



Effectiveness of In-Store Displays in Consumer Decision Making

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<p>Sammandrag:</p> <p>Bageriindustrin påverkas av flera rådande trender såsom naturlighet och välbefinnande, vilka betonas när det gäller bageriprodukter. Nya produkter och produktförbättringar lanseras kontinuerligt. På grund av detta blir annonsering en viktig aspekt, speciellt när en stor mängd av inköpsbesluten görs i butiken. Ett av de viktigaste sätten att annonsera produkter i butiken är genom butiksskyltar. Förståelse för hur konsumenterna faktiskt tittar på butiksskyltar och hur effektiva de är på att förändra konsumenternas beteende till ett köpbeslut vid köptillfället kommer att informera om bästa möjliga utställande och utläggning av skylten. Huvudsyftet med studien var att få en bättre förståelse för vad som är en effektiv butiksskylt vid konsumenternas beslutsfattande. Detta gjordes genom att utvärdera tre olika aspekter av butiksskyltar (1) förmågan att attrahera visuell uppmärksamhet, (2) om den avsedda kommunikationen och innehållet är begripligt på butiksskylten och (3) om skylten i butiken positivt kan påverka konsumenternas beslutsfattande. Den primära metoden innefattade bruket av eye-tracking-utrustning med kompletterande frågeformulär. Forskningen genomfördes genom ett experiment i två faser.</p>	
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<p>Abstract:</p> <p>The bakery industry is affected by many of the current trends and naturalness (clean label) and wellbeing is emphasized in regard to bakery products. New products and product improvements are continuously being launched. Because of this, advertising becomes an important aspect especially when a large amount of purchasing decisions are done in-store. One of the main ways to advertise products in the store are through in-store displays. Understanding how consumers actually look at in-store displays and how effective they are in changing consumer behavior into a purchase decision at the point of purchase will inform the best execution and layout of the display. The main aim of the study was to get a better understanding of what an effective in-store display in consumer decision making is. This was done by assessing three different aspects of in-store displays: (1) the visual attention attracting ability, (2) if the intended communication and content is comprehensible on the in-store display and (3) if the in-store display can positively influence consumer decision making. The primary methodology included usage of eye-tracking equipment with a complementary questionnaire and the research was conducted by way of a two-phase experiment.</p>	
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*“The eye sees only what the mind is
prepared to comprehend”*

— Robertson Davies (1913-1995)

1 INTRODUCTION

For hundreds of years bread has been an essential part of the Finnish food regime, especially rye bread which is one of the most popular types of bread in Finland. Bread is part of the Finnish nutritional advice and therefore it is also served with almost every meal in Finland, or at least it used to be. In recent years, there has been a significant drop in the consumption of bread in Finland, even if nutritional recommendations still strongly support it. Finns eat four times more vegetables, fruits and berries than what they did in the 1950s and the increase is still noticeable in the 2000s. However, the consumption of grain has decreased in the long term and unfortunately rye is eaten a lot less than five years ago. The impact of this change is a clear reduction on the intake of fibers which is an important part of a wholesome diet. (Terveyttä Ruoasta 2014)

According to Leipätiedotus (Bread Information) press release, Finns ate bread at an average of slightly over 40 kg in 2015. The daily consumption of bread is about 110 grams for Finns, which is equivalent to 3-4 slices of fresh bread or ten slices of dry bread. Throughout the 2010s the bread consumption has remained relatively stable and despite the increase in imports Finns still prefer domestic bread (which is about 34 kg of the yearly consumption). (Leipätiedotus 2016)

On the other hand, in the early 2000s the yearly bread consumption was a couple of kilos more. One of the reasons for the decrease is the consumer behavior and lifestyle changes. For example snack eating is actively growing and in-store baking (warming frozen readymade bakeries) and in-store bakeries have changed consumer behavior and consumers have increasingly switched to buying store-baked bakery products. The product offering has been highly diversified and availability from even small shops has increased. ACNielsen has estimated in early 2015 that the in-store baking increased 17 % during the previous year. Changes in consumption such as snack time, food trends and salad bars etc. have changed the market situation and reduced the consumption of traditional bakery products. The local food trend has impacted the shift from large to smaller bakeries and intensified competition. Price competition has resulted in the reduction of the traditional packaged loaves of bread. (Hyrylä 2015)

The impact on consumption is caused by consumers' increasing demand and various food trends (such as wellbeing, naturalness and enjoying everyday life) and novelty seeking, mostly spur of the moment purchase cravings such as sweets, pastries and a variety of white bread. Also the private label supply has increased in Finland. (Hyrylä 2015)

There is also an increasing number of Finnish people interested in ethical, sustainable and healthy consumption. Food is not only purchased for survival but for wellbeing, good conscience and feasting. At the same time, the consumption is polarized and for a large part of consumers, domestic products are more important than ever. Individualism is emphasized and the importance of self-expression through food has grown. Different types of values, diets and trends all influence consumers' choices. The carbohydrate awareness is definitely here to stay, although the low carb diet is more in the past, the protein rich diet is a strongly influential trend and the market has been flooded with protein snacks and breads. The growing health and wellness trend has increased consumers' interest in the healthiness of food. (Hyrylä, 2015)

The long recession that is still visible in the Finnish economy is also weakening the purchasing power, and the trust of consumers is also evidently reflected in last year's grocery development. (PTY 2015) The number of market-size stores has gone down from nearly 10.000 stores to approximately 3.100 stores in the last 25 years, but the selection has tripled in 20 years. The grocery store shopping visits per week for a household has remained more or less the same the last 5 years, with the average being 3,3 times. In Q1 of 2016 it has however gone down to 3,1 times a week. However, if we look almost 20 years back the average shopping visits per week was 4,3 times. (PTY 2016 & Päivittäistavara-kauppa 2006-2007)

With significantly more selection and less trips to fewer stores, companies' face a new challenge: how to get their brand visible and marketed in the store. According to Hyryläs 2015 report of the bread industry, 65 % of the bakery industry companies experienced in the summer of 2015, that internal development needs is on marketing and sales. This becomes more essential when looking at Point of Purchase Advertising International's (POPAI 2012) 2012 shopper engagement study, where they claim that 76

% of the purchasing decisions happen in-store. Since an over-whelming amount of purchase decisions are made in-store, companies need to focus on influencing the consumer behavior and decision making at the moment of point of purchase. That is when the consumer actually chooses one product over the other.

To contribute to the future of retailing, Sigurdsson et al (2015) have conducted behavioral analysis research in in-store environments. One of their main arguments is that retailers need to dig deeper into in-store consumer behavior and focus more on in-store visual attention (merchandising) and promotions because of the declining growth of new customers.

It is not only the advertising that has an impact on consumer behavior, but also the environment they are in. Dijksterhuis et al (2005) argue that many choices in grocery shopping are made unconsciously based on subtle cues from the environment, in this case the in-store environment, and attitudes can be influenced by different stimuli that affects consumers' decision and behavior.

1.1 Background

The bakery industry will continue to be a major player in Finland due to its strong role in our food culture. But the whole business industry is more challenging and the sector's profitability has deteriorated. This demands competitiveness, more efficient operations, product development, specialization and renewal and agility in order for businesses to see growth. Due to the development of the gross domestic product (GDP), the share of food and non-alcoholic beverages in household consumption has fallen from more than 21 % in 1980s to around 12,8 % in 2014. Bread and cereal products were 16 % of the household food expenditure per capita in 2014. (Hyrylä 2015)

The consumer behavior is changing and there is an increase of individual consumption within the family. Behavior is also affected by increased leisure time and the polarization of wealth. We are more independent within the family as regards to hobbies etc. Food and dining is becoming an ever stronger part of the individual identity and personality expression and thus consumers increasingly make informed choices based on their

own set of values. Consumers' expectations are increasing and the consumer power in the food chain is strengthening. Domestic, local production and a higher appreciation of less additives will create opportunities to stand out from the import and retailer's own brands. Consumers want to buy their bread fresh. In-store baked products are more and more available including as bulk. Food decisions is increasingly controlled by price, as it is given more attention in times of economic uncertainty. Consumer behavior is becoming more fragmented, part of the consumers are searching for cheap price's, some for quality and others for easy weekday food and weekend treats. On the other hand, consumers may be willing to pay more if it gives them an added value such as ease of use. Food has become fashionable. (Hyrylä 2015)

Therefore, the food industry is actively seeking to develop new products, innovations or product improvements that interest the consumer. Food trends, values and changes in legislation all guides the development work. Green values, sustainability and environmental responsibility operations will increase. The bakery industry is affected by many of the trends and naturalness (clean label) and wellbeing is emphasized in regard to bakery products. The product's fiber content has been added and supplemented by enhancing the nutritional value of the ingredients such as protein-rich seeds or vitamin D. In addition, the structure and contents of the package and the ease of use have been paid attention to.

New products, improvements in the product, packaging reform and the use of domestic raw materials aim at attracting consumers as well as increasing sales. More and more people are also interested in the ethical and company responsibility side. Dark bread consumption is rising and the nutritional recommendations for grain products as well as the strong position in Finnish food culture will continue to maintain a demand for bakery products. Special dietary food requirements will need special products such as milk-free, lactose-free and gluten-free bakery products. Lifestyle related diseases such as overweight are becoming more common and this should be considered when it comes to packaging size and dose size. In addition, sweet bakeries with low calorie and ready-made snacks have growing demand. On the other hand, organic bakery products are required. As consumers' health awareness increases, the bakery industry develops healthier products for example by increasing fiber content and reducing the use of additives.

Access to gluten-free raw materials with higher quality has improved the taste and diversity of the products and they are now also enjoyed by others than persons with celiac disease. (Hyrylä 2015)

1.2 Statement of the problem

The bakery industry is a challenging environment and competition is fierce due to increased imports, companies pursuing growth and overcapacity and lack of natural growth. Growth will demand companies to adapt quickly and be agile in their operations, and the development of in-store baking will have long term consequences for the tight competitive situation. It is not only the increase of import and competition that is challenging for the bakery industry. A major issue is also the decline of the bread consumption, which causes a reduction of the demand and a lack of organic growth in the industry. (Hyrylä 2015)

The Finnish bread industry's specialty is its versatility. The product selection corresponds to the customer and market base needs and the range includes everything from nationwide high volume products to regional and local products. Even convenience stores nowadays have extensive bread departments and in-store baking. Overall, the Finnish bakery industry has a good knowledge of consumers and trends are monitored on a regular basis. Consumers' individual requirements of the product range are on the rise and the extent of the product range responds to customer groups with different needs. Products related to food allergies, wellbeing and organically produced products are considered as the industry's opportunities. Development in these areas are believed to increase profitable growth. However, the focus should also be on development of branding and communications and strengthening the consumer loyalty. (Hyrylä 2015)

New products and product improvements are continuously being launched and there is an increase on the market of smaller bread packages and full grain products and reduction of additives. In addition, seasonal products sales are starting earlier than before. Moreover, product offering is highly diversified and it is possible to purchase of loose, which reduces the sales of traditional packed fresh produce. Even retailers' own brands are becoming more diversified and popular, including bakery products. (Hyrylä 2015)

Because of this, companies need to become more innovative in keeping their customers. Advertising becomes an important aspect especially when a large amount of purchasing decisions are done in-store. When going in to a store, consumers are immediately hit with different signs and displays which aim to communicate the brand and the product, as well as the use of it. Understanding how consumers actually look at in-store displays and how effective they are in changing consumer behavior into a purchase decision at the point of purchase will inform the best execution and layout of the display. On the other hand, consumers might not even look at the display since they are so accustomed to going to the store and buying the same products they always do. Therefore the importance of having displays that catch the consumer's eye and influence their decision to buy the product is essential. Because of the overload of in-store displays, consumers might see the display but rarely notice and remember the product that was advertised. Consequently, it is crucial for a company to understand what kind of displays are effective in the sense of attracting consumers' attention and changing the consumer's behavior into a purchase decision.

Several research studies have focused on the products package, for example Clement (2007) or the more recent study of Clement et al. (2013) which examines the influence of package design on visual attention, whereas Chandon et al (2009) studied only a part of the retail environment, namely the effect the number and position of shelf facings have on brand attention. Breugelmans and Campo (2011) made a research on how effective in-store displays are but this was done in a virtual store environment. Eye-tracking studies are not only restricted to indoor. For example, Maughan et al. (2007) have in their research evaluated consumer perceptions and likings of outdoor advertisements. Pieters and Wedel (2004) conducted several studies on attention capture and transfer in advertising. However, this study considered magazine advertisements.

As a method, eye-tracking has been used to see how consumers look at advertisements but there seems to be a lack of experiments focusing on the actual in-store environment and the ability of displays to attract visual attention and affect the consumers' decision making at the point of purchase.

1.3 Aim and research questions

The main aim of the study was to get a better understanding of what is an effective in-store display. A display that is effective should lead to better sales results as the intention is to persuade consumers to purchase the advertised product. In order for the in-store display to have the expected effect, it firstly needs to attract the consumer's visual attention. Secondly it needs to communicate the advertised product comprehensibly. Even if the display in itself looks good, it must also communicate the brand and the uniqueness of the product? Does the consumer understand what the product is and is the intended image conveyed? Lastly, the display should have a positive impact on the consumer's decision making in the sense that it will end in a purchase decision of the advertised product. Conclusively, the intended result of an effective in-store display is to capture the consumer's attention and influence the consumer to buying the product at the point of purchase. The following research questions are formulated in order to assess this aspect of the subject.

- I. Does the in-store display attract visual attention?
- II. Is the intended communication and content comprehensible on the in-store display?
- III. Can the in-store display influence consumer decision making positively?

1.4 Limitations

The study encompasses considerable topics such as consumer behavior, visual attention and communication and in-store consumer decision making. All of which are broad enough subjects for a number of further and different researches. The design of the packages of the products used in the display are not analyzed and the effect of different placements of the displays in-store are not examined. Furthermore, the lack of a control group due to limited participants is a limitation.

1.5 Fazer Bakeries

The Finnish bakery industry is very traditional, diverse and family owned. The sector has very few large bakeries, some medium sized and a considerable number of small bakeries (or pastry shops) operating in the local market. Fazer Bakeries, which is part of

Fazer Group, and Vaasa Oy which is now part of Lantmännen prepares a significant part of Finland's bakery products and they dominate the industry nationally in addition to operating internationally. Fazer is still the leading bakery company in Finland and 99 % of their freshly packaged bread is made in Finland. There seems to be a value increase of domestic food and food culture. This is expressed, among other things, in a study made by Markkinointi&Mainonta-lehden and Taloustutkimus concerning Finland's most prestigious brands. The results showed, for the seventh time, Fazer Blue at first place and at third place Fazer, followed by Hyvää Suomesta or Joutsenlippu. In tenth place was the Swan label (eco-label) and Vaasan ruispalat (rye bread) was ranked 49. The results indicate a consumer brand loyalty, but on the other hand the bakery brands are in fact not succeeding so well in the competition. (Hyrylä 2015)

To respond to the trends and the increasing demand of new products that are healthy and gluten-free, Fazer has developed a completely new type of bread family called Fazer Vatsaystävällinen (stomach-friendly). This includes three different wholesome breads that highlights health and wellbeing: Rye bread which is easier for the stomach due to the low FODMAP (acronym for carbohydrates that are poorly absorbed during the digestive process), oat bread which consists of 100 % oat and no wheat and a gluten-free bread. These breads can also be recognized by the "Parempi leipä" (better bread) thumb mark, which aims to facilitate the selection of bread on the shelf by highlighting both healthy and tasty options. (Fazer Vatsaystävällinen) The displays for the Fazer Vatsaystävällinen products are the ones that will be used in the research.

2 THEORETICAL FRAMEWORK

The theoretical framework will address the three areas related to the research questions. Beginning firstly with an introduction to consumer behavior and factors influencing the consumer decision making. After this the discussion will move on to visual attention and its importance in consumer behavior. Next, the importance of communication and content will be presented. Finally the in-store displays influencing factors on consumer decision making will be addressed.

2.1 Consumer behavior

Consumer behavior as a whole is a big concept and contains a lot of different aspects. Thus, it can be examined from a variety of different perspectives and views. In short, however, consumer behavior can be defined as the “*study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas, or experiences to satisfy needs and desires.*” (Solomon 2013 p. 31). As the citation above implies, it is a process, or more accurately an ongoing process, that is influenced all the time by for example other people, cultural values or environmental variables. Looking at the consumption process dissolved down to three stages, it starts with the pre-purchase stage when the consumer decides that he/she needs a product. This stage is influenced by consumers’ attitudes towards a product and information search or cues about alternative choices. Second is the purchase stage when the consumer is actually making a purchase decision. Here, however, elements such as time, pressure or in-store displays can affect the consumers purchase decision. Third is the post-purchase stage when the product is eventually disposed of. The last stage will determine if the consumer is satisfied with the product and if the consumer will buy it again. In addition: if the consumer tells others about the product will it influence their purchase decision? (Solomon 2013)

2.1.1 Different actors and values in consumer behavior

It is, however, important to remember that different people can be involved in the process. The purchaser and the user of the product are not always the same person, as when

parents buy food or clothes for their children. Or, as depicted in the consumption process, when another person acts as an influencer for, or against, a certain product without actually buying or using the product. Finally, it can also be a group of people, as when all family members play a role in the decision on the product or services that will be used by everyone. (Solomon et al. 2006) However, individual consumption decisions are increasing within the family. This is also supported by Wang and Lang's (2015) study about the effects of special displays on shopping behavior. The authors' conclude that social influence does not have the expected effects on grocery shopping. When shopping with companions, the effects of special displays does not change the proportion of lower priced items purchased.

Through consumption patterns consumers try to establish their identity (this is but one way), as buying simply to provide for physical needs are decreasing. Instead, there is a shift towards consumption whereby goods are increasingly used to create and express self-identity and values (for example vegetarianism or only buying organic products). (Batey 2008 p. 31) Therefore, consumers can buy and use certain products or brands that (as symbolic) signify the desired or idealized identity. Consumption choices are made also for the symbolic meaning of the products in an effort to create and express social and personal aspects of identity, (Batey 2008 p. 33). For instance when buying healthy products in order to express a healthy lifestyle.

Conclusively, consumer behavior not only involves looking at what and why we buy, but also focuses on how marketers can understand the consumers' needs and how they can influence this need and the choice of the product. In order to do this, marketers need to understand the consumer decision making process and how consumers think and use information in different stages of the process.

2.1.2 Consumer decision making

One of the central parts in consumer behavior is consumer decision making. The amount of time spent on choosing a product and the thought behind it varies widely depending on the product or service. Consumers make countless of different purchase and consumption decisions every day. Most of them are routinely made decision's with little

engagement, whereas other's happen over a long period of time with a high amount of engagement and information searching. What is however common with these decisions are that the consumer will always go through the same steps in the decision making. Figure 1 is a general model on the different stages in all consumer making decisions. (Solomon 2013, Dahlén & Lange 2003)

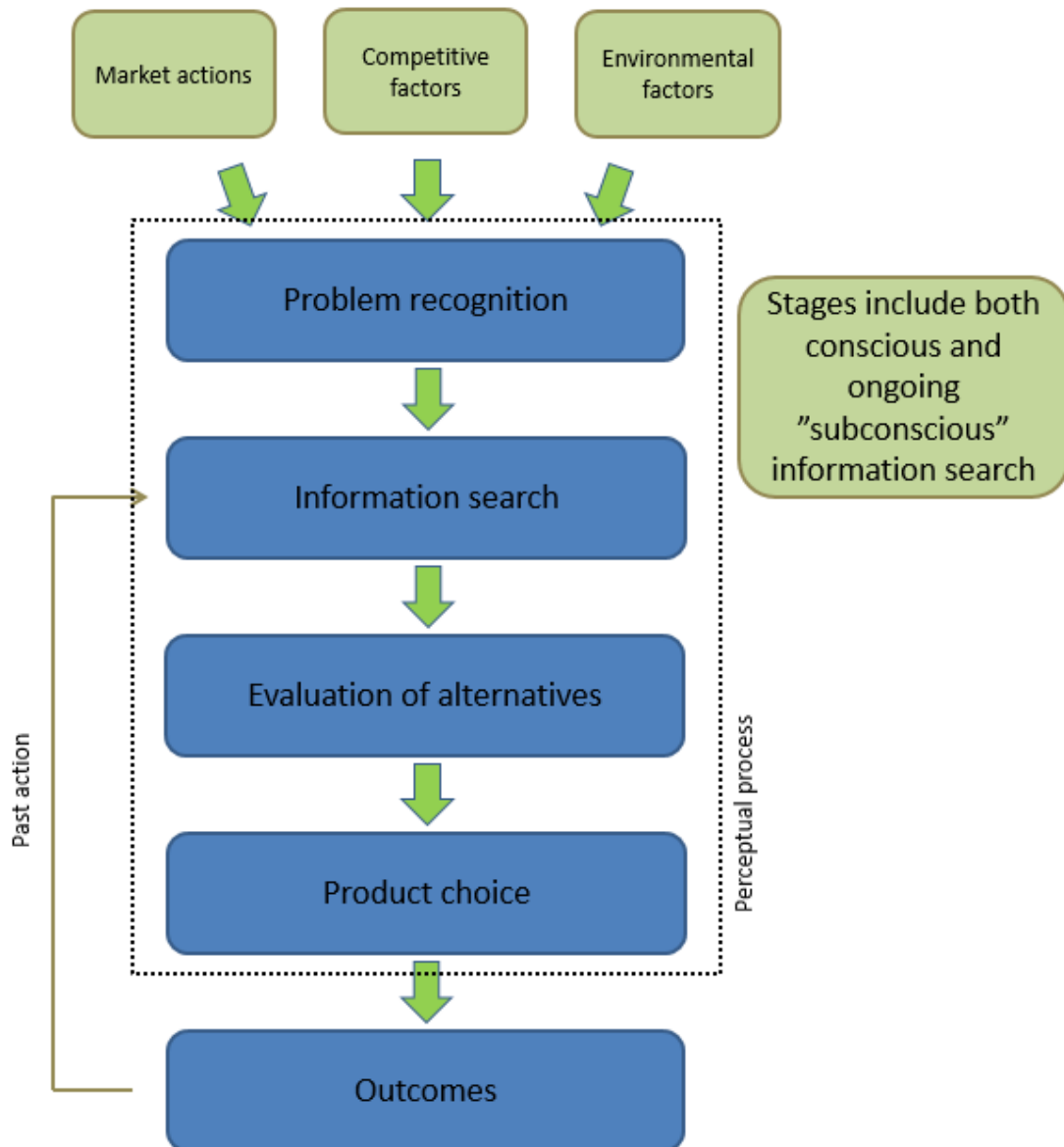


Figure 1. Stages in Consumer decision making (Combined from Solomon 2013 p 320 and Duchowski 2007 p 262).

A consumer purchase is always a response to a problem, which can either be a need or a desire for a product. It is expected that a consumer will likely purchase a product that can be identified as potentially satisfying the need or desires, even if the consumer had not been aware of the product's availability. In other words, the purchase can be influenced not only by internal factors (perceptual process) but also external factors. External factors can be marketing actions (e.g. product promotion), competitive factors (better and newer products) and environmental factors (rains outside causes a need for an umbrella). But in order to make a purchase, and a choice on which product to purchase, the consumer will undergo a series of steps. (1) Problem recognition, as described above, (2) information search, which can either be done by gathering external information such as research, advertisement and friends and/or through internal information such as past memories and experiences. (3) Evaluation of alternatives involves the consumer considering various alternative products to meet the needs that have already been identified. (4) Product choice, eventually the consumer actually chooses a product which is the least complex part of the decision making since it is really just a manifestation of the information and evaluation stages. (5) Outcomes occur after the consumer makes a decision, which is an important part of the learning process since it is based on how well the choice worked out and it will influence the likelihood of making the same choice the next time the need for a similar purchase decision occurs. (Solomon 2013, Duchowski 2007, Dahlén & Lange 2003)

It is important to note that the purchasing experience can for some consumers be a form of entertainment and the buying process itself can be more important than the product. For others it can be strictly taskoriented (buying everyday goods) and a rational activity to meet the physiological needs. (Evans et al. 2008 p. 28) Some purchase decisions are also more important than others and thus the amount of effort we put into them differs. It can range from being almost automatic, a few seconds, to the degree that it resembles a full-time job and takes months of contemplation. Regardless, the important part is how consumers think and use information at the different stages. What type of visual information is it that consumers want or use to make their decisions? Answering this will enable understanding how to attract consumers' visual attention and tailor the information in such a way that it is delivered as directly and efficiently as possible and com-

municates the advertised products clearly. (Solomon 2013, Duchowski 2007 p. 262, Dahlén & Lange 2003)

2.2 Visual attention

These days consumers are constantly exposed to far more information than they can process. We are limited beings that cannot attend to all things at once even though the competition for our attention is steadily increasing. So what is it then that attracts consumers' attention? Attention refers to the extent which processing activity on selections of sensory input, so that the mind can successfully devote to a particular stimulus (Solomon 2013, Duchowski 2007). One important attention attracting way is the use of visual stimuli. Historically visual attention has been emphasized by three main mechanisms, namely *where*, *what* and *how*. Von Helmholtz' (1925) theory focused on the *where*: we let our eyes roam continually over the visual field until we concentrate and focus our sight on something interesting or new. In other words, the information of a new product can attract attention. James' (1890) theory contradicts this as he believed visual attention to be connected to imagination or thoughts and defined it in terms of the *what*. The expectation associated with the target is more a question of *what* people are searching for. So a special display will draw attention if it is something that a consumer needs. These theories are however focused on the environment and target driven and particularly relevant to a bottom-up explanation of visual attention. This is however a rather simplified view of visual attention and it does not consider peoples' preconceived and consciously managed thoughts for a product or a top-down process. Based on this, Gibson (1941) proposed a high-level factor of visual search that was centered on intention. He described visual attention dealing with viewers' advance preparation or *how* people react to visual attention. For example, if a person is expected to view words of colour, the misspelling of "bleu" will be read as "blue". By changing the expectations it will result in a different outcome. This becomes relevant when designing displays and experiments, since it will impact how viewers react based on their preconceptions and attitudes. Naturally, there have been other ensuing researches and theories after this, but any theory or experiment on visual attention should address the fundamentals of what, where and how. (Duchowski 2007, Clement, 2007)

“The eye sees only what the mind is prepared to comprehend.” – Robertson Davies.

Consider the above quote and sentences like “I see what you mean”. Even though we rely on our sight to comprehend the world we do not actually *see* with our eyes. We see with our brain. But because the brain only has limited capacity to process information and prevent sensory overload, people filter out and choose the stimuli to which they are exposed for conscious processing. Thus, certain factors increase the stimulus chances of getting noticed. The factors concern consumer needs, motives and goals since consumers are more likely to notice information that is instrumental to achieving their goals or satisfying their needs. The needs can be conscious or unconscious. (Batey 2008 p. 52 & 71) But what is relevant is understanding what the needs of the consumer are and how this can be conveyed and attract visual attention. Marketing materials that visually capture attention engages consumers so that they focus on the advertisement from its environment. If a consumer is positive towards an advertisement there is a clear correlation between liking the advertisement and the time spent looking at it (Maughan et al. 2007). Pieters and Wedel (2004) established that ad elements such as brand, pictorial and text size each have a unique effects on attention to advertisements. However, the connection between increased attention and consumers’ purchase intention is not yet thoroughly established. (Maughan et al. 2007)

2.2.1 Visual attention in consumer behavior

Since humans can only process a limited amount of information we become selective of what we pay attention to. Perceptual selection (Figure 1) is the process by which people filter out irrelevant or less significant information and only attend to a small portion of the stimuli to which they are exposed. In other words, we pick and choose among the stimuli with help of both personal and external factors. These personal factors include personality, motivation and experience but also the external factors or visual stimuli will play an important role in determining what we notice or choose to disregard. In the context of consumer behavior, the visual stimuli from the environment will attract consumers’ attention and thus influence their reaction and decision making which hopefully leads to a purchase decision. (Solomon 2013, Evans et al. 2008) As discussed previously there are however external factors that affect the perceptual selection. A message or display is more likely to differ from others if it creates contrast. Displays that contain

distinct visual features such as size: the larger the size the more likely it will command attention. Different colors have the ability to catch the attention better than black and white. Also the intensity or contrast will increase the perceptual selection. Breugelmans and Campo (2011) displayed the importance of position. Even if this study was made for a virtual store environment, it did however show that aisle displays clearly outperform shelf tag displays. If a special display is viewed at the entrance, it will influence consumers' behavior in the remainder of the shopping trip. (Wang & Lang 2012) Displays that are in places where consumers are more likely to look will certainly stand a better chance of getting consumers' attention. Therefore, it is a good idea to have displays and products at eye level in the store. Motion is another factor that will more likely catch the attention. It is however difficult to do this with a static picture but using for example a blurry background can simulate movement in a still image. Furthermore, novelty is a usable factor. When a perception is new or appears in an unexpected way or place, it tends to attract consumers' attention. Lastly, repetition and familiarity stimuli is more likely to be noticed. Selection is more likely because of the familiarity of it or because of an existing conditioned response. (Solomon 2013 p. 90, Evans et al. 2008) In consumers buying behavior, a combination of these factors as well as internal factors are operating at the same time to determine whether a visual stimuli will be noticed or not.

It is however wise to remember that there are many personal preferences that also are taken into account for the displays to have an effect on consumers, even more than the visual aspect will. It seems that women are more aware of the visual displays (in the complete retail experience) whereas men search more for signs of where to find the product they are looking for. (Hefer & Cant 2013)

2.3 Communication and content

Visual impact catches consumers' visual attention and they choose with their eyes. But they do not have a distinct visual search, but instead they are influenced by visual distracters. Therefore, displays need to communicate the advertised product's attributes through design elements. (Clement 2007) Because bread is usually an impulse purchase, or rather the type of bread, it is important that the display messages or content have their

greatest influence on consumers' purchase decision when delivered at the point of purchase.

When consumers look at a display, the aim is to get them to buy the product you are selling. However, in order for that to be successful the displays needs to "talk" to the consumer. If nothing else than at least on a subconscious level. When a display is well designed with quality and logic, the consumers tend to be attracted to the section of a product or products that are emphasized on the display. It does however need to be perceived of as a superior quality to capture a positive consumer decision making. On the contrary, negative decision making might emerge if the display does not register as that of a superior quality. (Hefer & Cant 2013) Similar findings are also noticeable in Breugelman's and Campo's (2011) study. Most of the ineffectiveness stems from the advertising clutter of shelf tag displays. Instead, the focus should again be on exclusive and isolated display positions.

As the old saying goes: "a picture is worth a thousand words". This certainly encompasses the importance of the content of the display or advertisements. Images, as communication, have a tendency to move us powerfully and more than 30 times more brain resources are budgeted for processing visual information in comparison to sound information. Hence, a vast amount of information can be communicated through images as opposed to speech or text. Gerard and Goldstein argue in their book "Going Visual" that an image can convey more information than only a textual message and that it can promote actions and decision making, because images are complete and detailed and delivers an information experience that has greater impact than words. (Gerard & Goldstein 2005)

However, according to Solomon (2013) an image is not always as effective when it communicates factual information. Different advertisements with the same content presented in visual versus verbal form will elicit different reactions. When accompanied with an image that reinforces the verbal element it tends to be more effective. (Solomon 2013 p. 299)

Bickel et al., (2008) studied whether compelling point of purchase signs alone can suffice to increase sales of compact fluorescent lamps (CFL). The study used three different displays with different identified effective message content. One was to promote long life, the second one was cost savings and the third one was a combination of long life and cost savings. The study offered evidence that compelling point of purchase messages (the long life message) alone can contribute to increased sales of CFL. However, all the three designs were different in respect of image, text placement and font size which makes it unable to draw definitive conclusions about the relative impact of each message. It does however indicate that a display's overall design may be even more important than the message it conveys and in-store the effectiveness is certainly context sensitive. (Bickel et al. 2008)

It seems that affective experience is a stronger predictor of approach behavior than evoked intellectual experience. (Dennis et al. 2013) In 2013 Dennis et al. wrote an article about the "influence of the content of digital ads on customer in-store experience" and demonstrated the effectiveness of a digital signage ad that stimulates pleasure and evokes affective experience. This research shows how marketing communication can influence consumers' approach behavior, especially if the message contains affective or a mix of affective and intellectual cues. (Dennis et al. 2013) Preferably, the content of the display should arouse some type of emotion. Emotions determine our values, ethics and influence our judgments. Because they are motivational in nature, they will arouse certain behavioral responses and patterns. (Batey 2008 p. 24)

Sciulli et al., (2012) made an eye-tracking analysis about print advertisement with emotional appeals. The authors used both positive and negative emotional appeals to find out the audience's engagement (and attention selection) with social cause print advertisements. The advertisement content reflects the way the message is delivered and what is actually stated. Since the emotional level is increased, people are more likely to be persuaded by the appeal of the advertisement's message content. This in turn will illicit higher level of audience engagement and willingness to offer support for social cause. The research shows that emotional advertisements has a longer gaze duration which would suggest that they generate more interest. However, the authors note that this may result in some areas of the advertisement attracting too much attention while other areas

have minimal attention. Either way, the research may offer insight into how to improve message content and understand the effectiveness of more stimulating messages. (Sciulli et al. 2012)

When creating the display, the dynamics of language and the emotions and meanings that words convey should be considered carefully, since, over time, the words will be associated with the brand and the meaning it has for consumers. Batey (2008 p. 29-30) writes that emotions “... *mediate the effects of advertising content on attitudes toward the advertising and that the combined result partially mediates the effects of advertising content on attitudes toward the brand itself.* “.

Marketers should always remember that the communication and meaning takes place in the mind of the beholder and what the consumer experiences may not have been the initial idea of the advertisement (e.g. due to cultural differences). But brands that can appropriately communicate meanings through their advertising will be at a considerable advantage. In order for a display to be successful, it is crucial that the communicated message and the brand are integrated into the creative content. This will lead to desired mental connections, otherwise the brand might not be noticed even if the content is recalled. In other words effective advertising should always be effective brand communication. (Batey 2008)

2.3.1 Impact of displays

Nordfält (2011) studied aspects of improving the displays' attention-capturing abilities by varying the design and the components combined in a special display. 13500 customers were observed as they approached special displays and it was found that retailers can considerably increase the sales by changing from one display design to a design much more effective in directing consumers' observational behavior. (Nordfält 2011) Thus, changing the displays and their design can improve the impact of them.

This is also supported by the figures from Point of Purchase Advertising International (POPAI, 2012). As stated in POPAI, 13 % of eye fixations were made to in-store displays (which is a high number in the field of eye-tracking) and more than 1 in 6 acquisi-

tions are made when a display with that brand is present in the store. Thus, the effectiveness or impact of displays and their stimulation on the consumer decision making becomes fundamental in leveraging sales. (POPAI 2012)

2.3.2 Displays at the point of purchase decision

A recent experiment showed that sales in hypermarkets are enhanced when digital displays are on. However, in supermarkets the influence only has a minimal effect on sales and in small stores (e.g convenience stores) the digital displays actually have a negative impact on sales. This would suggest that bigger stores with more aisles and stock keeping units are more likely to influence customers with in-store stimuli such as displays and in smaller stores digital displays can be seen as disrupting the usually quick and efficient shopping that is usual for these types of stores. Because of this, the content of the display becomes important. The study showed that for digital displays to increase sales, the message content must promote price, whereas non-price content did not impact sales. Therefore, the digital displays content that are of non-price it becomes utterly important to display relevant visual information. (Roggeveen et al. 2016) A similar conclusion is also in Menon et al. (2016) research of consumers' attention to price in social commerce. There is a higher fixation on price when the price is placed along with a picture. Thus, it seems that a visual stimuli and price complement each other and together receives a higher fixation from consumers.

However, it seems that brand consideration is much more attention attracting than price. Consumers did not note the price if they had not noted the brand (Chandon et al. 2007) and only high priced brands were more likely to be recalled. Otherwise, the price had no effect on attention (Chandon et al. 2009). This would suggest that price does not have the main impact on visual attention. Interestingly Huddleston et al. (2015) found that signs with price have a higher fixation count than signs with product information. Nonetheless, the likelihood to buy was higher for consumers viewing only product information displays, which would suggest that price should be a secondary message in influencing consumer decision making at point of purchase.

2.4 In-store influencing factors on consumer decision making

Regardless of how much information we get outside the store through advertising and research, when we are actually in the store, the store environment can exert strong influence on many purchases. So much that we can even forget the predefined decision to buy something or make the consumer more likely to make a spontaneous buying. This occurs for two reasons. Firstly due to an *unplanned buying* when the consumer is reminded of something in the store and realizes she needs it, there is a time pressure or when the store's layout is unfamiliar. The second reason is *impulse buying*, which is when a consumer experiences a sudden and persistent urge to immediately buy a product offered that he or she simply can't resist. (Solomon 2013, Evans et al. 2008 p 96)

The aim of the marketers is to evoke these effects in consumers and because of this the influencing factors in-store becomes an important approach to impact consumer decision making at the point of purchase. Visual stimuli is a great way to evoke these feelings. Aspects of Hefer & Cant's study show that consumers' attention is drawn to certain aspects (such as colour and breathing space in the store) of visual merchandising displays. This makes for a positive shopping experience which hopefully will lead to a purchase decision made in the store. (Hefer & Cant 2013) It seems though that younger and more educated consumers are more affected by in-store marketing since they are more open and willing to consider and select brands that are brought to their attention by in-store influencing factors. (Chandon et al 2009)

The goal of in-store displays is to attract consumers' visual attention and thus increase the likelihood of a purchase decision at the point of the purchase decision. (Chandon et al. 2009) The aim of Hefer and Cant's research was to see if visual merchandising displays in a store effect the consumer's decision to make a purchase. As regards the consumer purchase decision making, the authors concluded from their study that the displays influence to a limited amount. It is more a question of the displays guiding the consumers in the direction of the products they are seeking and guiding their product choice, thus, aiding the consumer in the final stages of the decision making regarding the purchasing of a specific product. Though there are still other factors that will impact the final choice. (Hefer & Cant 2013)

2.4.1 In-store decision making

While it is true that consumers' decisions are not only made in the store, there is still an overwhelming number of purchasing decisions that are. According to figures from Point of Purchase Advertising International (POPAI, 2012) more than 76 % of decisions are made after the shopper enters the store, which shows an increase from 1995 when it was 70 %. Chandon et al. (2009) showed that a higher attention in-store increases consideration and choice of new brands but this is only true to a certain extent. It is not only in-store factors that impact consumers' choices, even if it has a higher influence on visual attention, but the positive out of store evaluation (and past brand usage) will increase brand preference and in turn increase the attention and consideration in-store. (Chandon et al. 2009)

What is interesting is that even though Breugelman's and Campo's (2011) research was conducted for displays in a virtual store environment the same implications can still be drawn in an actual store. By appearing early in the shopping process there is a higher influence and control on targeting the consumers at the time and place they make their purchase decision. (Breugelmans & Campo 2011) Often the decision making does not occur until a shopper actually sees a product in the store and therefore it is essential how the product is displayed and supported by in-store marketing materials and their ability to attract consumers' attention.

2.5 Literature summary

One of the main aims for an in-store display is to persuade the consumer into buying the product that is advertised. This is not one of the easiest tasks as there are a number of factors influencing the consumer decision making. Thus the importance of the display firstly attracting visual attention becomes vital. This can be done in a manner of different according to the studies cited above. After the display has attracted visual attention it still needs to communicate the advertised products attributes. This is mainly done through design elements that reinforces the verbal element. Here however, it is important that the display is perceived of as a superior quality. This again will lead to the in-store display positively influencing the consumer decision making into purchasing

the advertised product. According to the literature review all three topics are equally important into making an in-store display effective.

3 METHOD

The primary method of this study was the usage of eye-tracking supported by a quantitative research in the form of a questionnaire. The research was done in two different phases. During both phases all participants went through the exact same experiment and was given the exact same instructions. In the first phase, participants were asked to look at three different videos all containing three different displays of the same products (Fazer Vatsaystävälliset). No instructions on what to look for was given beforehand. After this a short questionnaire was answered by the participants.

After the first phase was analyzed, the researcher could move on to the second phase. In the second phase, only the display that scored the most in terms of visual attention (and positive feedback) in the first phase was used, in order to better assess if the content is comprehensible on the display. The participants in the second phase were asked to look at the display and again answer a questionnaire afterwards.

In order to get a better understanding of the eye-tracking data, two different questionnaires were designed for the two phases. Both questionnaires contained demographic questions and questions about participants' bread consumption. The questionnaire from phase one was more aimed at investigating the displays' level of attracting visual attention and influencing consumer decision making. The questionnaire in phase two, on the other hand, focused more on the content of the display and its impact on consumer decision making

To answer the research questions, data from the eye-tracking experiments were analyzed and compared with answers from the questionnaires.

3.1 Eye-tracking

Simply put, the name “Eye-tracking” can shortly be explained as a technology that tracks where a person is looking. What perhaps is more of interest, is why there is an interest in recording the human eye movements. When we look at a picture we move our eyes over it and most often divert our attention to a specific object or region where we focus our concentration, if only for a brief moment. The eye-tracker can measure both the eye movement over the picture and how long the eye is positioned on a certain object or region in the picture. Since this is traceable we can get insight into what it is in the image that draws the attention of the eye, which also is called visual attention. (Duchowski 2007 p. 3) There are different ways of tracking eye movements but the most widely applied procedure is through video-based, combined-pupil/corneal reflection systems. Corneal reflection is created typically by infra-red light which is guided towards the eyes and measured relative to the location of the pupil center, thus registering the eye movements. There are two movements that can be registered with eye-tracker, *saccades* and *fixations*. Saccades are rapid eye movements when the eye moves from one fixation to another, they range in duration from 10ms to 100ms. During these quick eye movements or saccades the person is actually blind, which is what the eye-tracker registers. The movements are then presented as a line over the stimuli, therefore making it possible to follow the eye movements over advertisements. Fixations on the other hand are when the eye movement is stabilized, lengths varies from about 150ms to 600ms, and information is gathered about the visual stimuli. Eye-trackers register the number of fixations as well as their lengths on a stimulus. The eye-tracking data is generally divided between specific areas of interest (AOI). Areas of interest is a specific stimulus area on the advertisement, such as an image or a brand name. The boundaries of the area is set by the researcher and stems from the purpose of the experiment and the design. The areas of interest are then analyzed between each other and visualized through gaze plots (shows saccades and fixations) and heat maps (darker color more and higher fixations, lighter color less and lower fixations). (Duchowski 2007 & Tobii a.) Eye-tracking technology has displayed heaps of advantages and below the technology that will be used in this experiment is shortly presented.

3.1.1 Stationary eye-tracker Tobii T120

The Tobii T120 Eye tracker (Figure 2) is a stationary eye-tracking device produced by Tobii (formerly known as Tobii Technology AB). The table-mounted eye-tracker looks like a common flat panel display but beneath the 17” monitor there is an eye-tracker embedded. This allows the participants to behave naturally in front of the screen as there is no visible or moving tracking devices that might affect the respondent. (T-Series)



Figure 2. Tobii T120 Eye Tracker (T-Series).

3.1.2 Eye-tracking glasses Tobii Pro Glasses 2

The Tobii Pro Glasses 2 (Figure 3) is a wearable eye-tracking device that is produced by Tobii. Since the glasses are wearable and wireless they are perfect to use in real-world environmental experiment with little distraction for respondents as they look at stimuli. The glasses shows exactly what the person is looking at in real time and is intended to be used in research activities about human behavior including eye movements. (Tobii Pro b.)



Figure 3. Tobii Pro Glasses 2 (Tobii pro b.).

3.1.3 Eye-tracking study

There have been several past eye-tracking researches that support the use of eye-tracking technology as a study method in understanding consumer behavior and consumer decision making. Rosbergen et al. (1990) used eye-tracking to study consumers' visual attention over print advertisements. Key print ad elements such as headline, pictorial, bodytext and packshot were measured to understand the impact of repetition on advertising effectiveness. The authors found that repetition reduces the amount of attention paid to the ad and its elements but does not dramatically change the order of scanning the advertisement's elements. (Rosbergen et al. 1990) In 1997 Rosbergen, Pieters and Wedel did a research of individual eye movements to study consumers' visual attention to advertising and its physical properties. Based on the use of different consumer segments the authors detected unique patterns of visual attention for physical advertisement properties as well as with respect to product involvement, brand attitude and advertising recall. (Rosbergen et al. 1997)

Pieters and Wedel (2004) used eye-tracking to demonstrate the effect three advertisement elements, including brand, pictorial and text size have on visual attention towards the advertisement. The authors clearly found a relationship with size being the foremost element of capturing attention to advertising.

More recently eye-tracking research has been focusing on the evaluation of point of purchase marketing. (Chandon et al. 2007) In 2009, Chandon et al. studied how placement of shelf displays assess brand consideration and added insight into how the number of shelf facing and position of shelf affect attention.

The use of eye-tracking research can help us understand and study the consumer’s decision making process (Clement 2007). Nordfält (2011) however observed that, “Despite the typically large and hence promising sales effects of special display studies, the area is not particularly well mapped out. For instance, special displays are assumed to be a powerful tool to capture the customers’ attention. Yet, this aspect is very little elaborated on in academic studies” (Nordfält 2011 p. 169). Clement et al. (2013) also noted that in marketing research the effects of visual cues in-store are not comprehensively explored. Hence, the authors above recognize that learning more about capturing attention and the power of in-store visual cues are of academical interest and should not be overlooked. The research efforts above, contribute to using eye-tracking as a research method to reveal and understand consumer behavior and consumer decision making process.

3.2 Phase 1

The main aim of the first phase was to determine which of the following three different displays attract visual attention and to what extent. The second aim was to see if the display influenced participants’ consumer decision making as regards purchase decisions. The following advertisements, A, B and C that were made by Fazer, were used in the test (Figure 4). Display A and B had only minor differences like the “Uutuus” sign in the right corner and the “Parempi leipä” logo being of a different size. Display C had a different layout and communicated a different message.



Figure 4. A, B and C displays used in phase 1 (courtesy of Fazer Bakeries).

3.2.1 Experiment

The experiment was done in K-Citymarket Myyrmäki 14 October 2016, with the permission of the store owner. Three similar videos were made, all containing one of the three different advertisements. The video was filmed in the form of a person walking into the store's bread department and seeing the in-store display on the right side of the bread shelves (Figure 5). Although a virtual film was used, it was contextualised within the store and rendered from the perspective of a shopper and thus preserving the context of walking in-store.



Figure 5. Example picture from the store, K-Citymarket Myyrmäki.

The eye-tracking experiment was then conducted in Arcada on October 21st 2016, simulating a situation when a person walks into the bread department. A sample of 12 randomly selected participants, took part in the study. All participants did the test individually. The only information beforehand was that the test is about a store's bread department (and the buying behavior there). Before showing the videos, participants were asked to answer what type of bread they are going to buy or usually buy in-store. After this, participants were simply asked to watch the three different videos subsequently with no further instructions on what to look for, thus keeping it as close as possible to actually walking in the store. After the videos were viewed participants were asked to

answer the questionnaire and informed that the study actually concerned the Fazer displays. Finally, pictures of all three displays were shown to the participants and they were asked which of the displays they recall.

3.2.2 Data collection and analysis

The Tobii stationary eye-tracker was used to record in real time as the participants watched the videos. Each participant was seated in front of the Tobii eye-tracker screen and first underwent a calibration procedure to ensure that the eye-tracker could read the participants eye movements. The researcher was able to use all 12 participants' recordings. However, one of the participants did not once look at any of the Fazer displays and therefore the visual attention could not be analyzed for this participant.

In the first phase, the whole advertisement was used as one area of interest (AOI) since the main aim was only to see how effective the display is at drawing attention. The following attributes were analyzed using the Tobii Studio software.

- The time to the first fixation on the advertisement
- The time of the first fixation's duration
- The number of fixations on the whole advertisement
- The average fixation duration
- The sum of the fixation duration

The individual participants' data was extracted from Tobii software into text files and imported into Excel for further analysis.

The experiment's questionnaire consisted of questions about the respondents' typical consumer behavior as regards bread, if they noticed and what they thought about the display and a few demographical questions (Appendice 1). Answers from the questionnaires were collected and entered into Excel. In Excel, a pivot table was created in order to easily analyze the data

3.2.3 Participants

The participants in the first phase were both male (5) and female (7) with most being in the age group 30-39 (Table 1). The main reason for the biggest sample belonging to the age group 30-39 is that individuals in this group are more likely to not only buy for themselves but also for others. They also follow health trends and are more likely to notice displays in-store. Half of the participants stated that for health reasons they are eating less bread than before but all participants still eat bread. None of the participants normally use Myyrmäki K-Citymarket, which makes them more susceptible to visual displays in the environment, as it is unfamiliar.

Table 1. Gender and age group of the participants in phase 1.

Age group	Gender		Sum
	Female	Male	
20-29		1	1
30-39	6	4	10
50-	1		1
Sum	7	5	12

3.3 Phase 2

In the second phase, the experiment was done with the display that was able to attract visual attention and receive most positive feedback in phase one. The aim was to analyze this display more in depth as regards content and communication and if it affects consumers' decision making. Display B was used in the second phase, since it got most positive comments and was clearest in its structure (Figure 6).



Figure 6. Display B used in phase 2 (courtesy of Fazer) and image of phase 2 experiment.

3.3.1 Experiment

On the 7th of November 2016, the experiment took place at the researcher's workplace in a closed off meeting room (no windows) to avoid any outside influences. The display was attached to a door at eye level (Figure 6). When the experiment started the door was shut and the display was revealed to the participants. This was done in order to avoid the participants seeing the display before the actual start of the experiment. In this phase, 16 randomly selected participants, participated in the experiment. All participants were asked to stand at the same spot to have the same distance between participant and display and in order to better analyze the final results. Again all participants did the test individually, the only information they were given was that they will be asked to look at a display shortly and answer a questionnaire afterwards. The participants received no information or indication in advance on what kind of display the experiment was about or what kind of questions will be asked.

3.3.2 Data collection and analysis

In the second phase, instead of using a stationary eye-tracker, the Tobii eye-tracking glasses were used to record in real time as the participants watched the display. Each participant was asked to wear the eye-tracking glasses and undergo a calibration procedure to ensure that the eye-tracker could read the participants eye movements. For a couple of participants the calibration had to be done twice but the eye-tracker was able

to read all 16 participants' eye movements. However, one of the participants moved around too much so only 15 participants' results will be analyzed.

In the second phase, the main areas of interest were the different features on display B. In other words the breads, the text, the Fazer logo and the Parempi leipä logo. To assess these, participants' gaze plots and heat maps were analyzed using Tobii Pro Glasses Analyzer software. The data was then analyzed and compared with the participants answers from the questionnaire. The questionnaire consisted again of questions about the respondents' typical consumer behavior as regards bread, but the later questions focused more on the content of the display (Appendice 2). Answers from the questionnaires were collected and entered into Excel. In Excel, a pivot table was created in order to easily analyze the data

3.3.3 Participants

In phase two, the participants were both male (3) and female (12) with the age group 30-39 being mostly represented (Table 2) in order to keep it similar to phase one. Over half of the participants stated that they have tried to eat less bread during the last year. The main reason being health and dietary restrictions. Because of this, the participants make for a good sample in order to study if the display that should communicate healthy bread actually does this and if it is clear to the participants.

Table 2. Gender and age group of the participants in phase 2.

Age group	Gender		Sum
	Female	Male	
20-29	3	1	4
30-39	6	2	8
50-	3		3
Sum	12	3	15

3.4 Validity and reliability

The validity of the research is determined by whether the research actually measures that which it was intended to measure. As regards eye tracking experiments the truthfulness of the data is always questioned. In this research, one strong indicator of the validity is the data quality obtained from the eye tracker, since the results of the research are clearly dependent on the quality of the data. These statistics are presented in the results section for both phases.

There are however factors that influence the quality of eye tracking. Holmqvist et al. (2012) brings up the following aspects that can influence the data quality: participants' eye characteristics, the skill and experience of the operator, the task itself, the environment of the study and the eye tracking equipment and design. Looking firstly at phase one of the research, none of the participants had glasses since it would not have been possible to measure the data in that case. Only one of the participant's wore contact lenses, nevertheless the data quality still showed a good level. The experiment did not require any significant movements and only basic technical setup was required to collect the data. Hence, the skill of the operator should not have any significant effect on the quality of the data. Furthermore, the experiment was conducted in Arcada's eBusiness Lab room which is a solid and suitable environment for eye tracking studies.

Considering the same aspects in phase two, more or less the same things can be concluded. The usage of eye-tracking glasses only made it possible to use participants who do not use glasses or contact lenses. All participants were asked to stand at the same place when looking at the display and therefore it did not require much movement. Either way the eye-tracking glasses does not prohibit movements, only the analyzing phase might become cumbersome. There was no problem with the equipment of the eye-tracking glasses and therefore the skill of the operator should not impact the quality of the data. In addition, the phase two experiment was organized in a closed of room with very little distractions from outside.

Finally, the quality of the eye tracking equipment is of a high level as presented earlier and thus able to measure precise data. Conclusively, the validity of the research should not have been lessened to a large extent by the above mentioned data quality factors.

In order to fulfill the reliability of the results, the experiment was conducted separately with all participants in order to avoid any influence from other participants. Instructions were given before the eye tracking test and before the questionnaire. All questionnaires have been in written form and saved in order to make sure that the information will be reliable for later results analysis.

4 RESULTS

To answer the research questions a two phase research study was conducted. The first phase was to get insight into which of the three displays had the best ability to attract participants' visual attention and possibly influence their decision making. The display that was considered most effective in this aspect was used in the second phase. To get a better understanding of what made this display effective in terms of content and communication and if it has an impact on consumer decision making, a second experiment was conducted.

In the first phase, the experiment took an average of ten minutes for each participant. The eye tracking data measured from Tobii software showed an overall high quality, in other words how large percentage of the eye movement was recorded. Well over half of the majority of the participants had over 90 % of their eye movement recorded with the lowest being 82 %. In eye-tracking research this is a very good result and an indication of high quality data.

In phase two, each participant was asked to look at the display for an average of 15 seconds. After this each participant spent a few minutes filling in the questionnaire. The eye-tracking data collected from the Tobii eye-tracking glasses showed a very high quality of data with the average of the gaze samples being 96,3 % for 15 participants.

4.1 Phase 1

The first phase of the study is connected with the aim, especially research question one, “Does the display attract visual attention?” and to some extent to research question three, *Can the in-store display positively influence consumer decision making?* In order to assess this the objective of the first phase was to see which of the following three different posters got the most attention (and if any conclusions about the content can be drawn). The second aim was to see if it influenced the participants’ decision making. For this phase, the whole display was used as an area of interest.

The age group of the participants was already presented earlier and as expected over half, 67 %, of the participants buy bread for their family, whereas the rest buy for themselves. The participants’ bread consumption is summarized in the table 3 below.

Table 3. Summary of participants’ bread consumption in phase 1.

How often do you eat bread?	Female	Male	Sum
Very often (several times per day)	2	1	3
Often (once a day)	2	3	5
Less often (once a week)	1	1	2
Very rarely (a few times a month)	2		2
Sum	7	5	12

Interestingly almost half of the participants eat bread at least once a day, even though 50 % stated that they have tried to reduce their bread intake.

4.1.1 Visual attention

In order to better understand the displays’ attention attracting ability a statistics called “time to first fixation” and “first fixation duration” has been extracted and analyzed. Time to first fixation tells how long it took for the participants to first look at the display, and the duration how many seconds they looked at it before moving on to some-

thing else. The interpretation is that the shorter the time to first fixation the better the display is at attracting attention.

As one participant did not at any stage look at any of the displays, only 11 participants' information will be analyzed for this stage.

For display A it took an average of 19,54 seconds before the participants first fixated on the advertisement. The average of the first fixation duration was 0,33 seconds (Table 4).

Table 4. Display A. Time to first fixation and first fixation duration.

Display A

	Time to first fixation	First Fixation Duration (seconds)
	18,08	0,77
	18,25	0,17
	19,06	0,21
	19,24	0,03
	19,29	0,58
	19,32	0,01
	19,37	0,2
	19,46	0,78
	20,52	0,35
	21,15	0,25
	21,20	0,32
Average	19,54	0,33

The average for display B was 20,73 seconds and it showed a lower first fixation duration with the average being 0,24 seconds (Table 5).

Table 5. Display B. Time to first fixation and first fixation duration.

Display B

	Time to first fixation	First Fixation Duration (seconds)
	16,21	0,08
	17,21	0,72
	18,09	0,07
	18,14	0,33
	19,16	0,27
	20,00	0,29
	22,64	0,27
	22,86	0,22
	24,19	0,07
	24,66	0,2
	24,86	0,08
Average	20,73	0,24

For displays C it took the longest amount of time before the participants noticed it with an average of 23,52 seconds and first duration time being 0,31 seconds (Table 6).

Table 6. Display C. Time to first fixation and first fixation duration.

Display C

	Time to first fixation	First Fixation Duration (seconds)
	20,20	0,47
	21,46	0,35
	22,15	0,06
	22,94	0,08
	23,02	0,2
	23,16	0,23
	23,93	0,07
	26,09	0,25
	26,21	1,1
	26,43	0,37
	23,15	0,28
Average	23,52	0,31

This would suggest that display A and B have the largest attention attracting ability. Even if display B's first fixation duration is low, it does not necessary mean that it is a

negative thing. It might also suggest that the display is clear in its content and the participants do not need to gaze at it for a long time to absorb all the information, as it had the least amount of text and pictures overall. This is also suggested by the questionnaire where 64 % of the participants who noticed the displays informed that they remember display B best (A and C both got 18%).

As can be seen from the numbers above, the participants all looked at the displays. However, of the participants, 92 % remembered that they noticed one of the Fazer displays in the videos. The participant who did not notice the displays answered that she never looks at ads in-store. Unfortunately however, only 25 % of the participants actually remembered what bread was on the displays, indicating that even if the display demands visual attention the content is not memorable. Interestingly though, when asked why the display got their attention (max 2 reasons to be given), the majority of the participants answered that “good visual ad” was the number one reason. The options “good place” and “new product” were the second most popular reasons given for why the display attracted attention. Figure 7 below, shows a compilation of the answers given per display and the total answers.

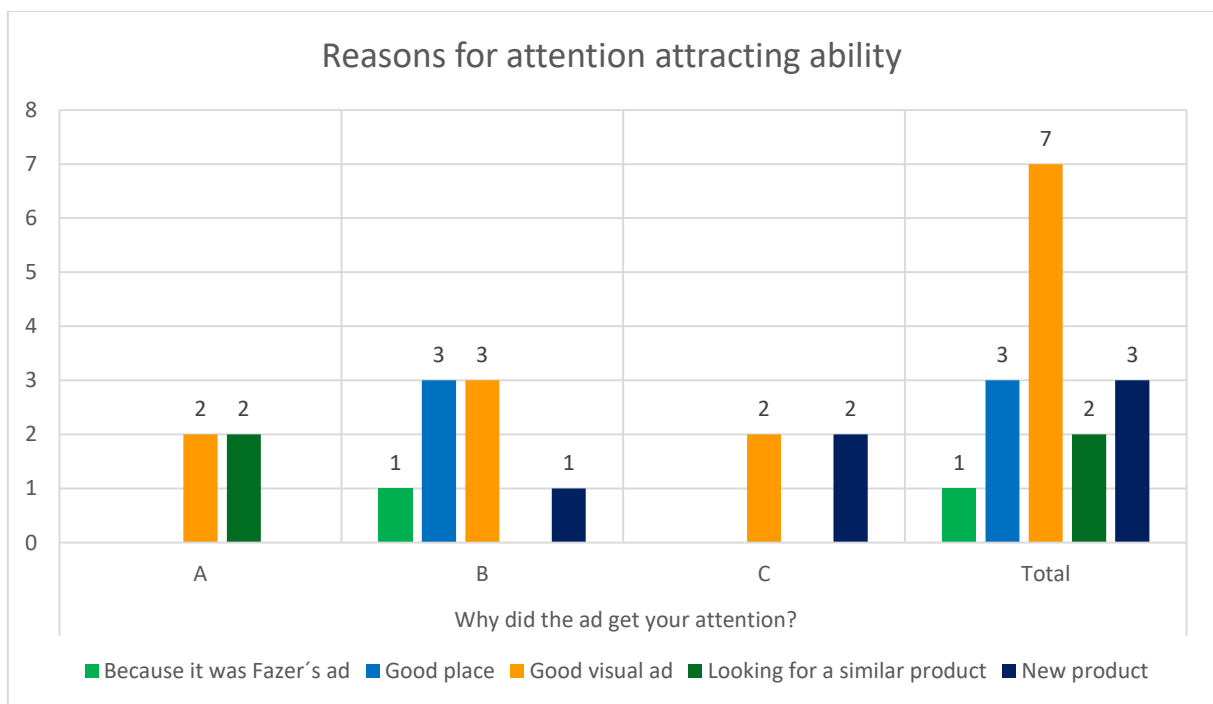


Figure 7. Summary of why the displays got participants attention in phase 1.

In order to get a deeper understanding of the visual attention, the total fixation times and the sum of it is analyzed. Even if only 18 % of the participants informed that they only remember display A, the exported information from eye-tracking shows that display A was viewed an average of 5,5 times with a fixation sum of 1,52. The participants fixated on display B an average of 3,5 times and on display C an average of 3 times (Table 7).

Table 7. Summary of fixation duration, times, mean and sum.

Average	Fixation Duration times (Count)	Fixation Duration mean (seconds)	Fixation Duration Sum (seconds)
Display A	5,50	0,33	1,52
Display B	3,5	0,29	0,84
Display C	3	0,29	0,97

4.1.2 In-store influencing factors on consumer decision making

The participants were also asked if the display influenced their purchase decision and, as can be seen from table 8, unfortunately only one participant informed that it did.

Table 8. Summary if the display influenced participants purchase decision in phase 1.

Did the ad influence your purchase decision?			
	Female	Male	Sum
I had already decided in advance	3		3
No	3	5	8
Yes	1		1
Sum	7	5	12

This participant also stated that the display attracted attention because she was looking for a similar product, which was a different Fazer bread. Three participants informed that they had already decided what to buy and the rest of the participants informed that the displays had no effect on the purchase decision. However, it should be noted that one of the participants who informed that the display had no effect on the purchase decision, already in the beginning informed that he was going to buy Fazer's Vatsaystävällinen bread.

In table 9 is a summary of what type of bread the participants stated that they usually buy when going to a grocery store. Although all the participants gave different answers, it is still noticeable that the most popular bread is some sort of rye bread.

Table 9. Summary of what bread participants usually buy in phase 1.

What bread do you usually buy?	Sum
Female	7
Juuresleipä	1
Jälkiuunileipä	1
Myslileipä / ruis	1
Reissumies	1
Tuoreleipä / monivilja	1
Tuoreleipä / ruis	1
Täysruis / kaura	1
Male	5
Paahtoleipä	1
Reissumies / Ruispalat	1
Reissumies tumma	1
Vatsaystävällinen	1
Depends on the mood	1
Sum	12

The low feedback of the display influencing purchase decision can partly be explained by the participants already having something else in mind when going to purchase bread, as can be seen from table 9.

On the other hand, it is not surprising that the displays did not affect the purchase decision as it is conclusive with the result of not remembering what bread or product was on the display. How can the participant get influenced by the displays if they do not know what they are looking at? Therefore, in phase two, the focus will be more on whether the display actually changes the consumer decision making when participants are asked to look at it. In phase two, the communication and content of the display itself will have a higher focus.

4.2 Phase 2

In the second phase of the study, the connection with the aim is primarily to research question two, “*Is the intended communication and content comprehensible on the display?*”, secondly to research question three “*Can the in-store display positively influence consumer decision making?* On the display, there are four main areas of interest that will be looked at in greater detail. In order to interpret the different areas of interest on the display heat maps and gaze plots will be analyzed as well as the questionnaire and how the answers connect with the eye-tracking data.

During the experiment of phase two, one participant moved around too much to get any clear conclusive data to compare with the display itself and with other participants. Therefore 15 participants’ results will be analyzed and presented for phase two.

The gender and age group distribution was previously presented in the participants section. The split between buying bread only for yourself (47 % of the participants) and for your family (53 % of the participants) is pretty even between males and females. The significant difference can be seen in the age distribution where younger participants only buy bread for themselves (Table 10).

Table 10. Summary of whom participants buy bread for in phase 2.

Do you usually buy bread?	Age group			Sum
	20–29	30–39	50–	
For your family		6	2	8
For yourself	4	2	1	7
Sum	4	8	3	15

Regarding the consumption behavior of the participants the majority of them eat bread at least once a day, only two participants eat bread several times a day with the rest eating significantly less (Table 11).

Table 11. Summary of how often participants eat bread in phase 2.

How often do you eat bread?			
	Female	Male	Sum
Very often (several times per day)	2		2
Often (once a day)	6	2	8
Less often (once a week)	2	1	3
Very rarely (a few times a month)	2		2
Sum	12	3	15

Again, this becomes interesting as 60 % of the participants informed that they have tried to eat less bread during the last year.

4.2.1 Communication and content

Looking at all the participants' combined heat maps on the display (Figure 8), it clearly shows that the text and the breads, mainly the orange bread package (in the middle), got the most attention. Some attention was given to the Parempi leipä logo, but here it was mainly the thumbs up picture and not the text, and lastly the Fazer logo.

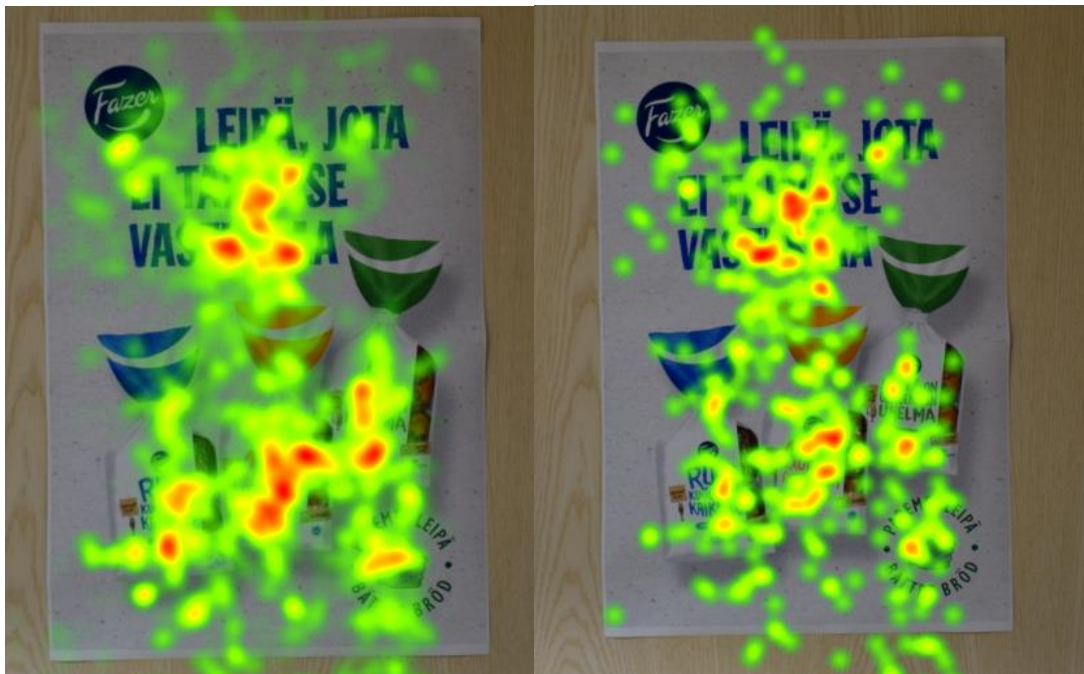


Figure 8. All participants heat map result, visualized in raw and fixation format in phase 2.

The small attention given to the Fazer logo can also indicate that it is so familiar and recognizable that there is no need to look twice. The combined heat map is also conclusive with the questionnaire answers of which part of the display got the most attention. Breads and text clearly received most attention with the Fazer logo only receiving some. Participants were able to state the top two things that received their attention the most. If they only felt that one thing attracted their attention, it was allowed to leave the other choice empty. Interestingly, the Parempi leipä logo did not receive any attention, which could be due to the logo being unfamiliar to participants and them not recalling it.

Table 12 shows horizontally the number one attribute on the display that received most attention. Vertically is the second attribute that received most attention on the display.

Table 12. Summary of what areas of the display got most attention in phase 2.

What got your attention the most? 2				
What got your attention the most? 1	Fazer logo	Text	Empty	Sum
Breads	1	3	3	7
Fazer logo			2	2
Text	1		5	6
Sum	2	3	10	15

The two participants (participant 7 and 12) who informed that the Fazer logo received most attention did, interestingly, not tick anything else. Instead they choose to leave the second option empty (Table 12). However, if we look at the heat maps for these participants, especially participant 7 who clearly focused on the middle bread, it tells a slightly different story (Figure 9).



Figure 9. Participant 7 and 12 heat maps in phase 2.

The first gaze plots of the participants indicate similar results (Table 13): the text and the breads are the features that receive the majority of the first gaze plots. In the age group 30-39, the text is the clear majority.

Table 13. Summary of first gaze plots in phase 2.

First Gaze plots

Age group	Breads	Text	Fazer logo
20-29	2	1	1
30-39	2	6	
50-	2	1	
Sum	6	8	1

Since all the participants looked at both the text and the breads there will be gaze plots for both attributes. The main differences are the attention to the Fazer logo and the Parempi leipä logo. Some participants did not look at the Fazer logo at all and some did not notice the Parempi leipä logo.



Figure 10. Gaze plots for participants 1, 12, 13 and 16 in phase 2.

In the gaze plots examples above (Figure 10), the Fazer logo did not receive any gaze plots. Instead, the focus was on the text and the breads, with the Parempi leipä logo still receiving some attention. In the cases below (Figure 11), the Parempi leipä logo did not receive attention and in some cases neither of the logos received any attention.



Figure 11. Gaze plots for participants 10, 5 and 6 in phase 2.

Naturally, there were also participants that gazed at all four different parts of the display.

Looking at the participants' answers about the best thing of the display, the "new product" and "overall look" got the most answers. The youngest age group did not care for the advertisement message and the brand only got answers in the age group 30-39 (Figure 12).

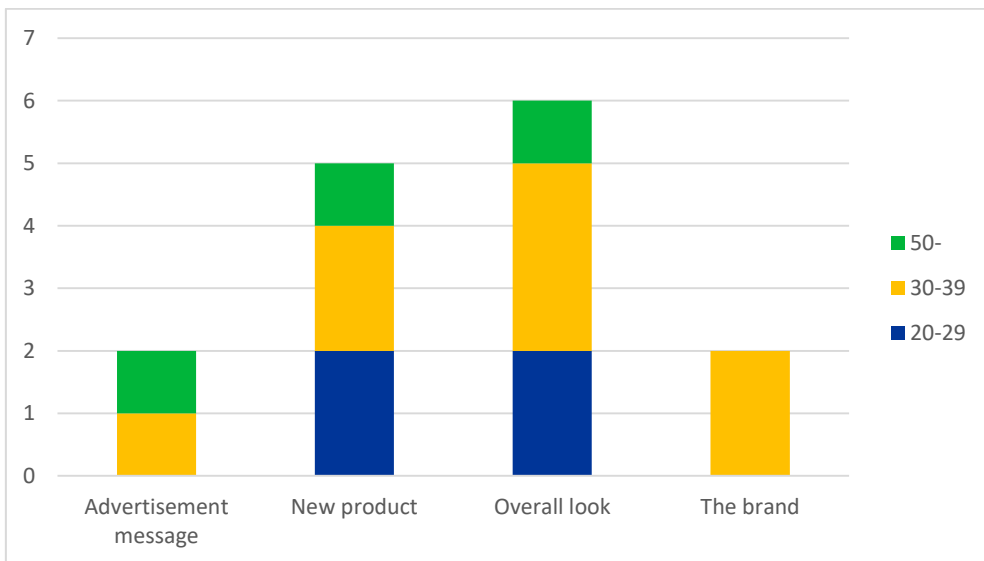


Figure 12. Summary of what the best thing in the display was in phase 2.

Interestingly, the two participants who answered that the best thing on the display was the advertisement message answered that they did not remember what product was on the display, but they did answer that they noticed something was different with the breads. This would indicate that the message and bread packages does not support one another. Only 60 % of the participants remembered what bread products was on the display but 67 % of the participants noticed that there was something special with the breads (e.g. gluten free or 100 % oats).

The participants were also asked to answer what kind of image the display gave them. The comment “healthy” and “fresh” came up several times, which would suggest that the overall design is conveying the correct message. Below is a list of the comments received and a grouping with similar comments (Table 14).

Table 14. Summary of what kind of image the display gave participants in phase 2.

What kind of image did the ad give you?	Sum
Clear	1
Clear & interesting	1
Interesting	1
Sum	3
Fresh	2
Healthy & Colorful	1
Healthy	2
New healthy bread	1
Sum	6
Suitable for all	1
New innovation	1
Worth trying	2
Sum	4
Hungry	1
Don't know	1
Sum	2
TOTAL	15

4.2.2 In-store influencing factors on consumer decision making

When asked if the participants would notice the display in-store, 13 of the participants, which is 87 %, said that they would notice the display in-store. Unlike the answers in phase one, 67 % of the participants in phase two thought that the display would influence their purchase decision (Table 15).

Table 15. Summary of if the display would influence participants purchase decision in phase 2.

Do you think the ad would influence your purchase decision?	Female	Male	Sum
I always buy same bread	1		1
No	3	1	4
Yes	8	2	10
Sum	12	3	15

One explanation for the increase of the display influencing the purchase decision in phase two participants is that in this phase, the participants were asked to actually look at the display. This gave the participant more time to understand what the products are. This in turn gives the display a higher chance of influencing participants, which is also indicated in the increase of participants remembering the products, as accounted for earlier. Another explanation for this can also be that 60 % of the participant informed that they have tried to eat less bread during the last year with the main reasons being less carbohydrates and dietary and health reasons. For these participants, the Vatsaystävälliset bread on the display is a good option. This is also conclusive as regards the answers on what kind of bread the participants usually buy (Table 16). A great deal is rye bread and different multigrain, oats and Juuresleipä, which again would suggest that the breads on the display are good alternatives.

Table 16. Summary of what bread participants usually buy in phase 2.

What bread do you usually buy?	Sum
Female	12
Bread with seeds	1
Changes	1
Dark bread	1
Juuresleipä	1
Perheleipuri Salonen ruisleipä	1
Real ruis	1
Reissumies	1
Reissumies tosi tumma	1
Rye bread	1
Toast multigrain	1
Vaasan ruispalat	2
Male	3
Oats bread	1
Perheleipuri Salonen	1
Vaasan ruispalat	1
Sum	15

Finally, in the phase two experiment, there were also more participants in a younger age group, which could explain why the display scored a higher influence on the purchase decision, as younger consumers are more affected by in-store display. This is also correlated by the answers in figure 12 and table 14, where new product and overall look scored high as regards the best thing on the display (Figure 12) as well as the fact that participants found the image on the display interesting and worth trying (Table 14).

5 DISSCUSSION AND REFERENCE TO PREVIOUS RESEARCH

The objective of this research was to examine the effectiveness of in-store displays as regards whether they work in (I) attracting visual attention, (II) is the intended communication and content comprehensible on the display and (III) can the in-store display influence consumer decision making positively. To answer these questions, a two phase eye-tracking experiment with a complementary questionnaire was conducted.

As already discussed in the introduction, rye bread is one of the most popular bread types in Finland. When looking at the questionnaire, answers from both phases, it becomes clear that this is still the case. One of the major problems in the bread industry is the decline of the bread consumption. This becomes evident in both phases of the study as half, or over half, of the participants informed that they eat less bread than before. The main reason for this was either health reasons or dietary reasons with participants eating less carbohydrates and requiring gluten free bread. This is already a major prerequisite that will influence consumers' decision making. For Fazer Bakeries, this is a good starting point for the Vatsaystävälliset-bread displays to get noticed, as it should communicate the same values and healthy lifestyle as that of the participants.

5.1 Consumer behavior

The in-store displays are external factors that aim at influencing the consumer decision making. One way for an external factor to get noticed is the advertising of a better and newer product that can satisfy the consumer's need or desire. The displays are of new products which would suggest that it has a great chance of influencing the consumer decision making.

The majority of the participants from both phases informed that they not only buy bread for themselves but for the whole family. Therefore it still becomes important that the displays not only focus on individual consumption decisions, even if it is increasing within the family.

5.2 Visual attention

Let us go back to the three main mechanism of visual attention, the where, what and how. The new products on the display can attract attention as it is something new (Von Helmholtz - where). As a majority of the participants stated that they eat less bread due to health and dietary reasons, the products on the display could be characterized as something that the consumer needs and which thus draws attention (James – what). In phase one there was one participant that did not look at any of the displays. Instead she mainly focused on the in-store bakery which was visible in the background of the videos. This participant also informed beforehand that she mainly buys freshly baked bread. This showed a clear connection between the visual attention and the participants' advance preparation (Gibson – how)

The findings of phase one, which focused on the visual attention attracting ability, did not show any strong support for the correlation between liking the advertisement and time spent looking at it (Maughan et al. 2007). Instead the results indicate the opposite. Display B, which had the lowest fixation duration, was the one that participants recalled best. This would suggest that not only the size of the pictures and text have unique effects on visual attention (Pieters & Wedel 2004), but, according to the researcher, also the amount of letters. Display B, with less letters, had a lower fixation time but a stronger remembrance effect. The wordlength on display C also seemed to interfere with the visual attention as the words were too long to easily read in one gaze. This suggests that not only the size of the text is important, but also how it is divided on the display.

The first phase did however show a strong support for the importance of the display position and placement in the store (Breugelmans & Campo 2011). The display was placed next to the bread shelf on eye-level and for 92 % of the phase one experiment the displays were noticed. This is also supported by the phase one questionnaire where one of the top three reasons for the display getting noticed was the placement of the display.

As regards gender, there was no significant deviation between male and female participants noticing the display. Neither is the repetition of a stimuli more likely to be noticed. This did not seem to have a significant effect on the results.

5.3 Communication and content

Studies show that displays that contain distinct visual features such as different colors and are logically designed with quality and neatness stand a better chance of getting noticed. (Hefer & Cant 2013, Breugelmans & Campo 2011). This is also the conclusion from phase one. Display B, which had the best impact, was also the most clear in its content and layout.

The second phase focused more on examining the content and communication of display B. Displays need to communicate the advertised product's attributes (Clement 2007) and in order for it to be effective the picture should reinforce the written message (Solomon 2013). The advertised message content should affect the emotional level as it is more likely to persuade consumers. In phase two of the research the display was only able to fulfill these requirements to a certain amount. The results clearly show that the main focus of the participants' gaze is on the picture of the breads and the text, which are also the fields that should receive most attention. Over half of the participants got the feeling that the image on the display was healthy or new and interesting. However the message on the display did clearly not support the picture. The message on the display does not give any indication of what type of product is advertised and it does not support the notion of the products being healthy.

The overall look was scored highest as the best attribute of display B. This result connects with Bicket et al. (2008) study where the authors concluded that the overall design of displays seems to be more important than the message it conveys. Nordfält (2011) showed that changing the display design or content can improve the impact of them. This is also conclusive with the first phase. Three different displays were used which all had different outcomes as regards attention capturing abilities.

As Batey (2008) discussed, the brand should be integrated in the content in order for the display to be successful. The results show that a great deal of the participants did not notice the Fazer logo which is unfortunate as brand consideration also has significant attention attracting ability. (Chandon et al 2007 & 2009)

When looking at the first gaze plots for the participants in phase two, it would seem that for the age group 30-39, text is a clear focus on the display. When designing displays, this is one aspect that should be kept in mind.

5.4 In-store influencing factors on consumer decision making

When it comes to the in-store displays influencing consumer decision making, in phase one, the displays had only a minor effect on the participants' purchase decision with the majority informing that the display did not affect the purchase decision. One explanation for this can be drawn from the "*what*" people are searching for. If the participants already have something else in mind in regard to what they need, or are going to buy, the chances of changing this decision are limited. However, if the display is advertising a product that can satisfy the consumer needs, it is more likely to be influential. This correlates with the result from phase one, where one participant informed that the display influenced the purchase decision, as she was looking for a similar product. Thus, this could be perceived both as an unplanned buying and impulse buying, which are the main reasons for in-store displays influencing consumer decision making.

Breugelman and Campo (2011) concluded from their research that in-store displays that appear early in the shopping process and supporting the product, have a higher chance of influencing the consumer. Hefer and Cant (2013) on the other hand discussed that for example breathing space in the store creates a positive shopping experience which hopefully leads to a purchase decision. In phase one of the study, no such similar conclusions could be drawn. The in-store display was shown early in the video and, as can be seen from figure 5, the display had ample of breathing space around it together with the products.

In phase two of the research, there was a considerable increase in the participants' answers that the in-store display influenced their purchase decision. Chandon et al. (2009) argued that a positive brand usage out of store will increase the attention and consideration in-store. As can be seen from the participants' answers in phase two regarding what type of bread they usually buy, some of the participants are already buying other Fazer bread or similar types of bread as the one advertised. This can explain the higher consideration of the display influencing the purchase decision, as in phase two, participants were asked to view the display and, thus, the Fazer brand was more likely noticed.

Conclusively however, similar conclusions can be drawn from this research as from Hefer and Cant's 2013 research, where they concluded that displays only have a limited influence on buying behavior. The majority of the participants in phase one informed that they did not remember what type of bread was on the display. Only in cases when the display is actually noticed, looked at and understood, can it properly influence buying behavior. This becomes evident in phase two of the study. Here, the participants were asked to look at the display and the result of the display influencing the purchase decision is considerably higher than in phase one.

5.5 Managerial implications

This research offers some insights and managerial implications that should be considered as regards how in-store displays can influence consumer decision making. Marketers need to firstly understand what attracts visual attention before they can make informed decisions on the content of in-store displays. One of the main arguments is that in-store displays need to be clear and easily understood within a short time span. This becomes evident from phase one, where display A had too many different attributes and display C had too much text and too long words to be easily read fast. The main aim should not be to fill the display with several different attributes that all demand attention, but instead focus on exclusive design features which communicate the uniqueness of the product correctly. The message needs to support the product: in this study the message did not communicate what makes the product unique and therefore the product is not memorable. Depending also on the age group, focus should be on different attrib-

utes of the display. Here, it becomes important to have a clear understanding of who the primary consumer is.

Overall, the displays used in this research had a good use of colours as they attracted attention and gave the overall image of a fresh and healthy product which was the intention of the displays. However, the brand should not be overshadowed, as it is an important part of visual attention and product consideration. The brand needs to be taken into account in the content of the display, as brand communication can help build up the product image that in turn corresponds to the brand identity.

5.6 Limitations and future research

As with any research, this study has some limitations which offers opportunities for further research. One main area for future research is to test the validity of these results as none of the experiment phases were done in a real time in-store environment. Future research should include the usage of eye-tracking in-store in real time to study if consumers might respond differently or whether the findings are replicable in a store environment. Another area for future research is the validation of the eye-tracking methodology, as the usage of eye-tracking glasses are still at the beginning. There are already intriguing technological development in the field of eye-tracking systems. Such as long range eye gaze tracking systems (Cho et al. 2012) which can be integrated into shelf structures and enable an even less intrusive eye-tracking measurement. The apparatus will surely open up new opportunities for researchers and companies to get a deeper understanding of visual attention and the influence on consumer behavior.

Due to the nature of the study, all videos in phase one were showed to the same participant. The researcher acknowledges that this process could have slightly impacted the results, as repetition is one of the factors for a stimuli being noticed. Instead, other research could only focus on phase one but show the videos to different participants and compare the results between the participants. Studies also show that gender and age have different impact on visual attention. The research did not solely focus on a specific demographic attribute even though some majorities were represented in the study. It

would be interesting to do the same experiment with bigger groups of more equal demographic participants and in addition compare the results.

6 CONCLUSION

Over the last decade the bakery industry has become increasingly challenging in regard to maintaining profitability and growth. The main reason for this is the health and wellness trend that is impacting the consumption of bread. Therefore, the importance of properly advertising different bread products in order to leverage sales becomes evident. The researcher's aim was to obtain and present a better understanding of what is an effective in-store display. Throughout the whole study it became increasingly evident that visual attention is one of the key roles in consumer decision making and it underlines the need for a better understanding of visual attention and effectiveness of in-store display.

Visual attention research has come a long way from the three main mechanisms, of *where*, *what* and *how*. The availability of new eye-tracking equipment's gives possibility to address the validity and limitations in this research. The research does however give insights into attracting visual attention and the importance of a comprehensible visual communication through in-store displays. Effective displays should attract visual attention through design elements and the message of the displays should have a clear goal, for example that a product is healthy. Finally the visual image needs to support the message and the whole content needs to be supported by the brand that in turn conveys the overall feel of the message and visualization.

Everything, from the overall design to the colour, text size and word length of the in-store display matters. If it does not attract attention, communicate the brand and product comprehensively it will not influence consumer decision making in the expected way, which is getting the consumer to buy your product.

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APPENDICES

Appendice 1

Phase 1 Questionnaire in Finnish (original)

Kysely
numero

Ennako
kysymys

Minkä leivän ostat yleensä?

- | | | | |
|---|---|--------------------------|---|
| 1 | Sukupuoli? | <input type="checkbox"/> | Mies |
| | | <input type="checkbox"/> | Nainen |
| 2 | Ikäryhmä? | <input type="checkbox"/> | 20-29 |
| | | <input type="checkbox"/> | 30-39 |
| | | <input type="checkbox"/> | 40-49 |
| | | <input type="checkbox"/> | 50- |
| 3 | Kuinka usein syöt leipää? | <input type="checkbox"/> | Erittäin usein (monta kertaa päivässä) |
| | | <input type="checkbox"/> | Usein (kerran päivässä) |
| | | <input type="checkbox"/> | Harvemmin (kerran viikossa) |
| | | <input type="checkbox"/> | Hyvin harvoin (pari kertaa kuukaudessa) |
| 4 | Ostatko yleensä leipää? | <input type="checkbox"/> | Itsellesi |
| | | <input type="checkbox"/> | Perheellesi |
| | | <input type="checkbox"/> | Joku muu |
| 5 | Huomasitko Fazerin mainoksen?
Jos vastasit "Kyllä" siirry kysymykseen 7, jos vastasit "Ei" siirry kysymykseen 6. | <input type="checkbox"/> | Kyllä |
| | | <input type="checkbox"/> | Ei |
| 6 | Miksi luulet ettet huomannut mainosta? | <input type="checkbox"/> | Huono sijoitus |
| | | <input type="checkbox"/> | Liian pieni mainos |
| | | <input type="checkbox"/> | En ikinä katso mainoksia kaupassa |
| | | <input type="checkbox"/> | Kiire |
| | | <input type="checkbox"/> | Tiesin jo mitä ostan |
| 7 | Minkä takia mainos sai huomiosi?
Top 2 | <input type="checkbox"/> | Hyvä visuaalinen mainos |
| | | <input type="checkbox"/> | Mielenkiintoinen viesti |
| | | <input type="checkbox"/> | Uusi tuote |
| | | <input type="checkbox"/> | Etsin jotain samanlaista tuotetta |
| | | <input type="checkbox"/> | Hyvässä paikassa |

- Koska se oli Fazerin mainos
- 8 Muistatko mikä leipätuote oli mainoksessa? Kyllä
 Ei
- 9 Vaikuttiko mainos ostopäätökseesi? Kyllä
 Ei
 Olin jo etukäteen päättänyt
- 10 Oletko pyrkinyt vähentämään leivän syömistä
(viimeisen vuoden aikana)? Kyllä
Jos vastasit kyllä siirry kysymykseen 11 Ei
- 11 Miksi olet vähentänyt?

- 12 Minkä mainoksen muistat eniten? A
 B
 C

Phase 1 Questionnaire in English (translated)

Questionnaire
number

Pre-question What bread do you usually buy?

- 1 Gender? Male
 Female
- 2 Age group? 20-29
 30-39
 40-49
 50-
- 3 How often do you eat bread? Very often (several times per day)
 Often (once a day)
 Less often (once a week)
 Very rarely (a few times a month)
- 4 Do you usually buy bread? For yourself
 For your family
 Somebody else
- 5 Did you notice Fazer's ad?
If you answered "Yes" move to question 7, if you
answered "No" move to question 6. Yes
 No
- 6 Why do you think you did not notice the display? Bad placement
 Too small ad
 I never look at ads in-store
 In a hurry
 I already knew what to buy
- 7 Why did the ad get your attention?
Top 2 Good visual ad
 Interesting message
 New product
 Looking for a similar product
 Good place
 Because it was Fazer's ad
- 8 Do you remember what bread product was on Yes

the display?

No

9 Did the display influence your purchase decision?

Yes

No

I had already decided in advance

10 Have you tried to eat less bread during the last year?
If you answered "Yes" move to question 11.

Yes

No

11 Why have you reduced?

12 Which advertisement do you remember most?

A

B

C

Appendice 2

Phase 2 Questionnaire in Finnish (original)

Kysely
numero

- | | | | |
|----|---|--------------------------|---|
| 1 | Sukupuoli? | <input type="checkbox"/> | Mies |
| | | <input type="checkbox"/> | Nainen |
| 2 | Ikäryhmä? | <input type="checkbox"/> | 20-29 |
| | | <input type="checkbox"/> | 30-39 |
| | | <input type="checkbox"/> | 40-49 |
| | | <input type="checkbox"/> | 50- |
| 3 | Kuinka usein syöt leipää? | <input type="checkbox"/> | Erittäin usein (monta kertaa päivässä) |
| | | <input type="checkbox"/> | Usein (kerran päivässä) |
| | | <input type="checkbox"/> | Harvemmin (kerran viikossa) |
| | | <input type="checkbox"/> | Hyvin harvoin (pari kertaa kuukaudessa) |
| 4 | Ostatko yleensä leipää? | <input type="checkbox"/> | Itsellesi |
| | | <input type="checkbox"/> | Perheellesi |
| | | <input type="checkbox"/> | Joku muu |
| 5 | Mikä asia mainoksessa sai eniten huomiosi?
Top 2 | <input type="checkbox"/> | Leipä |
| | | <input type="checkbox"/> | Teksti |
| | | <input type="checkbox"/> | Fazer logo |
| | | <input type="checkbox"/> | Parempi leipä logo |
| 6 | Mikä oli paras asia mainoksessa? | <input type="checkbox"/> | Hyvä visuaalinen mainos |
| | | <input type="checkbox"/> | Mainoksen viesti |
| | | <input type="checkbox"/> | Uusi tuote |
| | | <input type="checkbox"/> | Yleiskuva |
| | | <input type="checkbox"/> | Brändi |
| 7 | Muistatko mitkä leipätuotteet oli mainoksessa? | <input type="checkbox"/> | Kyllä |
| | | <input type="checkbox"/> | Ei |
| 8 | Huomasitko oliko leivissä jotain erikoista? | <input type="checkbox"/> | Kyllä |
| | | <input type="checkbox"/> | Ei |
| 9 | Minkä mielikuvan mainos antoi sinulle? | <hr/> | |
| 10 | Luuletko että olisit huomannut mainoksen | <input type="checkbox"/> | Kyllä |

kaupassa?

Ei

11 Luuletko että mainos vaikuttaisi ostopäätökseesi kaupassa?

Kyllä

Ei

Ostan aina sama leipä

12 Oletko pyrkinyt vähentämään leivän syömistä (viimeisen vuoden aikana)?

Kyllä

Ei

Jos vastasit kyllä siirry kysymykseen 13

13 Miksi olet vähentänyt?

Loppu

kysymys Minkä leivän ostat yleensä?

Phase 2 Questionnaire in English (translated)

Questionnaire
number

- | | | | |
|---|---|--------------------------|------------------------------------|
| 1 | Gender? | <input type="checkbox"/> | Male |
| | | <input type="checkbox"/> | Female |
| 2 | Age group? | <input type="checkbox"/> | 20-29 |
| | | <input type="checkbox"/> | 30-39 |
| | | <input type="checkbox"/> | 40-49 |
| | | <input type="checkbox"/> | 50- |
| 3 | How often do you eat bread? | <input type="checkbox"/> | Very often (several times per day) |
| | | <input type="checkbox"/> | Often (once a day) |
| | | <input type="checkbox"/> | Less often (once a week) |
| | | <input type="checkbox"/> | Very rarely (a few times a month) |
| 4 | Do you usually buy bread? | <input type="checkbox"/> | For yourself |
| | | <input type="checkbox"/> | For your family |
| | | <input type="checkbox"/> | Somebody else |
| 5 | What got your attention the most?
Top 2 | <input type="checkbox"/> | Breads |
| | | <input type="checkbox"/> | Text |
| | | <input type="checkbox"/> | Fazer logo |
| | | <input type="checkbox"/> | Parempi leipä logo |
| 6 | What was the best thing in the display? | <input type="checkbox"/> | Good visual ad |
| | | <input type="checkbox"/> | Advertisement message |
| | | <input type="checkbox"/> | New product |
| | | <input type="checkbox"/> | Overall look |
| | | <input type="checkbox"/> | The brand |
| 7 | Do you remember what bread products
was on the display? | <input type="checkbox"/> | Yes |
| | | <input type="checkbox"/> | No |
| 8 | Did you notice if there was anything spe-
cial about the breads? | <input type="checkbox"/> | Yes |
| | | <input type="checkbox"/> | No |
| 9 | What kind of image did the display give
you? | | |
-

10 Do you think you would have noticed the display in-store? Yes
 No

11 Do you think the display would influence your purchase decision? Yes
 No
 I always buy same bread

12 Have you tried to eat less bread during the last year? Yes
If you answered "Yes" move to question No
13.

13 Why have you reduced? _____

End question What bread do you usually buy? _____