in the questionnaire was whether the respondent was a vegetarian or not. Because vegetarians can still remember a scandal on meat, but not be as affected by it since they do not eat meat. If this would have been taken into consideration, the analysis could possibly have included different correlations and factors. Furthermore, since we asked the customers to estimate their own consumer behavior after the scandals, we think that there was a potential chance that they overestimated themselves, since we think that there is a difference between thinking that they are affected yet still purchasing the product, as Qvarford previously stated that; despite customers being selective, open minded and trusting certain products, it all boiled down to the price in most cases (see 4.1). Qvarford also mentioned that, price is the most important factor when it comes to purchasing food.

The Affected group received 31,3 per cent of the total variance explained. As seen in the text, this can be linked to the following factors: Age, COO, high levels of product involvement and trust.

4.3.2 Component 2 - The Memory group

The next component in the factor analysis explained 11,7 per cent of total variance. We decided to call this group for the "Memory Group", since six out of seven variables were linked to the questions on how much the respondents remembered different scandals. The seventh variable included in the memory group was *age*, which means that the older the person is, the stronger the possibility that (s)he remembers more of the scandal. The variables which had the strongest correlation were the three foreign meat scandals: the *Pork-Beef scandal* (0,701) from 2012 and the two older scandals - *the Belgian Blue* (0,649) and the *Mad Cow Disease* (0,641). This high correlation indicated two

things; first it indicated that in terms of memory the respondents tended to remember the foreign scandals more than the Swedish scandals, despite the age of the different scandals. Regarding the consumers' memory, in order for the consumers to establish a strong emotional link and get affected by a scandal, the consumers who were exposed to negative information, tend to store that information for longer periods of time. This can be directly linked to Baumeister et al. (2001) in chapter 2.4. Especially since we believed that they see foreign food as having less quality, so when a scandal occurs involving a foreign product or company, it becomes a self-fulfilled prophecy to the consumer.

This can ultimately affect the purchase-decision-making of the individual compared to non-negative information. Second, another important finding that can be analyzed from the correlation between the *age* and *memory* among respondents; was that the old scandals (*Belgian Blue* and *Mad Cow Disease*) were remembered more by the older respondents compared to the younger respondents. We believed this was normal since it was most likely that some of the younger respondents were too young to remember some of the scandals occurring.

It is clear from the findings in the "Memory group" the respondents tended to remember the foreign scandals more than the domestic ones. Only two domestic scandals were included in this component, while the remaining four were of foreign origin, which also had higher levels of correlation. Therefore the COO of the food scandals had made an impact on the consumer's long-term memory. Since the ICA scandal was also included, but ranked the lowest in this group, it can be argued that the *age* variable played a significant role as on the older scandals. But as for similar reasons given in chapter 4.3.5, consumers tended to remember more about a scandal if the company was a large well-known and respected brand with strong brand equity compared to scandals from smaller brands relatively unknown brands. Furthermore, the another reason ICA best before date was included in this group can be linked to Hoffman's (2000) article (see 2.3.2) where he discussed that Swedish meat was, communicated through media as being more superior, and therefore increasing the impact with which

foreign scandals have on the consumers long-term memory. Especially since Hoffman (2000) stressed out that quality and food safety cues are important factors to customers. Furthermore, Hoffman (2000) also claimed meat is a high-level involvement product, and therefore we argue that it is to be perceived as an important factor when deciding to purchase and therefore people remember this ICA scandal longer. WOM could be a contributing factor, when it comes to spreading negative information which in turn makes people remember it more. Qvarford however, stated in the interview that the single most important factor on how much consumers remember a certain scandal could directly be linked to how good the company in question deals with a scandal (see 4.1). As for her statements, we agreed with her to a certain degree, but we were more inclined to believe that Hoffman's (2000) claims were more relevant.

The Memory group got 11.7 per cent of the total variance explained. This can be linked to the following factors: *Age, COO, trust* and the high-levels of *product involvement* which can all have an effect on the consumers' memory.

4.3.3 Component 3 - The Sensationalist group

The next component, explained 9,4 per cent of the total variance and was named the "Sensationalist group" since there existed strong correlations between the *Fake* question, the *Worm* question and the *Acrylamide affect* question, but with similar low mean levels of remembrance and impact (see 4.2). Based on the combination of the variables in this group, the respondents who had a strong memory towards the *Fake* scandal and were affected by it, also tended to remember the *Worm* and *Acrylamide* scandals as well. In our opinion, the combination of these different variables being in the same group indicates two possibilities; either the respondents did not carefully read the question or they were not as sincere when answering.

As can be seen in table 6, very few remembered both the *Worm* scandal and the *Fake* scandal; therefore, we think that the respondents who claimed to remember the *Worm* Scandal are likely the same people who claimed to remember the *Fake* scandal and vice versa. Therefore this might indicate that the external validity of the research

could somewhat have been affected negatively. The reason we chose to call this group the sensationalist group was because we thought the respondents who tended to remember these scandals either just filled out the question randomly or that they pretended to remember everything without giving it any serious thought, and took everything as fact with no critical thinking. Because of this, we could not draw any parallels to the COO or the Consumer memory.

We think another issue which could be as suggested by Krosnick and Alwen (1987) (see 3.4), was that it would have perhaps been better to have randomized the order of the questions in our questionnaire. This would have led to a more reliable external validity. The reason for this is as previously mentioned in the same chapter, is that long questionnaires tend to bore the respondents. This would have affected the outcome of their answers and possibly influenced them to just randomly fill out the questionnaire. However, as also mentioned in the same chapter, this would have been very time-consuming when both constructing the questionnaire and analyzing the data from it. Therefore this method is more suitable for electronic surveys and not hand-outs in paper form.

In all, the total variance explained in the Sensationalist group was 9.2 per cent. This could be according to the previous text, directly related to this small group of respondents having either answered just for the sake of filling out the questions in random order, not being sincere, or mixing up the scandal with another or perhaps any combination of these, all of which could be possible flaws in the external validity.

4.3.4 Component 4 - The COO group

In the fourth component which explains 6,2 per cent of the total variance, all three variables are negatively correlated. In this group, all variables could be linked to the *COO* and *trust*. The variables concerned questions regarding ~~with~~ what level of trust the respondents had towards food of different origins. Therefore we chose to call this component the "COO group". The trust towards the foreign food variable had the most strongly correlated variable.

Since the variables correlated negatively, this meant that in this case if a person did not trust Swedish food, (s)he would most likely not trust foreign food and unknown labeled food to a certain degree. This indicates that Swedish food is more favored over the other two variables. This is also supported by the findings in 4.2.1, we can draw a clear linkage to both Hoffman's (2000) and Bilkey & Nes' (1982) theories regarding the COO (see 2.2, 2.3.2 and 2.3.3), as well as to Qvarford's interview (see 4.1), where they all claimed that Swedish consumers favor domestic food over foreign, and have a bigger mistrust towards foreign food since the consumers perceive the quality and food safety of the Swedish food as being more superior. As mentioned earlier, since entering EU, Swedish media and other channels have put more focus on reporting shortcomings of foreign food. We believed this has led to the consumers putting more focus on extrinsic cues such as the country characteristic - the *image* of the country. This signals a certain perceived quality of the food when deciding to make the purchase or not. Also, Balestrini and Gamble (2006) talk about the COO being used as a favorable extrinsic cue, as it can signal, according to Hong and Wyer (1989), an emotional meaning to the customer (see 3.2.1). This can make customers possibly opt to choose and trust a certain product over price when deciding to make a purchase (See 3.2.1).

Because of this, it is clear that people are prejudice towards foreign food to a greater degree than with Swedish food. So if a foreign product sold in Sweden is involved in a scandal, this would be seen as a self-fulfilling prophecy, which in turn would cause the customer to strongly remember this scandal more. Therefore we very firmly felt that the "*Swedish image*" is more favorable compared to the perceived general *image* of foreign countries.

This, along with the product characteristics of perceived *quality* and *trust* are all important cues, which marketers need to be aware of. This is because they can take leverage from these characteristics, for when the consumer makes his or her purchasing decisions. Therefore these three characteristics are important factors and can be clearly linked to figure 3 - the Conceptual Structure model (see 2.1). However, it should be noted that neither *gender* nor *age* are included in the COO

group which contradicts what Bilkey & Nes (1982) as well as Hoffman (2000) claimed in regards to the consumer characteristics of *age* and *gender* which are both important factors when a person evaluates the extrinsic cues via the COO (see 2.3.3). This however supports Wang's (1978) findings, where he came to the conclusion that gender had no effect on how consumers perceive different products.

Despite domestic food being favored due to trust and higher perceived quality, we believe that Qvarford were right in her statements that price is the single most important factor when it comes to purchasing food in general. Therefore, the conclusion from the COO group was that the COOE is an important marketing tool, where trust and quality can impact on the long-term memory. Because of this, this is the most important variable when it comes to the customers purchasing decision, but only when it comes to certain types of products and if the price differences are too great between the domestic and foreign products.

The COO group received 6.2 per cent of the total variance explained. As seen in the chapter above, this can be directly linked to the following factors: *Trust*, *COO*, perceived *quality* of products such as *image* and *quality*.

4.3.5 Component 5 - The ICA group

Last but not least, was the "ICA group" component which explained only 4,9 per cent of the total variance. This group included three out of four questions asked about the two ICA scandals. This indicated that for those respondents who remembered the two scandals, they were very badly affected by them, especially the old ICA scandal where the mean value of remembering it was 62 per cent (see 4.2.2). When looking at table 7, one can see that the general mean impact of the old ICA changing the best-before-date scandal ranked second (29,7 per cent) on the table and got a Std. deviation of 27,7. This means that it was only surpassed by the Mad Cow Disease indicating that people remember the ICA scandals strongly despite them being old. The remembrance of the ICA Cheese scandal and the self-perceived purchasing effect from it, were ranked second to bottom in table 6

(21,3 per cent) and second to bottom in table 7 (11,8 per cent). But as being discussed in the correlation analysis (see 4.4.7), there was a strong correlation between these two questions (remembrance of the Cheese scandal and how much it impacted on the consumers behavior) but with a low degree of remembrance and effect from it (see 4.2.2.). This indicated that the ones who actually remembered the Cheese scandal were indeed the "cheese lovers" and therefore the impact was greater among that group due to the correlation presented. Another reason why people remembered the old meat scandal could be linked to what Hoffman suggested (2000) that Swedish people are sensitive when it comes to meat scandals since it is food which requires high levels of product involvement (see 2.3.2).

When it comes to the consumer memory, the effect from the ICA cheese scandal had a significant impact on the "cheese lovers". The "cheese lovers" still remember the scandal since cheese is a dear product to them. So because of this, cheese also occurs in their memory frequently and as a result of the product being on their mind a lot, it has had an influence on both the respondent's long-term memory and has had an effect on their purchasing behavior, which can also be supported by McLeod's (2010) findings (see 2.4).

However, we believed the above mentioned factors are only a small part of the reason for these variables being put in the same group by the EFA. ICA is one of the main supermarkets in Sweden beside Willy:s, City Gross and Coop Konsum. Also, since ICA figure frequently in media with prime-time commercials, they are trying to position themselves as having good quality products where price is secondary. The actual shopping experience comes first compared to other low-price shops like Willy:s for example. Therefore, ICA has lots of loyal and regular customers due to the perceived quality and shopping experience. We believe that because of this any scandal involving ICA would lead to the customers being aware of it directly via media, both consciously and subconsciously, which in turn would lead to the consumers storing that scandal in their long-term memory. Another contributing factor that we suggested might have led to the scandal being stored in the respondent's long-term memory and which also inter-correlates in the EFA, is as mentioned above, ICA is a

strong brand with strong brand equity on the market. Since we believed ICA is trying to position themself as being a high quality food chain compared to their competitors. We thought it was likely that they were on the top of the mind of the customers, where the customers of ICA perceive ICA as being superior to the other mentioned food chains. This creates an illusion of trust towards ICA as a company and its perceived high quality products.

However if a scandal occurred at a Lidl store for example, we believed the customers would have been more acceptant towards the scandal, since they did not have as much trust towards the company in the first place. Because of this, the impact of the scandals occurring at ICA is greater. We also believed that the higher the trust due to positioning, perceived quality and other factors of a brand, the greater the impact of the scandal. Due to this, we thought this lead to a higher probability of the customers storing the scandal in their long-term memory. Our claims go hand-in-hand with the opinion of Elisabet Qvarford (see 4.1), who also thought that broken trust from a dominating brand like ICA, who as company market themselves as having high quality products and puts lots of resources on building their image, severely damages the trust they have with their customers.

She also addresses that this is the most likely explanation as to why the respondents remembered the scandals. Qvarford also claimed in the interview that the single most important factor on how much consumers remembered scandals could be linked to how the company in question deals with the scandal (see 4.1). We thought that if this was the case, ICA has failed to fully recover from their scandals.

Finally, The ICA group got 4.9 per cent of the total variance explained. As seen in the chapter above, this can be directly linked to following factors: *Trust*, *Strong brand equity*, *Brand image* (perceived quality), and especially products which requires a higher *product involvement*.

4.4 Correlations

First we did a correlation analysis with all the variables. This resulted in a big table consisting of 265 correlations (see the appendix for the full table). In order to analyze the most relevant correlations, we chose to select the most significant ones which could be linked to the aim and purpose of this thesis - *age, gender, trust, memory* and *COO*. Sometimes we had to include a discussion of a variable despite the significance levels in the correlations being low and the CI having none or only one star since it was part of our aim to discuss (see 4.4.2 for example). Furthermore, we also decided to include all of the top variables in each of the component groups from the factor analysis (see the Rotated component Matrix on page 64).

The purpose of this was to include the most important variables - the ones with the most explanations in each group, and then to see which other variables they correlated with the most in order to draw further relevant conclusions.

The variables discussed from the factor analysis were:

- Belgian Blue Affect – the Affected group
- The Remembrance of the Pork-Beef scandal – the Memory group
- The Remembrance of the Fake Scandal – the Sensationalist group
- The levels of trust in the Foreign food – the COO group
- The Remembrance of the ICA Cheese Scandal – the ICA group

To find the most important correlations to discuss, we looked at the correlation analysis for each one of these variables. We decided to include a presentation and discussion regarding the correlating variables to which had a CI of 99 per cent CI (**) and significant levels that were either above 0,500** or under minus (-) 0,500**.

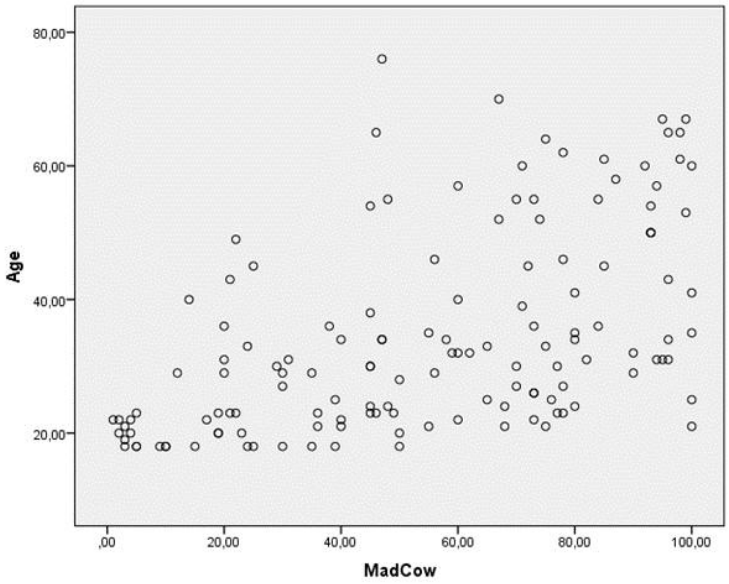
In order to ensure linear regression we conducted Chi-squared tests for each of the correlations via SPSS. However, only one of the Chi-Squared tests will be presented mainly as an example of our findings (see Graph 2 in 4.4.1). If there were no linear regressions between two variables, we chose to test the next variable in the same factor group to see if there were linear regressions between the other remaining variables instead.

This would ensure that we would get a higher external validity of our analysis. A discussion and analysis are then presented along with possible links to the theories in chapter 2.

4.4.1 – Age

As can be seen in the correlation analysis, there was a direct correlation with a linear regression between the age variable and how much the respondent remembered both the *Mad Cow Disease* and the *Belgian Blue scandal* where the PCC showed 0,529** in the age variable correlated to the Mad Cow Disease.

Graph 2: Chi-Squared test - Age and Mad Cow Disease



(Source: SPSS)

Table 10: Descriptive statistics – Age

Descriptive Statistics

	Mean	Std. Deviation	N
Age	34,4857	14,79378	140
MadCow	55,4071	30,12919	140
BelgianBlue	48,2444	36,41315	135

(Source: SPSS)

Table 11: Correlations – Age

Correlations

		Age	MadCow	BelgianBlue
Age	Pearson Correlation	1	,529**	,571**
	Sig. (2-tailed)		,000	,000
	N	140	138	133
MadCow	Pearson Correlation	,529**	1	,637**
	Sig. (2-tailed)	,000		,000
	N	138	140	134
BelgianBlue	Pearson Correlation	,571**	,637**	1
	Sig. (2-tailed)	,000	,000	
	N	133	134	135

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

(Source: SPSS)

The PCC shows a 0,571** in correlation between the Age variable and the Belgian Blue scandal variable. This means that the older a person ~~is~~ was, there was a 99 per cent's certainty that they would be more likely to remember more of both of the old scandals. Furthermore, there was an even stronger correlation between the Belgian Blue scandal and the Mad Cow Disease (0,637**), meaning that there was a 99 per cent certainty that the more the respondent remembered from one of the scandals, it was also likely (s)he would also remember more of the other scandal as well.

We felt this was natural since we saw that age was the most common denominator. This is only natural as the older a person were, the greater the likelihood of that person of having been exposed to both of the scandals. For example, we think the respondents who were in the age between 18 and 25 in our survey, did not remember too much from those scandals since they would have at the eldest been 13 years of age when the newest of the two old foreign scandals figured in media. We believed that the children would not pay attention to scandals which is why the younger respondents are not so familiar with the scandals compared to the older respondents. Regarding the strong correlation between the two scandals, we also believed that since both scandals were figuring frequently in media, they were both remembered by the older respondents. This can be linked to both memory and COO theories (see 2.2 and 2.4).

The fact that Swedish consumers remembered more of the old foreign scandals than the old domestic scandals, proves that they believed that Swedish food has superior quality and that they are more negatively minded towards foreign food, which can also be supported by Hoffman (2000). Also as Lin and Chen (2006) stated, there is less trust towards foreign food, especially in products which require more involvement in the purchasing decision process such as meat (Hoffman, 2000). Therefore, any scandals concerning domestic meat are more likely to be stored in the long-term memory according to McLeod (2010). This is also being supported by Baumeister et al. (2001) that negative information tends to be stored for longer periods. Therefore we also believed that due to the negative attitude and trust towards foreign food, when a scandal occurs with a foreign produced item it then becomes, in the minds of the customers, a self-fulfilling prophecy, which then ultimately affects their long-term memory.

However, regarding age and consumer memory, Hoyer and Verhaeghen (2006) claimed it existed a link between these two variables (see 2.4) meaning that with increased age memory starts to fade. Old and Naveh-Benjamin (2008) stated that older people tend to forget the details of a certain image or happening (see 2.4). But since the findings of our study showed that the respondents mean value for remembering the two scandals were 54,6 and 45,9 (see table 6) this is still a fairly high number, and due to the Correlation analysis showing clear evidence that old foreign scandal have been remembered for the same reasons given above. This indicates that old people do indeed forget scandals, but if the scandals were domestic, the levels of remembrance and correlation would have been even less. This also indicated that old people have a stronger memory toward the foreign scandals.

One possible explanation why these specific variables were remembered could also partly be explained with the help of the *Lex Lindberg* and a lesser media explanation given in 4.1, at least with the *Belgian Blue scandal* which took place in 1995. But those arguments are not as strong when it comes to the *Mad Cow Disease* which took place in 2001, when there was a lot more media coverage and over 13 years after the *Lex Lindberg*. Therefore we agreed with Qvarford to a

certain extent on her views, yet our findings showed that people in general have a stronger memory towards foreign food scandals compared to domestic food scandals when all other factors were the same.

4.4.2 - Gender

The findings regarding the correlations between the gender variable and other variables such as COO, trust, memory and being affected by different scandals were non-exist. No significant correlations linked to gender were found whatsoever. Only one correlation had a CI of 95 per cent, but the actual correlation was not significant since those levels were only 0,204*.

This is interesting because according to Dornoff et al. (1974) and Scholer (1971) Swedish females tend to use the COO as an indicator of the quality of the meat, meaning that they did not trust foreign food as much as males did (see 2.3.3), also it contradicts Qvarfords statements (see 4.1). What is even more interesting is that there were no correlations between the *gender* and the *memory* questions. This is opposite to what Huang (1993) claimed saying that females generally outperformed males when it came to having a good memory.

Also, it was not in accordance to Dehurst et al. (2012) whose findings claimed that men were more insensitive to recall negative information compared to females (see 2.4), again this seemingly contradicts Qvarford's statements as well. Since our findings go against our assumptions and pre-understanding (see 1.5) as well as most of the theories in chapter 2, this signals that the answer to one of our purposes was that gender did not play a part when remembering scandals from a - different origin, trusting food of different origin, and being impacted by the scandals.

4.4.3 - Factor group 1 - Belgian Blue Effect - The Affected group

From the Affected group in the factor analysis, we analyzed the respondent's self-estimated affect from the Mad Cow Disease with the self-estimated affect from the Belgian Blue scandal.

Table 12: Descriptive statistics – The Affected group

Descriptive Statistics

	Mean	Std. Deviation	N
MadCowAffect	33,5368	28,96176	136
BelgianBlueAffect	24,8507	29,27277	134

(Source: SPSS)

Table 13: Correlations – The Affected group

Correlations

		MadCowAffect	BelgianBlueAffect
MadCowAffect	Pearson Correlation	1	,691**
	Sig. (2-tailed)		,000
	N	136	130
BelgianBlueAffect	Pearson Correlation	,691**	1
	Sig. (2-tailed)	,000	
	N	130	134

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

(Source: SPSS)

As can be seen in the table above, the correlations between the Mad Cow affect and the Belgian Blue affect scored 99 per cent CI with a correlation level of 0,691**. This means that if a respondent was affected in their consumer behavior by the Belgian Blue scandal, there is a 99 per cent certainty that they were affected to a certain degree by the Mad Cow Disease as well. According to the mean values, the impact of the scandals was low (33,5 and 24,9). This can be explained with two reasons.

First of all, both scandals are old, this implies that respondents who actually remembered these scandals are the ones who actually claimed to be have affected by them, which as mentioned in 4.4.2 is most likely to be the older respondents. Second, these two scandals are both

foreign. This would assume that the COO has had an effect to a certain degree in both variables. As seen in 4.4.1, there is a strong correlation between how much the respondents remembered the Belgian Blue scandal and the Mad Cow Disease, naturally we think that this is why there is a strong correlation in the impact of these scandals - i.e. it was only the older people who remembered the scandal and who claimed to have been affected by it, therefore they had lower levels of the mean values. This suggests that due to the same reasons as given in 4.4.1, we believed these respondents who remembered these scandals are in fact the older respondents. At the same time, we also thought they perceived Swedish food as being of superior quality and as much safer compared to the foreign food which has had more negative associations with it.

Since the scandals in this group were of foreign origin, this made the impact of the scandals stronger in the mind of the respondent, which in turn led to the scandal being stored in the long-term memory. Clear linkage can be drawn to Hoffman (2000) who claimed that Swedish people favored Swedish meat and are more negative towards foreign food, which in addition can be further linked to Baumeister et al. (2001) who claimed that any negative information tends to last longer in the memory.

Because of this, it can be further linked to Martín and Cerviño's (2011) article where they claimed that depending on the product, it affected people's purchasing decisions differently (see 2.3.2). This is also supported by Lin and Chen (2006) where they claimed that exposure to negative information, implied a negative influence on the consumers decision making and intention to purchase (see 2.1), especially if the product inherits extrinsic cues which requires more product involvement on the purchase decision as consumers are more selective when purchasing meat due to lower levels of *trust*. Because of these given reasons, this is why there was a strong correlation between these two variables. With people being more affected by foreign scandals it is only natural that older people remember these scandals more.

4.4.4 - Factor group 2 –Belgian Blue scandal– The Memory group

In the Memory group there were no significant correlations between the top variable and the others. This made us choose the next variable from the Factor analysis which had significant correlations between the Belgian Blue scandal and when the respondents self-estimated affect from it were analyzed.

Table 14: Descriptive statistics – The Memory group

Descriptive Statistics

	Mean	Std. Deviation	N
BelgianBlue	48,2444	36,41315	135
BelgianBlueAffect	24,8507	29,27277	134

(Source: SPSS)

Table 15: Correlations – The Memory group

Correlations

		BelgianBlue	BelgianBlueAffect
BelgianBlue	Pearson Correlation	1	,529**
	Sig. (2-tailed)		,000
	N	135	132
BelgianBlueAffect	Pearson Correlation	,529**	1
	Sig. (2-tailed)	,000	
	N	132	134

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

(Source: SPSS)

From the findings between the Belgian Blue scandal and the impact of it had a 99 per cent CI, with a significant level of 0,529**. This meant that if a respondent remembered the Belgian Blue scandal, there was a 99 per cent's chance that (s)he got significantly affected by it as well. This is to us natural, because if a person strongly remember a scandal it is more likely (s)he got affected by it as well to some capacity. As in previous chapters (4.4.1 and 4.4.3.), the variable in this chapter is in regards to an old foreign scandal. Therefore we think due to the fairly high mean value of remembrance (48,2) seen above, and

ranking as the fifth most remembered scandal despite being 18 years old. In our opinion, as seen in the correlation analysis, the respondents who remembered the Belgian Blue scandal were also the ones who felt they were most affected by it. In other words, the more the respondent remembers the scandal the more they get affected. It would in our opinion be against all common sense that any respondent who did not remember the scandal would claim to be affected from it.

We see the combination of *Age, COO* and the product itself (meat) as the factors contributing to this correlation. Because as mentioned by Hoffman (2000), Swedes tend to favor domestic food and are more negative towards foreign food products. Since a scandal occurred with a foreign product, it is to be perceived that the consumer will remember this scandal more due to negative associations toward the foreign meat or country, especially since (s)he according to Martín and Cevriño (2011) claim; that respondents can put negative cues via the COO on a whole range of products where *quality* and food safety are important factors. As Baumeister et al. (2001) claim, negative information tends to last longer in the consumer memory, and is therefore stored in the Long-term memory. Because of this, we believed that this to some degree affects the consumers purchasing decision, since it is evident according to Lin and Chen (2006) that the COO can be an important factor when deciding to make a purchase or not. Therefore we also believed that any meat labeled as being non-Swedish, can signal to older customers in particular, that the product "may or may not" contain a "*Belgian Blue Bull"* in the meat.

Since the customer is not familiar with the foreign standard requirements, the perceived product knowledge therefore decreases. Since meat is considered as a high-involvement product according to Hoffman (2000) and Martín & Cevriño (2011), where *trust* is an important ingredient as mentioned, these three factors can ultimately affect the consumers purchasing decision behavior negatively. This is why these variables correlate. See Lin and Chen´s (2006) conceptual structure model (see figure 3), where they clearly stressed out that these factors (Product involvement, COO Image and product knowledge) were essential parts in the purchasing decision process.

4.4.5 - Factor group 3 - The Fake Scandal – The Sensationalist group

In the Sensationalist group the Fake scandal was clearly the top component. As can be seen in the correlation analysis, the remembrance of the fake Scandal has its strongest correlation with the variable where it was asked and how much the respondent felt (s)he got affected by the fake scandal.

Table 16: Descriptive statistics: The Sensationalist group

Descriptive Statistics

	Mean	Std. Deviation	N
FAKE	26,8881	29,22911	134
FAKEAffect	18,3798	25,35781	129

(Source: SPSS)

Table 17: Correlations – The Sensationalist group

Correlations

		FAKE	FAKEAffect
FAKE	Pearson Correlation	1	,657**
	Sig. (2-tailed)		,000
	N	134	128
FAKEAffect	Pearson Correlation	,657**	1
	Sig. (2-tailed)	,000	
	N	128	129

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

(Source: SPSS)

The CI was 99 per cent and had a level of significance which was 0,657**. This correlation was second only to the correlation discussed in 4.4.3, which got a correlation of 0,691**. This would assume that if the respondent tended to remember the fake scandal it was also very likely that (s)he would be affected by it as well. In order to explain this correlation, we first needed to look at the mean value. The mean value of the question of how much the respondent remembered the fake question was 26,9 on the VAS, with a std. deviation of 29,2. The

mean value on the VAS of respondents being affected by the fake scandal was only 18,4 with a std. deviation of 25,4. This indicated that very few respondents actually remembered this scandal. It is clear in the table 17 that those who claimed to remember this scandal also claimed to have been affected by it. We believed that for the same reasons presented in 4.4.3, this correlation can be explained in a few ways.

First, it could have to do with the external validity of the research. The fake question was number 12 out of 14 in our questionnaire. There is a chance that some respondents grew tired of filling out the questions which led to a random filling out the questions after a while. This is a valid reasoning as Krosnick and Alwen (1987) (see 3.4) also suggested randomizing the questions in order to increase the external validity and to reduce the chances of randomized answering by the respondents. The second possibility could be that the respondents pretended to remember everything, took everything presented for face-value without any critical thinking.

A third possibility, but what we believed may be a more far-fetched explanation, could be that the respondents might have answered the Fake scandal because it included the word "Coop Konsum" in it. Swedish consumers are very familiar with the brand Coop Konsum which is a big food chain in Sweden. It is possible that the respondents related the fake scandal to another scandal in their mind and somehow mixed up Coop Konsum with say the ICA Scandal.

However, with these three possible explanations, there was no link towards any theories which could help explain any of the three possibilities. We strongly felt that it was mostly a combination of the first and second explanation. The reason for this we believe was because several times after our hand-outs with the questionnaires, when we informed the respondents that question number 12 was faked, we were often met with comments such as –"*Oh I must have thought of something else*". A few times the respondents even just laughed at our reveal, indicating they may not have taken the questions too seriously.

4.4.6 - Factor group 4 - Levels of Trust – The COO group

All three variables from the *COO group* had been analyzed in the correlation analysis since all three were linked together and part of the aim of this thesis. The variables analyzed were in regards to how much the respondent's trusted Swedish food, foreign food sold in Sweden and food with unknown origin sold in Sweden. The reason for asking these questions was to get a general idea on how much the respondents trusted food from different origins.

Table 18: Descriptive statistics – The COO group

Descriptive Statistics

	Mean	Std. Deviation	N
Foreign	45,0357	24,48532	140
Swedish	69,5423	21,12262	142
Unknown	33,2590	23,94842	139

(Source: SPSS)

Table 19: Correlations – The COO group

Correlations

		Foreign	Swedish	Unknown
Foreign	Pearson Correlation	1	,552**	,575**
	Sig. (2-tailed)		,000	,000
	N	140	140	138
Swedish	Pearson Correlation	,552**	1	,375**
	Sig. (2-tailed)	,000		,000
	N	140	142	139
Unknown	Pearson Correlation	,575**	,375**	1
	Sig. (2-tailed)	,000	,000	
	N	138	139	139

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

(Source: SPSS)

As was discussed in chapter 4.2.1, Swedish people tended to favor and trust domestic food over foreign food. The food with unknown labeling got the lowest levels of trust. As for the correlations in table 19, all three variables had a 99 per cent CI towards each other.

Furthermore, the significance levels between the variables were all similar in two cases, reaching levels of 0,552** and 0,575**. Only the correlation between Swedish food and unknown origin were lower (0,375**)

Table 18 has already been discussed in chapter 4.2.1. Therefore the reader is advised to go back and read that chapter again in order to refresh their memory before continuing reading this chapter.

Regarding the correlations in table 19; they can be explained based on a person's trust towards food in general. This means if a person trust Swedish food, it is also likely that (s)he will trust both foreign unknown labeled food to a certain degree.

As a possible explanation to the correlations, we believed that the people in general, who trusted Swedish food, did not care so much from where the food actually came. This indicated to us that the Swedish consumers perceived food as being just something to consume when eating, the origin is therefore in most cases secondary. Furthermore, we felt that the consumers were a bit more sensitive to food with unknown labeling since we believed people in general are were afraid of testing unknown foods. This is in accordance with Lin and Chen (2006) who stressed out that having proper labeling affects the consumers purchasing decision more positively, while labeling which is not clear enough would have a more negative effect. Because of this, the purchasing decision process can be affected negatively by food with unknown origin and why it is important for marketers to be aware of.

One explanation as to why people just see food as something to consume and seemingly do not put so much thought behind the differences, is that the actual questions we asked in the questionnaire were too general; We asked the respondents for their opinion on "food". We did not specify any type of food, therefore we believed people generalized food as of all kinds of food when filling out the questionnaire. They might have thought of food in terms of purchasing; rice from China, bananas from Panama or coffee which originates from Colombia. These are all heavily imported food products from abroad. Martín and Cerviño (2011) stressed out that

there are different kind of levels of purchasing decision involvement for the customer to think of and that the involvement can vary greatly depending on what type of product it is (see 2.3.2). This is also in accordance with what Qvarford claims in the interview (see 4.1) she said that trust is essential to Swedish consumers, but that Swedish people are still very open minded towards trying new food products since foreign companies use Sweden as a test market at times.

We think that the mentioned products do not require as much thought when deciding to purchase them. However, if we would have asked the respondent how much they trusted a specific product which required more involvement, like meat for example, we believe that the correlations would have been very different, and that the levels of trust would have been much lower for foreign meat and meat with unknown labeling compared to Swedish meat. Therefore the *trust* factor in this chapter is not of importance to discuss. Focus should be more on the actual question, as the questionnaire would have needed to be more specific in regards to what the product was.

Therefore, to conclude this chapter, it can be said that without a doubt Swedish consumer's favored Swedish food above all other foods. Because of this, we found that our empirical findings support clearly support Hoffman (2000) and Bilkey & Nes (1982). But when it comes to food in general terms, consumers perceive food as something to eat, and do not put as much thought as to from where it originates. One explanation for this is that many importing enterprises have strict rules for *quality* to follow. This leads to a higher level of quality food products being imported and widely found throughout the supermarkets in Sweden. However if the word "food" in the question would have been replaced with a more specific food product like "meat", the findings and analysis would most likely have been different.

4.4.7 - Factor group 5 - ICA Cheese Scandal – The ICA group

The ICA group from the factor analysis, showed the correlation between the remembrance of the ICA cheese scandal (where the best-before-date had been changed) and the self-estimated effect from it which were analyzed. As can be seen in the tables 20, the mean values (23,2 and 13,2) and std. deviation (29,3 and 19,4) values were low among the respondents.

Table 20: Descriptive statistics – The ICA group

Descriptive Statistics

	Mean	Std. Deviation	N
ICACheese	23,2231	29,25728	130
ICACheeseAffect	13,2205	19,38332	127

(Source: SPSS)

Table 21: Correlations – The ICA group

Correlations

		ICACheese	ICACheeseAffect
ICACheese	Pearson Correlation	1	,598**
	Sig. (2-tailed)		,000
	N	130	124
ICACheeseAffect	Pearson Correlation	,598**	1
	Sig. (2-tailed)	,000	
	N	124	127

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

(Source: SPSS)

However the correlation between these two variables were significant with a 99 per cent CI (**) and the level of significance were 0,598**. This meant that the few respondents who actually remember this scandal were also greatly affected by it. This also meant that if a respondent remembered the Cheese scandal, it is also likely that they got affected in their consumer behavior by it.

We believe that that cheese products are considered to be a basic product which is purchased and consumed by a high number of the respondents. As mentioned in chapter 2.1 by Kotler (2006), products which are considered to be frequently purchased products, lead to the consumers not putting too much evaluation on whether to make a purchase or not. This makes the five-stage model of the *Consumer decision behavior* rather quick. However, due to the findings, it was suggested that the few respondents who actually remembered the cheese scandal vividly are in fact cheese-lovers and were therefore more affected by this scandal than other respondents.

This indicates to us that certain products such as cheese can affect a small group more negatively due to stronger preferences for that particular product. Therefore we believe that the COO is of no significance here whether or not it was domestic. However, if we would have conducted a study regarding a preference for cheese specifically based on the COO among "cheese lovers", and would have included just a few selected countries that are in our opinion famous for cheese; countries like Holland and Switzerland - We believe the results may have differed greatly. Since we know their different products require different levels of production involvement, which is also supported by Martín and Cerviño (2011) (see 2.3.2). But we also perceive cheese in general as being a product which does not require so much product involvement in the purchasing decision. However, for mentioned reasons, to "cheese lovers", this process would in fact be just as important if not more than other products.

Another reason which could be a contributing factor to the strong correlation is that ICA is a well-known company in Sweden. We believe that they have fairly high brand equity compared to most other supermarkets in Sweden, and trying to position themselves as the market leader of higher quality products over price.

Furthermore as mentioned, ICA also figures frequently in media on primetime TV in different commercials. We assume gives them loyal customers on the basis of high quality products. So when a company like ICA are involved in a scandal of this magnitude, this immediately gets a stronger negative response since the trust of the brand would

have been somewhat diminished. If the respondent is a loyal customer to ICA and a cheese lover, when a scandal hits the ICA company like the Cheese scandal, this would then lead to a stronger negative response from that particular customer.

The scandal would then be stored in the long-term memory and subconsciously kept fresh due to the ICA commercials airing on TV frequently. This would suggest that any large companies with strong brand equity need to be extra cautious when it comes to avoiding scandals since it affects their customer's long-term memory and their purchasing behavior. This is supported by Miller (2010) who suggested that negative information dominates customers purchasing decisions. If companies are being hit hard with more scandals, this could be fatal to them, since according to Keaveney (1995), customers are likely to change their purchasing behavior for good.

5. Conclusions

This chapter has been divided into different subchapters. First the findings from the factor analysis have been presented. This was then followed by the findings from the Correlation analysis, which culminated in the final conclusion based on the most relevant findings from both the factor and the correlation analyses. Next we discussed business implications, research implications before we concluded with a subchapter presenting critique to this paper.

5.1 Factor Analysis

The factor analysis showed five different important components to which the total variance could be explained to a degree of 63,5 per cent. The memory group was one important component which explained 11,7 per cent of the 63,5 per cent presented. It was shown in this group that six out of seven variables were linked to the consumer memory, COO and scandals. The scandals which were remembered the most by the respondents, regardless of whether the scandal was old or new, shared a common factor - foreign origin. This goes back to showing the preference of the respondents to Swedish food compared to the foreign and unknown food as mentioned earlier (see 2.3.2). The scandal most remembered from this component group was a new domestic scandal from a big Swedish food chain. This came as no surprise since the scandal was from a strong brand which had a much higher level of *trust* from their customers. Surprisingly the second and third most remembered scandals where two old non-domestic food scandals.

The reason the consumers remembered the foreign scandals could be linked to the COO theory, and the high level of product involvement, causing an impact on the long-term consumer memory. Some of the possible reasons we found for the consumers remembering the domestic scandals, could be partly explained due to the respondents being familiar to and having more trust towards the respective brands. Such scandals involving products which have a perceived lower quality end up becoming nothing more than a self-fulfilled prophecy consumer. Media and WOM could also be a minor

contributing factor in influencing and making people remember the scandals. Furthermore, the brands also signalled good quality, good food safety, and high brand equity. Also the products in the scandals involved, were all linked to high level involvement in the purchasing process. Because of the scandals, the trust was broken, which led to a strong impact on the long-term memory since the consumers felt betrayed. *Age* was a significant variable included in this group as well, which suggested that due to the high ranking of the old scandals (see table 6), older people vividly recalled and were more impacted by the old foreign scandals than the old domestic scandals. In all, these mentioned factors seemed to impact the long-term memory.

The main factor which explained one third of the total variance was found in the *Affected group*. These respondents were first able to estimate the effects different scandals had on their consumer behavior. It was found that those respondents', who claimed to have been affected by the scandals, were most likely the same respondents who had remembered them. It showed that the older people tended to remember and had been affected more by the older foreign scandals over the older domestic scandals. Therefore the COO of the scandal was of significant importance.

Other reasons for claiming to be affected by the scandals included a greater mistrust towards foreign food, and higher levels of product involvement in the purchasing decision process when it came to meat; especially since all these variables involved meat scandals only. Therefore, these characteristics are to be considered as important extrinsic cues to the consumer, which ultimately impacts on their long-term memory if a scandal was to occur. Because of this, any time a scandal occurs, involving a product regarded as having a high-level involvement in the purchasing decision process, the impact on the long-term memory would last longer. This in turn, would lead to a self-perceived change in their consumer behavior. However since all scandals in this group were self-estimated by the respondents themselves, and this study did not investigate whether this was just their made up perceived version or if it was actually true, it is impossible to know for sure. One thing that was not taken into consideration in the questionnaire was whether or not the respondent

was a vegetarian. Vegetarians can still remember a meat scandal, but are not affected by meat scandals to the same extent as meat eaters. The main reason for this is meat being excluded from their diets.

However, there were indications from the interview with Qvarford, that there was a big difference between what people say and what they actually do. She claimed that in general, the price is the single most important factor when the consumers' are making their purchases. This is something we agree to as well.

The third component was the Sensationalist group, which explained 9,4 per cent of the *total variance explained*. This group indicated that there could be flaws in the questionnaire. A small group of respondents seemed to remember certain scandals to a great degree, which were in fact non-existent. This could possibly have affected the external validity to a certain degree. Other explanations could be that the respondents mixed up different scandals or that they were not being sincere when answering.

The fourth component – The CCO group, explained only 6,2 per cent of the total variance. The findings from this component showed that Swedish consumers favored and *trusted* Swedish food, while being more negative towards foods from other countries or foods with unknown origins. Foods originated/produced elsewhere were perceived as being of lesser quality and of being less trustworthy in terms of food safety. Therefore it was found that the perceived image was an important factor when it came to evaluating the perceived quality and safety of the food. Because of this the COO cue can be seen as an important factor to consider when marketing, which is in accordance to Schooler (1965), Martin and Cerviño (2011), Maheswaran (1994), Nagashima (1970), Hoffman (2000). But in the end, as mentioned, we believed that price was the most important factor for the customers in general when purchasing food. Only when it came to certain products which required more thought and evaluation or had certain preference to it did the price become secondary. Furthermore, it was found that neither *gender* nor *age* played a significant part when it came to differences in *trusting* food

from other origins, which did not support what we thought and what Qvarford and most of the scientific journals believed and claimed.

The Last component in the factor analysis was the ICA group which explained only 4,9 per cent of the total variance. The findings in this group showed that despite some products having low levels of product involvement when purchasing, such as cheese, a scandal could still have a severe effect on a particular customer segment which have very specific preferences for that one food product. This would cause those customers to recollect that exact scandal for a longer period of time. The most important finding in this group however, was that large companies and brands with strong brand equity which the common consumer and loyal customers put their trust in, can be affected negatively to such a degree, that the consumers despite a long time transpires, still remember the scandal. If the brand has been positioned as a high quality brand, selling high level involvement products like meat and then is caught in a food scandal like ICA, there would be a very strong inevitable chance that they would have to face severe consequences. The reason for this is because it had affected the customer to such an extent, that it was then stored in the long-term memory of the customer as a something negative when the consumers trust was broken. Furthermore as previously discussed, negative information is most likely to be stored in the memory and recalled.

5.2 Correlation Analysis conclusion

It was found that the age variable was a significant factor when it came to remembering the old scandals as older people remembered them more than young. However this is natural to assume since the younger people were never likely to have been exposed to these scandals. Although it was also revealed that in regards to the old scandals, it was the foreign scandals which were the most recalled ones. We were then able to link this to less trust towards foreign scandals which had affected the long-term memory more. Remembering those scandals more could also possibly be linked to Swedish media being partial when reporting scandals by choosing to overexpose the foreign ones instead. It was also found that the reason the respondents remembered the foreign scandals more was because

they trusted foreign food less. So when a scandal occurs, it becomes a self-fulfilling prophecy in the minds of the respondents. This is easier to process since it fit their view more and thus is easier to store in the long-term memory. A strong correlation was also found to exist between remembering the Mad Cow Disease and remembering the Belgian Blue scandal both of which could be linked to the COO. As discussed earlier on, people tend to trust foreign food less, especially food such as meat which requires more involvement in the purchasing decision process. This indicated to us that since the Belgian Blue scandal and the Mad Cow Disease both concerned meat, these scandals were more easily stored in the long-term memory.

There was a strong correlation between how much the respondents estimated their consumer behavior having been affected by the Mad Cow Disease and how much they estimated their consumer behavior to have been affected by the Belgian Blue scandal. It was to our assumption that the respondents who remembered these particular scandals were also the same respondents who had been affected by them as well. Therefore this correlation can also be linked indirectly to age, depending on the amount of knowledge and remembrance the respondents had of these scandals. Because of this, the older the respondents were, the more they claimed to have been affected by them. An explanation for this is the perceived quality and food safety of the product which then leads to less *trust* towards foreign products. As found in previous correlations the level of product involvement when purchasing played a significant role in impacting the long-term memory. For the same reasons given previously, this is a clear evidence that those scandals have been remembered because they are foreign scandals and with them comes perceived lower *quality* and lower *trust* to food safety. Because of these two correlations, parts of the aim for this thesis were explained – Swedish consumers do remember scandals differently depending on origin, and they are in accordance to themselves more affected by them. Furthermore, our pre-understanding was also justified because of this.

Even though it was stated by Huang (1993) (Chapter 2.4) that gender has an influential role when it comes to the extent of the consumers' memory, we found that gender did not have an influence

on the respondents memory span. Both females and males had almost the same extent of remembrance to specific scandals. Furthermore, no correlations in regards to gender and preferences depending on the COO were found despite there being an almost equal balance of genders among the participating respondents. This went against the findings of several scientific journals, as well as our assumptions and Qvarford's statements.

An interesting find in the correlation analysis was that, despite a low mean value of remembrance for this scandal, there was a strong correlation between remembering the fake Scandal and the degree to which the respondents got affected by it. Since this scandal never occurred, we assumed that the ones who claimed to have remembered it, most likely were also the same respondents who claimed to have been affected by it. Three different possibilities were presented as an explanation to this; some of the respondents grew tired answering the long questionnaire which led to them randomly filling it out. There was also the possibility that some of the respondents may not have been as sincere to begin with when filling out the questions. The third explanation is that there is a possibility that the respondents who are figuring in this correlation, could have also mixed up this scandal with another scandal. The reason for this we believe was due to the commonly used brand name in the question. Due to this, there are indications that the external validity could have been slightly affected.

Despite the high mean values of trust for Swedish food compared to the trust for the foreign food and food with unknown labeling, it was revealed that there were significant correlations between all three variables. This indicated that if the respondent trusted Swedish food, they likely trusted foreign food and unknown labeled food as well. The explanation for this was that despite favoring and trusting Swedish food more. Swedish people were open-minded when it came to trying new food. These findings support and link together the three significant correlations between all the variables. We came to the conclusion that trust was indeed an important factor, but that the word "*food*" used in the questions was so broad, that it involved too much of a wide variety of different food products with varying levels of trust attached to them. If the questions would have asked for a specified

food-product instead, like a food product which requires more involvement in the purchasing process such as meat, it is possible that the respective analyses would have shown different correlations and factors. Because of this when answering these three questions, it was suggested that Swedish people in general have high levels of trust for Swedish food, and foods which are imported due to strict rules regarding quality when importing. Therefore, Swedish people who trust food in general also trust foreign food, but not to the same degree as Swedish food. Therefore, trust and the level of product involvement are important variables to consider for the consumer because they can have quite a large impact on the long-term memory.

The last finding in the correlation analysis was that there was a significant correlation between the ICA Cheese scandal and the degree to which the respondents estimated themselves as having been affected by it. Despite that cheese is a frequently purchased product and is consumed by the majority of people. It was proven that the small segment of "Cheese lovers" still put a lot of involvement in the evaluation process on whether or not to purchase the cheese.

Since cheese scandal involved the ICA brand and their out of date cheese products, causing the trust of this consumer segment to be broken. This is why this small number of consumers remembered this scandal vividly and was affected by it. Another contributing factor to why people remember this scandal is because it involved a large well-known company (ICA) with high levels of brand equity and their positioning for selling high quality food products. The "cheese lovers" not only favored the cheese, but they trusted the ICA brand too due to its positioning of having high quality products and brand equity. However this trust was shattered due to the scandal, since the higher the trust the higher the fall.

5.3 Final conclusion

As was seen in both the correlation and factor analyses, *trust* was the essential theme throughout the empirical findings. We found there were numerous factors which could affect the long-term consumer memory in a negative way, based on perceived or broken trust. However, we also found no linkage in differences between the genders

in regarding these issues. We were able to divide *trust* in the different characteristics and are presented here.

First of all, the quality of food and the food safety of a product are both important purchasing components to the customers, especially if the food product in question requires more involvement in the purchasing decision process. Since *quality* is an essential factor, but if the product in question fails to live up to the expectations of the customer, such as the recent scandal where people believed they were purchasing beef, but which was in reality was found to be horsemeat. This led to the trust being shattered, which gave a negative impact on the consumer's long-term memory. Furthermore, it was found that products which can be perceived as everyday food products such as cheese, bread, eggs etc. where most people do not put as much consideration into the purchasing process, can still have a negative impact on the consumer memory. Because if there is a scandal involving a product where there is a strong preference from a certain customer segment, no matter what the size of the segment, this can cause a great mistrust in that particular segment. The horsemeat scandal will therefore be stored in the long-term memory of the customer for a long time. Therefore the trust of the product is essential.

Second, it was found that people remembered food scandals from abroad more vividly than domestic food scandals despite age of the scandal. Naturally, older respondents remember the older scandals more. Therefore the COOE is an important factor since it signals a certain perceived quality, where the most respondents perceived domestic food to be of superior quality. This signals higher levels of trust towards Swedish products and companies. Therefore the trust and perceived quality for foreign products is lower. Because of this, any product which has been manufactured abroad but sold in Sweden and has been involved in a scandal becomes a self-fulfilling prophecy in the mind of the customer, which in turn is more easily stored in the long-term memory of the consumer. This could then ultimately lead to possible changes in consumer purchasing behavior. Furthermore, it has been implied that scandals of foreign origin tend to be more negatively reported on and possibly get more coverage in media. This

causes Swedish consumers to mistrust foreign food more. Therefore concerning this particular type of scandal when a product or a company of foreign origin is involved, it is more likely to be stored in the long-term memory of the customers along with help from the biased media.

The third significant finding was that depending on what type of brand, size and levels of brand equity a company has, it can affect the consumer's future purchasing behavior and especially loyal customers to a negative degree. If a large enterprise like ICA, which positions themselves as having higher quality products compared to their competitors, are involved in a scandal. It is more likely that they cause a bigger mistrust among their customers, which in turn could have a negative impact on the long-term memory of their loyal customers.

It was argued that companies with lower brand equity and different business strategies, who focused less on positioning themselves as a high quality brand, but rather focusing on lower prices that peoples trust towards them was much lower. But on the other hand, consumers also had a better acceptance towards possible scandals for these other companies, since "they knew from the beginning that the prices indicated lower quality products". So there was no element of surprise. Therefore there is a big difference in the levels of trust towards the respective brands.

Widely publicized scandals are more likely to have an impact upon the customers trust more negatively when it comes to large brands like ICA. This would in turn lead to that the negative information being stored in the long-term memory for a longer period, especially if they have been broadcasting commercials frequently during the primetime on TV.

Also, any scandal concerning larger companies automatically gets more coverage in Swedish media which is also a contributing factor to the scandal being stored in the long-term memory.

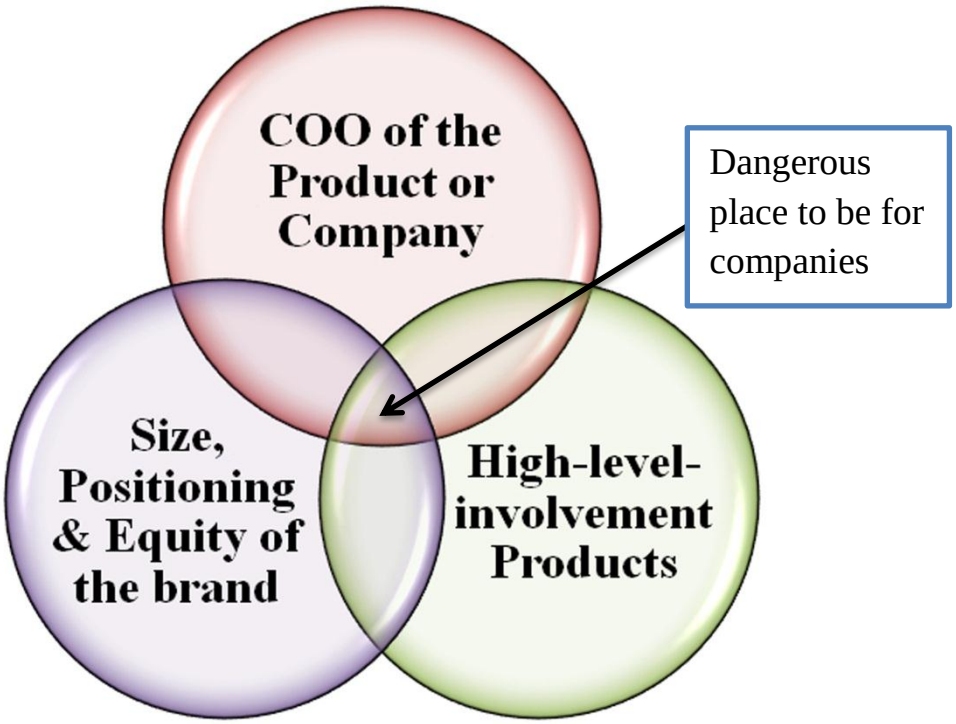
With this in mind, we have come to the conclusion that despite when the scandal has occurred, Swedish consumers tended to remember foreign scandals more. Three different characteristics, all linked to *trust* were found:

1. High-level-involvement products
2. COO of the product or company
3. Size, positioning and equity of the brand

We therefore argue that companies, who have any of these characteristics and are involved in a scandal, are more likely to be remembered over a longer period. The more an enterprise has of these characteristics, the higher risk of the scandal being perceived as more negative.

An illustration below is given in order to exemplify for the reader the different characteristics of trust.

Figure 11: Essential characteristics of trust



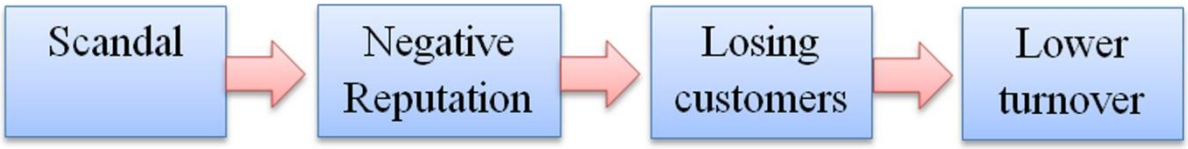
(Source: Authors)

As can be seen in the illustration, the middle area of the Venn-diagram where all three circles are overlapping – indicates the

companies which inherit all three characteristics, are more likely to be affected severely by scandals than companies who only have one or two of the these characteristics.

Because of this, if a company which inherits these three characteristics, indeed is involved in a huge scandal, it will affect their customers trust towards them and be more susceptible to receiving a negative reputation. This could lead to the customers, sponsors, and business partners of that company, brand or product to decrease in numbers and if they seek other alternatives, this would consequently affect the company's turnover negatively. Therefore as mentioned by Qvarford, the biggest contributing factor in how much consumers remember from a scandal depends on how good the company deals with the scandal and tries to rebuild any trust broken. If that is the case, it is extra important for the companies to be aware of the characteristics they have, so that they could work out preventing strategies for avoiding such scandals in the best possible way. This negative consequence of a scandal chain reaction is illustrated here which demonstrates what could happen if a company which has these three characteristics is involved in a scandal.

Figure 12: The Scandal Chain reaction



(Source: Authors)

To summarize our findings in accordance to the aim and purpose, we found differences in how Swedish consumers remembered publicized scandals based on the country of origin. It was found that consumers remembered the foreign scandals more, but there was no correlation in regards to one gender remembering the scandal more vividly than the other. Age was found to be of little significance other than the fact that older people remembered older scandals more than young. Otherwise both age groups remembered the foreign scandals more than the domestic scandals. However, the respondents tended to

remember scandals involving large brands to a higher degree. Furthermore, the level of impact the scandals had in regards to the consumers trust, was that they had been more affected by the foreign scandals than to special preferences (Cheese lovers) and to the size of the brand (ICA) (see table 9).

It was also found that the consumers truly believed that, due to the foreign scandals occurring estimated their own consumer behavior had been affected. The levels of trust could therefore partly be linked to the COO of the scandal. In regards to age and gender, we found no differences towards how the consumers felt when they got affected by the scandals. However, it was found that Swedish consumers, due to media coverage and other factors were sensitive in mind when it came to foreign food and the COOE since quality and food safety are important cues. This signaled that trust was an important factor. However as for how it affected the consumers in real life when purchasing food products and not just in the mind was not researched in this study.

5.4 Business Implications

Food scandals can have severe effects for the companies involved, both legally and financially among other timely and costly effects.

Media plays a crucial role in influencing a consumers mind to a greater extent, especially when it comes to reporting scandals linked to foreign products and food products. If media was to report negatively about a foreign company due to a scandal, this could lead to less or completely broken trust that the customers have towards that company or brand; which means that there could be a potential risk of losing customers, sponsors, business partners and other stakeholders. This loss could affect the consumers in a number of ways such as causing them to change their consumer behavior, by seeking alternative competitors and the loss of loyal customers. When the reputation and image of the company has been hurt it takes time to rebuild due to the long-term memory of the customers - especially if the company or product is of foreign origin. Furthermore, in order to attract new and regain old customers the process would be very time consuming and costly. If a company gets involved in a huge scandal, not only is there

a risk of losing consumers due to changed consumer behavior towards their product(s), but a scandal can also detract possible future business partners along with the already existing ones. In other words, as consumers and business partners loose trust, this could detract stakeholders which will ultimately result in a decrease in the turnover for the company. Also, there could be legal aspects to consider which may be very costly and time consuming for the company as well.

In well-known enterprises such as ICA, a bad reputation can be seen as a great threat to the organization. The negative image which has been created in the consumers' minds is also shared among existing and potential consumers by media who spreads the news through its various communication channels.

Due to our findings regarding scandals and how the media can be used in a negative way to impact on a company's image, it is crucial for companies to be aware of the three characteristics presented in figure 11. All of these three characteristics combined can generate an even greater negative impact on the consumers trust. Therefore it is essential that companies are aware of what type of characteristics is associated with their company in order to be able to protect themselves easier. Due to the findings, the most important thing of a company could do when being affected by a scandal, would be to act immediately in order to minimize the impact of the scandal as much as possible. Therefore, it is crucial that companies, who have any combination of these characteristics, should have an emergency plan in case something like this occurred where the company's sales and image were threatened when it comes to scandals. We believed media to be the main driving force behind the publicity of any scandal, but also perceived it to be of vital importance when it comes to fixing the damage caused by a the scandal. Therefore for companies needs to be "media-friendly", especially in the time when a scandal occurs.

5.5 Research Implications

In the process of writing this thesis, we encountered some interesting issues and topics which can be recommended for any future and further research.

One of these suggestions we would like to make would be to conduct this exact type of study, but have the questions in the questionnaire placed in a randomized order. This would to possibly help increase the external validity and therefore possibly produce different results. However, since this thesis focused on investigating whether the consumer memory based on the COO was linked to food in the general, our findings indicated that depending on what type of food it is, peoples levels of sensitivity varied greatly. Therefore, we suggest conducting the exact same study, based on specific food products which require more product involvement in the purchase decision process such as meat or even to go as far as comparing different kinds of meats like pork and beef.

Since the findings indicated that the brand had a significant impact on how much consumers remembered different scandals, it can be suggested to conduct future studies on the impact of scandals between different brands and the effect it has on the consumer memory

As the respondents consisted of 50 per cent females and close to 50 per cent males in our study, with no gender related differences found. This contradicts Bilkey & Nes (1982) and Hoffman (2000) but support Wang's (1978) findings. It can be suggested that more studies with the COO and consumer memory in regards to gender and scandals are needed - especially since our findings went against our own assumptions and some already existing articles. We believed this could be crucial knowledge for companies to be aware of in regards to how a scandal impacts differently depending on the gender. If the company is aware of these different impacts, they could perhaps come up with different customized incentives for each of the specific customer segments. This could in turn minimize any negative effect of the scandal and generate a better turnover in the long run.

Another factor worthy of mentioning concerning our study was when we asked our respondents to name five food scandals in the pre-study; only four respondents remembered the McDonalds food scandal from 2010. No other scandal was mentioned in regards to fast-food chains or restaurants. Could it therefore be that either media reports more frequently about scandals affecting supermarkets than they do with restaurants and fast food chains, or could it be that restaurants like McDonalds and Burger King in general, have stricter rules and regulations when it comes to handling and distributing the food? If so, the research implications concerning this would be to conduct an investigation regarding this matter in order to help supermarkets to be better at handling and distributing the food by benchmarking the restaurants and fast food chains. We believe this would increase their possibilities in avoiding future scandals to a much higher degree, which in turn would increase the levels of trust they have with their customers and ultimately increase their own turnover in the long-run.

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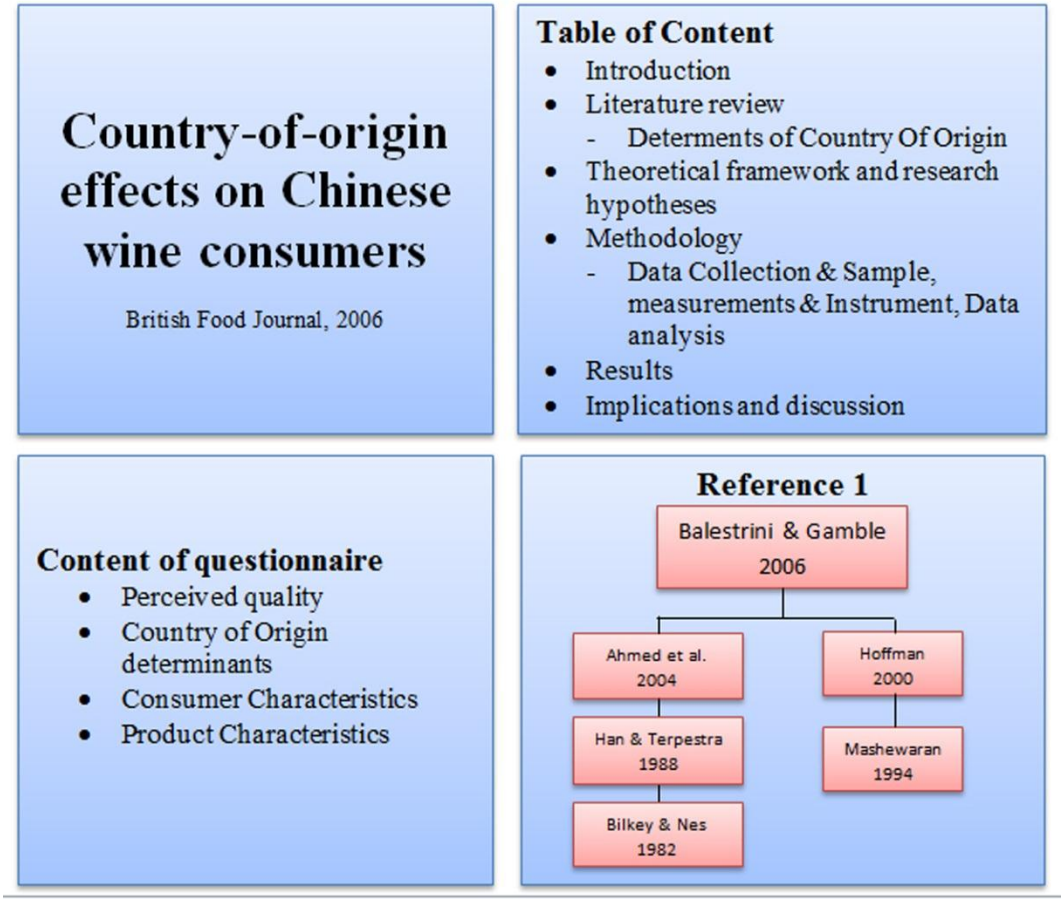
Appendix

Figure1: Summarized Power-Point-Presentation	B
Recurring Demographic Variables used in earlier Studies	B
Words typed-in when searching for Scientific Journals and Articles	C
Most Suggested Scandals from 30 respondents	D
Questionnaire/Matskandaler	E
Interview Questions	G
Ages of Respondents	H
Total Variance Explained Table	I
Complete Correlation Analysis Table	J

*Figure1: Summarized Power-Point-Presentation



*Recurring Demographic Variables used in earlier Studies

- Age
- gender
- income
- marital status
- religion
- income
- Origin
- Lives
- Family size
- Numbers of Members in household

*Words typed-in when searching for Scientific Journals and Articles

- Consumer memory
- Consumer memory age
- Consumer memory gender
- Consumer memory process
- Consumer perceiving countries
- Country image country of origin effect
- Country of origin
- Country of origin consumer trust
- Country of origin scandals
- Country of origin scandals effects
- Customer memory
- Demographic factors country of origin
- Demographic factors purchasing decision theory
- Demographic factors consumer memory
- Determinants of the country of origin
- Long term consumer memory
- Purchasing process
- Scandals consumers trust
- Sensory memory
- Short term consumer memory
- Purchasing decision gender age
- Purchasing decision theory process

*Most Suggested Scandals from 30 Respondents

Scandal	Frequency
• 2013 Horse meat scandal from Romania	30
• 2013 Horsemeat in the Roast beef	22
• 2001 Mad Cow Disease	19
• 2012 Meat scandal Filet of Pork instead of Filet of beef	13
• 2013 Finding worms in Findus pre-made food products	11
• 2007 ICA Changing best before date on meat products	10
• 2013 Selling wrong type of fish in the packaging	10
• 2002 Acrylamide in Swedish Crisps	8
• 2007 ICA changed best before date on the Cheese packaging	7
• 1995 Belgian Blue Bull	7
• 2010 McDonalds serving old hamburgers in their restaurants	4
• 2012 Scan Salmonella in revoked meat	3
• 2001 Foot-and-mouthdisease	2
• 2007 Lidl's – Listeria bacteria in Food	1
• 2007 Uppdrag gransknings reportage om Mat fusk i Sverige	1
• 2008 Lidl Food poisoning	1
• 2010 Chinese meat scandal	1

*Questionnaire -Matskandaler

HÖGSKOLAN I GÄVLE

1. Ålder?
2. Kön?

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3. Markera ett **X** på linjen hur mycket du litar på utländsk mat som säljs i Sverige?

Absolut inte alls ——— **Litar till 100 % på utländska matvaror**

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4. Markera ett **X** på linjen hur mycket du litar på Svensk mat som säljs i Sverige?

Absolut inte alls ——— **Litar till 100% på svenska matvaror**

---

5. Markera ett **X** på linjen hur mycket du litar på mat som säljs i Sverige men saknar ursprungslandsmärkning?

Absolut inte alls ——— **Litar till 100 % på matvaror med okänt ursprungsland**

---

6. Hur mycket minns du av Galna kosjukan?

Absolut Ingenting ——— **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting ——— **Väldigt mycket**

---

7. Hur mycket minns du av Hästköttskandalen där Rumänskt hästkött lanserades som biff?

Absolut Ingenting ——— **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting ——— **Väldigt mycket**

---

8. Hur mycket minns du av när Ica bytte bästföredatumen på sina köttprodukter?

Absolut Ingenting ——— **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting ——— **Väldigt mycket**

---

9. Hur mycket minns du av Belgian Blue kontroversen?

Absolut Ingenting ——— **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting ——— **Väldigt mycket**

10. Hur mycket minns du av när man fann spår av akrylamid i Svenska chips?

Absolut Ingenting **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting **Väldigt mycket**

11. Hur mycket minns du av när man hittade mask i Findus färdigmat?

Absolut Ingenting **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting **Väldigt mycket**

12. Hur mycket minns du av då det upptäcktes spår av fågelinfluensan i en frysdisk på Coop?

Absolut Ingenting **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting **Väldigt mycket**

13. Hur mycket minns du av när ICA systematiskt bytte bäst före datum på sina ostar?

Absolut Ingenting **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting **Väldigt mycket**

14. Hur mycket minns du av från då man hittade färgad fläskfilé som istället såldes som oxfilé?

Absolut Ingenting **Minns den väldigt väl**

Hur mycket har detta påverkat dina konsumtionsvanor?

Absolut Ingenting **Väldigt mycket**

Tack så mycket för ditt deltagande önskar Benny Berggren och Mai Fouda (Högskolan i Gävle). Vänligen fyll i dina Kontaktuppgifter om du önskar delta i utlottningen av 2st biobiljetter och trisslotter

Namn: _____

E-postadress alt. Adress**:** _____

I forskningssyfte, var fråga 12 fiktiv och har därmed aldrig inträffat.

*Interview Questions

1. Kan du berätta lite för om din bakgrund inom området
2. Vad är ditt nuvarande yrke
3. Hur länge kommer folk ihåg matskandaler?
4. Var fick du den informationen ifrån?
5. Tror det är skillnad i hur konusmenter kommer ihåg olika skandaler beroende på om de är utländska eller inte, samt om ålder och kön kan ha en bidragande faktor?
6. Den skandal respondenterna mindes mest i vår undersökning var höstköttskandalen, men den näst mest nämnda skandalen var från 2007 då ICA ändrade bäst-före-datum, vad kan du säga om detta?
7. Tenderar folk att minnas matskandaler mer än skandaler för andra produkter så som när man upptäckte att leksaker som tillverkades i Kina innehöll giftiga kemikalier
8. Vilka faktorer anser du spelar störst roll när det kommer till hur konsumenter minns mat skandaler och att det minns dem länge?
9. Enligt vår studie visar det att respondenterna tenderade att minnas äldre utländska skandaler betydligt mer än Svenska skandaler som exempelvis Galan Kosjukan och Belgian Blue, vad tror det beror på?
10. Anser du att Svenska konsumenter är partiska till svenskproducerad mat? I så fal varför?
11. Litar Svensken till högre grad på Svensk?
12. Anser du att media generellt är partiska när de rapporterar om matskandaler?
13. Är vi kräsnare än andra likvärdiga länder?
14. Finns det något samband mellan kön och konsumentminne?
15. Finns det något samband mellan ålder och konsument minne?
16. Tenderar skandaler att påverka lång eller korttids minnet hos konsumenten?
17. Till vilken grad brukar matskandaler påverka konsumentbeteende?

*Age of the Respondents

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18,00	14	9,9	10,0	10,0
	19,00	1	,7	,7	10,7
	20,00	6	4,2	4,3	15,0
	21,00	7	4,9	5,0	20,0
	22,00	7	4,9	5,0	25,0
	23,00	10	7,0	7,1	32,1
	24,00	4	2,8	2,9	35,0
	25,00	4	2,8	2,9	37,9
	26,00	2	1,4	1,4	39,3
	27,00	3	2,1	2,1	41,4
	28,00	1	,7	,7	42,1
	29,00	6	4,2	4,3	46,4
	30,00	5	3,5	3,6	50,0
	31,00	6	4,2	4,3	54,3
	32,00	4	2,8	2,9	57,1
	33,00	3	2,1	2,1	59,3
	34,00	6	4,2	4,3	63,6
	35,00	3	2,1	2,1	65,7
	36,00	4	2,8	2,9	68,6
	38,00	1	,7	,7	69,3
	39,00	1	,7	,7	70,0
	40,00	2	1,4	1,4	71,4
	41,00	2	1,4	1,4	72,9
	43,00	2	1,4	1,4	74,3
	45,00	3	2,1	2,1	76,4
	46,00	2	1,4	1,4	77,9
	48,00	1	,7	,7	78,6
	49,00	1	,7	,7	79,3
	50,00	3	2,1	2,1	81,4
	52,00	2	1,4	1,4	82,9
	53,00	1	,7	,7	83,6
	54,00	2	1,4	1,4	85,0
	55,00	4	2,8	2,9	87,9
	57,00	2	1,4	1,4	89,3
	58,00	1	,7	,7	90,0
	60,00	3	2,1	2,1	92,1
	61,00	2	1,4	1,4	93,6
	62,00	1	,7	,7	94,3
	64,00	1	,7	,7	95,0
	65,00	3	2,1	2,1	97,1
	67,00	2	1,4	1,4	98,6
	70,00	1	,7	,7	99,3
	76,00	1	,7	,7	100,0
	Total	140	98,6	100,0	
Missing	,00	2	1,4		
Total		142	100,0		

(Source: SPSS)

*Total Variance Explained Table

Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6,888	31,308	31,308	2,723	12,377	12,377	3,060	13,908	13,908
2	2,578	11,718	43,025	4,928	22,401	34,778	2,982	13,555	27,463
3	2,070	9,410	52,436	2,019	9,176	43,954	2,228	10,128	37,591
4	1,359	6,177	58,612	1,372	6,237	50,191	1,975	8,979	46,569
5	1,068	4,853	63,465	,874	3,971	54,162	1,670	7,592	54,162
6	,991	4,502	67,968						
7	,906	4,119	72,087						
8	,836	3,802	75,888						
9	,823	3,740	79,628						
10	,656	2,982	82,611						
11	,631	2,867	85,477						
12	,514	2,334	87,812						
13	,455	2,067	89,879						
14	,386	1,754	91,633						
15	,352	1,602	93,235						
16	,289	1,316	94,551						
17	,282	1,283	95,834						
18	,249	1,131	96,964						
19	,230	1,047	98,012						
20	,185	,840	98,852						
21	,130	,592	99,444						
22	,122	,556	100,000						

Extraction Method: Maximum Likelihood.

(Source: SPSS)

*Complete Correlation Analysis Table

Correlations

		Age	Gender	Foreign	Swedish	Unknown	MadCow	MadCowAffect	Horsemeat	HorsemeatAffect	ICABeefsteakMeat	ICABeefsteakAffect	BelgianBlue	BelgianBlueAffect	Acrylamide	AcrylamideAff	Worms	WormsAffect	FAVE	FAVEAffect	ICACheese	ICACheeseAff	PorkBeef	PorkBeefAffec t
Age	Pearson Correlation	1	.062	-.174*	-.201*	-.117	.529**	.232**	.245**	.231**	.083	.179*	.571**	.390**	.384**	.373**	.236**	.070	.158*	.072	.149	.103	.467**	.352**
	Sig. (2-tailed)		.470	.041	.017	.172	.000	.007	.004	.007	.340	.040	.000	.000	.000	.000	.007	.431	.070	.419	.092	.244	.000	.000
	N	140	140	138	140	137	138	134	139	134	134	132	133	132	129	132	131	132	132	127	128	125	134	129
Gender	Pearson Correlation	.062	1	-.218**	-.084	-.130	.129	.132	.049	.084	-.043	.006	.066	.035	-.025	-.015	.079	.080	.060**	.044	.109	-.025	.163	.029
	Sig. (2-tailed)	.470		.010	.963	.129	.132	.114	.568	.018	.625	.950	.692	.455	.777	.871	.371	.373	.496	.622	.221	.782	.973	.743
	N	140	140	138	140	137	138	134	139	134	134	132	132	122	129	124	131	127	132	127	125	125	134	129
Foreign	Pearson Correlation	-.174*	-.218**	1	.552**	.575**	-.182*	.377**	.025	.372**	.058	.202**	-.170	.286**	-.010	-.139	-.168	-.188*	.067*	.155*	.179*	.036*	.177*	.255**
	Sig. (2-tailed)	.041	.010		.000	.000	.033	.000	.767	.000	.504	.020	.051	.001	.911	.125	.055	.035	.004	.082	.044	.691	.048	.003
	N	138	138	140	140	139	138	134	139	134	134	132	133	132	129	124	131	127	132	127	128	125	135	130
Swedish	Pearson Correlation	-.201*	-.084	.552**	1	.375**	-.126	.291**	-.033	.268**	-.040	.164**	.241**	.266**	.056	.125	.055	.035	.079	.017	.127	.056	.085	.188*
	Sig. (2-tailed)	.017	.963	.000		.000	.138	.001	.700	.002	.646	.059	.005	.002	.527	.276	.776	.852	.144	.376	.129	.534	.344	.028
	N	140	140	140	142	139	140	136	141	136	136	132	134	134	129	124	131	126	134	129	130	127	136	131
Unknown	Pearson Correlation	-.117	-.130	.575**	.375**	1	-.155	.291**	-.160	.289**	-.048	.194**	.172*	.294**	.112*	.139*	.078*	.209**	.038*	.123*	.035*	.031*	.186*	.328**
	Sig. (2-tailed)	.172	.129	.000	.000		.071	.001	.062	.001	.583	.011	.047	.001	.204	.233	.377	.018	.670	.168	.694	.795	.031	.000
	N	137	137	138	139	139	137	133	138	134	134	133	134	133	130	125	131	127	131	127	128	126	134	129
MadCow	Pearson Correlation	.529**	.129	-.182*	-.126	-.155	1	.276**	.304**	.163*	.260**	.191*	.333**	.407**	.350**	.224*	.049	.224**	.112*	.207*	.163*	.046*	.465**	.264**
	Sig. (2-tailed)	.000	.132	.033	.138	.071		.001	.000	.060	.001	.028	.000	.000	.000	.010	.585	.009	.207	.066	.066	.612	.000	.003
	N	138	138	138	140	137	140	135	140	134	134	132	134	133	129	124	131	126	133	126	128	125	134	129
MadCowAffect	Pearson Correlation	.232**	.137	-.377**	-.291**	-.291**	.276**	1	.029	.569**	.012	.415**	.330**	.691**	.211*	.386**	.129	.177*	.059	.286*	.123	.279**	.134	.359**
	Sig. (2-tailed)	.007	.114	.000	.001	.001	.001		.739	.000	.895	.000	.000	.000	.018	.000	.142	.045	.501	.001	.167	.002	.126	.000
	N	134	134	134	136	133	135	136	136	132	132	132	129	130	127	124	131	128	131	127	127	125	131	127
Horsemeat	Pearson Correlation	.245**	.049	.025	-.033	-.160	.304**	.029	1	.739**	.000	.160**	.065*	.269**	.123*	.199*	.170*	.103*	.005*	.162*	.156*	.063*	.499**	.152**
	Sig. (2-tailed)	.004	.568	.767	.700	.062	.000	.739		.000	.000	.065	.023	.001	.158	.023	.058	.241	.953	.061	.086	.481	.000	.085
	N	139	139	139	141	138	140	136	141	135	135	133	134	133	130	125	132	129	134	129	129	126	135	130
HorsemeatAffect	Pearson Correlation	.231**	.084	-.372**	-.268**	-.289**	.163*	.569**	.160**	1	.025*	.557**	.209**	.612**	.125*	.351**	.283**	.381**	.147*	.387**	.204*	.283**	.230**	.470**
	Sig. (2-tailed)	.007	.018	.000	.002	.001	.060	.000	.065		.781	.000	.017	.000	.157	.000	.001	.000	.095	.000	.022	.001	.008	.000
	N	134	134	134	136	134	134	132	135	136	131	132	130	132	129	125	129	125	130	125	126	126	131	128
ICABeefsteakMeat	Pearson Correlation	.083	-.043	.058	-.040	-.048	.260**	.012	.378**	.025	1	.417**	.324**	.090	.332**	.196*	.082	-.018	.183*	-.042	.215*	.057	.434**	.187*
	Sig. (2-tailed)	.340	.625	.504	.646	.583	.001	.895	.000	.781		.000	.000	.309	.000	.031	.353	.840	.037	.640	.015	.524	.000	.035
	N	134	134	134	136	134	134	132	135	131	131	132	132	131	128	123	131	127	130	126	128	125	133	128
ICABeefsteakAffect	Pearson Correlation	.179*	.006	-.202**	-.164	-.219*	.191*	.415**	.208*	.557**	.417**	1	.239**	.518**	.184*	.308**	.225**	.346**	.182*	.382**	.363**	.380**	.247**	.508**
	Sig. (2-tailed)	.040	.950	.020	.058	.011	.028	.000	.016	.000	.000		.006	.000	.037	.000	.010	.000	.039	.000	.000	.000	.005	.000
	N	132	132	132	134	133	132	132	133	132	133	132	131	132	129	123	130	126	129	125	126	126	131	127
BelgianBlue	Pearson Correlation	.571**	.035	-.170*	-.241**	-.172*	.637**	.330**	.269**	.209**	.324**	.239**	1	.529**	.446**	.381**	.216**	.004	.236**	.167*	.206*	.119	.494**	.280**
	Sig. (2-tailed)	.000	.692	.051	.005	.047	.000	.000	.001	.017	.000	.006		.000	.000	.000	.014	.968	.007	.063	.021	.190	.000	.001
	N	133	133	133	135	134	134	129	134	130	132	131	135	132	128	123	128	124	128	124	126	124	132	127
BelgianBlueAffect	Pearson Correlation	.390**	.066	-.208**	-.264**	-.204**	.333**	.691**	.123*	.612**	.090	.518**	.529**	1	.339**	.502**	.393**	.337**	.229**	.484**	.256**	.352**	.315**	.512**
	Sig. (2-tailed)	.000	.455	.001	.002	.001	.000	.000	.158	.000	.309	.000	.000		.000	.000	.000	.000	.009	.000	.004	.000	.000	.000
	N	132	132	132	134	133	133	130	133	132	131	132	132	134	130	125	129	125	129	125	127	126	132	128
Acrylamide	Pearson Correlation	.384**	-.025	-.010	-.056	-.112	.407**	.211*	.199*	.125*	.332**	.184*	.446**	.339**	1	.634**	.419**	.199*	.438**	.271**	.224*	.198*	.401**	.258**
	Sig. (2-tailed)	.000	.777	.911	.527	.204	.000	.018	.023	.157	.000	.037	.000	.000		.000	.000	.026	.000	.002	.012	.027	.000	.004
	N	129	129	129	131	130	129	127	130	129	128	128	128	130	131	126	128	124	128	124	125	124	126	126
AcrylamideAffect	Pearson Correlation	.373**	-.015	-.139	-.097	-.108	.350**	.386**	.170*	.351**	.195*	.308**	.381**	.502**	.634**	1	.412**	.239**	.425**	.396**	.281**	.394**	.253**	.401**
	Sig. (2-tailed)	.000	.872	.125	.279	.233	.000	.000	.058	.000	.031	.000	.000	.000	.000		.000	.008	.000	.000	.002	.000	.005	.000
	N	124	124	124	126	125	124	124	125	125	123	124	123	125	126	126	124	123	124	121	121	122	122	122
Worms	Pearson Correlation	.236**	.079	-.168	-.025	-.078	.224*	.129	.103	.283**	.082	.225**	.216*	.397**	.419**	.412**	1	.600**	.549**	.498**	.240*	.386**	.223*	.320**
	Sig. (2-tailed)	.007	.371	.055	.776	.377	.010	.142	.241	.001	.353	.010	.014	.000	.000	.000		.000	.000	.000	.007	.000	.011	.000
	N	131	131	131	133	131	131	131	132	129	131	130	128	129	128	124	133	128	131	126	126	124	130	126
WormsAffect	Pearson Correlation	.070	.080	-.188*	-.017	-.209*	.049	.177*	-.065	.381**	-.018	.346**	.004	.337**	.199*	.239**	.600**	1	.298**	.457**	.183*	.438**	.012	.335**
	Sig. (2-tailed)	.431	.373	.035	.852	.018	.585	.045	.953	.000	.840	.000	.968	.000	.027	.008	.000		.001	.000	.043	.000	.898	.000
	N	127	127	127	129	128	128	127	129	125	127	126	124	125	124	120	128	129	128	124	125	123	126	126
FAVE	Pearson Correlation	.158	-.060	-.067	.127	-.038	.224*	.059	.162	.147	.183*	.182*	.236**	.229**	.438**	.425**	.549**	.298**	1	.657**	.255**	.344**	.197*	.257**
	Sig. (2-tailed)	.070	.496	.448	.144	.670	.009	.501	.061	.094	.037	.039	.007	.009	.000	.000	.000	.001		.000	.004	.000	.025	.004
	N	132	132	132	134	131	133	131	134	130	130	129	128	129	128	123	131	128	134	128	127	123	130	128
FAVEAffect	Pearson Correlation	.072	.044	-.155*	.079	-.123	.112	.286**	-.152	.387**	.042	.440**	.167	.484**	.271**	.396**	.498**	.457**	.657**	1	.352**	.572**	.053	.419**
	Sig. (2-tailed)	.419	.623	.082	.376	.207	.207	.001	.086	.000	.640	.000	.063	.000	.002	.000	.000	.000	.000		.000	.000	.551	.000
	N	127	127	127	129	127	128	127	129	125	126	125	124	125	124	120	126	124	128	129	125	123	123	123
ICACheese	Pearson Correlation	.149	.109	-.179*	-.056	-.035	.163	.123	.156	.204*	.215*	.383**	.206*	.256**	.224*	.281**	.240**	.183*	.255**	.352**	1	.598**	.254**	.438**	.012
	Sig. (2-tailed)	.092	.221	.044	.526	.694	.066	.167	.078	.022	.015	.000	.021	.004	.012	.002	.007	.043	.004	.000		.000	.004	.898
	N	128	128	128	130	128	128	127	129	126	128	126	126	127	125	121	126	123	127	125	130	124	125	126
ICACheeseAffect	Pearson Correlation	.103	-.025	-.036	.085	-.031	.046	.279**	.063	.283**	.057	.380**	.119	.352**	.190*	.394**	.386**	.438**	.344**	.572**	.598**	1	.127	.084	.351**
	Sig. (2-tailed)	.244	.782	.691	.344	.735	.612	.002	.481	.001	.524	.000	.190	.000	.031	.000	.000	.000	.000	.000	.000		.127	.351	.000
	N	125	125	125	127	126	125	125	126	126	125	126	124	126	125	122	124	121	125	123	124	127	126	123
PorkBeef	Pearson Correlation	.467**	-.003	-.177*	-.188*	-.186*	.465**	.134	.499**	.230**	.434**	.247**	.494**	.315**	.401**	.253**	.223*	.012	.197*	.053	.254**	.084	1	.483**
	Sig. (2-tailed)	.000	.973	.048	.028	.031	.000	.131	.000	.008	.000	.005	.000	.000	.000	.005	.011	.898	.025	.551	.004	.351		.000
	N	134	134	135	136	134	134	131	135	131	133	131	132	132	129	124	130	126	130	127	129	126	136	131
PorkBeefAffect	Pearson Correlation	.352**	-.029	-.255**	-.211*	-.328**	.264**	.359**	.152	.470**	.187*	.508**	.280**	.512**	.258**	.320**	.335**	.126	.257**	.419**	.268**	.432**	.483**	1
	Sig. (2-tailed)	.000	.743	.003	.016	.000	.003	.000	.085	.000	.035	.000	.001	.000	.004	.000	.000	.000	.004	.000	.003	.000	.000	
	N	129	129	130	131	129	129	127	130	128	128	127	127	128	126	122	126	122	126	123	125	123	131	131

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

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

(Source: SPSS)