## ARCADA

# Consumer behaviour of pharmacy customers 

Choice of pharmacy and over-the-counter medicines

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| DEGREE THESIS |  |
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| Arcada |  |
|  |  |
| Degree Programme: | International Business |
|  |  |
| Identification number: | 9404 |
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| Title: | Consumer behaviour of pharmacy customers - Choice of <br> pharmacy and over-the-counter medicines. |
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| Abstract: <br> With this research the author aims to explore factors influencing the behaviour of phar- <br> macy customers. The research strives to answer how consumers choose in which pharma- <br> cy to run their errands and how they choose between similarly priced generic over-the- <br> counter (OTC) medicines. The focus is on OTC medicines since they are available with- |  |
| out prescription and are subject to public advertising. The quantitative research was con- <br> ducted during fall 2011, mainly in four pharmacies in the Helsinki region to reach recent <br> pharmacy customers. A sample of 273 consumers participated by answering a question- <br> naire form. Results show that in order of importance based on average results, the top <br> three reasons behind the consumer's choice of pharmacy is the following; location (being <br> by far most important), product range, staff. Likewise the top three order for choosing <br> OTC medicines is; pharmacist's opinion and recommendation, family's and friends opin- <br> ion and recommendation, product brand or producer. Almost all consumers usually buy <br> the same product again and the majority sometimes buy products they know through ad- <br> vertisement. The majority have bought from the pharmacy an OTC medicine or vitamin <br> supplement even though it was not in the plans, and the largest disparity between male <br> and female consumers in the research is that more women have done so. |  |
| Keywords: | Consumer behaviour, pharmacy, over-the-counter medi- <br> cines, pharmaceutical industry, Helsinki |
| Number of pages: | 42 |
| Language: | English |
| Date of acceptance: | 14.12 .2011 |

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## 1 INTRODUCTION

### 1.1 Background

With the pharmaceutical business growing and with some experience in a pharmaceutical working environment, the author has chosen to explore this field further through research. The pharmacy sector has its interesting structure as medicine prices are the same in all pharmacies, and therefore they lack in price competition in comparison to stores of the daily consumer goods trade. Today there are more product options as more generic medicines come out on the market and challenge original products with their lower price. Hence, the focus of the research is on pharmacy customers and their consumer behaviour in regards to pharmacies and similarly priced over-the-counter (OTC) medicines, thus medicines which are not on prescription. The research is limited to OTC medicines because they are products that are available to all consumers and that are advertised publicly. The research helps to understand current behaviour of pharmacy customers and gives an insight to the 4P's of marketing; product, place, price and promotion. The results aid to understand the pharmaceutical market a little better and to gain knowledge on pharmacy customers in the capital region.

### 1.2 Aim of research and research questions

The aim of the research is to find out about factors influencing the customer's choice of pharmacy as well as OTC medicines. The aim is to understand and explore consumer behaviour and to relate it to pharmacy clientele.

Research question 1:
What determines in which pharmacy customers do their purchases?

Research question 2 :
What influences the customer's choice between similarly priced generic over-thecounter medicines?

### 1.3 Material and research method

This thesis work is based on literature of marketing and consumer behaviour. The secondary data is used to explore theories and former discoveries. Relevant information is also obtained from online publications and websites of actors from the pharmaceutical industry. The quantitative research is conducted as a survey in the Helsinki region, primarily focused on recent pharmacy customers. The research findings are then analysed and the results are presented with the support of visuals.

## 2 CONSUMER BEHAVIOUR

Consumer behaviour is a topic of great interest for marketers because a command of this field can be crucial in terms of choosing the right marketing strategy, and so make business prosperous (Solomon et al. 1999 p. 10). Consumer behaviour can be seen according to Solomon et al. (see $1999 \mathrm{pp} .8-9$ ) as the knowledge of a process that an individual or a group go through to satisfy a need, by choosing and buying as well as using and disposing products. This process in not only related to products as it can likewise be ideas and experiences that satisfy the need. The same idea is also supported by Kotler (see 2003 p. 182).

If an organization knows how the consumers will react to different marketing stimuli, then they can adapt such strategies that will give them the desired outcome in terms of consumer response. Knowledge of consumer behaviour helps companies to determine their marketing mix, the 4 P's of marketing; product, price, place and promotion. (Kotler 2003 p. 16). According to Kotler et al. (see 2005 pp. 255-256) these four categories represent stimuli that consumers are exposed to and which will affect their behaviour.

A fundamental reason for an organization to exist is to satisfy the needs of consumers. A company that succeeds to do so can be successful and therefore, it is of great importance to know what the needs and wants of the consumers are. A knowledge of con-
sumer behaviour helps to explore and understand these needs and wants. (Solomon et al. 1999 p. 10). Every consumer has biological needs that are essential for survival, such as food, water and shelter. These needs turn into wants when the consumer does choose between different options that all satisfy the need but otherwise have differences. The need for food can be satisfied by different food products and the consumer's wants does express with which type of product the consumer prefers to satisfy that need. (Kotler 2003 p. 11). To understand the consumers' needs and their behaviour a hierarchy of needs was developed by psychologist Abraham Maslow. Even if his theory is criticized for not being fully adaptable to all cultures, it still helps to display how consumers' needs can vary depending on their life situation. According to Maslow's hierarchy pyramid the individual has a need to fulfil specific needs at the bottom of the pyramid to be able to climb up to the top. When the psychological needs are met the individual can satisfy his or her needs of safety, then needs of belongingness, then ego needs and last self actualization. (Solomon 2006 pp. 126-127).

### 2.1 Elements of influence

The way that consumers behave and how they purchase goods and services is influenced by different factors. Not all individuals or groups follow the same manners, and organizations need to consider cultural, social, personal and even psychological factors when they study consumer behaviour. (Kotler et al. 2005 p. 256).

### 2.1.1 Cultural influence

The effect that culture has upon a consumer's behaviour is considerable, and culture is a factor which has the greatest influence (see Kotler 2003 p. 183). Culture creates the foundation of the individual's values, opinions and behaviour, and is learnt from the other members of society or from school and institutions that play a significant part of one's environment. These traits constitute what the consumer values or wants and therefore do affect the way the consumer acts. A culture also consists of different subcultures that group people by their nationality, ethnicity, geographic location, religious views or
by their set of shared values. By targeting members of a specific culture or sub-culture, businesses can tailor their marketing mix to match the needs and values of that segment. (Kotler 2003 pp. 183-184). Consumers are more prone to accept products that are in line with the values and preferences and the customs and norms of their culture. Nonetheless, a culture is constantly evolving and the values, social structures, worldviews and other cornerstones of the culture change through time. (Solomon 2006 pp. 542-544).

Society is divided in social classes which group members of society that have a similar social status and a comparable behaviour. These classes display the hierarchy of society, and are characterized by a set of factors (Solomon et al. 1999 pp. 332-333). A common way to determine a consumer's social class is through the income, occupation and education but these are only factors that influence on how the person is ranked in society. To determine the accurate social class is not always easy or obvious. The social class can also change through time when people climb up the corporate ladder or even change to an occupation of a lower rank. Also, new family relationships can have a rapid change on someone's status and social class. (Solomon 2006 pp. 461-463).
Consumers of one social class often socialize together and have similar lifestyles. They might be in the same occupational field, have related hobbies and may behave alike. Their social class can be seen as an indicator of purchasing power and availability to certain products, due to their level of income, way of life and social norms related to their status in society. Therefore, social class is used as way of segmenting and deciding a target market. As Solomon points out, a social class is not only a measurement of one's wealth, but also an indicator on how that wealth is being used and how it can be used to define one's status. (Solomon 2006 pp. 456-457).

### 2.1.2 Social influence

A consumer's buying behaviour is also affected by the people around. Family is a strong entity that has an influence on buying behaviour. This includes both the parents, as well as the spouse and kids with whom the consumer might more regularly spend time with. Through the upbringing, parents teach their children about love, self-esteem, economics, politics and so forth. With this guidance the influence of the parents does
not cease to affect the child even after the child no longer lives with the parents, and therefore can have an influence on the consumer's behaviour throughout life. The opinion of a spouse and kids can directly affect and guide the purchasing decision. According to Kotler et al. (2005 p. 262) there is however, a big difference of influence by a spouse depending on the product category, and there are several buying roles that a person can take on. The buyer is not always the user, and thus the purchase may be made for someone else keeping that person's opinions in mind. The initiator is the one who comes up with the idea of buying a certain product or service, whereas the influencer is the one who's opinion matter and is taken into consideration when making a purchasing decision. The final decision about whether or not to buy, and how, when and what to buy is made by the decider. (Kotler et al. 2005 pp. 261-262).
There are also other reference groups in addition to family that affect a consumer's behaviour and opinions. Like family, these groups can be primary groups with whom there is frequently interaction on a non-formal level. Hence, to primary reference groups can be counted for example friends, colleagues and also those who free time is often spent with. Secondary reference groups also have an influence on the behaviour and can be represented by groups such as religious groups and business associations, with whom there is less frequent and more formal interaction. Because of the role and status that a consumer holds in society or within a reference group due to social class, occupation or group role, there are expectations from other group members that the person is expected to live up to. Because of the desire to display the given role properly in accordance with the society's and other people's expectations, individuals tend to adapt themselves and their behaviour accordingly to fit in with this role or image. This role can change depending on the situation or environment. An individual can take on different roles when spending time with different people, such as a role of a child, boss or parent. All of these factors have an influence on the consumer's behaviour and the purchasing decisions that are made. (Kotler et al. 2005 pp. 259-262).

### 2.1.3 Personal influence

Consumers can furthermore be segmented according to their personal characteristics and personality type that shape their consumer behaviour. Research can bring out per-
sonality traits that are common for users of certain products, and thus describe and group consumers that hold specific characteristics. Consumers can for instance be grouped depending on if they are social, confident, aggressive or adaptable because they may portrait similarities in behaviour due to these characteristic.
Not only are personality and personal traits affecting the consumer's behaviour but also the consumer's self-concept. The self-concept stands for the way the consumer does see himself and the way he evaluates his own attributes. The self-concept is related to the buying behaviour seeing that an individual's belongings often demonstrate what the person is like or how the person is. Nevertheless, there are three types of self-concepts to take into account when drafting a marketing strategy or seeking to understand consumer behaviour. The actual self-concept does display how a person sees himself. In addition the person has an ideal self-concept which reflects how he would ideally like to see himself. Additionally there is the self-concept of others which shows how the person thinks that other people see him. Thus the consumer's behaviour can be influenced by any of these three self-concepts and the consumer can either act according to what he thinks he is, what he wants to be or according to what he believes that others think he is. (Kotler et al. 2005 p. 268). Depending on how positive a consumer's actual self-concept is the better is his self-esteem. Advertisement can have great influence and shape the consumer's self-concept and self-esteem as consumers compare themselves to what they see in advertisements. Consumers can create a link between the advertised product and the person displayed in the advertisement, and form their personal image of the product brand accordingly. This brand image can then influence the decisions the consumer makes when choosing between available products. (Solomon 2006 p. 157).

It is known that consumers of a similar age or generation usually have many things in common related to taste, opinions and activities. They go through similar experiences and stages in life which shape their attitudes and tastes. Consumers of the same age group can therefore have similarities in their behaviour that might not apply to consumers of another age group. Behavioural differences between age groups can take many forms such as the form of disparity in buying power, amounts of money used on specific product categories, brand loyalty and other aspects. Age groups can react in a different way to advertisements, and knowledge of these disparities support companies in their
decisions about which products to emphasize in advertisements and how to adapt their language to best suit their target group. (Solomon 2006 pp. 512-513).

The consumer's pattern of consumption, allocation of money and choice of products is based on the lifestyle. Lifestyle is something rather unique which is characterized by the consumer's life interests. Because of lifestyle differences, differentiation in behaviour arises even if consumers share many similar factors like social class, leisure time activities and cultural interests. These contrasts make up the consumer's own unique lifestyle that influences the consumer's consumption pattern. (Solomon et al. 1999 pp. 401-402). Consumers with a specific lifestyle can favour certain sets of products and can choose products based on the lifestyle that the product itself stands for, in the mind of the consumer (Solomon 2006 p. 210). Knowledge of consumer behaviour that is related to a lifestyle can explain what type of products consumers of a specific lifestyle usually associate to and which products fit their taste. As many other influential factors as well, a consumer's lifestyle is not permanent and may change through time. When the consumer's lifestyle changes the pattern of consumption will also change alongside it. (Solomon et al. 1999 pp. 401-402).

Money plays its part when it comes to consumer behaviour as the consumer's economic situation, either in terms of how much money the consumer has or how good of a borrowing capacity the consumer has, affects the purchasing power. (Kotler et al. 2005 p. 265). Additionally, there are differences in consumers' attitudes and psychological approach to money, which shape their ways of consumption. For consumers that give money a lot of symbolic value the money can symbolize for example freedom, security, success or failure. For those consumers that money represents other things, the consumption patterns can be very different. What also influence consumption, regardless of the consumer's current money situation, are the beliefs of the future. A consumer who is unsure about the future might be very strict with money and rather save up for upcoming difficulties while others can have a positive outlook on the future and spend much more. (Solomon 2006 pp. 454-455). Occupation affects consumption not only in terms of income and buying power, but in terms of taste and needs that are connected to a consumer's occupational field. The consumer's behaviour and product choices are influenced by what is needed by an actor within their occupational field such as appropriate dress code etiquette. (Kotler et al. 2005 p. 265).

### 2.1.4 Psychological influence

Motivation can be used to describe one's behaviour and it can be seen as the reason behind one's actions. Motivation is what drives individuals to attain a certain goal. When the consumer feels a need, there is tension that the consumer wants to eliminate by satisfying that particular need. If the drive to reach that goal is strong enough the consumer will possess a motivation that drives and pushes him towards its realization. (Solomon 2006 pp. 118-119). In accordance to a theory outlined by Sigmund Freud, consumers are not fully aware of their true motivations and are not always able to explain them. Freud's theory points out that unconscious motives which have their roots in the individual's childhood affect the consumer's choices. The theory also acclaims that consumers may base their product choice on a product's symbolic meaning, in order to be able to satisfy a desire that is not acceptable but which the consumer can find symbolised in an acceptable product. (Solomon et al. 1999 pp. 112-113). Abraham Maslow on the other hand, explains motivation through his hierarchic pyramid where consumers are motivated by needs that have a different classification and that are part of a hierarchy (Kotler et al. 2005 p. 269).

With the help of the five senses; taste, smell, sight, touch and hearing, consumers interpret their surroundings. With the process of choosing, organizing and interpreting stimuli consumers create their own perception. Because the perception of a person differs to one another, the buying behaviour does as well. Consumers are drawn to products not only by their practical function but also by the hedonic features of the product. The added value that a competitor's product has can simply be the emotional value that it has for the customer. (Solomon 2006 pp. 49-50).

Learning is a relatively permanent change in behaviour and customers learn through experiencing things on their own or by gaining experience through observation. It is a constantly ongoing process and learning occurs even if it is not deliberately intended. Through the process of learning the buying behaviour of the consumer evolves and is subject to change. (Solomon 2006 p. 84).

What is difficult to change and that influence buying behaviour is the consumer's attitude. Depending on attitude the consumer either has a positive or a negative approach towards a product or a subject and it guides the decision making. A consumer's product beliefs stem partially from advertisement. The beliefs that a consumer holds about a product can be shaped either by real knowledge or by the consumer's interpretation of advertisements. Sometimes these beliefs do not correspond to reality but does nevertheless discourage the consumer from buying a specific product. (Kotler et al. 2005 pp. 274-275).

### 2.2 The purchasing process

Before a consumer makes a choice of product the consumer evaluates different alternatives that are available. During this process various product attributes that the consumer associates with each product option, can be evaluated and its importance determined. (Kotler et al. 2005 pp . 282-283). The evaluation of alternatives can either be very extensive at times and rather narrow and fast at others. Consumers can create different rules that help and facilitate their decision making, and decreases the amount of information that they will process. The consumer narrows down the alternatives by the help of his or her personal heuristic rules. These rules can be of various nature and can represent different assumptions or mindsets. They can be related to their personal beliefs about products and companies, if they associate product familiarity with product quality, or how they interpret product quality based on indications that they obtain from a product's visual appearance. Some consumers tend to judge a book by its cover and it is common to associate high price with good quality, or to form beliefs of product attributes based on the country of origin. (Solomon et al. 1999 pp. 225-226). Companies occasionally use advertisement to connect their products with feeling of nostalgia, a sometimes even sad longing of the past, because these feelings that arise can influence the consumer to choose a certain product over another. (Solomon et al. 1999 p. 83).

In some cases the buying behaviour can turn into a habit where the consumer does not need to put effort into making a decision. Such a buying habit can stem from a brand loyalty where the consumer feels strongly and positively about a certain brand, and thus, makes consciously a choice to buy a product of that particular brand. A personal con-
nection to the brand can be developed over time and reinforces the habitual buying behaviour and makes the consumer less prone to switch to any other brand. For other consumers the habitual buying behaviour does often come from inertia when the consumer is reluctant to put effort into the decision making process. As a result the consumer develops behaviour of buying a product out of habit. Because there is not a strong personal connection to the product or the brand itself, the consumer is prone to switch to other brand. The reason for a change of product can be the opportunity to easily buy another product due to better availability or price. (Solomon et al. 1999 pp. 230-231).

All product purchases are not planned and the purchasing environment can influence the consumer to buy products that the consumer was not intended to buy. Consumers sometimes shop by impulse when they cannot resist to buy a product that they all of a sudden feel a strong desire for. The purchasing can likewise be spontaneous, where the purchase is not planned upon but the consumer is led to buy the product because of a reminder in the store, because the consumer is in hurry or any other reason that incite the consumer to buy. (Solomon et al. 1999 p. 252). To measure how well advertisements affect consumer behaviour and therefore sales is not an easy task. The expenditure on advertisement as well as sales results can be compared to previous experience, or different amounts of money can be spent on advertisement in similar locations to measure variations in the sales results that each location generates. (Kotler et al. 2005 p. 778). It is known that many consumers are unable to recall advertisements that they have been exposed to. This does raise a concern for the advertising company, since there is reason to assume that the consumer may not remember the product or the advertised message at point of purchase. However, the influence on the buying behaviour of a consumer that is able to recall an advertisement is not positive in every case. Consumers tend to not only remember advertisements that they like, that raise strong emotions or that communicate a message that they believe in, but also advertisements that do the opposite. Those recalled advertisements may have an unwanted effect and makes the consumer avoid that product. (Solomon et al. 1999 pp. 85-87).

## 3 PHARMACEUTICAL INDUSTRY IN FINLAND

The pharmaceutical industry in Finland is supervised and monitored by the Finnish Medicines Agency, Fimea. This is the central administrative agency that works for the Ministry of Social Affairs and Health since 2009 when it did start its operations taking over after Lääkelaitos. The aim of the agency is to ensure a secure use of medication in Finland and to develop the Finnish pharmaceutical sector. By monitoring active actors of the whole industry, Fimea controls and ensures the safety of medicinal, blood and tissue products meant for humans and pets. Fimea also works in collaboration with the European Medicines Agency, EMA, from where it receives part of its income. Other income comes from Fimeas operations in Finland and by governmental funding. (Fimea n.d.). In accordance to the Finnish law on medication, all medicinal products need to receive an authorization from Fimea prior to making the product available to the public or any institution that distributes such products. A sales authorization from an institution of the European Union also serves to give the pharmaceutical company the right to start to sell their product. Medicines that pass the requirements for an authorization and registration, have been found to be following the medicinal regulations and has been stated to be of sufficient quality and to be safe for use. (Finlex 10.4.1987/395).

Finland has also shown a good example of voluntary supervision for decades with the help of the registered association Pharma Industry Finland, PIF. Members of PIF are medicinal companies in the pharmaceutical sector which get support and are promoted by the association (Lääketeollisuus ry n.d.). The association has published rules for pharmaceutical marketing which follows the Finnish legislation as well as international laws such as legislation of the European Union. These rules serve as an ethical guideline for marketing and do encompass matters such as pharmaceutical marketing, pharmaceutical product introduction and demonstration, consumer targeted communication regarding health and diseases, as well as cooperation with the pharmaceutical industry and associations intended for patients. (Lääketeollisuus ry 2008).

### 3.1 Pharmacy sector

Pharmacies ensure the distribution and the accessibility of medicines to end consumers nationwide. Pharmacies can open for business only after Fimea has issued a pharmacy licence. Only pharmaceutical professionals that are head dispensers can receive such an authorization to establish a pharmacy and become a dispensing chemist. Fimea is also regulating the location of pharmacies to guarantee the good accessibility of medicines. As of the beginning of year 2011, Finland has more than 800 pharmacies that cover most of the municipalities. (Suomen Apteekkariliitto n.d.). Currently nineteen pharmacies are also represented online and sell products over the internet. (Fimea n.d.). There are more than 8000 pharmaceutical professionals in Finland of which more than $60 \%$ is made up by dispensing chemists, head dispensers and pharmacists (Suomen Apteekkariliitto 2011). All pharmacists have completed a pharmacy degree on bachelor level while head dispensers and dispensing chemist are graduates of a pharmacy degree on master level (Helsingin yliopisto n.d.). These pharmaceutical professionals help pharmacy customers with medical advice and this is an important role of pharmacies and their contribution to the welfare sector. The professional advice that pharmacy customers are offered by the pharmaceutical staff provide them with accurate information about medicines. Customers can get advice on how to use the medicines correctly, how long they should use a medicine, how compatible some medicines are with one another, how the medicine will affect the user and when to seek help from a doctor. This helps to prevent incorrect use, misuse and even unnecessary use of medicinal products. (Suomen Apteekkariliitto 2005 p. 8).

### 3.2 Marketing of pharmaceuticals

There are differences in legislation regarding marketing of pharmaceuticals to practitioners and to consumers or end users. The law prohibits marketing of medicinal products on prescription, to consumers. Prescription medicines can only be marketed to practitioners like doctors and pharmacists who need information about the products they can prescribe or advice to patients. Only prescription-free medicines can be directly marketed to end users, the consumers. (Fimea n.d.).

Some general rules of pharmaceutical marketing apply regardless of the product being prescription-free or a prescription medicine. Prior to any marketing the product must receive a licence and be authorized to be marketed. The marketing cannot by any means be misleading, and the communicated information has to be in line with the information stated on the package leaflet. Furthermore the advertisement has to contain all necessary information in order to use the product properly, and it has to promote and encourage a rational usage of the product as well as encourage to carefully read the package leaflet or instructions. All advertisements must give a clear message that it is question of an advertisement, and that the advertised product is a medicinal product. (The European Commission n.d.).

### 3.3 Price on medicines

The overall price on medicines has gone down during the last decade in Finland. Increased price competition due to changes in regulations is believed to have strongly supported this price development. While the wholesale price on prescription medicines has decreased by more than $15 \%$ between year 2000 and 2009, the price on over-thecounter medicines has instead increased even more. (Lääketietokeskus Oy 2010 pp . 122-124). The lobbyist of the actors of the daily consumer goods trade, Päivittäistavarakauppa ry (PTY), is lobbying for a change in law that would give convenience stores the right to sell over-the-counter medicines. Such a change would according to PTY lead to a decline in price for OTC medicines. (PTY n.d.). Nicotine products for smoking recession treatment is the only OTC product category for which an exception has been made so far, that allows for them to be sold in convenient stores. All other OTC medicines are exclusively sold in pharmacies. The medicine prices are regulated to be identical independent of the pharmacy where they are sold. Thus, medicines in Finnish pharmacies are available to consumers at a fixed price. (Lääketeollisuus ry n.d.)

## 4 METHODOLOGY

The empirical research is done with a quantitative research method to find answers to the research questions presented in section 1.2. A survey has been conducted with a questionnaire form in paper. The questionnaire form is two sided and contains sixteen research questions, out of which three questions are used to collect personal information about the respondent. This information however, cannot identify or be linked to the respondent later on. Additionally the survey contains information about the purpose of the study and points out that participation is voluntary.
The questionnaire contains closed-ended and multiple-choice questions, as well as questions asking the respondent to rank a few options depending on their importance to the respondent. The questions are designed to be clear so that respondents are able to answer quickly and independently, also elderly people. All questionnaire forms that are answered are in Finnish language, and all forms that were used throughout the entire research are identical.

It was considered suitable to use a questionnaire in the research since it allows collecting information from a large amount of individuals. A questionnaire also serves the purpose well since it enables to gather information rather quickly and about a vast set of questions. In order to best reach pharmacy customers of all ages the research was not conducted online but through a paper form.

### 4.1 Data collection

The individual respondents of the research are mainly chosen on a random basis. To ensure that the majority of the respondents are recent pharmacy customers, $91 \%$ of the questionnaire responses are gathered in a pharmacy environment. This enables the research to come in contact with the current main age group and client base of pharmacies. Around twenty pharmacies were approached in the hopes of taking part in the research. Questionnaire responses are gathered from four pharmacies, all located in the capital region. Customers were approached by the researcher and asked their willingness to participate in a thesis research by responding to a questionnaire form. Thus, the respondents had a possibility to ask for clarification if needed. All kinds of customers
were approached and primarily those who were queuing for service at the prescription counters. The reason for targeting customers with a prescription although the research has its focus on over-the-counter medicines, is because of the fact that they are not occupied and hence are not interrupted and have the time to take part in the research. To respect the privacy of the respondent's answers, the filled in forms were gathered and immediately mixed together. Also to respect the privacy of the participating pharmacies they are not mentioned by name in the research.

In participating pharmacies where the author approached customers, the approximate time spent and the gathered results are as follows:
Pharmacy A: Three hours during a Friday lunch hour gives a result of 49 answers.
Pharmacy B: Three hours during a Monday afternoon gives a result of 37 answers.
Pharmacy C: Three hours during an early Friday afternoon gives a result of 104 answers.

Pharmacy D: Four hours during a Monday afternoon and Tuesday lunch hour gives a result of 50 answers. Furthermore, the pharmacy staff gathered eight questionnaire answers from their customers during the overall research time, which gives pharmacy D a total result of 58 answers.
The questionnaire form was also made available for customers in a fifth pharmacy but gave a result of zero answers.

In addition to carry out the research in various pharmacy facilities, one response derives from a friend of the author and 24 answers are gathered from residents in a storey building in Espoo. These respondents were approached in an attempt to increase the amount of survey results. The inhabitants received a questionnaire form and a personal note from the author. Those who wanted to participate returned the filled in questionnaire form to a mailbox specified in the note. The total amount of respondents in the research is 273 , and all research answers have been collected during a two week period in October 2011.

The responses are transcribed by the author from paper form to a free online survey program, KwikSurveys. The online program serves as a backup for the material and facilitates the analysis of the results.

### 4.2 Reliability and validity

The reliability of the research does address the consistency of the survey answers and the functionality of the survey. It is important that all respondents understand the questionnaire correctly. The questionnaire used in the research is designed to be very clear, simple and easy to understand quickly. In most cases the respondent had the opportunity to ask the author for clarifications. All questions that ask the respondent to rank a few options based on their importance, also clearly state which ranking number stands for most and for least important. The research is reliable and also valid as it gives an answer to the research questions of the research.
A total number of 273 responses are collected of which all respondents have not answered each question of the survey.

## 5 RESEARCH RESULTS

### 5.1 Survey respondents

The result shows that $69 \%$ of the respondents are female and $31 \%$ are male.
A significantly large amount of $87 \%$ of the respondents are aged 30 and upwards. Respondents of 30-49 years of age and 50-65, both represent an amount of $34 \%$ each, and those over 65 years represent $19 \%$. Young adults of 20-29 stand for $11 \%$ while those under 20 years old make up only $3 \%$ of the total amount of respondents. Since the research did not favour any specific group of customers the result partially also reflects the overall distribution of pharmacy customers based on gender and age. $55 \%$ of respondents work full-time and $6 \%$ work part-time. Only $2 \%$ announced to be currently unemployed and $10 \%$ are students. As much as $28 \%$ informed that they are retired. The result regarding occupation corresponds rather well to the result of the respondents' age distribution. Out of 273 survey answers $92 \%$ informed their gender, $97 \%$ their age and $92 \%$ their occupation. This information can give an insight to some personal characteristics that can have an influence on the behaviour.

### 5.2 Survey answers

The research material demonstrates that the majority buy their over-the-counter medicines from a specific pharmacy. More than half, $53 \%$ say that they often run their errands in a specific pharmacy and $33 \%$ say that they do it sometimes. Only $14 \%$ say that they do not make their purchases in a particular pharmacy. Those consumers who often use a certain pharmacy are to $71 \%$ women, they are aged from 30 years up to more than 65 , half of them have a full-time job and a third of them are retired. Those who sometimes use a certain pharmacy are also mostly women as they stand for $70 \%$, the majority is aged between 30 and 65 , half of them have a full-time job, one fourth is retired and up to $16 \%$ are students.

Table 1. Buy over-the-counter medicines from a specific pharmacy.

| $\|$Buy over-the-counter medicines from <br> a specific pharmacy    <br> Answer Frequency Percentage, $\%$  <br> Yes, often 145 53,11  <br> Yes, sometimes 90 32,97  <br> No 38 13,92  |
| :--- |
| Total |

Respondents did rank and put in order of importance location, staff, product range, extra services and loyalty card or membership program in regards of how important they are to the respondent, when they choose which pharmacy to go to. The ranking goes from 1 to 5 where 1 stands for the most important and 5 for the least important. As much as 79 $\%$ grade location with a number 1 , and state that location is the most important factor. Furthermore, location did receive the best average score calculated from answers of all ranks that concern location. Location received an average score as good as 1.34. From the results received the order of importance only based on the amount of answers giving a ranking score of number one, is the following; location $79 \%$, product range $11 \%$, loyalty card or membership program $7 \%$, staff $2 \%$ and extra services $1 \%$.

Table 2. Order of importance for choice of pharmacy. Exclusively based on answers indicating most important.

| Order of importance for choice of pharmacy, based on answers of rank $1=$ most important | Frequency | Percentage, \% |
| :---: | :---: | :---: |
| 1 Location | 192 | 78,69 |
| 2 Product range | 28 | 11,48 |
| 3 Loyalty card / membership program | 17 | 6,97 |
| 4 Staff | 4 | 1,64 |
| 5 Extra services | 3 | 1,23 |
| Total | 244 | 100 |

Nearly the same ranking order is received through each respective option's average score that is based on all answers received of all rankings, and is the following; location 1.34 , product range 2.25 , staff 3.14 , loyalty card or membership program 4.05 and extra services 4.11. The difference to the average score based on answers of rank 1 is that staff is more important than a membership program based on the overall average scores. Some respondents did not rank all five options but indicated the most important one for them or their top three choices. These answers have also been taken into account in the results, and a calculation of each option's average score show each option's importance when taking into account all answers that are given for the option that is concerned.

Table 3. Order of importance for choice of pharmacy. Based on average scores from a 1-5 rank where 1 is most important.

Order of importance for choice of pharmacy, based on average scores from a 1-5 rank where $1=$ most important Average score

| 1 | Location | 1,34 |
| :--- | :--- | :--- |
| 2 | Product range | 2,25 |
| 3 | Staff | 3,14 |
| 4 | Loyalty card / membership program | 4,05 |
| 5 | Extra services | 4,11 |



Figure 1. Frequency and distribution of responses for choice of pharmacy. Based on a ranking scale of 1-5 where 1 is most important.
$93 \%$ of respondents do not prefer, or it does not matter to them if a pharmacy is located in a quiet place where the chances are low that they would meet or see people that they know. The minority who prefer to avoid acquaintances by going to pharmacies in quieter locations are mostly women aged 30 years or older who have a full-time job or are retired.

Table 4. Preference for pharmacies located in quieter places due to a smaller chance to meet or see acquaintances.

| Prefer pharmacies in a quiet place to avoid acquaintances |  |  |
| :--- | ---: | ---: |
| Answer | Frequency | Percentage, $\%$ |
| Yes | 18 | 6,62 |
| No, it does not matter | 254 | 93,38 |
| Total | 272 | 100 |

$84 \%$ say that they do not need to be familiar with the staff while $10 \%$ do want to be familiar with the staff. Only $6 \%$ state that they want the staff not to recognize them and that they wish to stay anonymous.

Table 5. Desired type of relationship with the pharmacy staff.
The consumer's desired type of relationship with the pharmacy staff

| Answer | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| I want to be familiar with the staff | 27 | 9,93 |
| I do not need to be familiar with the staff | 228 | 83,82 |
| I do not want the staff to recognize me, I want to stay |  | 17 |
| anonymous | 272 | 6,25 |
| Total | 100 |  |

For $39 \%$ the product brand is of importance.

Table 6. Importance of product brand.

| Product brand is important |  |  |
| :--- | ---: | ---: |
| Answer | Frequency | Percentage, $\%$ |
| Yes | 105 | 38,89 |
| No, does not matter | 165 | 61,11 |
| Total | 270 | 100 |

$45 \%$ prefer OTC medicines that are domestic.

Table 7. Preference for domestic over-the-counter medicines.

| Prefer domestic over-the-counter medicines |  |  |
| :--- | ---: | ---: |
| Answer | Frequency | Percentage, $\%$ |
| Yes | 122 | 45,02 |
| No, does not matter | 149 | 54,98 |
| Total | 271 | 100 |

Package design or the form of packaging does influence the purchasing decision of only $14 \%$ of the respondents.

Table 8. Influence of the package design on the purchasing decision.

| Package design influences the purchasing decision |  |  |
| :--- | ---: | ---: |
| Answer | Frequency | Percentage, $\%$ |
| Yes | 39 | 14,29 |
| No, does not matter | 234 | 85,71 |
| Total | 273 | 100 |

The answers indicate that even $60 \%$ of the consumers sometimes take the opinions and recommendations of family and friends into consideration when they buy OTC medicines. Those consumers who often take them into consideration stand for $16 \%$ and those who do not consider the opinions and recommendations stand for $24 \%$.

Table 9. Consideration of opinions and recommendations from family and friends, for the choice of over-the-counter medicines.

| Take into consideration opinions and recommendations from <br> family and friends when choosing over-the-counter medicines |  |  |
| :--- | ---: | ---: |
| Answer | Frequency | Percentage, $\%$ |
| Yes, often | 44 | 16,24 |
| Yes, sometimes | 162 | 59,78 |
| No | 65 | 23,99 |
| Total | 271 | 100 |

Regarding the opinions and recommendations from the pharmaceutical staff, they are often taken into consideration by $59 \%$ of consumers, sometimes considered by $39 \%$ and are not considered by only $2 \%$.

Table 10. Consideration of opinions and recommendations from pharmaceutical staff, for the choice of over-thecounter medicines.

| Take into consideration opinions and recommendations from the <br> pharmaceutical staff when choosing over-the-counter medicines |  |  |  |
| :--- | ---: | ---: | :---: |
| Answer | Frequency | Percentage, $\%$ |  |
| Yes, often | 157 | 59,25 |  |
| Yes, sometimes | 103 | 38,87 |  |
| No | 5 | 1,89 |  |
| Total | 265 | 100 |  |

Respondents did rank and put in order of importance product brand or producer, pharmaceutical company's country of origin, package design, pharmacist's opinion or recommendation, family's and friends' opinion or recommendation and product advertisement in regards of how important they are for the respondent when they choose an OTC medicine. The ranking goes from 1 to 6 where 1 stands for the most important and 6 for the least important. Of all the answers that give a ranking of number 1, that stands for the most important when choosing an OTC medicine, $49 \%$ goes to the pharmacist's
opinion or recommendation. $22 \%$ goes to product brand or producer, $16 \%$ to family's and friends' opinion or recommendation, $10 \%$ to pharmaceutical company's country of origin, $2 \%$ to product advertisement and $1 \%$ to package design. Of those consumers who indicated that product brand or producer is the most important, nearly half are aged between 50-65 years.

Table 11. Order of importance for choice of over-the-counter medicines. Exclusively based on answers indicating most important.

| Order of importance for choice of OTC medicines, |  |  |
| :--- | ---: | ---: |
| based on answers of rank 1 = most important | Frequency | Percentage, \% |
| 1 Pharmacist's opinion and recommendation | 119 | 48,77 |
| 2 Product brand or producer | 54 | 22,13 |
| 3 | Family's and friends' opinion and recommendation | 38 |
| 4 Pharmaceutical company's country of origin | 24 | 9,57 |
| 5 | Product advertisement | 6 |
| 6 Package design | 3 | 2,46 |
| Total | 244 | 1,23 |

Based on each option's average score that is calculated taking into consideration answers of all ranking scores, the order and the obtained score is the following; pharmacist's opinion or recommendation 1.85 , family's and friends' opinion or recommendation 2.73, product brand or producer 3.01, pharmaceutical company's country of origin 3.75 , product advertisement 4.57 and package design 4.93. In contrast to the order obtained solely on rank number one answers, only family's and friends' opinion and recommendation and product brand or producer switch order.

Table 12. Order of importance for choice of over-the-counter medicines. Based on average scores from a 1-6 rank where 1 is most important.

| Order of importance for choice of OTC medicines, based on <br> average scores from a 1-6 rank where 1 $=$ most important | Average score |
| :--- | ---: |
| 1 Pharmacist's opinion and recommendation | 1,85 |
| 2 | Family's and friends' opinion and recommendation |



Figure 2. Frequency and distribution of responses for choice of over-the-counter medicines. Based on a ranking scale of 1-6 where 1 is most important.

70 \% of respondents do sometimes buy OTC medicines that they have either seen or heard an advertisement of. Around $28 \%$ do not buy, or the advertising does not matter to them. Only a small percentage of approximately $3 \%$ often buy OTC medicines that they have seen or heard an advertisement of.

Table 13. Buy over-the-counter medicines of which one has seen or heard an advertisement.
Buy over-the-counter medicines of which have
seen or heard an advertisement

| Answer | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| Yes, often | 7 |  |
| Yes, sometimes | $184 \quad 191$ | 2,65 |
| No | 73 | $69,7 \quad 72,35$ |
| Total | 264 | 100 |

A significant amount of $95 \%$ of respondents indicates that they usually buy the same OTC medicine again. $88 \%$ of these consumers do so because they know that the product does work, $7 \%$ because they do not have the time or energy to explore other options, $4 \%$ because the product could be found in their family's or childhood home and 1 \% due to some other reason. A percentage of $2 \%$ do usually not buy the same product
again. For $67 \%$ of these consumers it is because they want to find the best product available and for $33 \%$ because they want variation. $3 \%$ responded that they do not know whether or not they usually buy the same product again.
Some respondents answered both yes and no and indicated why. However, these answers have not been taken into consideration in the results since the research primarily investigates if consumers usually do or do not buy the same products again and not only why they do so.

Table 14. Usually buy the same over-the-counter medicine again.

| Usually buy the same over-the-counter medicine again. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Answer | Frequency | Percentage, \% | Percentage, \%, of 'Yes' answers | Percentage, $\%$, of 'No' answers |
| Yes, because: | 21910 | 82,953,79 | 87,64 | 4 |
| I know that it works |  |  |  |  |
| The same product could be found in my family's or childhood home |  |  |  |  |
| I do not have the time or energy to explore other options | 18 | 6,82 | 7,2 |  |
| Other | 3 | 1,14 | 1,2 |  |
| Sub total | 250 | 94,7 | 100 |  |
| No, because: | 24068 | 0,76 |  | 33,33 |
| I want variation |  |  |  |  |
| I want to find the best product available |  | 1,52 |  | 66,67 |
| Other |  | 0 |  | 0100 |
| Sub total |  | 2,27 |  |  |
| Do not know |  | 3,03 |  |  |
| Total | 264 | 100 |  |  |

The majority of the respondents, $71 \%$, confirm that they have bought an OTC medicine or vitamin supplement from the pharmacy although it was not in their plans. Out of these consumers $56 \%$ had done so because they noticed the product on the shelf, $21 \%$ because they saw an advertisement in the pharmacy that caught their attention, $20 \%$ because the staff recommended the product and $3 \%$ because of some other reason.

Table 15. Have bought an over-the-counter medicine or vitamin supplement in a pharmacy, even though it was not in the plans.

| Have bought an over-the-counter medicine or vitamin supplement in the pharmacy, although it was not in the plans |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Answer | Frequency | $\begin{gathered} \text { Percentage, } \\ \% \end{gathered}$ | Percentage, $\%$, of 'Yes' answers | Percentage, <br> $\%$, of 'No' <br> answers |
| Yes, because: |  |  |  |  |
| The staff recommended the product | 43 | 14,63 | 20,48 |  |
| I noticed the product on the shelf | 117 | 39,80 | 55,71 |  |
| I saw an advertisement in the pharmacy that caught my attention | 44 | 14,97 | 20,95 |  |
| Other | 6 | 2,04 | 2,86 |  |
| Sub total | 210 | 71,43 | 100 |  |
| No | 84 | 28,57 |  | 100,00 |
| Sub total | 84 | 28,57 |  | 100 |
| Total | 294 | 100 |  |  |

The research demonstrates that the majority go to a pharmacy where they have been before. They are not concerned about the possibility to run in to people they know and they choose the pharmacy primarily based on its location. After location they mostly also consider the product range and the staff of the pharmacy. They do not feel a need to be familiar with the staff but they do take the pharmaceutical staff's opinions and recommendations into consideration when they choose OTC medicines. When price is not taken into consideration, they are likely to find the pharmacist's opinion or recommendation the most important for their choice of OTC medicines. They consider the opinions or recommendations from their family and friends, and see them as well as product brand or producer as important factors for making a product choice. The majority has bought an OTC medicine or a vitamin supplement in a pharmacy even though it was not in their plans. It is most likely that they did so because they noticed the product on a shelf. They usually buy the same OTC medicine again because they know that it works. They also buy sometimes OTC medicines that they have seen or heard an advertisement of. They think that product brand (as such) is not important or does not matter to them,
and they do not prefer or it does not matter to them if an OTC medicine is a domestic product. They are women with a full-time job and are most likely to be aged between $30-49$ or 50-65.

The result shows that the general behaviour of female and male consumers is rather similar in spite of a few differences. With a difference of $8 \%$ it is more common for males not to use a specific pharmacy for their purchases. For the choice of pharmacy the male consumers find loyalty card or membership program the least important while for female consumers it is extra services instead. It is also more common for males not to prefer domestic products, with a difference of $5 \%$. Also $9 \%$ more males than females do not buy OTC medicines that they have seen or heard an advertisement of. With a difference of $9 \%$, it is more common for women to buy an OTC medicine or vitamin supplement from the pharmacy even though it was not in their plans, because they saw an advertisement in the pharmacy that caught their attention. A large disparity of $18 \%$ is that more males have not ended up buying from the pharmacy an OTC medicine or vitamin supplement, which was not in their plans.

Table 16. For females; order of importance for choice of over-the-counter medicines. Based on average scores from a $1-5$ rank where 1 is most important.

| For females; Order of importance for choice of OTC <br> medicines according to average scores from a 1-5 <br> rank where 1 = most important |  |
| :--- | ---: |
| 1 Location | Average score |
| 2 | Product range |

Table 17. For males; order of importance for choice of over-the-counter medicines. Based on average scores from a 1-5 rank where 1 is most important.

For males; Order of importance for choice of OTC medicines according to average scores from a 1-5 rank where $1=$ most important

Average score

| 1 | Location | 1.33 |
| :--- | :--- | :--- |
| 2 | Product range | 2.25 |
| 3 | Staff | 2.95 |
| 4 | Extra services | 4.05 |
| 5 | Loyalty card or membership program | 4.39 |

Female and male consumers that choose OTC medicines have the same view of which factors are important. There are no significant differences to the general average score or its order of importance, based on the gender of the respondent.

## 6 DISCUSSION

The conducted research has been executed to answer the research questions presented in section 1.2. The research clearly demonstrates that the majority of pharmacy customers often or sometimes use one specific pharmacy. This indicates that for many consumers the choice of pharmacy is done deliberately and that the store environment is often familiar to them. What influences this choice of pharmacy has shown to be its location, which received clearly the highest ranking out of five options. What the research does not clarify is the consumer's interpretation of a good location. Also product range and staff are highly valued while for most consumers a loyalty card or membership program are least important. It is however, good to note that besides the average ranking loyalty card did receive fourth most number one rankings with $7 \%$ of the responses, while staff received only $2 \%$. The average score for loyalty card is the highest for consumers who often use a certain pharmacy and the lowest for those who do not use a certain pharmacy. For this segment it seems that the consumers are drawn to a specific pharmacy to which they are loyal customers and can benefit from a membership program.

Only $10 \%$ of the respondents want to be familiar with the staff. This tells that even if consumers perceive the staff to be of importance, for many it rather relates to their competency than to their personal connection or relation. 21 out of 27 consumers that indicated a want to be familiar with the staff are also often using a certain pharmacy. For this particular customer group the staff is probably important not only by their competency but also based on their personal traits and relationship. As a vast majority of consumers do not feel a need to be familiar with the staff, it goes to show that for most consumers a personal connection to the staff is not very highly valued. Due to this fact many consumers might not have a hedonic or emotional attachment to the pharmacy they mostly use, and might therefore easily switch to another one that fills the criteria of
what they find most important, such as a good location. Only a small percentage wants to stay anonymous and do not want to be recognized by the staff. They as well are most likely to use pharmacies that they have been to before, and not to prefer pharmacies in more quiet locations. It can be concluded that consumers do not bother to avoid acquaintances during their pharmacy errands, and thus are not likely to be embarrassed or timid about using pharmacy services.

When price is not considered nearly half of the consumers find the pharmacist's opinion or recommendation to be the most important out of six options, when they choose OTC medicines. The pharmacist's opinion received the highest average result and their opinions are taken into consideration by nearly all consumers of which the majority take them into consideration often. It shows that consumers have a deep trust in the knowledge and competency of the pharmaceutical staff, and that they are easily influenced by them. For this consumer segment the pharmaceutical staffs are influencers who shape the consumers' view on different products and affect their final purchase decision. The pharmaceutical staff can influence the range of products that the consumer evaluates as an alternative. If we now consider that many consumers take into consideration and also place their product choice based on the opinion or recommendation from the pharmaceutical staff, the pharmaceutical staff is likely to have a great influence on which products have a good stock turnover as long as price is not considered a problem for the consumer. Nevertheless, the attention that consumers give to the staff indicates that the expertise of the pharmaceutical staff is put into use which ensures a more safe and correct usage of OTC medicines among consumers.

The opinion or recommendation of family and friends is also considered as one of the more important factors that help the consumer choose an OTC medicine. The majority report that they sometimes do take these opinions and advices into account. These primary groups that consist of family and friends are a social influence on the consumer. The consumer is not always aware of the influence himself, as family can have a very strong influence where also the parents with whom the consumer may have only little contact with, may still be influencing the consumer's behaviour because of the knowledge and direction they did provide during the parenthood. Therefore, the actual amount of consumers that are influenced or take into consideration the opinions and
recommendations from their family and friends, can possibly be even higher than what the research result shows. Those who identify themselves to consider these opinions and recommendations give it a slightly higher average score of importance during a purchasing situation than the average consumer. What the result does not explain is to which dimension these primary groups affect the consumer. Apart from primary groups' opinions and recommendations regarding products, their attitudes and expectations towards the consumer as a person and as an individual of a certain social status can affect the consumer's product choice as well.

Furthermore, many consumers consider the product brand or the producer to be important for choosing their product. It can be considered that brand or company image does guide the decision making process of the majority, after they have taken into consideration other people's input. Product brand or producer received an average of 3.01 indicating its importance, and an average of 2.35 from consumers that earlier indicated that product brand is important to them. An interesting insight is that still, the majority does say that product brand is not important to them as such or that it does not matter to them. All consumers who say that product brand is not important to them have placed product brand or producer in their top three choices of factors that are important when they choose an OTC medicine. These answers seem slightly contradictory to each other. Perhaps, that for many consumers price is so important that they do not feel brand loyal. When the price becomes equal, then they put focus on product attributes such as brand or producer. In this case the results may indicate that on a general basis more than half of the consumers ( $61 \%$ of all respondents) are not brand loyal as long as they can gain on price.

Consumers under the influence of social factors may attempt to build their image, display their social role or meet the expectations related to their social status by the help of purchasing products that supports that goal. Given that reference groups can have an influence on consumer behaviour, it naturally might as well have an effect upon the importance that the consumer then puts on image, product brand and producer. The package design or form of packaging can determine how the consumer thinks that buying the product will affect the image of the user. When it comes to choosing OTC medicines the majority does not find package design to be important for their choice. Medicines are
products that usually are not visible to others and therefore its visual importance may be less than for other more frequently or more publicly used products.

The pharmaceutical company's country of origin got a fair share of $10 \%$ of all responses that say most important for their choice of product. For one in ten persons the country of origin is a very important aspect of the product they choose. It indicates that there is a segment who's product choice is influenced by the background of the pharmaceutical company and not only by product features or others people's opinions.

A little less than half of the respondents or consumers say that they prefer domestic OTC medicines. They also stand for nearly all answers scoring the pharmaceutical company's country of origin as the most important factor guiding their product choice. Thus, a clear majority ( $83 \%$ ) of the consumers that see the company's country of origin the most important do refer to prefer domestic companies. It can be assumed that this segment is more opt than others to place their product choice on a product from a domestic company and that this segment might link Finnish companies with good quality products.

Product advertisement is scored low importance by the consumers. Product advertisement often informs consumers about products features and can create an appealing image that persuades them to choose the product in question. However, the pharmacy customers value the opinion and recommendations from the pharmaceutical staff and family and friends very highly, which might override their own product opinions that they have created based on advertisement. Because advertising is used not only to put products on display, but more precisely to create an image and a strong product brand, it is also likely that many consumers reckon product brand or producer to be of more importance than the actual advertisement. The advertisement might be the reason behind the product image they have that does influence them when they choose between different options of OTC medicines.

A clear majority of consumers buy sometimes OTC medicines of which they have seen or heard an advertisement. It does tell that many consumers are exposed to advertisement of OTC medicines and occasionally buy these products. As product advertisement is not a very important attribute for most consumers when they choose a product, it may on the other hand be an important influence to buy a product of a specific product cate-
gory. Pharmaceutical advertisements may encourage consumers to visit a pharmacy, where other factors then guide the decision making process. There is reason to believe that current pharmaceutical advertisements are either memorable or awake the interest of consumers, since a majority seem to recall that they have been exposed to advertisement and sometimes buy these products. Those who often or sometimes buy products that they have seen or heard an advertisement of did not think that product advertisement is very important when they choose OTC medicines.

It is important for pharmaceutical companies that their product is the first product choice that the consumer makes in that specific product category, as nearly all consumers say that they usually buy the same OTC medicine again. The most common reason for this purchasing pattern is that they know that the product does work. Through previous experience they have learnt about the product and that it is a solution to their problem or need. Some customers do not have the time or energy to explore other options and buy the same product again. It is very likely that they have developed a habitual buying routine based on inertia, so that the buying process is easy and quick. For nearly all of them the product brand is not important or does not matter to them.

Only few consumers usually buy the same OTC medicines because the product could be found in their family's or their childhood home. These familiar products may catch the consumer's attention due to an emotion of nostalgia, or it has become a habitual buying routine based on heuristic rules that the consumer has created based on previous experience and knowledge.

The majority of consumers have experienced spontaneous or impulsive shopping by buying an OTC medicine or a vitamin supplement in a pharmacy, even though it was not in their plans but because they did notice the product on the shelf. Most consumers have not made the purchase because of advertisements in the pharmacy or because the staff recommended the product. Even though consumers value the pharmaceutical staff's opinion greatly, it seems that they are often not persuaded by them to buy products that they had not planned to buy. Also the in-store advertisements seem not to be very likely to persuade the pharmacy consumers to make impulsive or spontaneous purchases. Since the chances are high that a consumer has run errands in the pharmacy before it is likely that the shopping environment is already familiar. If the consumer already knows where to find the products he or she is searching for, it is likely that the
consumer will not remark as many other products in comparison to a consumer who visits the pharmacy for the first time.

## 7 CONCLUSION

Consumer behaviour of pharmacy customers has here been researched to discover the factors behind the consumers' behaviour and their decision making, which affect their choice of pharmacy and choice of generic and similarly priced over-the-counter medicines. Consumers in the capital region and of all ages, genders and no specific occupation were included in the research. The research was almost entirely conducted in a few chosen pharmacies but also had inhabitants of a storey building and a friend of the author to take part in the research. The research was conducted as a survey with a questionnaire form during fall 2011 and the survey answers were collected during a two week time period in October. The addressed research questions were:

1. What determines in which pharmacy customers do their purchases?
2. What influences the customer's choice between similarly priced generic over-thecounter products?
The topic was limited to only OTC medicines since these products that represent one of the main product categories in pharmacies are available to the public, and the consumers have the possibility to make their product choice independently. These are also the products that pharmaceutical companies are allowed to advertise directly to the end consumers.

The research shows results that answer the research questions on pharmacy customers' choice of pharmacy and choice of OTC medicines, based on the options outlined in the questionnaire that is used. The research does point out that pharmacy location is very important and consumers are very likely to use a specific pharmacy many times. It also showed that the opinions and recommendations of the pharmaceutical staff are very important for the choice of OTC medicines. Other main findings are that many consumers have bought an OTC medicine or a vitamin supplement either on impulse or spontaneously. Here however, it is noted that the percentage of women who have done so is
higher than for males. Out of those consumers that have done so it is also more common for the women than for the men to have made the purchase because of in store advertisement.

### 7.1 Suggestions for further research

Further research could be done to clarify the consumer's interpretation of options such as a good location and a good product range. Additional research could explore how consumers make use of the pharmaceutical staff when they are in a pharmacy, and how the pharmaceutical staff is aware of their own influence on the customers and how they use their knowledge to guide the decision making process. More focus on the promotional sector can be done through further research that studies through which media pharmaceutical advertisements are best to reach the consumer segment that is recognized to buy products that are familiar to them through advertisement.

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## APPENDICES

## Appendix 1. Questionnaire form in Finnish.

## Arvoisa apteekin Asiakas

Tämä kysely koskee pelkästään kāsikauppaläākkeitä (ei reseptillā saatavia lääkkeitā) ja kyselyn vastaukset käytetään tradenomiopiskelijan lopputyön kirjoittamiseen.

Osallistuminen on vapaaehtoista ja vastaukset pysyvät anonyymeinä.
Kyselyyn vastaaminen kestää pari minuuttia.
Kiitos osallistumisesta, mielipiteenne on arvokas!

1. Ostatko käsikauppalääkkeesi tietystā apteekista?Kyllä, useinKyllä, joskusEn
2. Minkälaisen toivoisit suhteen olevan apteekkihenkilökunnan ja asiakkaan vālillä?Haluan että henkilökunta on minulle tuttuHenkilökunnan ei tarvitse olla minulle tuttuEn halua henkilökunnan tunnistavan minua, vaan haluan pysyä anonyyminä
3. Suositko hiljaisemmalla paikalla sijaitsevia apteekkeja jossa mahdollisuus tavata tai nähdā tuttuja on pienempi?KylläEn, sillä ei ole merkitystä

## 4. Mikā asia on tärkein kun valitset missā apteekissa asioit?

Numeroi vastauksesi tärkeysjärjestykseen numeroilla 1-5. Numero 1 vastaa eniten tärkeintä ja numero 5 vähiten tärkeintā asiaa.
$\qquad$ Sijainti
$\qquad$ Henkilökunta
$\qquad$ Tuotevalikoima
$\qquad$ Ylimääräiset palvelut
$\qquad$ Kanta-asiakkuus
5. Suosin kotimaisia kāsikauppalääkkeitā.
$\square_{\text {Kyllä }}$En, sillä ei ole merkitystä
6. Tuotemerkki on minulle tärkeā.
$\square$ KyllaEi, sillä ei ole merkitystä
7. Pakkauksen ulkonākō tai pakkausmuoto vaikuttaa ostopäätōkseeni.
KylläEi, sillä ei ole merkitystä
8. Kun valitsen käsikauppalääkkeitä, otan huomioon perheeni ja ystävieni mielipiteet ja suositukset.Kyillā, usein
$\square$ Kyllä, joskus
$\square \mathrm{En}$
9. Kun valitsen käsikauppalääkkeitä, otan huomioon farmaseuttisen henkilökunnan mielipiteet ja suositukset.Kyllā, usein
Kyllā, joskus
10. Yleensā ostan saman kāsikauppalääkkeen uudestaan. $\square$ Kylla, koska:
$\square$ Tiedā sen toimivan.
$\square$ Sama tuote löytyi perheeni tai lapsuuden kodistani.
$\square$ Minulla ei ole aikaa tai energiaa tutustua muihin vaihtoehtoihin.
$\square$ Mus: $\qquad$En, koska:$\square$ Haluan vaihtelua
$\square$ Haluan löytää parhaan mahdollisen tuotteen.
$\square$ Mus: $\qquad$En osaa vastata
11. Ostan kāsikauppalääkkeitā joista olen nāhnyt tai kuullut mainoksen.Kyllä, usein
$\square_{\text {Kyllä, joskus }}$
$\square$ En, sillä ei ole merkitystä

## 12. Mikä on tärkein asia kun valitset käsikauppaläākkeitä?

Numeroi vastauksesi tärkeysjärjestykseen numeroilla 1-6. Numero 1 vastaa eniten tärkeintä ja numero 6 vähiten tärkeintā asiaa.
_ Tuotemerkki tai valmistaja
_ Lääkeyhtiön kotimaa
_ Pakkauksen ulkonākö tai pakkausmuoto
_ Farmaseutin mielipide tai suositus
_ Perheen tai ystāvien mielipiteet ja suositukset
_ Tuotteen mainokset
13. Oletko päätynyt ostamaan apteekista jonkun käsikauppalääkkeen tai vitamiinivalmisteen, vaikka se ei ollut suunnitelmissasi?
$\square$ Kyllä, koska:
$\square$ Henkilökunta ehdotti tuotettaHuomasin tuotteen apteekin hyllyssä
$\square$ Näin apteekissa mainoksen joka herätti huomioniMuu: $\qquad$
14. lkāalle 20 vuotta20-29 vuotta30-49 vuotta50-65 vuottayli 65 vuotta
15. AmmattiKokopäivätyö
OsapāivātyöTyötōnEläkeläinenOpiskelija
16. SukupuoliNainenMies

Kiitos vastauksesta!

## Appendix 2. Questionnaire form in English.

## Dear pharmacy customer

This questionnaire concerns only over-the-counter medicines (not medicines on prescription) and the answers of the questionnaire are used for the writing of a BBA student's degree work.

Participation is voluntary and the answers will stay anonymous.
To fill in the questionnaire takes a few minutes.
Thank you for your participation, your opinion is valuable!

1. Do you buy your over-the-counter medicines from one specific pharmacy?

- Yes, often
- Yes, sometimes
- No

2. What type of relationship do you wish to have with the pharmacy staff?

- I want to be familiar with the staff
- I don't need to be familiar with the staff
- I don't want the staff to recognize me, I want to stay anonymous

3. I prefer pharmacies located in a quiet place where the chances are low
that I'll meet or see people I know

- Yes
- No, it does not matter

4. What is most important about the pharmacy you decide to you visit?

Please rank the answers from 1 to 5, where number 1 stands for the most important and 5 for least important.
__ Location
_ Staff
_ Product range
_ Extra services
_ Loyalty card or membership program
5. I prefer domestic over-the-counter medicines.

- Yes
- No, does not matter

6. Product brand is important to me.

- Yes
- No, does not matter

7. Package design influences my purchasing decision.

- Yes
- No, does not matter

8. I take into consideration opinions and recommendations from my family and friends when I choose over-the-counter medicines.

- Yes, often
- Yes, sometimes
- No

[^0]9. I take into consideration opinions and recommendations from the pharmaceutical staff when I choose over-the-counter medicines.

- Yes, often
- Yes, sometimes
- No

10. Usually I buy the same over-the-counter medicine again.
-Yes, because: - I know that it works.

- The same product could be found in my family's or childhood home.
- I don't have the time or energy to explore other options.
- Other: $\qquad$
- No, because: - I want variation
- I want to find the best product available.
- Other: $\qquad$
- Do not know

11. I buy over-the-counter medicines of which I have seen or heard an advertisement.

- Yes, often
- Yes, sometimes
- No, it does not matter

12. What is most important when you choose an over-the-counter medicine?

Rank the answers from 1 to 6 , where number 1 stands for the most important and number 6 stands for the least important.Product brand or producerPharmaceutical company's country of originPackage design
_ Pharmacist's opinion and recommendationFamily's and friends' opinion and recommendation
_ Product advertisement
13. Have you bought an over-the-counter medicine or vitamin supplement in the pharmacy, although it was not in your plans?

- Yes, because: - The staff recommended the product

> - I noticed the product on the shelf

- I saw an advertisement in the pharmacy that caught my attention
- Other: $\qquad$
- No

| 14. Age | 15. Occupation | 16. Gender |
| :--- | :--- | ---: |
| - under 20 | - Full-time work | - Female |
| $-20-29$ years | - Part-time work | - Male |
| $-30-49$ years | - Unemployed |  |
| $-50-65$ years | - Retired |  |
| - over 65 years | - Student |  |

1. Do you buy your over-the-counter medicines from one specific pharmacy?

| Answer | Frequency | Percentage, \% |  |
| :--- | ---: | ---: | ---: |
| Yes, often | 145 | 53,11 |  |
| Yes, sometimes | 90 | 32,97 | 86,08 |
| No | 38 | 13,92 |  |
| Total | 273 | 100 |  |

2. What type of relationship do you wish to have with the pharmacy staff?

| Answer | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| I want to be familiar with the staff | 27 | 9,93 |
| I do not need to be familiar with the staff | 228 | 83,82 |
| I do not want the staff to recognize me, I want to stay |  |  |
| anonymous | 17 | 6,25 |
| Total | 272 | 100 |

3. I prefer pharmacies located in a quiet place where the chances are low that I'll meet or see people I know

| Answer | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| Yes | 18 | 6,62 |
| No, it does not matter | 254 | 93,38 |
| Total | 272 | 100 |

4. What is most important about the pharmacy you decide to you visit?

Please rank the answers from 1 to 5 , where number 1 stands for the most important and 5 for least important.

Location

| Rank / <br> Score | Frequency | Percentage, $\%$ |
| :---: | ---: | ---: |
| 1 | 192 | 81,36 |
| 2 | 25 | 10,59 |
| 3 | 8 | 3,39 |
| 4 | 5 | 2,12 |
| 5 | 6 | 2,54 |
| Total | 236 | 100 |
| Total score |  |  |
| Average score |  | 316 |

Staff

| Rank / |  |  |
| ---: | ---: | ---: |
| Score | Frequency | Percentage, $\%$ |
| 1 | 4 | 1,85 |
| 2 | 40 | 18,52 |
| 3 | 107 | 49,54 |
| 4 | 52 | 24,07 |
| 5 | 13 | 6,02 |
| Total | 216 | 100 |
| Total score |  |  |
| Average score |  | 678 |

Product range

| Rank / |  |  |
| :---: | ---: | ---: |
| Score | Frequency | Percentage, $\%$ |
| 1 | 28 | 12,73 |
| 2 | 128 | 58,18 |
| 3 | 49 | 22,27 |
| 4 | 10 | 4,55 |
| 5 | 5 | 2,27 |
| Total | 220 | 100 |
| Total score |  |  |
| Average score |  | 496 |

Extra services

| Rank / |  |  |
| :--- | ---: | ---: |
| Score | Frequency | Percentage, $\%$ |
| 1 | 3 | 1,40 |
| 2 | 3 | 1,40 |
| 3 | 27 | 12,62 |
| 4 | 116 | 54,21 |
| 5 | 65 | 30,37 |
| Total | 214 | 100 |
| Total score |  |  |
| Average score |  | 879 |

Loyalty card or membership program

| Rank / <br> Score | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| 1 | 17 | 7,73 |
| 2 | 20 | 9,09 |
| 3 | 25 | 11,36 |
| 4 | 30 | 13,64 |
| 5 | 128 | 58,18 |
| Total | 220 | 100 |
| Total score |  |  |
| Average score |  | 892 |


| Order |  | Rank 1 frequency | Percentage, \% |
| ---: | :--- | ---: | ---: |
| 1 | Location | 192 | 78,69 |
| 2 | Product range | 28 | 11,48 |
| 3 | Loyalty card / membership program | 17 | 6,97 |
| 4 | Staff | 4 | 1,64 |
| 5 | Extra services | 3 | 1,23 |
|  | Total | 244 | 100 |

For females: Location

| Rank / <br> Score | Frequency | Percentage, \% |
| :---: | :---: | :---: |
| 1 | 117 | 80,14 |
| 2 | 15 | 10,27 |
| 3 | 8 | 5,48 |
| 4 | 2 | 1,37 |
| 5 | 4 | 2,74 |
| Total | 146 | 100,00 |
|  |  |  |
| Total score |  | 199 |
| Average score |  | 1,36 |

For females: Staff

| Rank / <br> Score | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
|  | 1 | 3 |
|  | 2 | 21 |

For females: Extra services

| Rank / |  |  |
| :--- | ---: | ---: |
| Score |  | Frequency | Percentage, $\% 9$ (1,54

For females: Loyalty card or membership program

| Rank / <br> Score | Frequency | Percentage, \% |
| :---: | :---: | :---: |
| 1 | 13 | 9,70 |
| 2 | 15 | 11,19 |
| 3 | 12 | 8,96 |
| 4 | 21 | 15,67 |
| 5 | 73 | 54,48 |
| Total | 134 | 100,00 |
|  |  |  |
| Total score |  | 528 |
| Average score |  | 3,94 |

For females: Order of importance

|  |  | Average <br> For females: Order of importance |
| :--- | :--- | ---: |
| 1 | Location | 1.36 |
| 2 | Product range | 2.25 |
| 3 | Staff | 3.17 |
| 4 | Loyalty card or membership program | 3.94 |
| 5 | Extra services | 4.11 |

For males: Location

| Rank / |  |  |
| :--- | ---: | ---: |
| Score | Frequency | Percentage, \% |
|  | 1 | 56 |
|  | 2 | 9 |
|  | 3 | 0 |
|  | 4 | 13,04 |
|  | 5 | 0,00 |
| Total | 69 | 2,90 |
|  |  |  |
| Total score |  |  |
| Average score | 2,90 |  |

For males: Product range

| Rank / <br> Score | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
|  | 1 | 10 |

For males: Staff

| Rank / <br> Score | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
|  | 1 | 1 |
|  | 2 | 17 |

For males: Extra services
$\left.\begin{array}{|l|r|r|}\hline \text { Rank / } & & \\ \text { Score } & \text { Frequency } & \text { Percentage, } \% \\ \hline & 1 & 1,54 \\ & 2 & 1\end{array}\right)$

For males: Loyalty card or member-
ship program
$\left.\begin{array}{|l|r|r|}\hline \text { Rank / } & & \\ \text { Score } & \text { Frequency } & \text { Percentage, } \% \\ \hline & 1 & 3\end{array}\right) 4,48$
2

For males: Order of importance

|  |  | Average <br> For males: Order of importance |
| :--- | :--- | ---: |
| 1 | Location | 1.33 |
| 2 | Product range | 2.25 |
| 3 | Staff | 2.95 |
| 4 | Extra services | 4.05 |
| 5 | Loyalty card or membership program | 4.39 |

5. I prefer domestic over-the-counter medicines.

| Answer | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| Yes | 122 | 45,02 |
| No, does not matter | 149 | 54,98 |
| Total | 271 | 100 |

6. Product brand is important to me.

| Answer | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| Yes | 105 | 38,89 |
| No, does not matter | 165 | 61,11 |
| Total | 270 | 100 |

7. Package design influences my purchasing decision.

| Answer | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| Yes | 39 | 14,29 |
| No, does not matter | 234 | 85,71 |
| Total | 273 | 100 |

8. I take into consideration opinions and recommendations from my family and friends when I choose over-the-counter medicines.

| Answer | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| Yes, often | 44 | 16,24 |
| Yes, sometimes | 162 | 59,78 |
| No | 65 | 23,99 |
| Total | 271 | 100 |

9. I take into consideration opinions and recommendations from the pharmaceutical staff when I choose over-the-counter medicines.

| Answer | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| Yes, often | 157 | 59,25 |
| Yes, sometimes | 103 | 38,87 |
| No | 5 | 1,89 |
| Total | 265 | 100 |

10. Usually I buy the same over-the-counter medicine again.

| Answer | Frequency | Percentage, $\%$ | Percentage, $\%$, of 'Yes' answers | Percentage, $\%$, of 'No' answers |
| :---: | :---: | :---: | :---: | :---: |
| Yes, because: |  |  |  |  |
| I know that it works | 219 | 82,95 | 87,60 |  |
| The same product could be found in my family's or childhood home | 10 | 3,79 | 4,00 |  |
| I do not have the time or energy to explore other options | 18 | 6,82 | 7,20 |  |
| Other | 3 | 1,14 | 1,20 |  |
| Sub total | 250 | 94,70 | 100 |  |
| No, because: |  |  |  |  |
| I want variation | 2 | 0,76 |  | 33,33 |
| I want to find the best product available | 4 | 1,52 |  | 66,67 |
| Other | 0 | 0,00 |  | 0 |
| Sub total | 6 | 2,27 |  | 100 |
| Do not know | 8 | 3,03 |  |  |
| Total | 264 | 100 |  |  |

11. I buy over-the-counter medicines of which I have seen or heard an advertisement.

| Answer | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| Yes, often | 7 | 2,65 |
| Yes, sometimes | $184 \quad 191$ | $69,70 \quad 72,35$ |
| No | 73 | 27,65 |
| Total | 264 | 100 |

12. What is most important when you choose an over-the-counter medicine? Rank the answers from 1 to 6 , where number 1 stands for the most important and number 6 stands for the least important.

Product brand or producer

| Rank / <br> Score | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| 1 | 54 | 23,18 |
| 2 | 32 | 13,73 |
| 3 | 60 | 25,75 |
| 4 | 49 | 21,03 |
| 5 | 20 | 8,58 |
| 6 | 18 | 7,73 |
| Total | 233 | 100 |
|  |  |  |
| Total score |  |  |
| Average score | 702 |  |

Pharmaceutical company's country of origin

| Rank / <br> Score | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| 1 | 24 | 10,39 |
| 2 | 34 | 14,72 |
| 3 | 42 | 18,18 |
| 4 | 45 | 19,48 |
| 5 | 47 | 20,35 |
| 6 | 39 | 16,88 |
| Total | 231 | 100 |
|  |  |  |
| Total score | 867 |  |
| Average score | 3,75 |  |

Pharmacist's opinion and recommendation

| Rank / <br> Score | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| 1 | 119 | 50,42 |
| 2 | 65 | 27,54 |
| 3 | 32 | 13,56 |
| 4 | 11 | 4,66 |
| 5 | 6 | 2,54 |
| 6 | 3 | 1,27 |
| Total |  |  |

Family's and friends' opinion and recommendation

| Rank / <br> Score | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| 1 | 38 | 16,45 |
| 2 | 84 | 36,36 |
| 3 | 39 | 16,88 |
| 4 | 47 | 20,35 |
| 5 | 18 | 7,79 |
| 6 | 5 | 2,16 |
| Total | 231 | 100,00 |
|  |  |  |
| Total score |  |  |
| Average score | 631 |  |

Product advertisement

| $\begin{aligned} & \text { Rank / } \\ & \text { Score } \end{aligned}$ | Frequency | Percentage, \% |
| :---: | :---: | :---: |
| 1 | 6 | 2,62 |
| 2 | 5 | 2,18 |
| 3 | 42 | 18,34 |
| 4 | 49 | 21,40 |
| 5 | 53 | 23,14 |
| 6 | 74 | 32,31 |
| Total | 229 | 100,00 |
|  |  |  |
| Total score |  | 1047 |
| Average score |  | 4,57 |


| Order |  | Rank 1 frequency | Percentage, $\%$ |
| ---: | :--- | ---: | ---: |
| 1 | Pharmacist's opinion and recommendation | 119 | 48,77 |
| 2 | Product brand or producer | 54 | 22,13 |
| 3 | Family's and friends' opinion and recommendation | 38 | 15,57 |
| 4 | Pharmaceutical company's country of origin | 24 | 9,84 |
| 5 | Product advertisement | 6 | 2,46 |
| 6 | Package design | 3 | 1,23 |
|  | Total | 244 | 100,00 |


| Order |  | Average score |
| ---: | :--- | :--- |
| 1 | Pharmacist's opinion and recommendation | 1,85 |
| 2 | Family's and friends' opinion and recommendation | 2,73 |
| 3 | Product brand or producer | 3,01 |
| 4 | Pharmaceutical company's country of origin | 3,75 |
| 5 | Product advertisement | 4,57 |
| 6 | Package design | 4,93 |

13. Have you bought an over-the-counter medicine or vitamin supplement in the pharmacy, although it was not in your plans?

| Answer | Frequency | Percentage, \% | Percentage, \%, of 'Yes' answers | Percentage, $\%$, of ' $\mathrm{No}^{\prime}$ answers |
| :---: | :---: | :---: | :---: | :---: |
| Yes, because: |  |  |  |  |
| The staff recommended the product | 43 | 14,63 | 20,48 |  |
| I noticed the product on the shelf | 117 | 39,80 | 55,71 |  |
| I saw an advertisement in the pharmacy that caught my attention | 44 | 14,97 | 20,95 |  |
| Other | 6 | 2,04 | 2,86 |  |
| Sub total | 210 | 71,43 | 100 |  |
| No | 84 | 28,57 |  | 100,00 |
| Total | 294 | 100 |  |  |

14. Age

| Years | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| Under 20 | 7 | 2,65 |
| $20-29$ | 29 | 10,98 |
| $30-49$ | 89 | 33,71 |
| $50-65$ | 90 | 34,09 |
| Over 65 | 49 | 18,56 |
| Total | 264 | 100 |

15. Occupation

|  | Frequency | Percentage, \% |
| :--- | ---: | ---: |
| Full-time work | 138 | 54,55 |
| Part-time work | 15 | 5,93 |
| Unemployed | 5 | 1,98 |
| Retired | 70 | 27,67 |
| Student | 25 | 9,88 |
| Total | 253 | 100 |

## 16. Gender

|  | Frequency | Percentage, $\%$ |
| :--- | ---: | ---: |
| Female | 172 | 68,53 |
| Male | 79 | 31,47 |
| Total | 251 | 100 |

Appendix 4. Participants' self produced questionnaire answers.

Answers together with English translations.
10. Usually I buy the same over-the-counter medicine again.

Yes, because; Other:

- Yleensä ekalla kerralla valitsen huolella enkä viitsi uudelleen paneutua. On the first time I usually make my choice carefully, and do not bother to go deep into it again

13. Have you bought an over-the-counter medicine or vitamin supplement in the pharmacy, although it was not in your plans?

Yes, because; Other:

- Ystävän suositus

A friend's recommendation

- Näin jossain ilmoituksen

I saw a notification somewhere

- Varmuuden vuoksi/varastoon
- Olin joskus kuullut että se toimi (omega3-kapselit :) + monivitamiini talveksi I had once heard that it worked (omega3-kapsels :) + multivitamin for the winter


[^0]:    TURN THE PAGE, THANK YOU

