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1 Introduction

This chapter provides the reader with an introduction to the subject of interest. It commences by presenting a background that directs to the problem discussion and the problem statement. With regard to those the authors formulate the purpose of the study.

1.1 Today's health care consumers

People in the western world are becoming increasingly aware of their health and the president of People's Medical Society in America, Mr. Inlander (2003) argues three important facts concerning today's healthcare consumers. The first is the empowerment of the consumers in relation to the healthcare. This comes as a result of: better education, higher access to experts, viewing healthcare as a service and expecting high ethical standards. Following is the demand; the consumers expect their wants to be fulfilled both concerning competence and fair pricing. A final aspect is that the consumers are increasingly critical of the healthcare system and its providers. The consequence of these factors is increased demand regarding quality and access to service. This has transformed the health care industry and lead to a paradigm shift from a physician focused approach to a consumer focused approach (Zabransky, 2004; Inlander, 2003; Merlin 2003). This signifies that the marketing and sales of health care products and services are conducted in direct contact with the consumer, instead of having a physician as a third party (American Association for Clinical Chemistry, 2003).

1.1.1 Home-use tests

The alteration in the health care industry resulted in increased demand of Home-use tests that enable individuals to diagnose their health state on their own (BBC, 2005; Zabransky 2004). There are two different categories within the Home-use tests. The first is labeled test kits or Over-The-Counter tests, hereby referred to as OTC tests. When using an OTC test the consumer on its own purchase the test, take the sample, then examine it with the product and finally interprets the result. The other category sustains of collection kits, also known as Direct Access Testing. The process is the same as for the collection kit except that the sample is mailed to a laboratory which analyses it and sends the result to the consumer (US Food and drug administration, 2005; Merlin, 2003; Inlander, 2003).

The Home-use test area is a fast growing market within the healthcare industry and new products are developed at a rapid speed (American Association for Clinical Chemistry, 2003). The progress has provided several possibilities, however there are three advantages that have been argued as the most important. The first is the fact that it is easier to detect undesirable health conditions at an early stage. This enables early treatment and reduces the probability of complications. The next benefit of the products is that they ease the task of following the course of a disease. The third highly argued advantage is that the tests provide cost saving possibilities both for the healthcare and the individual (Gamp Medical AB 2005b; Apoteket 2005; Zabransky, 2004; Inlander 2003; Merlin 2003). The main protest regarding the tests, made by the scientific community, concerns: the loss of control by doctors over their patients, the incapacity of the consumers to understand the results of the tests and the inclination of hypochondriacs to incorrectly use the tests (Zabransky 2004; Inlander, 2003).

1.1.2 Over-The-Counter tests

According to Merlin (2003) the American market of OTC tests has grown rapidly the last decade. The sales have spread from the United States to the rest of the world and at present the OTC products can be found in several European countries. However, while OTC testing is an accepted phenomenon in the United States, and a growing market in several parts of Europe, the tests have not had a similar breakthrough in Sweden. Here the tests have been heatedly debated and several healthcare representatives have delivered critics concerning the area of OTC testing. This could have increased the uncertainty among the Swedish health care consumers concerning these products (Apoteket, 2005). With the negative aspects representatives have left positive judgments on the fact that it is the Swedish state monopoly Apoteket that vends most of the products, since the chemists can give the customers the proper information needed in order to use the tests properly (Apoteket, 2005).

1.1.3 AWARE Breast self-examination pad

One of the latest tests to be introduced to the majority of Swedish women via Apoteket and in the future also via commodity stores is AWARE Breast self-examination pad. AWARE is to be used as an aid for women that on their own want to examine their breasts in search of possible breast cancer lump. The test consists of two examinations. The first part is carried out by examining the breast with the hand only. The second is performed with the help of the test, which consists of two special groomed latex-pieces. The purpose of the latex pieces is to diminish the friction between the fingers and the breast during the examination, which makes it easier to discover possible cancer lumps. The product is clinically tested and lasts three years. It is recommended to use once a month from the age of 20. The price the company intends to use for the product is 285 SEK (Gamp Medical AB, 2005; Biomerica, 2001). Since AWARE is recommended to use form the age of 20 the Swedish market for the product is very large. In 2004 the number of women in Sweden between the age of 20 and 79 was 3 187 507 (Appendix 1).

1.1.4 Breast cancer

Today breast cancer can practically always be treated and cured in time. In Sweden if the cancer is detected at an early stage 85% of the cases will be out of the risk zone within five years (Universitetssjukhuset i Lund, 2004). Still breast cancer is the most common type of cancer among Swedish women and covers one fourth of all female cancer victims. Women above the age of 60 years are more liable to the decease and less than five percent of the afflicted are below the age of 40 (Cancerfonden, 2005). Only in the year of 2003, 6790 women got diagnosed with breast cancer (Socialstyrelsen, 2005). This number roughly illustrate that every tenth woman is in the risk zone of obtaining the decease per year (Infomedica AB, 2005). As breast cancer is common all women above 35 years is required to undergo annual mammogram exams in order to minimize the risk of fatal cases by detecting the cancer at an early stage. The reasons behind the frequent tests are the chance that a tumor arises between two exams and that it was not visible at the previous exam (Infomedica AB, 2005; Gamp Medical AB, 2005c). Investigating the breasts frequently is the first step in preventing breast cancer. In order to aid women in this process an examination procedure called Breast self-examination was developed. The examination is to be used by women between and before attending mammogram exams. The recommendation is that from the age of 20 all women should start to perform Breast self-examination once a month (Biomerica, 2001).

1.2 Problem statement

Statistics show that breast cancer is an increasing problem in Sweden. It is a fact that the there is a possibility that the mammogram exams do not detect small lumps and that lumps can arise between exams. This complicates the early discovery of the disease, which is a requirement to ease the treatment radically. The early detection of lumps could be aided by the usage of AWARE. Given the information regarding breast cancer and the number of women in Sweden it can be argued that AWARE is to be launched at very large private market. Yet no market research has been conducted regarding the product within the Swedish market. Therefore at present Gamp Medical AB does not hold any market information regarding the product. Given the sensitive nature of the product and its area of usage it is crucial for the company that women become aware of the product in a way that they appreciate. This would make them purchase the product and use it in their everyday life as a mean of preventing the development of breast cancer. The fact that there has been no market research makes it difficult for the company to know what factors to enhance in their advertising of AWARE. This could be aided by investigating the factors women would want to see in the advertising.

1.3 Purpose

The purpose of this thesis is to identify which factors to emphasize in the advertising of AWARE.

1.4 Delimitation

To study the whole Swedish market for AWARE would be an immense task. Therefore this research is delimitated only to its potential market interest within the Jönköping region where the number of women in the year of 2004 between 20 and 79 was 42 477 (Appendix 1).

1.5 Contractor – Gamp Medical AB

After recognizing the potential in the OTC tests market the company Gamp Medical AB was created in October 1998. The primary goal was and remains, to lead and develop the quick growing product segment of OTC tests in Scandinavia. The

establishment in the market was immediate and in the summer of 1999 Gamp Medical AB launched their first products to the commodities stores and Apoteket. Given their goal to lead and develop their market in Scandinavia the company aimed towards gaining deals with leading manufacturers within the OTC tests area. At present this is a fulfilled goal and the company's holds valuable deals and cooperates with important manufactures of OTC products. Furthermore their market has grown from Sweden into Norway and they are currently entering Finland (Gamp Medical AB, 2005b; Gamp Medical AB, 2005d). The product portfolio of Gamp Medical AB contains of test used to examine: levels of cholesterol, traces of blood in the excrements, infection of the urinary tract, pregnancy, ovulation and the latest addition AWARE. Since their first delivery in June 1999 the company has delivered 600 000-700 000 tests and approximately 6 million condoms to the Swedish commodity stores, Apoteket and the professional health care. The trademark of Gamp Medical AB is to deliver products that are adjusted to their consumers' needs regarding price, model, package and quantity. Some of the products, one of them AWARE, do at the moment not have any competition in the Scandinavian market (Gamp Medical AB, 2005a; Gamp Medical AB, 2005d).

1.6 Outline of the Thesis

Chapter 1 – Introduction The first chapter supplies the reader with a background to the subject of this thesis and continues with stating the problem concerning the area of interest that derives to the purpose.

Chapter 2 – Factors that affect the purchasing of AWARE The following part presents the theories that will be applied in order to accomplish the purpose of the thesis. The authors provide the reader with theories and relevant information that enable the understanding for the empirical data collection and the analysis.

Chapter 3 – Market Research This chapter aims to illustrate how the research was accomplished. The chapter is based on a Market Research model, which in a pedagogical way facilitates the reader to gain knowledge concerning all parts of the research.

Chapter 4 – Factor findings and Analysis As the heading implies the first part of fourth chapter contains of the empirical findings, which sustains of the results from the market research regarding AWARE. In the second part the knowledge gained from the theory is united with the empirical findings, based on this an analysis is conducted in relation to the problem.

Chapter 5 – Conclusion and Final discussion In the subsequent chapter the analysis is briefly presented, and then the authors carry out a conclusion that relates to the purpose. The next component of the conclusion is the final discussion; this will give the reader a reflection of recommendations and further studies.

2 Factors that affect the purchasing of AWARE

In this section the theories, facts and definitions regarding factors that affect consumers' purchase of AWARE are presented. The chapter is concluded by summarizing the factors in a manner that serve as a base for the subsequent chapter.

2.1 Introduction

According to Christensen, Andersson, Carlsson and Haglund (2001) "A theory is an abstract description - conceptualization – of a specific phenomenon in the reality. Its language is made up by models and conceptions, where a model is a description of how different conceptions are directly related to each other." (Christensen et al., 2001, p.63). In this thesis several different theories are put together into a logical unit that delimits the analysis and aids the fulfillment of the purpose, this unit is referred to as Factors that affect the purchasing of AWARE. This chapter will therefore introduce theories that explain the different characteristics that affect female customers purchase decisions. First theories regarding consumer behavior in general are presented under heading 2.2, and then parts of the framework of Barletta's (2003) Gender Trends Marketing Model explains specific female buying behavior under headline 2.3. Theories regarding price will be discussed separately under heading 2.2 due to its high relevance both for the consumer and Gamp Medical AB.

2.1.1 Market segment

According to Kotler, Armstrong, Saunders and Wong (2001) a consumer market is "all the individuals and households who buy or acquire goods and services for personnel consumption" (Kotler et al., 2001, p. 189). It is crucial for companies to understand the buying behavior in the specific consumer market where the product is situated (Kotler et al., 2001). An important market segment today is women, due to their growing number, better education and higher income level (Barletta, 2003). A fact illustrating this is that in 1985, there were a total of 190 650 women with post-gymnasium educations in Sweden, and merely two decades later, in 2003 the amount had increased to 510 882 women (Appendix 2). Furthermore the wage gap between men and women has been constantly shrinking during the past years (Learned, 2004). In Sweden, the percentage for women during the same time period was 58% (Appendix 2). The percentage for women during the same time period was 72% (Appendix 2). This increase implies that the role of women has changed over the past decades, both in the society and at home which result in that the purchasing power of women is larger then ever (Barletta, 2003; Learned, 2004).

2.2 Factors that affect consumer purchase decisions

According to Kotler et al. (2001) consumers purchase decisions are affected by four factors: cultural, social, personal and psychological. Companies cannot control these factors but might be able to affect them; therefore it is important to understand them. Cultural factors it is the most basic cause of a person's wants and behaviors which have deep influence on people. Examples of cultural factors are basic values and

beliefs that are passed down from parents to children. This factor is often the most difficult to affect since people rarely change values and habits that they have gained during their childhood.

Social factors strongly affect consumers' purchase as they derive directly from the consumers' family, friends and surroundings (Billgren & Meurling, 1979; Howard, 1989; Kotler el al., 2001). The social class is an important part within the social factor that influences peoples' behavior, according to Howard (1989) a social class is an *"aggregate of individuals in the society who occupy a broadly similar position on the scale of prestige"* (Howard, 1989, p. 237). People belonging to the same social class often have similar buying preferences. The reference group is a subgroup within the social class; this group has either direct or indirect influence on a person's attitudes and behavior when it comes to brand and product choice, depending on what kind of product it is. Regarding private necessities influence from the reference group is low. For these products it is of higher importance to focus on individual factors, like personal, which affect buying behavior to a large degree (Kotler et al., 2001).

The last factors that affect buying behavior are the psychological factors. A psychological factor that highly influences buying decisions is a person's beliefs (Kotler et al. 2001; O'Shaughnessy, 1987). According to O'Shaughnessy (1987) "beliefs control and inform intentional action all the way from shaping wants into specific product preferences to guiding post purchase actions" (O'Shaughnessy, 1987, p. 18). Consumers often acquire additional beliefs regarding the product category they are looking for during their information search. Through this process people create new beliefs concerning certain product images that affect their buying behavior (Kotler et al., 2001; O'Shaughnessy, 1987).

2.2.1 Price aspects

According to Lönn (1995) it is critical when setting a price to know what the customers are ready to pay for the advantages that appears with the product. There are two different measurements of price to calculate the customer expectations of the price setting of a product; what the customers consider as range of a normal price and fair price (Urbany & Dickson, 1990). Normal price range is defined as *"the range of prices normally charged by retailers when the product is not on special"* (Urbany & Dickson, 1990, p. 2). The fair price is the price that is intrinsic between buyers and sellers. Generally the seller is seeking the highest price to sell their product and the buyer is seeking the lowest price to buy the product (Baker, 2000). It is important for a company to differentiate between two different consumer behavior prices when performing a study: expected prices and acceptable prices. These two behaviors among customers have the same normal price expectations and observe the same price; however one of the consumers buys the product and the other does not (Urbany & Dickson, 1990).

When a customer thinks about buying a product they have an idea of the maximum price that they are willing to pay for the product (Urbany & Dickson, 1990; Shirai, 2003). The maximum price that a customer is willing to pay for a product is called reservation price (Tesfatsion, 2004). The buyers' reservation price is individual and

varies among the consumer differences in three aspects: advantages for the good, their knowledge of price substitutes to the product and their income (Walbert, 2002; Tesfatsion, 2004). It is important for researchers and managers to understand to what extent their consumers use reference prices. If a consumer compares brand prices in a store to determine whether the focal brand is fair the consumer is said to have an external reference price (ERP) because no memory is needed of past prices to determine and encode brand price. The buyer can also have an internal reference price (IRP) that is defined as a standard in the memory of the consumer (Moon & Russell, 2002).

The memory is recalled to evaluate the strengths or attractiveness of a retail price and it is central to understand judgments of value that the consumer has (Shirai, 2003). Individual internal reference price derives from expectations developed from past purchase behavior that will be taken into account when making a choice (Moon & Russell, 2002). The internal reference price can be integrated into a model of internal reference price; the fair price, the lowest price, the highest price and the normal price, which all affect the perceived value (Chandrashekaran & Jagpal, 1995; Shirai, 2003).



Figure 2-1 The Unitized Model by Chandrashekaran and Jagpal (1995)

Consumers use physiologically encoded prices when making a choice derived from the internal reference price. Companies however assume that the consumers will treat the observed price as the relevant decision making variable in making a choice (Moon & Russell, 2002). According to Chandrashekaran and Jagpal (1995) by forming a reference price consumers do not develop a point estimation of the reference price, but rather a range of prices. This derives from uncertain consumers that do not know what prices to expect. For acceptable prices the quality is seen not as important like budget limits for the consumer (Urbany & Dickson, 1990). Prices within this range are acceptable but prices outside this range are not. Chandrashekaran and Jagpal (1995) stress that from the view of the Unitized Model and a managerial perspective, communication strategies for certain product categories should be developed. This would raise the reservation prices of consumers and benefit the company. If a consumer have both characteristics of internal reference price and external reference



price or just one of them is not clear as studies and literature goes apart. There are also studies saying that some consumer may not have any of them. Retailers cannot directly control the individual process of reference prices but however they can indirectly control it by manipulating the price pattern that the consumers see (Moon & Russell, 2002).

2.3 The Gender Trends' Marketing Model

The Gender Trends' Marketing Model eases the understanding of the factors that trigger women to purchase and provides companies with an aid of how to approach the female customers in their marketing. This consumer behavior part of the model partly sustains the Star and the Spiral Path (Barletta, 2003). Barletta (2003) argues that *"The key to creating marketing programs that will win women's business is to understand what women value"* (Barletta, 2003, p.44). The Star model explains the factors that will affect women's purchasing decisions and compares the differences of values between men and women. Furthermore the model explains the important of attributes for women when making decisions about what to buy. The four main characteristics that affect women's choice of product and services are: Social Values, Life and Time factors, Synthesizer Dynamics and Communication Keys.



Figure 2-2 The Gender Trends' Star by Barletta (2003)

Social values in this model aim to describe in which way men and women are different. Barletta (2003) argues that for both men and women people in their surroundings are the most important elements in life. The difference here is, whilst men are more individualists, women tend to act like members of the larger group they belong too. Furthermore influences from friends are of higher importance for women than men. Concerning Life and Time factors, the Star Model describes the role of women in today's society as busy working women who hold several roles at same time. Synthesizer Dynamics is an important part that affects women's buying behavior, this signifies that women seek to fulfill all criteria in the product they are looking for. Generally women are more concerned about details than men, marketers therefore have to focus not only on the general impression the product gives but also on the small details that may be of high significance in a woman's purchasing decision (Barletta, 2003). The Communication Keys part states the fact that women generally collect as much information as possible before making their buying decisions. Barletta (2003) further states that for women the word-of-mouth advertising is of high importance. According to Learned (2004) companies that are concerned about women's attitudes and personal values while conducting marketing plans will have an advantage when aiming to reach new customers and keeping the past consumers. The Spiral Path describes how women make their purchase decisions. The female consumer will go through different stages that affect the purchasing decisions. The customer will seek new information about the product during the whole process and at same time investigate substitute products. It is essential for companies to emphasize the benefits of their product to the customer during the whole process (Barletta, 2003).

2.4 The Factor Model

In this chapter theories regarding consumer behavior and female consumer behavior have been discussed. Based on the theories the authors have created the Factor Model. This model serves as a foundation for logical connections between the empirical findings, the analysis and the conclusions. Furthermore the factors within the model and the way of investigating them through broadly defined issues below, serve as an introduction to the following chapter where these aspects will be managed into appropriate questions in a market research. The model is based on the information in 2.2 and compared with the parts from the Gender Trends Marketing Model by Barletta (2003).



Figure 2-3 The Factor Model

The most basic factor that affects purchasing decisions is the Cultural. Due to its nature this factor is very difficult to affect. However all companies need to adapt to cultural differences. In the following Market Research chapter the authors argue that this factor would be interesting to examine with an in depth explanatory research. Nevertheless the authors find one aspect of high importance in the introduction. Inlander (2003) stresses that consumers nowadays are more aware of their health and demand products they can use to individually monitor and control their health. The authors argue this to be a Cultural factor since it concerns a society in general. A factor in the model that strongly affects buying behavior is the Social. This sustains of the Social factor brought up by Kotler et al. (2001) and the Social Values in the Star Model by Barletta (2003), due to their high resemblance with each other. The effect of this factor varies depending on the type of product. Since AWARE can be classified as a private necessity theory state that the group influence is weak, which will be examined in this thesis (Kotler et al., 2001).

A factor that would be important to examine regarding a private necessity like AWARE is the Personal, which according to Kotler et al. (2001) affect a person's purchase behavior. When comparing this with the Star Model it can be seen that the Life and Time factors match this subject and are included in the square. The Psychological factors also to large extent affect people's buying patterns. Due to the close connection between several of the variables in the upcoming analysis the authors have chosen to combine the Personal and Psychological factor in the model. This square furthermore includes Synthesizer Dynamics and Communication Keys from The Gender Trends Marketing Model, since both match parts of these factors. For AWARE the authors intend to investigate to what degree these factors would affect the possible consumers of the product.

The price aspect is included in the Personal and Psychological factors, because as theory state some consumers buy a product and some do not. The authors' state that this mainly depend upon aspect within these factors, such as different behaviors and the expected price a consumer has of a product (Urbany & Dickson, 1990). The different variables within the Person and Psychological Factors that influences the demand for AWARE will be essential for the price of the product (Lönn, 1995). The advantages when buying a product is an important factor since the price of the product will be based partly on the advantages with it. For AWARE it is important to investigate if the consumers are ready to pay for the advantages that they experience with the product such as quality, price, budget and information. Connected to this part is what the customer think they will obtain from buying and using the product and the perceived value. All companies strive to acquire their targeted customers' internal reservation price as it is the maximum price of similar products compared to products that the consumer has in the memory.

3 Market Research

This chapter introduces the market research and the method chosen to use in order to gather and analyze data. This in combination with the empirical findings and analysis serve as a platform for the accomplishment of the purpose of this research thesis.

3.1 Introduction

A well-established and frequently cited definition of market research is the one by American Marketing Association (1987).

"The function that links the consumer, customer and public to the marketer through information - information used to identify and define marketing opportunities and problems; to generate, refine and evaluate marketing actions; to monitor marketing performances, and to improve understanding of the marketing process." (Cited in Kotler et al., 2001, p.272; Christensen et al., 2001, p.11, Malhotra, 2004, p.7).

In order to ease the reading of this chapter the authors chose to base its composition on a market research process developed by Christensen et al. (2001). This research slightly differs from the model since it has the primary and secondary data under the heading data collection, as this better suit the needs of this specific research. All market researches have their point of departure in a marketing problem that requires a solution. Therefore the problem is the base of a market research and represented at the bottom of the figure of The Market Research Process by Christensen et al. (2001).



Figure 3-1 The Market Research Process by Christensen et al. (2001)

In order to solve a problem the first step in a market research is to develop an appropriate problem analysis that delimits the problem and focuses on the purpose of the study (Kotler et al., 2001; Christensen et al., 2001; Malhotra, 2004). The following step is to decide how and why the information is gathered, meaning which data is needed to solve the problem. This part of the process is called method. Following is the use of primary and the secondary data. The sample is a part of the population that the research is going to investigate and it is decided through a selection process

(Christensen et al., 2001). The next step is to gather the information which is shown as the data collection in the figure. Then the writers have to analyze the data. The final part of the market research process is to develop a report and a presentation sustaining of the conclusions and the possible recommendations (Christensen et al., 2001; Loudon, Stevens & Wrenn, 2002).

3.2 Problem

Fog (1979) state that "Before I know what to investigate I can not know how to do it" (Cited in Holme & Solvang, 1997, p.75). The first step for the authors was to investigate the base of the model meaning the problem. There are several types of research problems that to different degrees are suitable to analyze with specific research methods (Holme & Solvang, 1997). According to Kotler et al. (2001) and Christensen et al. (2001) there are three distinctive types of research problems: exploratory, descriptive and explanatory. An exploratory research asks the question "what", this study is performed when there is little or no information concerning the research problem and it can be an attempt to develop an initial description of an unknown market (Blaikie, 2003; Christensen et al., 2001). The exploratory study constructs the knowledge around the subject of interest by delimiting the problem area. Gamp Medical AB did not hold any previous market information concerning the product AWARE the authors therefore argued that the research was to be an exploratory.

However, this did not grasp the purpose. In order to examine how women feel about such a product and how they react to certain advertising features, the study had to continue with a descriptive research which is the most common market research tool and asks the question "how". The goal of a descriptive research is to provide measurements of characteristics of a certain population (Blaikie, 2003). The fact that this study sustains of both an exploratory and a descriptive study goes in line with what the theory state since they often overlap each other (Christensen et al., 2001). The last research form is the explanatory research. This is to be used when the subject is familiar. The research asks the question "why", and is often based on previous exploratory and descriptive researches (Blaikie, 2003; Christensen et al., 2001). The objective of the research is to determine the factors that creates a certain state of a social phenomenon, such as understanding the factors of why men and women might react in different ways to the same marketing (Blaikie, 2003). This thesis can not include in-depth "why" questions due to that there is no previous market information about the product, which is a requirement for an explanatory study. The authors argue that Gamp Medical AB, based on this exploratory and descriptive research could continue with such a study. An example of a field to examine would be the Cultural Factor and its effect on the customers of AWARE.

3.3 Method

According to Holme and Solvang (1997) method is a tool within research that aids the fulfillment of the purpose by solving problems and leading the way towards new knowledge. To accomplish the fulfillment of a purpose it is essential to have basic knowledge regarding method. The method provides the researcher with knowledge of how to systematically plan the research. Basically there is a distinction between two types of research methods within social science, namely qualitative and quantitative (Bryman, 1997; Christensen et al., 2001; Holme & Solvang, 1997; Curwin & Slater, 2002). Kress (1988) states that qualitative research consists of indepth "why" questions, while quantitative research on the other hand often consist of "how many" or "what" questions. The two techniques can also be distinguished by their form, where qualitative data sustains of words and images while quantitative is made up by numbers. This implies that when using a quantitative method the data will be analyzed by using statistics while qualitative data is to be interpreted (Christensen et al., 2001).

3.3.1 Choice of method

Bryman (1997) and Holme and Solvang (1997) state that the choice between qualitative and quantitative method should depend on to which degree the two different methods are suitable to answer the purpose of the study with. "The purpose of this research thesis is to identify which factors to emphasize in the advertising of AWARE". This was accomplished by a market research that investigated which factors that would create buyer intentions for the product. Under the previous heading the authors concluded that they were to perform an explanatory and a descriptive research. According to Kress (1998) theses researches are both appropriate to examine with the quantitative method, furthermore the authors wish to investigate the characteristics of a large population namely women in Jönköping which is in line with what Blaikie (2003) states about using a descriptive research. The conclusion is that this study was to be accomplished using a quantitative method.

3.3.2 Qualitative method

Quantitative data sustains of figures and focuses on variables that can be analyzed objectively such as quantity, number and frequency (Christensen et al., 2001). The method is appropriate to use when the research problem requires quantitative information and statistical generalization of a population which is its main advantage (Holme & Solvang, 1997; Bryman 2001). The analysis is conducted by discovering and stipulating variables and their connections from a static view of reality. In contrary to a qualitative study the quantitative does not look at any underlying factors. This is its main disadvantage since it neither investigates the relations between actions nor does it explore the actors' interpretations. The main features of a quantitative study are: structure, several shallowly investigated actors, clear framework that is made up by predetermined hypothesizes and hardly any contact between actors and researchers (Christensen et al., 2001; Bryman, 1997; Holme & Solvang, 1997).

3.4 Sample

A population is the total unit of elements with the same characteristics that the research wishes to obtain knowledge regarding (Djurfeldt et al, 2003; Holme &

Solvang, 1997). A market research is accomplished either by collecting information from a whole population or by using a sample, which is a smaller group out of the whole population. To investigate the whole population is highly resource demanding whilst a sample provides several advantages: cost and time saving, opportunity to focus on the investigation and more accurate results (Crask et al., 1995; Kress, 1988; Loudon et al., 2002; Holme & Solvang, 1997). Due to the advantages with investigating a part of a population the authors employed the sample method. The first step when deciding a sample is to define the population which should be accomplished according to the purpose of the study (Blaikie, 2003; Holme & Solvang, 1997; Loudon et al., 2002). The definition of the population of this research is "women above the age of 20 in the Jönköping region", which is an outcome of the delimitation and that women above 20 years are regarded as potential customers of AWARE.

The two main sampling methods are probability sampling and non-probability sampling. A probability sample involves some form of random selection meaning everyone in the sampling frame have the same chance of being included in the sample, which not is the fact with a non-probability sample (Kress, 1988; Loudon et al., 2002; Blaikie, 2003; Holme & Solvang, 1997). In order to use the pure probability sampling one has to create a sample frame, which is a list of all members of the targeted population. The sample itself is a selection of elements within the sampling frame, which if in accordance with the definition should be representative for the whole population (Blaikie, 2003; Loudon et al., 2002; Holme & Solvang, 1997). The fact that it would have required large resources to create a sample frame of all women in the Jönköping region above 20 created a problem. The authors chose to solve this by using a quasi random sampling referred to as stratified sampling. Within this method there are different manners of how to provide a representative sample without excessive bias. The technique which suited this research to the highest degree was the quota sampling (Lucey, 2002; Gorard 2003; Balnaves & Caputi, 2001). In this case that signified gathering a quota of women in three different age groups. Furthermore to increase the probability of the sample the answers were collected at different places, hours of the day and days of the week.

The last step in the sampling process was to determine the sample size. Blaikie (2003) state that "My thumb rule when advising students is to say that 300 may be adequate, 500 would be better and 1000 would be even better" (Blaikie, 2003, p.166). Gorard (2003) adds to the discussion by stating that after 80 cases the standard error decrease with a smaller marginal than before 80. Meaning that an additional sample after 80 cases provides a relatively little difference regarding the accuracy. Floyd (2002) states the same characteristic for the number 200. Bryman and Bell (2003) continue the discussion by stating "the bigger the sample the more representative it is likely to be, regardless of the size of the population from which it is drawn" (Bryman & Bell, 2003, p.103). In order to provide as high accuracy as possible the goal was to gather a higher number of cases meaning at least 300.

3.5 Data collection

The two main types of data a researcher can gather conducting a market research are primary and secondary. Primary data is gathered specifically for the research undertaken, whilst secondary data is gathered for another other purpose (Kress, 1988; Blaikie, 2003; Loudon et al., 2002; Edling & Hedström, 2003, Crask et al., 1995). This thesis mainly sustains of primary data due to that there was no prior market information. Primary data can be collected through four different research designs: experimental, cross-sectional, longitudinal and case study. The authors concluded that they were to use a quantitative method, and the most frequently used design to perform this is the cross-sectional; also know as the Social survey design (Bryman, 2001; Christensen et al., 2001, Loudon et al., 2002; Kress, 1988). A survey is normally structured to its form and sustains of many cases that are investigated at a specific moment in time (Christensen et al. 2001; Bryman, 2001; Djurfeldt, Larsson & Stjärnhagen, 2003; Bryman, 1997; Malhotra 2004). The main advantages with this study are that it requires few resources to perform and that it enables statistical generalizations by using quantitative data (Bryman, 1997; Christensen et al., 2001; Bryman 1997). The disadvantage with the approach is the lack of ability to capture a social process and to examine the cases profoundly. These facts all associates the survey with the quantitative method and verified the choice of method made by the authors. There are two main groups of surveys: self administered and interviewer administered (Christensen et al., 2001).

3.5.1 Interviewer administered survey

The authors chose to use an interviewer administered survey, meaning that the interviewer asked the respondent a question. Then the interviewer wrote the answer on the questionnaire. Kress (1988) and Floyd (2002) state two important reasons for using this method: the interviewer may want to show the respondent material connected to the research and the respondent may not understand the questions. This market research concerns a product that was supposedly unknown (Flod, 2002; Kress, 1988; Blaire & Czaja, 1996; Burns, 2000). Due to this it was important to bring a sample of the product, and product information leaf from which the authors will be able to answer questions. Another advantage with this method is that it has a very high response rate in comparison with the self administered survey, which of course affects the choice (Kress, 1988; Floyd 2002). A further advantage is that the sampling can be done in a more representative way since the interviewers are in direct contact with the respondents (Loudon et al., 2002). This is an important aspect in this market research since the quota sample requires gathering of answers from different age groups.

A disadvantage with personal interviews is the cost of traveling from place to place to gather data (Blaire & Czaja, 1996; Kress, 1988; Loudon et al., 2002; Floyd, 2002). This thesis was delimitated to the Jönköping region and therefore did not require large amounts of traveling. Within the interviewer administered method there are three techniques; phone interview, visiting interview and city interview (Kress, 1988). The method appropriate for this research is the city interview technique as the authors wanted to get in touch with woman that moves around the current places were the product can be bought in the future. The next step of the authors concerned the types of questions that would be used. Three common types of questions are: openended questions, which lets the respondents answer the questions with their own words, dichotomous questions, were the respondents only have two alternatives to choose from and multichotomous questions, where the respondent have more than two answers to choose from. This market research used a combination of the three, however the open-ended questions were limited to age, price and income of the respondents (Loudon et al., 2002). The questionnaire can be found in Appendix 3 for the Swedish version and Appendix 4 for the English. According to recommendations in theory the authors performed a pilot test two days in advance to the data gathering on ten women in their surroundings. The test was reviewed and small alterations were made in the questions according to the comments gained during the pilot test (Kress, 1988; Loudon et al., 2002; Gorard, 2003).

3.6 Analysis

The choice of method in this research is quantitative, which involves making statistical investigations of the variables by using different statistical tools. Before deciding which tools to use it is important to investigate which scale of measurements to apply, since variables have different characteristics and are associated to different levels of measurement. Moreover the levels of measurement are connected to different statistical tools (Djurfeldt et al., 2003; Bryman & Cramer 1999). There are two levels of measurement: categorical and metric. The categorical measurement is the lower and sustains of data that can be separated into numerically ordered categories. The numbers are only used to describe objects and do not have any mathematical significance (Djurfeldt et al., 2003; Blaikie 2003). The categorical measurements can be of two types. One is the nominal-level measurement, which only classifies the variables, these are mutually exclusive; two examples are sex and civil status. The other is ordinal-level measurement. The difference from the former is that the categories can be placed in order of preference; examples are grading and attitudes such as 1 seldom, 2 sometimes and 3 often (Holme & Solvang, 1997; Bryman & Cramer, 1999; Djurfeldt et al., 2003; Blaikie; 2003).

Metric measurement is the higher level of using numbers (Djurfeldt et al., 2003; Bryman & Cramer, 1999). Interval-level measurement is the lower level in the metric scale. This is realized when categories on a scale have the same distance apart. Meaning there is the same distance between 1 and 2 as there is between 2 and 3. An example is the Celsius scale. The highest scale level is the ratio-level measurement. The difference between the former and this is that the ratio-level scale has an absolute zero, which the former does not. Examples of this are age, number of children and income (Blaikie, 2003; Djurfeldt et al., 2003; Holme & Solvang, 1997; Bryman & Cramer, 1999). The four scales can be divided into two types of variables, where nominal and ordinal are qualitative variables and interval and ratio are quantitative variables (Djurfeldt et al., 2003). In this survey the first, the second and the eight questions are measured on the ratio scale whilst the remaining questions are either on the nominal or the ordinal scale. The research therefore includes both qualitative and quantitative variables.

3.6.1 Types of analysis and statistical tools

After examining which variables to work with there was one further step before choosing the statistical tools; to investigate which type of analysis that is appropriate. Depending on how many variables that are studied there are three types of analysis. The first, univariate, studies information regarding one variable, following is bivariate, which examines connections and differences between two variables, finally the multivariate analysis looks into connections between more than two variables (Djurfeldt et al., 2003; Bryman & Cramer 1999). This thesis includes analysis at all three levels.

When conducting univariate analysis in this thesis the frequency distribution was summarized in frequency tables and bar charts. Besides the frequency the univariate analysis includes measures of central tendency. For the quantitative variables, mean was used and for the qualitative mode (Djurfeldt et al., 2003; Bryman & Cramer, 1999). One of the tools used to perform bivariate analysis is cross tabulations, which combines the frequency distribution of two qualitative variables simultaneously. It is helpful in a market research since it demonstrates the presence or absence of relationships between variables. Furthermore the research includes Chi² tests which are used to examine the frequency of qualitative variables and whether they differ from a specific frequency in the population. When looking into the relation amid qualitative and quantitative variables the authors use t-test to investigate the differences between two means (Djurfeldt et al., 2003; Bryman & Cramer, 1999). The authors also performed mean analysis where the measures of association are referred to as Eta and Eta². An Eta value close to the value one demonstrates a strong relation between the variables and a value close to zero proves that there is little connection between the two variables. The Eta² value shows how the qualitative variable explains the percentage change of the quantitative variable. The last test used in the bivariate analysis is Pearson's r which examines the connection between two quantitative variables.

Regarding the multivariate analysis only one test was performed namely multivariate regression, which examines the connection between a dependant quantitative variable and two independent quantitative variables (Djurfeldt et al., 2003) In order to provide as high accuracy as possible the statistical analysis was preformed in SPSS 11.5 for Windows. Through SPSS it was possible to draw the tables, cross tables and different analysis needed to compare the questionnaire findings with the theories in chapter 2, Factors that affect the purchasing of AWARE

3.7 Report and Presentation

The final part of this Market Research is the development of a report and a presentation. The report and presentation sustains of all previous mentioned parts of this thesis. Moreover the report includes the conclusions and recommendations. The conclusions were reached by connecting the analysis and the questionnaire findings



to the original market research problem, meaning the purpose (Christensen et al., 2001). With the conclusions the authors have created recommendations for the contractor of this thesis: Gamp Medical AB. By studying the conclusion and the recommendations the company can decide on which measures to take and how to make decisions regarding the advertising of AWARE.

4 Factor findings and Analysis

The commencing part of the chapter provides information regarding the respondents and the results reached by the questionnaire. It is ordered according to the question sequence of the survey. In the following part the questionnaire findings are analyzed based on the Factor Model in chapter 2; Factors that affect the purchasing of AWARE, and the statistical tools brought up in chapter 3; Market Research.

4.1 Factor findings

The market research regarding AWARE was conducted by three interviewers during six days during weeks 16 and 17. It was carried out at different places in the Jönköping region some examples are: A6, the city centre and at the care center off Rosenlund, all places where the product potentially could be purchased in the future. During the research a total of 354 answers were collected from three different age groups (see figure below and Appendix 5). When the field research was completed the authors printed the data in the statistical program SPSS in order to relieve the analysis of the material. The frequency tables drawn from SPSS can be found in Appendix 5, were each table is situated under its relevant question. The bar charts below are also extracts from SPSS.



The first question in the survey concerned the age of the respondents. Due to the usage of a quota sample the 354 answers were gathered based on three different age categories: 20-39, 40-59 and 60-79 with a total of 118 in each group (Appendix 5). The second question regarded the respondents' net income per year, subsidies excluded. As the authors expected there was a large variation between the respondents net income per year with a range from 19 000 SEK to 550 000 SEK. The frequency table of "net income

income per year" can be

found in Appendix 5. The wide range depends on the different age of the respondents and the fact that the respondents were included without any consideration to their occupation. Question three regarded whether or not the respondent had been to a mammogram examination. Out of 354 answers 64.1%, answered "yes" and the remaining 35.9% "no". Due to the fact the mammogram exams in general are performed at the age of 45 the main part of the women that had attended the exams belonged to the age categories 2 and 3.





The fourth question concerned how often the respondents examined their breast at home. As the figure illustrates the result was as following: 17.2% "never", 29.9% "once a year", 29.1% "twice a year", the reaming 23.7% examined their breast "once a month". The answers illustrate that 82.7% examine their breast by themselves at least once a year, which shows a high concern regarding the breast cancer issue.

Interest in aid

40

The fifth question considered

the respondents' interest in having an aid to ease the Breast self-examination process. A majority of the respondents' showed interest in having a product that aids the examination process at home. Of the people that were interested, 20.3% were "slightly interested", 46% "interested" and 13.6% "very interested".

Question six concerned how much the respondents' surrounding affects their buying



respondents', 86.7%, were "not affected at all" or "very little" affected by their surroundings. Following this was the question of what the respondents find most valuable when making a decision to buy products such as AWARE. Before stating that question the interviewers shortly presented information regarding AWARE, showed a

showed a sample and answered questions.

56.2% of the respondents answered that quality was the most essential feature of this product category. Following that with 22.3% was information, and close behind price with 20.9%, only two of the 354 respondents answered appearance as the crucial factor when it comes to the purchase decision.





For question eight the respondents were asked to give a price they were willing to



pay if purchasing AWARE. 95.5% gave a price ranged between 100 SEK to 600 SEK. Almost a third of the respondents 31.6% said that they would buy AWARE if the price was at 300 SEK. Due to the high variation in price the authors choose not to make a bar chart for this variable; however the answers can be studied Appendix 5. The last question in the survey was concerned of where the respondents think AWARE should be sold. 95.5% answered at the pharmacy and many of them stated that it would feel safer if the product was sold by people that have knowledge about the decease as well as the product. 4.2% of

the respondents wanted the product to be sold at grocery stores and only one person said that the product to be sold over the Internet.

4.2 Analyzing the Factor Model

The authors have structured this subheading as in the Factor Model. The central part is now adapted towards AWARE and referred to as "Female consumer behavior regarding AWARE", this part is integrated in the analysis and sorted out in clear manner in the first part of the subsequent chapter.



Figure 4-1 The Factor Model

4.2.1 Cultural factor

As mentioned in chapter 2; Factors that affect the purchasing of AWARE, the Cultural factor is very difficult to affect. Nevertheless it is an important factor that is crucial for companies to adapt towards. As mentioned Inlander (2003) stresses that consumers are more conscious of their health and demand more products used to

control their own health. The Factor findings clearly represents this as true since 82.7% of the respondents' are conscious about breast cancer as they examine the breasts on a regular basis. Furthermore the demand of a private necessity used for self examination of there breast is high, 79.9% (Appendix 5). This proofs that as a Cultural factor today's consumers are more health conscious and demand more OTC products on the market. Inlander (2003) argues that one of the factors behind this shift is better education. Given the numbers of increased education among Swedish women the authors find another proof supporting what Inlander (2003) state regarding this Cultural factor (Appendix 2).

4.2.2 Social factor

From the Factor Model the authors find that a factor that affects purchasing is the Social. Barletta (2003) argues that women are highly affected by their surroundings, however as previously stated AWARE is a private necessity. According to Kotler et al. (2001) the influence of surroundings regarding this product category should be low. To investigate whether or not this is true the first test performed is a Chi² test of distribution which investigates if women are equally parted in categories regarding "Influence from surroundings" when purchasing a private necessity. The Chi² test demonstrated a clear proof that women are not equally parted into the four categories (Appendix 6). In order to find how women are differently parted in the categories the easiest way is to investigate the frequency table of the variable

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all	160	45,5	45,5	45,2
	very little	147	41,5	41,5	86,7
	slightly	40	11,0	11,0	98,0
	much	7	2,0	2,0	100,0
	Total	354	100,0	100,0	

Table 4-1 Frequency table of Influence from surroundings

The table clearly shows that a large percentage, 87%, belong to the groups "not at all" or "very little", which is a clear prove of what Kotler et al. (2001) state regarding the private necessity category. Furthermore Barletta (2003) argues that the education level has increased among women, which the authors argue leads to superior general knowledge thereby less effect from outside influence. This is supported by the fact that Swedish women with post-gymnasium educations have been steadily rising over the years (Appendix 2). In order to expand the analysis the authors continued by combining the "Influence form surrounding" variable with the "Age categories" in a cross tabulation. In this test the categories "not at all" and "very little" were combined into "not influenced" whilst "slightly" and "much" is shown by "influenced". This was done to obtain a clearer picture of the numbers that are influenced from their surroundings or not.

			Influence from s	urroundings	
			not influenced	influenced	Total
Age	1	Count	88	30	118
categories		% of Total	24,9%	8,5%	33,3%
	2	Count	114	4	118
		% of Total	32,2%	1,1%	33,3%
	3	Count	106	12	118
		% of Total	29,9%	3,4%	33,3%
Total		Count	308	46	354
		% of Total	87,0%	13,0%	100,0%

Table 4-2 Cross tabulation: Age categories*Influence from surroundings

The finding demonstrate that the group with highest influence from surroundings is the age group between 20 and 39 years old, representing a percentage of 8.5%, which is a total 65.4 % of the category "influenced".

4.2.3 Personal and Psychological factors

The following part of the Factor Model is the Personal and the Psychological factors. Aspects that are interesting to investigate within these factors are: age, income level, personality, lifestyle, attitudes and price. To a large extent this part of the thesis has focused on age, income and price as dependant variables which are compared with the remaining. The reason is that these three variables are quantitative variables which enable an extensive analysis in comparison with the remaining qualitative variables.

4.2.3.1 Single qualitative variables

"Interest in aid" can be argued to fit both with the Personal factor and the Psychological due to its connections to both lifestyle and attitudes (Barletta, 2003; Kotler et al., 2001). When using a Chi² test of distribution to investigate this variable the authors suggest that there is an equal deviation of the different categories, this gives a Chi² value of 87.8. As the minimum expected frequency value is 88.5 this proofs that the authors' suggestion of an equal deviation is not true (Appendix 6). This illustrates that there is a difference in the parting of the respondents' interest in aid. Continuing with investigating the central tendency regarding "interest in aid" the result clearly shows that the mode is represented in the category "interested" which has a frequency of 163 answers. Furthermore 48 respondents answered "very interested" and 72 "slightly interested". The conclusion of this analysis is that 79.9% of the respondents have an interest in AWARE as an aid for Breast self-examination. This gives a large demand for the product among women in Jönköping, which can be connected to what Inlander (2003) state regarding consumers in general demanding more tests to monitor their health individually (Appendix 6).

What the respondents "value most with the product" can be seen as a Psychological variable since the respondent beliefs influence the buying decision (O'Shaughnessy, 1987; Kotler et al., 2001). A Chi² test, where the authors assume equal deviation, investigates the variation between the categories provided a Chi² value of 225.9

(Appendix 6). The Chi² test proofs the fact that the authors' statement should be strongly rejected as the minimum expected frequency is 88.5 (Appendix 6). There is a significant difference in the variation of the categories. The central tendency analysis illustrate that the mode highly represented in category 2, "quality", with a frequency of 199 meaning that quality is the most important Psychological factor of that variable (Appendix 6). This proofs that the statement made by Urbany and Dickson (1990) is wrong. They state that budget limits is the most important factor and not the quality if the price are set at an acceptable price. O'Shaughnessy (1987) and Learned (2004) on the other hand both argue that beliefs and values, which the authors argue quality to be, highly influence buying behavior, which the analysis show is true.

Where AWARE should be sold is analyzed with the variable "What place". This can fit both to a Personal and a Physiological factor due to its connection to Synthesizer Dynamics which is reflected in both variables (Barletta, 2003). A Chi² test where the authors suggest no differences in the deviation between the categories is performed (Appendix 6). By comparing the Chi² value of 616.1 with the expected frequency 118, the authors statement can be strongly rejected (Appendix 6). Continuing with a mean analysis it is shown that the mode is in category 1, "pharmacy" with 338 respondents, meaning 95.5%. When comparing to theory the authors find that Barletta (2003) argue that due to Synthesizer Dynamics women seek to fulfill all criteria in a product, furthermore according to the Spiral Path women tend to have high need for information throughout the search process. These requirements can only be fulfilled if the product is vended at a place where the merchandiser can provide information, service and details regarding the product. In connection to this Kotler et al. (2001) and O'Shaughnessy (1987) both state the high influence of beliefs and Learned (2004) state the same regarding women's attitudes and personal values. Since women have an earlier trust in Apoteket, which the authors argue is shown by the results, their beliefs, Synthesizer Dynamics, information search and values can only be fulfilled if sold at that place. Therefore the fact that 95.5% answered Apoteket as the vending place shows a clear connection to the theory and thereby the Personal and Psychological factors, as this place is the only of the three suggested places that match what women seek.

4.2.3.2 Income, Age and Price as dependent variables

In this heading "net income per year", "age" and "what price" are set as dependent variables which are compared with several qualitative variables in order to establish connections. To analyze the information from the survey the different variables are tested and compared with each other with Eta and Eta² values. The first quantitative variable that authors have investigated is income. The three different qualitative variables, which are tested with this variable, are "Influence from surroundings", "Interest in aid" and "Value most with product".

The Eta value between "net income per year" and "influence from surroundings" is 0.205 resembling a small connection between the variables. Further more the Eta² value which is 0.042 shows that only 4.2% of the variable "influence from surrounding" explains the changes in the "net income per year" variable. This value

signifies that a small percentage of the variation in net income can be explained by the "Influence from surrounding" variable (Appendix 6). The test result between "net income per year" and the respondents' interest in having a product that aided the examination process at home gave an Eta value of 0.069, which implies that there is very little connection between product interest and income level (Appendix 6). When it comes to the relation between net income and what the respondents value most with AWARE, the Eta value was 0.141, which means that this variable is insignificantly related to income. The test further shows that the variable "Value most with product" only explains 2% of the variation in the respondents' net income level (Appendix 6).

The test shows that there is more connection between three variables "net income per year" and "Influence from surroundings" than between income and "Interest in aid" variable. However in summary the test result demonstrates that the Personal factor income does not affect the qualitative variables in the tests in a significant way; this could be due to several reasons. Concerning "Influence from surroundings" and income the authors find that Barletta (2003) argues that women in today are better educated and earn higher salary than before (for the education of Swedish women look in Appendix 2). Which as mentioned explain that the respondents are not affected by their surroundings and thereby the low connection between the variables. The authors argue that the very low connection between "interest in aid" and "net income per year" depend on how important the respondents feel that the breast cancer topic is to them and not income. This is based on the authors own experience and comments from the respondents which the interviewers gained during the data gathering. Regarding what the respondents' value most with AWARE it is also more dependent on the respondents' lifestyle and their attitude towards a new product than on their income level. The authors draw this conclusion since O'Shaughnessy (1987) state that beliefs have high influence and Learned (2004) argue this for attitudes and personal values of women.

The next quantitative variable to investigate is age. For the analysis of this variable is set as dependent and tested with the qualitative variables: "Breast self-examination", "Interest in aid", "Value most with product" and "Influence from surroundings". Between "age" and "Breast self-examination" the Eta value was 0.317 for the relation. This value shows that there is some relation between age and how often women they examine their breast. The Eta² value for these variables shows that 10% of the "breast self examination" variable can explain the changes in the "age" variable. The next Eta test compares "age" with the variable "interest in aid" and gives the Eta value 0.181. The value shows that the respondents' interest in having an aid for the breast examination process does not depend on the age factor in a significant way. However there is still some connection between them and the Eta² value illustrates that 3.3% of the "interest in aid" variable affects the "age" variable. The value most with product "gives an Eta value of 0.077 (Appendix 6).

In total the analysis of the three variables: "Value most with product variable", "Interest in aid" and "Breast self-examination" are more dependent upon a person's attitude towards AWARE and breast cancer related issues than her age. Meaning that putting "age" as dependant variable provides more or less the same results as with the income factor. The Eta value of 0.297 from the comparison between "age" and "influence from surroundings" shows some connection. Kotler et al. (2001) states that people in the same age category often belong to the same social class and have values that remind each other's. Therefore it could be argued that people within the same age category and within the same social class are more influenced by each other than from people belonging to other age groups and social classes. An interesting note is that for both "interest in aid" and "influence from surroundings" the relation to age is higher than towards income, whilst it is the opposite for the "value most with product variable".

The last quantitative variable to compare with the qualitative is price. According to Lönn (1995) the price of the product will be based partly on the advantages that the respondents would experience as most important with the product. The Eta measure of association of "What price" and "Value most with product" proves a vague connection between the advantages a respondent sees with the product, which further influence the price that the consumer is willing to pay for the product. The analysis illustrate that the consumers are somewhat ready to pay for the advantages that they experience with the product compared to the price setting that the company have decided (Appendix 6). The central tendency analysis of "What price" and "Values the most with product" show that quality is by far the most important factor in which the respondents are willing to pay 418 SEK for the product. Inlander (2003) stress that consumers are getting increasingly critical of the healthcare system and one of the consequences of this is the increased demand of quality that is a driving force within the health care industry. This analysis proofs that this is true as quality is the most important factor for the consumers when purchasing AWARE.

Logically the respondents that valued price highest answered the lowest mean price: 250 SEK. Furthermore the Eta show a vague, but existing connection between the price and "value most with the product" and according to the Eta² value 3.8% of these values are explained by the variations in price (Appendix 6). By conclusions drawn from the frequency of "what the respondent value most", product information from the company and the vendor are also an important factor before purchasing AWARE. 22.3 % of the respondents would value this highest before making a decision of purchasing or not. This factor is important, as the respondents are affected by the information the company spreads about AWARE (Appendix 6). This proofs the fact that respondents have different thoughts and beliefs of the advantages with the product and how they value them differently. This affects the reservation price that each respondent have (Walbert 2002).

The different price settings can also depend upon how often the respondents perform Breast self-examination at home, which influence how important the respondents consider this matter to be. The mean analysis of "What price" and "Breast selfexamination" demonstrate that the respondents who frequently (once every half year or once a month) perform the examinations at home are willing to pay a higher price than the respondents that answered "never" or "once year" (Appendix 6). Based on this information it can be argued that the respondents who perform Breast selfexaminations frequently would value this product higher than the remaining. This goes in line with the theory of Lönn (1995) regarding experience and price, since the respondents with higher experience in Breast self-examination are willing to pay a higher price for an aid. The association between the two variables shows an Eta value that is vague but where 3% of these values are explained by the variation in price according to the Eta² value.

Urbany and Dickson (1990) and Shirai (2003) stresses that when a consumer is considering buying a product the consumers thinks about the highest price that they are willing to pay. The authors of this thesis therefore argue that the respondents answered the maximum price when answering how much they would pay for the product. In theory this is referred to as the maximum reservation price (Tesfatsion, 2004). The mean maximum price for the whole sample is 367.43 SEK; this can be compared to the price setting made by the company which is 285 SEK (Appendix 6). The research shows that there is a large difference between the minimum and the maximum internal reservation price that the respondents are willing to pay. The differences may depend upon the experiences that different persons have with breast cancer and how they would value an aid that helps an early discovery of the disease. An example is the outsider price set to 5000 SEK by a lady that already had suffered from breast cancer, therefore her maximum price for the product is much higher than the other respondents (Appendix 5). The different price settings of the respondents can also be connected to the Unitized Model where different price categories are formed together to an internal reference price that will affect the perceived value. As the respondents are unsure of what price to expect they form a range of prices that they can imagine to pay (Chandrashekaran & Jagpal, 1995).

A further reasonable aspect shown by the analysis is that the maximum price is influenced by whether or not the respondent is interested in the product. The Eta analysis of "what price" and "interest in aid" proofs to a small extent that the respondents who are "interested" or "very interested" set a higher price than the "not interested" or "slightly interested". The mean price made by the "slightly interested" (350 SEK) respondents is however very close to the "interested" (352 SEK) category. The mean of the maximum price and the internal reservation price of the respondents are according to the authors logically highest in the "very interested", (515 SEK) category (Appendix 6).

To investigate the results of an analysis that shows the differences between the mean prices, 367.43 SEK, set by the respondents to the price set by Gamp Medical AB, 285 SEK. As the survey is a sample and the population is normally distributed, this also means that the price mean of the sample is normally distributed. A one-sample t-test is done to get the best results out of the analysis where the t-test compares the mean of the sample with that of the company in terms of how likely it is that differences between means have arisen by chance or not. The authors assume that the mean changes in price have not arisen by chance. The test value of the hypothesis is 250 SEK and from this the observed t- value is 4.552. The critical value with a 5% significant level is 1.960. The mean difference between the mean set by the participants and the price set by the company is 72.43 SEK. Because the observed t-value is larger than the critical value, conclusions can be drawn that there is a strong



proof that there is a significant difference between the mean price and the test value have arisen by chance (Appendix 6).

4.2.3.3 Price variable versus Income and Age variables

To analyze the relation between the quantitative variable "What price" the respondents are willing to pay for AWARE with "net income per year" and "age" Pearson's Correlation was used. First the "net income per year" and "What price" the respondents are willing to pay were tested.

		Net income per year	What price?
Net income per year	Pearson Correlation	1	,010
	Sig. (2-tailed)		,856
	Ν	354	354
What price?	Pearson Correlation	,010	1
	Sig. (2-tailed)	,856	
	Ν	354	354

Table 4-3 Pearson Correlation Net Income per year*What Price

The outcome value was 0.01, which implies that there is almost no relation between these two variables.

		What price?	Age
What price?	Pearson Correlation	1	-,012
	Sig. (2-tailed)		,820
	Ν	354	354
Age	Pearson Correlation	-,012	1
	Sig. (2-tailed)	,820	
	N	354	354

Table 4-4 Pearson Correlation What price*Age

The comparison between "age" and "What price" the respondents are willing to pay for AWARE gives the value -0.012, which also is close to zero and shows very little connection between the variables (Appendix 6). These three variables used in the test are according to Kotler et al. (2001) Personal factors. The price the respondents are willing to pay for the product is highly individual and to a higher degree affected by Psychological factors like their attitude towards the AWARE and breast cancer than by their Personal factors as income level and age, as have been proofed above.

Due to the low relation the analysis continued with a multivariate regression analysis, in order to examine a feasible relation between the three variables. "What price" was set as the dependent variable and compared with two independent: "age" and "net income per year".

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10143,953	2	5071,976	,043	,957(a)
	Residual	40959216,7 82	351	116692,925		
	Total	40969360,7 34	353			

Table 4-5 ANOVA^b What Price, Age and Net income per year

The significance is very low in the test and show that 957 out 1000 respondents could have answered by chance in the research. According to theory this significance value makes it unnecessary to examine the R^2 in the model summary (Djurfeldt et al., 2003). However the authors have chosen to include the summary to further show the lack of connection between the variables.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,016(a)	,000	-,005	341,603

Table 4-6 Model Summary What Price, Age and Net income per year

The summary illustrate a R² value of 0 which clearly state no connection at all between the three quantitative variable when "What price" is set as dependant. The low relation from these three tests can be answered by using the Spiral Path in Barletta's (2003) Gender Trends Marketing Model which states that women want to collect as much information as possible of a product before they make the purchase decision. Due to lack of information and comparable products the price they were willing to pay for AWARE is to some extent uncertain. Furthermore the price the respondents are willing to pay for AWARE in relation to the "age" and "net income per year" variables does not give a significant value due to that the buying behavior is according to O'Shaughnessy (1987) dependent on the respondents' beliefs regarding the product, which due to its newsworthiness they have not developed a clear image off.

4.2.3.4 Breast cancer related variables

To examine the relation between the three qualitative variables, "mammogram exam", "breast self examination" and "interest in aid", they are tested with each other in different combinations in cross tabulations. The two variables "mammogram exam" and "breast self examination" illustrates that 85% out of the 227 respondents that have done a mammogram exam do examine their breast by themselves at home. For the 127 respondents that have not been to a mammogram exam yet 78.7% examine their breast.

			Breast self-examination once once a every six once a never year months month				Total
Mammogr am examinati on	yes	Count	34	51	75	67	227
•		% of Total	9,6%	14,4%	21,2%	18,9%	64,1%
	no	Count	27	55	28	17	127
		% of Total	7,6%	15,5%	7,9%	4,8%	35,9%
Total		Count	61	106	103	84	354
		% of Total	17,2%	29,9%	29,1%	23,7%	100,0%

Table 4-7 Cross tabulation: Mammogram examination*Breast self-examination

This shows that most people whether if they have done mammogram or not do examine their breast and that people in general are concerned about their health and the breast cancer issue. The next two variables that are tested against each other are the "breast self examination" variable and the "interest in aid" variable.

				Interest in aid				
			not intereste d	slightly interest ed	intereste d	very interest ed		
Breast self- examinatio n	never	Count	24	17	17	3	61	
		% of Total	6,8%	4,8%	4,8%	,8%	17,2%	
	once a year	Count	25	29	42	10	106	
		% of Total	7,1%	8,2%	11,9%	2,8%	29,9%	
	once every six months	Count	19	23	51	10	103	
		% of Total	5,4%	6,5%	14,4%	2,8%	29,1%	
	once a month	Count	3	3	53	25	84	
		% of Total	,8%	,8%	15,0%	7,1%	23,7%	
Total		Count	71	72	163	48	354	
		% of Total	20,1%	20,3%	46,0%	13,6%	100,0%	

Table 4-8 Cross tabulation: Breast self-examination*Interest in aid

The test illustrates that out of the 293 people that examine their breast 246 are interested in having a product that aids the examination process at home, giving a percentage of 83.9%. The overall interest in having an aid for the breast examination process whether the respondent examine their breast or not is also high, 79.9%. The last two variables tested are the "mammogram exam" and "interest in aid" variables.

				Total			
			not interested	slightly interested	interested	very interested	
Mammogr	yes	Count					
am examinati on			57	43	97	30	227
		% of Total	16,1%	12,1%	27,4%	8,5%	64,1%
	no	Count	14	29	66	18	127
		% of Total	4,0%	8,2%	18,6%	5,1%	35,9%
Total		Count	71	72	163	48	354
		% of Total	20,1%	20,3%	46,0%	13,6%	100,0%

Table 4-9 Cross tabulation: Mammogram examination*Interest in aid

The result from the test shows that 170 out of the 227, 74.9%, respondents that have been to a mammogram exam are interested in having a product aid. It can be seen that interest in having a product aid is high whether the variable "interest in aid" is tested against the "mammogram exam" variable or the "breast self examination" variable.

These three variables are all concerned about the respondents' interest in the breast cancer topic. As Barletta (2003) and Learned (2004) state women nowadays are better educated and this could be a reason about the higher concern about health issues (look in Appendix 2 for Swedish figures). Furthermore it is also easier to find information about breast cancer today, which also has affected the better knowledge which leads to the increase in interest of having an aid for early detection of possible cancer lumps. By learning, people have increased their knowledge about breast cancer, which have changed their attitude towards breast cancer. One person's learning and attitude can be classified as Psychological factors. These have earlier been argued to have high effect on this product in comparison to the effect of the more Personal variable income, which by the tests above is verified as verified true.

5 Conclusions and Final discussion

The purpose of the introductory part of this chapter is to clarify the conclusions reached by the analysis of the questionnaire findings. The subsequent part is the Final discussion, which includes recommendations for Gamp Medical AB and the authors' thesis criticism.

5.1 Female consumer behavior towards AWARE

The purpose of this bachelor thesis has been to investigate which factors to emphasize in the advertising of AWARE. Through a survey the authors have gathered answers which had the intention to serve as a foundation for the analysis of the factors. The factors were clarified in the previous chapter based on the Factor Model and analyzed according to appropriate statistical measurements and connected to relevant theory. The continuing part represents the central part of the Factor Model "Female consumer behavior towards AWARE".

The Cultural factor shows that women today are concerned about their health and cancer breast issues as 82.7 % exams their breast at least once a year. This proofs the statement made by Inlander (2003) that people actually are getting more aware of their health. An aspect in the advertising that can be connected to this is that the company should stress the importance of monitoring the breasts. The research furthermore shows that 87% belongs to the group that is not influenced by their surroundings. Thereby the analysis proofs that Social factor is not significant to emphasize in the advertising of AWARE. In real life this would mean that word of mouth advertising would not be very effective for AWARE as the product is a private necessity. By this the authors conclude that Gamp Medical AB should focus on other factors than the Social.

The authors argue that the Personal and the Psychological factors demonstrate important tools for Gamp Medical AB to use in their advertising. However the analysis shows that it is the Psychological factors like values and beliefs women are mainly concerned about when purchasing a private necessity like AWARE. This comes as a result of the breast cancer concern and the fact that the health is of high importance for the possible consumers of the product. Regarding the Personal variables age and income the authors can conclude that they are not of the same importance for the consumers as the Psychological, however the analysis showed that the influence of age is higher than the one of income. The price variable showed resembling results to income and age. Meaning that the price the respondents were willing to pay for the product is highly individual and to a high degree affected by Psychological factors like attitude towards AWARE and breast cancer rather than by their Personal factors as income level and age. Quality and thereafter information from the company is the most important factors concerning AWARE and not the price. Therefore it is important for Gamp Medical to reach out with the benefits with AWARE to better be noticed by the consumer.

Given the analysis regarding the factors the authors conclude that the Psychological factor is the one of highest importance that Gamp Medical should concentrate upon

in their advertising. Concretely this means that when advertising AWARE the company should focus on the attitudes and believes that will make the consumers recognize the advantages by using the product compared to not using it. As woman tends to collect much information about the benefits they will get by using the product Gamp Medical should stress the high quality of AWARE. As 56.2% of the respondents answered product quality as most important product feature. In the advertising Gamp Medical AB's should emphasize the breast cancer issue and the importance of examining the breasts. In the advertising the company should also include the fact that the product is used by health care professionals. This would increase the customer's beliefs and attitudes regarding the quality and trustworthiness.

5.2 Thesis Evaluation

When evaluating the credibility of a research there are two prominent criteria: validity and reliability. Validity is to which degree the questions asked to the elements in a study corresponds with what is going to be investigated (Djurfeldt et al., 2003; Christensen et al., 2001). High validity implies that the research does not include any systematical errors (Holme & Solvang; Djurfeldt et al., 2003; Bryman, 2001). To ensure that the questions were relevant and could not be misinterpreted that authors performed a pilot test, which resulted in minor changes regarding the structure and word sequence. The fact that an Interviewer administered survey was used increased the validity since the interviews could answer questions at the scenario, which decreased the misinterpretations and misunderstandings. A fact that could have decreased the validity of the research is that the interviewers asked the respondents about their net income, which some of the respondents might not have been able to distinguish from gross income. However the authors argue that many of the doubtful respondents asked about this and it was explained by the interviewers. A fact that also could have decreased the validity is the large focus that was set to the price variable. It could be argued whether or not this variable follows the purpose of the study. The result of the analysis actually showed that price was not of high importance to the consumers regarding this product. The authors argue that the time spent on investigating this matter could have been used better to look in to as an example the Psychological factor, which in deed illustrated high importance.

Reliability deals to what degree the questions are consistent, which come as a result of how the questions are asked (Djurfeldt et al., 2003; Christensen et al., 2001; Bryman & Cramer, 1999). High reliability is when the results of a study are repeatable (Djurfeldt et al., 2003; Bryman, 2001; Bryman & Cramer, 1999). Lack in reliability might depend on several reasons: vaguely asked questions, answering alternatives that are difficult to understand, the behavior of the interviewer and other random circumstances (Bryman, 1997; Djurfeldt et al., 2003). In order to obtain a high reliability in this research the authors used a questionnaire with standardized questions. Another fact that increased the reliability of this thesis is the fact that the answers were gathered during different days, times of the days and places. This has enabled the authors to cover the whole targeted population.

5.3 Recommendations for the company

The large numbers, 79.9%, of interested potential buyers gives a proof for Gamp Medical AB that there is a large demand and market for the product. The price set by Gamp Medical AB compared to the respondents answer gives a mean price with the value of 367.47 SEK. This demonstrates a price higher than the price set by the company that the consumers see as the maximum price to pay. However this price has arisen by chance as shown in the analysis. Gamp Medical AB has stated a lower price than the consumers are willing to pay for AWARE. According to theory (Baker, 2000) the company seek the highest price to sell their product as the buyer seeks the lowest price to pay for the product. The price setting concerning AWARE should therefore be considered.

5.4 Further studies

As brought up in the Market Research chapter, this study is a mix exploratory and descriptive, which has led to the usage of a quantitative method. The quantitative method results in several shallowly investigated cases. As women value this product highly differently this research has presented difficulties in establishing connections between the factors to emphasize in the marketing of AWARE. In order to gain a profound picture of what women regard as important factors the authors claim that Gamp Medical AB should continue with a qualitative study. Since this provides a greater depth and establish find connections between variables that have not been clarified in this thesis. During the study the authors have found some theories that would be interesting to use in a continuing market research of the product.

Regarding the price aspect of the product the authors have found theories which can be connected to this specific study. The market demand for AWARE and the surroundings of Gamp Medical AB are factors that require to be evaluated when setting the price and its pricing strategy (Lönn, 1995). According to Dahlqvist and Westerståhl (1993) the product lifecycle is an important factor when the price setting is made for a product. In the introduction stage the company seeks to find awareness in a specific market for the product. In this stage price is one of the most important variables that has to be decided (Allen 1999). AWARE will soon be placed in the introduction phase to a new market. Here Gamp Medical AB can endure a higher price than if the price is set according to an already existing product (Albo & Jäverberg, 1990). This procedure is more known as skimming price policy (Schäder, 1995; Rosvall & Rosvall, 2000). This theory gives Gamp Medical AB hypothetically maximum profit from all levels of buyers. The skimming price policy is successful when a company has a considerable lead with their new product in relation to their competitors. This price setting engages high price setting to those who are willing to pay for the product, this is made before the striving to reach the more price-sensitive consumers (Allen, 1999). Shapiro, Perrault and McCarthy (2001) stress "a skimming policy is more attractive if the demand is inelastic" (Shapiro et al., 2001 p. 541). This requires a lack of close substitutes which would make consumers willing to pay more, which indeed is the fact with AWARE (Kotler et al., 2001). If Gamp Medical AB however desires initial large sales and large market share Albo and Jäverberg (1990) and Shapiro et al. (2001) suggest that they should put an initial low price on the product. This is referred to as the Penetrating price theory. The thought when implementing this theory is that when AWARE is well known and has a stabile market demand the company can raise the price (Allen, 1999).

Concerning the advertising from a company perspective the parts of The Gender Trends Marketing model, which were not brought up in Factors that affect the purchasing of AWARE, can serve as a base for further investigation. The Circle is the part of the Gender Trends Marketing Model that explains how companies should approach their female customers. In total it suggests twelve marketing tools that should be taken into consideration when creating a marketing plan aimed towards women. Barletta (2003) does not propose the usage of all twelve tools, but rather a combination of the tools that suits the specific the product. For the marketing of AWARE Gamp Medical AB can investigate the usage of a combination with advertising and Web site marketing. The combination of the Circle and the Star creates a new model, the Gender Trends Compass. The compass aids the company to create marketing strategies that fit a specific product. The model state that if a company wants to approach its customers with advertising it should focus more on the benefits the women obtain when using the product then on the product features itself. For Gamp Medical AB this research has already demonstrated that focus in the advertising should be set upon the advantages the female consumers will get by using AWARE.

5.5 Finally

As a final ending the authors argue that the results reached in this thesis can serve as an explanatory research base. This in combination with the theories brought up in Suggestions for further studies could enable Gamp Medical AB to create a marketing plan which stimulates the company's targeted customer to buy the product.



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Appendix 1 – Women in Sweden and Jönköping

Number of women in Sweden and Jönköping between the age of 20-79, 2004.

Age	Number of women in Sweden 2004
20-24	255784
25-29	268474
30-34	301973
35-39	318696
40-44	301862
45-49	289010
50-54	289037
55-59	319579
60-64	267838
65-69	209920
70-74	187356
75-79	177978
	Total number: 3187507

Age	Number of women in Jönköping 2004
20-79	Total number: 42477

Appendix 2 – Education and Income

The number of women in Sweden with more than 15 years of education in the years of 1985 and 2003. The average income of women in Sweden the years 1991 and 2003. The average income of men in Sweden the years 1991 and 2003.

Age	Number of women with more than 15 years of education in Sweden 1985
16-74	190650
	Number of women with more than 15 years of education in Sweden 2003
16-74	510882

Year	Average income of women in Sweden 1991					
1991	101400					
	Average income of women in Sweden 2003					
2003	174200					

Year	Average income of men in Sweden 1991					
1991	154100					
	Average income of men in Sweden 2003					
2003	243500					

Appendix 3 – Questionnaire in Swedish

Questionnaire regarding AWARE, Swedish version.

1. Vilket årtal är du född?

Skriv svar här:....

- 2. Vad är din nettoinkomst per år? Skriv svar här:.....
- 3. Har du varit på någon mammografiundersökning?
 - 🗆 Ja
 - 🗆 Nej
- 4. Undersöker du dina bröst på egen hand efter cancerknölar?
 - □ Aldrig
 - 🗆 En gång per år
 - En gång per halvår
 - □ En gång per månad
- 5. Skulle du vara intresserad av att ha ett hjälpmedel som underlättar undersökning av brösten efter cancer?
 - □ Ej intresserad
 - 🗆 Ganska intresserad
 - □ Intresserad
 - □ Mycket intresserad

6. Påverkas du av din omgivning vid köp av privata produkter?

- □ Inte alls
- □ Mycket lite
- 🗆 Något
- □ Mycket
- 7. Vad skulle du värdera högst med en produkt som AWARE?

□ Pris

- □ Kvalitet
- □ Utseende
- □ Information
- 8. Vad kan du tänka dig att betala för en produkt likt AWARE som kan användas i 3år.

Svara här:....

- 9. Var tycker du att AWARE borde säljas i första hand?
 - \Box Apoteket
 - □ Livsmedelsaffärer
 - □ Internet

Tack för din medverkan!

Appendix 4 – Questionnaire in English

Questionnaire regarding AWARE, English version.

- 1. Which year were you born? Answer here:.....
- 2. What is your net income per year?

Answer here:.....

3. Have you been at a mammogram examination?

 \Box Yes

- \square No
- 4. Do you examine your breasts in the search of cancer lumps?

 \Box Never

- □ Once a year
- □ Once every half year

□ Once a month

- 5. Would you be interested in an aid that eases the search of cancer lump in the breasts?
 - □ Not interested
 - □ Slightly interested
 - □ Interested
 - □ Very Interested

- 6. How much do your surroundings affect you in the purchasing of private necessities?
 - \Box Not at all
 - □ Very little
 - □ Slightly
 - $\square \ Much$
- 7. What would you value most with a product like AWARE?
 - \square Price
 - □ Quality
 - □ Appearance
 - □ Product information
- 8. What would you pay for a product like AWARE that lasts three years?

Answer here:....

- 9. Where do you think that AWARE primarily should be sold?
 - □ The pharmacy
 - □ Grocery stores
 - □ Internet

Thank you for your cooperation!

Appendix 5 – Questionnare findings

Questionnaire findings drawn from SPSS ordered as in the survey.

1. Which year were you born?

Age categories: 1. 20-39, 2. 40-59 and 3. 60-79.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	118	33,3	33,3	33,3
	2	118	33,3	33,3	66,7
	3	118	33,3	33,3	100,0
	Total	354	100,0	100,0	

2. What is your net income per year?

		-			Cumulative
	10000	Frequency	Percent	Valid Percent	Percent
valid	19000	1	,3	,3	,3
	20000	1	,3	,3	,6
	24000	1	,3	,3	,8
	30000	2	,6	,6	1,4
	44000	1	,3	,3	1,7
	45400	26	7,3	7,3	9,0
	50000	1	,3	,3	9,3
	55400	1	,3	,3	9,6
	60400	1	,3	,3	9,9
	65400	2	,6	,6	10,5
	68400	1	,3	,3	10,7
	69000	1	,3	,3	11,0
	70000	1	,3	,3	11,3
	70400	1	,3	,3	11,6
	72000	1	,3	,3	11,9
	74000	1	,3	,3	12,1
	75400	3	,8	,8	13,0
	80000	1	,3	,3	13,3
	84000	1	,3	,3	13,6
	85400	5	1,4	1,4	15,0
	90000	1	,3	,3	15,3
	95400	2	,6	,6	15,8
	96000	16	4,5	4,5	20,3
	100000	4	1,1	1,1	21,5
	102000	1	.3	.3	21.8
	105400	4	1.1	1.1	22.9
	108000	20	5.6	5.6	28.5
	110000	2	,6	,6	29,1



114000	2	,6	,6	29,7
120000	33	9,3	9,3	39,0
125000	1	,3	,3	39,3
127000	1	,3	,3	39,5
130000	10	2,8	2,8	42,4
131000	2	,6	,6	42,9
132000	19	5,4	5,4	48,3
137000	1	,3	,3	48,6
140000	7	2,0	2,0	50,6
144000	5	1,4	1,4	52,0
150000	10	2,8	2,8	54,8
160000	9	2,5	2,5	57,3
165000	1	,3	,3	57,6
168000	2	,6	,6	58,2
170000	6	1,7	1,7	59,9
180000	19	5,4	5,4	65,3
190000	6	1,7	1,7	66,9
192000	1	,3	,3	67,2
200000	26	7,3	7,3	74,6
204000	1	,3	,3	74,9
210000	7	2,0	2,0	76,8
216000	2	,6	,6	77,4
220000	10	2,8	2,8	80,2
228000	1	,3	,3	80,5
230000	3	,8	,8	81,4
240000	9	2,5	2,5	83,9
250000	14	4,0	4,0	87,9
251000	1	,3	,3	88,1
252000	1	,3	,3	88,4
260000	4	1,1	1,1	89,5
264000	1	,3	,3	89,8
270000	6	1,7	1,7	91,5
275000	1	,3	,3	91,8
280000	4	1,1	1,1	92,9
300000	6	1,7	1,7	94,6
315000	1	,3	,3	94,9
320000	3	,8	,8	95,8
325000	1	,3	,3	96,0
340000	1	,3	,3	96,3
350000	2	,6	,6	96,9
370000	1	,3	,3	97,2
380000	1	,3	,3	97,5
390000	1	,3	,3	97,7
400000	3	,8	,8	98,6
420000	1	,3	,3	98,9
470000 50000	1	,3	,3	99,2
500000	2	,6	,6	99,7
Total	1	,3	,3	100,0
TUTAT	354	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	yes	227	64,1	64,1	64,1
	no	127	35,9	35,9	100,0
	Total	354	100,0	100,0	

3. Have you been at a mammogram examination?

4. Do you examine your breasts on your own?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	never	61	17,2	17,2	17,2
	once a year	106	29,9	29,9	47,2
	once every six months	103	29,1	29,1	76,3
	once a month	84	23,7	23,7	100,0
	Total	354	100,0	100,0	

5. Would you be interested in an aid that eases the search of cancer lump in the breasts?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not interested	71	20,1	20,1	20,1
	slightly interested	72	20,3	20,3	40,4
	interested	163	46,0	46,0	86,4
	very interested	48	13,6	13,6	100,0
	Total	354	100,0	100,0	

6. How much do your surroundings affect you in the purchasing of private products?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	not at all	160	45,2	45,5	45,2
	very little	147	41,5	41,5	86,7
	slightly	40	11,3	11,0	98,0
	much	7	2,0	2,0	100,0
	Total	354	100,0	100,0	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	price	74	20,9	20,9	20,9
	quality	199	56,2	56,2	77,1
	product feature	2	,6	,6	77,7
	product information	79	22,3	22,3	100,0
	Total	354	100,0	100,0	

7. What would you value most with a product like AWARE?

8. What would you pay for a product like AWARE (lasts three years)?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	100	30	8,5	8,5	8,5
	150	4	1,1	1,1	9,6
	200	67	18,9	18,9	28,5
	220	1	,3	,3	28,8
	250	7	2,0	2,0	30,8
	300	112	31,6	31,6	62,4
	350	1	,3	,3	62,7
	400	41	11,6	11,6	74,3
	500	60	16,9	16,9	91,2
	550	1	,3	,3	91,5
	600	14	4,0	4,0	95,5
	700	3	,8	,8	96,3
	800	2	,6	,6	96,9
	900	1	,3	,3	97,2
	1000	6	1,7	1,7	98,9
	1500	1	,3	,3	99,2
	2000	1	,3	,3	99,4
	2700	1	,3	,3	99,7
	5000	1	,3	,3	100,0
	Total	354	100,0	100,0	

9. Where do you think that AWARE primarily should be sold?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	pharmacy	338	95,5	95,5	95,5
	grocery stores	15	4,2	4,2	99,7
	internet	1	,3	,3	100,0
	Total	354	100,0	100,0	

Appendix 6 – Factor Analysis

Extracts from SPSS regarding: Social factor, Personal factor and Psychological factor.

Social factor

Influence from surroundings

	Observed N	Expected N	Residual
not influenced	308	177,0	131,0
influenced	46	177,0	-131,0
Total	354		

Test Statistics

	Influence from surroundings
Chi- Square(a)	193,910
df	1
Asymp. Sig.	,000,

Personal and Psychological factors-Single qualitative variables

Interest in aid

	Observed N	Expected N	Residual
not interested	71	88,5	-17,5
slightly interested	72	88,5	-16,5
interested	163	88,5	74,5
very interested	48	88,5	-40,5
Total	354		

	Interest in aid
Chi- Square(a)	87,785
df	3
Asymp. Sig.	,000

a 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 88,5.

Value most with product

	Observed N	Expected N	Residual
price	74	88,5	-14,5
quality	199	88,5	110,5
product feature	2	88,5	-86,5
product information	79	88,5	-9,5

Total	354		
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	Value most with product
Chi- Square(a) df Asymp. Sig.	225,910
	3
	,000,

a 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 88,5.

What place?

	Observed N	Expected N	Residual
pharmacy	338	118,0	220,0
grocery stores	15	118,0	-103,0
internet	1	118,0	-117,0
Total	354		

	What place?
Chi- Square(a)	616,085
df	2
Asymp. Sig.	,000

a 0 cells (,0%) have expected frequencies less than 5. The minimum expected cell frequency is 118,0.

Personal and Psychological factor-Income, age and price as dependent variables

Report: Net income per year	Report:	Net	income	per	year
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Influence from			
surroundings	Mean	N	Std. Deviation
not at all	176522,50	160	101860,212
very little	160297,96	147	68635,800
slightly	131910,00	40	59694,486
much	86800,00	7	42168,234
Total	162970,06	354	85768,878

	Eta	Eta Squared
Net income per year * Influence from surroundings	,205	,042

Report: Net income per year

Interest in aid	Mean	Ν	Std. Deviation
not interested	165408,45	71	74828,562
slightly interested	173022,22	72	85885,791

interested	159763,19	163	91885,934
very interested	155175,00	48	80031,841
Total	162970,06	354	85768,878

	Eta	Eta Squared
Net income per year * Interest in aid	,069	,005

Report: Net income per year

Value most with product	Mean	Ν	Std. Deviation
price	139735,14	74	65416,366
quality	170104,52	199	93584,514
product feature	174000,00	2	93338,095
product information	166483,54	79	79281,987
Total	162970,06	354	85768,878

	Eta	Eta Squared
Net income per year * Value most with product	,141	,020

Report: Age

Breast Self Examination	Mean	Ν	Std. Deviation
never	45,07	61	20,256
once a year	42,74	106	18,149
once every six months	52,50	103	15,868
once a month	57,06	84	15,714
Total	49,38	354	18,217

	Eta	Eta Squared
Age * Breast Self Examination	,317	,100

Report: Age

Interest in aid	Mean	Ν	Std. Deviation
not interested	55,63	71	16,380
slightly interested	45,97	72	16,422
interested	48,67	163	18,883
very interested	47,63	48	19,358
Total	49,38	354	18,217

	Eta	Eta Squared
Age * Interest in aid	,181	,033

Report: Age

Value most with product	Mean	N	Std. Deviation
price	49,86	74	19,841
quality	48,28	199	18,087
product feature	55,00	2	32,527
product information	51,54	79	16,752
Total	49,38	354	18,217

	Eta	Eta Squared
Age * Value most with product	,077	,006

Report: Age

Influence from surroundings	Mean	N	Std Deviation
not at all	55.00	160	16.913
very little	46,07	147	17,173
slightly	40,65	40	19,498
much	40,00	7	24,021
Total	49,38	354	18,217

	Eta	Eta Squared
Age * Influence from surroundings	,297	,088

Report: What price?

Value most with product	Mean	Ν	Std. Deviation
price	250,95	74	174,616
quality	418,34	199	422,657
product feature	350,00	2	212,132
product information	348,73	79	151,059
Total	367,43	354	340,677

	Eta	Eta Squared
What price? * Value most with product	,194	,038

Report: What price?

Breast Self Examination	Mean	Ν	Std. Deviation
never	293,44	61	184,046
seldom (once a year)	328,77	106	161,237
sometimes (once every six months)	450,97	103	564,644
often (once a month)	367,50	84	172,724
Total	367,43	354	340,677

	Eta	Eta Squared
What price? * Breast Self Examination	,172	,030

Report: What price?

Interest in aid	Mean	Ν	Std. Deviation
not interested	320,42	71	584,171
slightly interested	350,00	72	317,561
interested	352,27	163	142,423
very interested	514,58	48	338,325
Total	367,43	354	340,677

	Eta	Eta Squared	
What price? * Interest in aid	,175	,031	

One-Sample Test

	Test Value = 285					
					95% Confide of the Di	ence Interval fference
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
What price?	4,552	353	,000	82,43	46,82	118,04