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Point of Purchase TV-Screens

*An Analysis of Gender and Generations in the
In-Store Retail Environment*

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Abstract

Title: Point of Purchase TV-screens - An analysis of Gender and Generations in the In-store-Retail-Environment

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Keywords: In-store Marketing, Point-of-Purchase, In-store TV, Gender, Generations.

Thesis Purpose: The purpose of the thesis is to contribute to a greater understanding as to how consumers react to and perceive PoP TV-screens within the in-store retail environment. More specific, the aim of the study is to investigate if gender and generations react and feel differently towards the use of PoP TV-screens. From a practical standpoint, the study will aid marketers in how they can communicate more effectively with their target-market inside the store. In addition to this, the study will provide retailers with an insight into the overall atmospheric effect that the placement of TV screens has on stores. From an academic position, it was felt that an unbiased academic study was necessary in order to provide a gainful insight and solid foundation for future research concerning the use of In-store TV.

Methodology: This thesis employs quantitative methods. 567 structured observations and 140 questionnaires through structured interviews were conducted in a Swedish supermarket.

Theoretical Perspective: “Consumer Behaviour” is the foundation of the theoretical framework. Furthermore, “Atmospherics” and “Market Segmentation” theories are used as supporting theories.

Empirical Foundation: The empirical data was collected during two days at a ICA Kvantum supermarket *Flygfyren* in Norrtälje, Sweden. The data from the observations and the questionnaires was analysed with the statistical software SPSS. This provided the study with indications of significant difference between demographic segments of gender and generations. Furthermore, a control group of 130 observations were conducted in order to increase the validity of the study.

Conclusion: The study shows that there is a difference in how gender and generations respond and feel towards the stimulus of in-store Point-of-Purchase TV-Screens. The most noteworthy findings are that the youngest generation, Generation Y, displays an extremely positive overall response for both behaviour and attitudes, whilst the stimulus of the TV screen proves to be a very useful tool in attracting the men’s attention.

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1 Introduction

1.1 Background Information

In 1965 three TV-advertising-spots had the capability to reach 80% of US households. By 2001 it required 97 spots to reach the same amount of homes (FT Global, 2004). This is due to the proliferation of media channels at the consumer's disposal. The rise of the internet, digital television and radio and other channels has made it increasingly difficult for marketers to effectively and efficiently reach their desired target market (Kessler, 2004). The fact that UK TV advertising has experienced a 4.7% fall in spending in 2006 highlights the declining amount of trust that manufacturers have in traditional channels (BBC, 2007).

As a consequence marketers are looking for a more efficient way to communicate with potential customers. It can be argued that the one place where all consumers remain reachable is inside supermarkets. Therefore it is an attractive proposition for marketers. This is further supported by the fact that 75 % of actual purchasing decisions are made in-store (Kessler, 2004). This attractiveness has led to an abundance of in-store marketing techniques. The term *in-store-marketing* covers all activities that focus on advertisement within the retail environment such as signs, promotions, service or displays (McGoldrick, 2003).

An abundance of vital information can be communicated at the point of sale. However, in-store marketing is underutilized as a venue for relevant, empowering marketing communications (Smith, 2006). This makes it relatively economical in comparison to other means of advertisement. Money spent on attracting attention to a specific brand at the moment of purchase may yield higher return-on-investment than traditional marketing methods (Kessler, 2004).

The challenge for marketers has thus become to establish which in-store medium most effectively caters for different target groups whilst simultaneously generating incremental sales. This increased interest in in-store marketing has resulted in the development of new and innovative methods of communicating with the consumer inside the supermarket. One of the most prominent examples of this is the use of flat-screen TVs (Zeta Display, 2007). TV-screens are being implemented and used in a variety of different contexts within the in-store retail environment (Adweek, 2006). One of the most innovative new ways of using the displays is as an attention-grabbing tool providing information about product, price and brand message. This information is given at the location where the consumer makes the final purchasing decision. This is commonly referred to as the *point-of-purchase* (PoP) (Carroll, 2006).

1.1.1 In-Store TV-Screens

TV-screens are being implemented and used in a variety of different contexts within the in-store retail environment. The following will briefly highlight these.

Some of the world's largest grocery retailers such as the UK's Tesco and USA's Wal-Mart have implemented in-store TV networks. This involves TV-screens being suspended from the ceiling and located around the stores and not placed at the exact advertised products PoP. The main aim of this is to generate revenue from broadcast style TV advertising in the in-store environment (Clarke, 2004). A similar in-store TV location strategy may also be used to create specific emotional feelings upon the consumer entering the store. Here the TV-screens are not used as a traditional TV network but continuously show a combination of appealing and enticing meal combinations that may induce a more positive and experimental shopping

behaviour (Liljebrunn, 2007). Implementing TV-screens above cash registers is also popular in the retail world. Their purpose is to lessen perceived queuing times whilst providing the consumer with an interesting stimulus. It is common that retailers strike deals with TV networks so that popular news/sports/weather programmes may be aired on these screens (Kryhul, 2007).

This research will investigate TV-screens that are used at the PoP to communicate the price and brand message of a product. It is specifically a multi-channel, 3-screen, mobile display stand which will be the focus of the study. See *Figure 1* for a graphic of the display in question. In the following a short description of the TV-display will be given.

As it is a mobile stand one of the advantages for this study is that it can easily be moved around a store to different product locations. The display stand has an audio output through a built in media player and can play simultaneous product commercials and digitally display sales promotions (Zeta Display, 2007). The TV-screen directly refers to the displayed product and does not show any other brands or products. The display stand receives its information via wireless GPRS/3G communication. A centrally controlled software program controls the information being shown, how it is shown and when it is shown in each respective display.



Figure 1: PoP TV-Display

The TV-screens create several clear benefits; it is positive for the retailer as it creates overall increased store sales through better floor space productivity. It also provides brand manufacturers with many advantages; it differentiates their product at the PoP and allows for the communication of key brand messages through short specifically designed commercials. Further to this it allows them to highlight any special promotions (Zeta Display, 2007). The PoP environment is at the time of writing principally still dominated by static and paper set-ups. However marketers believe that over the next couple of years the in-store environment will be highly influenced by digital communication (Carroll, 2006). This is highlighted for instance by the fact that Sweden's largest Supermarket chain ICA is already collaborating with in-store TV manufacturer Zeta Display on a nationwide in-store TV PoP testing campaign (Zeta Display, 2007).

Over the forthcoming years marketers believe the real impact of digital communications within the store environment will be realized (Carroll, 2006). Digital display advertising such as in-store TV networks or LCD monitors is growing into a prominent PoP choice (Convenience Store News, 2006). However, as in-store TV is still in its infancy there exists limited relevant research and marketers are still searching for the optimal use of the medium (Derrick, 2006).

A thorough research within several academic databases produced limited results. No academic literature was found. The information found originated from industry magazines and the like and therefore presents a less reliable case. The following section will highlight these findings.

1.2 Problem Discussion

Existing research material points towards a strong correlation between the implementation of in-store TV-screens and a subsequent improvement in sales of the featured product (Quilter, 2005). For example Zeta Display, a major and rapidly expanding player in the Swedish in-store TV industry, carried out tests across 120 ICA stores and concluded that the sales of the showcased product increased between 40 and 800 percent. (Zeta Display, 2006) Further to this in the UK Tesco rolled out a seven channel network where content was tailored to specific store zones such as health, beauty and baby. The advertising resulted in a 70% sales increase for featured products (Brand Strategy, 2004). Moreover a recent independent study that took place in a US grocery store found that non-discounted and otherwise non-advertised products that were displayed on a customizable, digital LED sign increased sale volume by 23.4 percent. The study also discovered that when the LCD screen was compared with additional sales and promotions an even greater sales increase of 688.4 percent was realized (Peth & Moscicki, 2006).

However there lies a major problem in simply relying on sales figures for featured products. This fails to consider the overall picture. While the effect might be positive for the particular product the marketing measure might have an adverse effect on overall category sales, store image or other factors (Underhill, 2000). It is vitally important to consider how different consumer demographics perceive the identified marketing measure. For example if a product is being targeted towards a segment that perceives TV's inside the store in a negative way, then it may drive the consumer away from not only the product but also the store. This scenario would prove devastating for retailers as it has been found that a 4% drop in customer in-store visits can relate to a 58% drop in the following years operating profits (Marketing News, 1997).

An exhaustive search of several universities databases was done in order to find existing research on the subject. However we have found that only limited research exists on the effects that TV-screens used as PoP displays have on factors beyond that of sales figures. For instance it appears that the important aspect of consumer attitude has not been investigated. The solitary research material found was a study that was conducted in a UK shopping mall involving ten participating non-grocery retailers. A survey of 313 people and a focus group of 50 people showed that 76% of interviewees responded positively towards in-store TV's and that the screens proved most popular among the 18-24 year olds. Further analysis showed that the screens directly affected shopping pleasure levels, enhanced the image of the stores and created a feeling of modernity (Brand Strategy, 2004). However this study did not mention or focus on TV-screens inside a grocery store that are used at the point of purchase.

However, a plethora of research does exist on another integral part of in-store marketing; the design of the store. The design encompasses for example the use of colours, lighting and PoP displays that combine to create so called *atmospheric* stimuli (McGoldrick, 2003). These have the ability to stimulate the consumer towards a purchasing-decision (Levy & Weitz, 2004). However, the majority of literature that exists on the subject of atmospherics focuses on individual sensory elements. Summers & Hebert (2001) focus mainly on the effect that lighting has on consumers while, Milliman (1982) and Yalch & Spangenberg (2000) focus on aural aspects. Other researchers such as Mattila & Wirtz (2001), Spangenberg et.al (1996) and Citrin et al. (2003) focus on the visual, olfactory and tactile elements of atmospherics. A prominent part of in-store marketing and atmospherics has traditionally been the classic cardboard display (McGoldrick, 2003). However as with the more modern TV-screen no academic studies appear to have been conducted in regard to customer reaction or attitude

towards this medium. Again any existing research that was found simply pointed out the improvement in sales figures that could be gained through using TV-screens as PoP-tools (Kerfoot, Davies, & Ward, 2003).

Marketers have the capability of controlling atmospheric stimuli in order to elicit a desired consumer response (McGoldrick, Retail Marketing, 2003). This statement is supported by researchers such as Hoffman & Turley (2002), Sherman et.al. (1997) and others such as Spies, Hesse & Loesch (1997) prove that store atmosphere can induce a greater level of satisfaction among consumers. This in turn can lead to a greater chance of spontaneous purchasing behaviour. This notion is supported by research conducted by Hoffman & Turley (2002) who found that a significant relationship between atmospheric influences and consumer shopping behaviour exist. Further evidence of the causal relationship of in-store environment and purchasing behaviour is given by Sherman et al. (1997), Arora (1982) and Horton (1979). This highlights the importance of designing the store in a way that appeals to the desired consumer groups.

A difficulty in creating a pleasant in-store environment lies in finding the environmental cues most appealing to the customers. A marketing measure might invite a person to approach a product or, should the stimuli be disliked, avoid it. Plenty of research details approach-avoidance theory throughout academic literature. The foundation for theory on approach-avoidance theory was laid by Maher (1964). He suggests that the presence of approach-avoidance behaviour is prevalent among individuals that find themselves in conflict situations. This initial research is further supported by Mehrabian & Russell (1974) who apply the theory to the in-store environment. They argue that it can be designed in a way that encourages approach behaviour which in turn makes the consumer more likely to purchase a product. These theories are further backed up by Foxall & Greenley (2000).

Not all consumers respond in the same way when faced with a certain stimulus (Underhill, 2000). This especially holds true across the demographics of generations and gender (Moriss, Venkatesh, & Ackerman, 2005). Technology in particular creates a strong divide. This is highlighted by Marconi (2000) who states that each generation differs in their acceptance towards technology and media. According to Wolburg & Pokrywczynski (2001) certain generations are easier to target than others due to their disposition to accept new technologies more readily. Research on gender has generally focused on shopping behaviour. For example Park & Park (1997) and Otnes & McGrath (2001) conclude that there are noticeable differences in how males and females shop. However how different genders and generations react to and interact with technology has thus far not been the focus of academic research. The following section will highlight how the above mentioned theories will be pulled together in order to help fill a knowledge gap surrounding the use of in-store TV as a PoP display.

1.3 Research Question

In-store TV is a relatively new marketing concept inside the store. Therefore certain consumer groups may perceive and react adversely towards this innovative and unfamiliar technological stimulus (Underhill, 2000). The literature review shows that this medium appears to have a positive effect on sales (Zeta Display, 2007), (Peth & Moscicki, 2006) . However the measure only provides a limited indication as to the overall effectiveness of TV-screens used at the PoP. It fails to provide a clear picture on how consumers interact with it (Underhill, 2000).

Consequently, how different consumers react towards the stimulus of an in-store PoP TV-display appears not to have been tested in previous studies as a literature search that was conducted for purposes of this thesis has revealed. The literature review also shows that the consumer's true attitude towards the screens is unknown. Therefore an overall knowledge gap as to how the different demographics of age and generations react towards and perceive TV as in in-store PoP display tool seems to exist. As a way of trying to fill this gap in academic knowledge the following research question was formulated:

“How does consumer-response and -attitude towards the stimulus of in-store point-of-purchase TV-screens differ across the demographic segments of gender and generation?”

1.4 Purpose

The purpose of this thesis is to contribute to a greater understanding as to how consumers respond to and feel about PoP TV-screens within the in-store retail environment.

As has been previously highlighted the vast majority of available research does not stem from academic origin. The available research appears to come from companies who are strategically involved in this evolving medium. Further to this the existing research only measures short term factors such as sales and fails to include important aspects such as attitude. Therefore it is felt that an unbiased academic study is necessary in order to provide a gainful insight and solid foundation for other future research.

From a practical standpoint the purpose of this paper is to use the previously noted theories to investigate how consumer responses and attitudes differ towards PoP TV-screens. The findings will aid marketers in how they can communicate more effectively with their target-market inside the store. The information will for instance give them insight into whether or not this is a medium that is suitable for their target audience. In addition to this the study will provide retailers with an insight into the overall atmospheric effect that the placement of TV-screens has on the stores.

Providing empirical, academic data in combination with a practical viewpoint will ultimately contribute to a greater overall understanding of this new medium.

1.5 Outline

In order to answer the above stated research question the paper at hand will be structured in the following way:

Several theories surrounding the research topic will be explained within the *theoretical framework*. The theory of Stimulus-Response is explained in order to provide the reader with a background of the processes taking place within a customer when faced with a marketing-influence. Accordingly the next section offers a more in-depth explanation of the concept of atmospherics and more specifically in-store marketing measures and TV-screens. This is meant to set the framework for the methodology surrounding the research about consumer response towards in-store TV-screens. Subsequently approach-avoidance behaviour is explained in relation to the effect of mood on consumer behaviour. This is done in order to show the responses stimuli are able to evoke and how they can affect purchasing decisions. Finally background information regarding the demographics of gender and generations and the corresponding attitude towards technology is given. These sub-chapters serve to frame the research regarding attitude towards the PoP TV-screens.

This is then followed by the *methodology* of the paper. Here the research design of the study and more specifically the design of the chosen methods will be explained in detail. Furthermore the sampling procedures employed for the methods and the actual data collection process will be described in order to give a clearer understanding of how the primary data within this document was acquired. This is then followed by a sub-chapter on how the data was processed in order to make it possible to process it within the statistical software SPSS. Finally an overview over the limitations of the paper will be given.

Chapter 4 gives an overview over the data analysis and presents the findings for the observations and the structured interviews. The demographic variables will then be linked to the observed behaviour and surveyed attitude.

Following this a discussion surrounding the reasons for certain types of behaviour and attitudes will be presented linking the theories upon which this paper is built with the acquired data. This will be done separately for each gender and generational segment in order to provide a comprehensive insight into each demographic.

Finally the paper will be concluded by giving a concrete answer to the research question. Furthermore a comprehensive overview over the research findings will be given and the meanings translated into academic and managerial implications. Recommendations for further research will also be provided.

2 Theoretical Framework

The following chapter serves to inform the reader about the relevance of the research subject by providing an insight into the different elements that affect and influence shoppers. In order to do so the concept of stimulus and response will be explained in relation to in-store atmospherics. TV-screens as an alternative PoP marketing tool will also be introduced. Furthermore the concept of approach-avoidance behaviour will be explored in relation to how different demographic segments react towards this medium.

2.1 Consumer Behaviour and Consumer Decision Making

In order to market products effectively, it is important to understand how TV-screens affect the consumer. This makes it necessary for the reader to understand the behaviour displayed by consumers inside a store (Hoffman & Turley, 2002). The following paragraphs are designed to provide a basic understanding of consumer behaviour.

Consumer behaviour can best be described as a consumer's decision making. This includes the perception and evaluation of brand information, weighing the advantages and disadvantages of different brands against one another and finally making a brand choice. There are two factors that are of importance to this study and influence a consumer's decision: marketing strategy and the individual consumer (Assael, 1984). Marketing strategy includes attempts to inform and influence the consumer. These are variables that are within the control of marketers such as above-the-line measures (TV-, radio, billboard advertisement) as well as below-the-line measures such as the afore mentioned in-store-marketing and sales-promotions. These measures are considered to be marketing stimuli that are perceived and processed by the consumer whilst making a buying decision (Assael, 1984). The individual consumer constitutes the second factor. Consumers make decisions about their needs, their perception of brands and brand alternatives. However, demographic, life-style and personality characteristics also strongly influence the consumer's product and store choice. The subsequent sections will further detail the behaviour of the individual consumer. Relevant market strategies will also be identified and their respective impact upon the consumer will be analysed (Assael, 1984).

2.2 The Stimulus-Organism-Response-(S-O-R) Model

Studies have shown that consumers respond strongly to stimuli provided by manipulated in-store environments (Hoffman & Turley, 2002). Two models, the Stimulus-Response- (S-R) as well as the Stimulus-Organism-Response- (S-O-R) model provide a frame of reference for the examination of the individual's shopping behaviour. The S-R-model assumes that a universally applicable response is activated by a given stimulus. As the inner processes of the individual consumer are not considered here this model is also called a black-box-model (Homburg & Krohmer, 2003).

The S-O-R-model on the other hand considers the psychological processes happening within the individual. This makes it possible to focus on individual differences between consumers such as emotions or the ability to process information. In the following the individual components of the model will be examined (Homburg & Krohmer, 2003).

One of the central concepts is that the behaviour of a consumer is the direct result of an external stimulus which provokes a reaction within the organism. This stimulus is derived from the external physical or social environment (Homburg & Krohmer, 2003). Each stimulus

is initially neutral but later transformed into a specific response which is discussed below (Foxall & Greenley, 2000). A stimulus can in short be defined as anything that rouses or incites an individual into action or increased action. Within the store context and for the purposes of this paper however the set of stimuli are made up of atmospheric elements such as interior design or lighting (Hoffman & Turley, 2002). This also includes features such as TV-screens that function as PoP displays.

These stimuli trigger psychological processes within the organism which is the recipient of the stimuli provided by the environment (Hoffman & Turley, 2002). The internal perceptual or physiological processes taking place within the consumer after having received the stimulus can be divided into activating and cognitive components (Sherman, Mathur, & Smith, 1997). Store-selection as well as most planned purchases is determined by cognitive factors as they include the collection of information (Sherman, Mathur, & Smith, 1997). Activating processes on the other hand are driven by factors such as motivation, emotion and attitude which influence purchase decisions. These are stimuli that evoke a pre-programmed biological reaction such as joy or pleasure. A thus derived positive attitude towards a brand or store can lead to the consumer buying a product or shopping at a specific venue (Homburg & Krohmer, 2003). This means that the environmental stimuli provided by for example marketing measures subliminally affect the emotional states of the consumers, thus determining the kind of behaviour the consumer undertakes towards a product or PoP display (Sherman, Mathur, & Smith, 1997). The next chapter will concentrate on stimuli found within the in-store environment. This will include a brief analysis of the more commonly found atmospheric stimuli and a more in-depth discussion about TV-screens being used as a stimulus at the point of purchase.

2.3 Atmospherics

As retail store designers can use a variety of marketing strategies in order to influence consumer responses. Intentions can be activated and certain moods created within the consumer (Markin, Lillis, & Narayana, 1976). In order to do so stimuli within the in-store environment must be manipulated. The following section will explore these stimuli whilst describing the importance store design as a way of influencing the consumer buying process.

Atmospherics is embedded in store design and refers to: *“the design of an environment via visual communication, lighting, colours, music, and scent to stimulate customers’ perceptual and emotional responses and ultimately to affect their purchase behaviour”* (Levy & Weitz, 2004, p. 609). The concept of atmospherics was first introduced by Philip Kotler in 1973. Kotler defined atmospherics as *“the effort to design buying environments to produce specific emotional effects in the buyer that enhance purchase probability”* (Kotler, 1973, p. 77). One consequence of atmospherics is that the consumer can become detached from the real world. Spaces and places can take on their own properties rather than acting just as a background to the products themselves (Kent & Omar, 2003).

Specifically four sensory terms are identified as ways of influencing the buyer’s emotions. Visual, Aural, Olfactory, and Tactile senses can effectively appeal to consumers. Therefore consumer behaviour may be shaped into one that is geared towards the buying process (McGoldrick, 2003). These elements also have the capability of significantly influencing a consumer’s decision-making time, patronage decisions, and product evaluations (Akhter, Andrews, & Durvasula, 1994). Moreover certain artefacts in an atmosphere can activate emotions or even tastes (Kotler, 1973). Therefore it can be argued that a fifth element should be added to the four original senses. This is supported by (Hoffman & Turley, 2002) who argue that atmospherics consist of both tangible and intangible elements. The latter refers to

the traditional senses introduced by Kotler. Tangible elements refer to artefacts such as buildings, carpeting fixtures and PoP decorations (Bäckström & Johansson, 2006).

The following section will analyse the concept of atmospherics based on the four traditional senses; Visual, Aural, Olfactory, and Tactile. PoP decorations have also been identified as a fifth element.

2.4 The Four Traditional Senses

The visual part of atmospheric stimuli deals with factors such as colours, lighting, sizes and shapes. One of the more popular marketing strategies for the influence of consumer choice is colour. It is able to stimulate interest and boost the effectiveness of promotions (Funk & Ndubisi, 2006). Research has also shown that music and sound produces varying emotions which can lead to different levels of time perception as well as store satisfaction. An example of this would be that lower music volume leads to the underestimation of time perception and increased store satisfaction while negative emotions and an overestimation of time stem from loud music (Lin & Wu, 2006). The tempo of the music can also have an effect on consumer behaviour such as the slowing down of in-store traffic-flow speed (Mattila & Wirtz, 2001). This has proven to have the most positive effect on purchasing activity (Milliman, 1982). Smell may also have a large impact on consumer emotions. These emotions are very valuable for marketers and retailers as they can influence the likelihood of purchase (Levy & Weitz, 2004). Research has also found that appropriate aromas can encourage shoppers to engage in impulse buying (Mattila & Wirtz, 2001). Finally, the tactile component deals with all physically felt attributes of a store such as temperature or touch. Putting merchandise into the shopper's hand, thus giving him a chance to examine and even try it, can greatly enhance buying behaviour as it lowers the perceived risk of buying a product (Underhill, 2000).

2.5 A Fifth “Sense” Element: Point of Purchase Decorations

Studies have shown that consumers have a flattened cone of peripheral vision that automatically and subconsciously scans the shelves inside the store (Phillips & Bradshaw, 1993). Products that are designated more space than competitors are therefore more likely to be viewed by the consumer, hence more likely to be purchased (McGoldrick, 2003). The increased likelihood of a purchase resulting from the capturing of consumers' attention is supported by Curhan who claims that there is a positive relationship between shelf space and unit sales (Curhan, 1973). Research shows that a well-planned display can improve the likelihood of purchase by up to four times (Kerfoot, Davies, & Ward, 2003). An interesting and innovative display may also attract a greater overall attention and therefore boost the sales for the entire product category as well as the individual promoted product (Procter & Gamble, 2007). Furthermore it is simple to adjust displays to different consumer segments. If the target-group for a product is small children then a display that is placed at the eye level point of the shopping cart may create a more interesting stimulus for a child. This is relevant as the child may form an important part of the final brand-decision (Rust, 1993). Displays can also act as an in-store indicator for product categories. For example a Coca-Cola branded display highlights the soft drinks category for consumers (Kessler, 2004). Research also shows that PoP decoration activity increases a consumers' sensitivity to promotions/prices (Bawa & Landwehr, 1989). Optimum effectiveness is realised for mature products and closely competing brands striving for an advantage in the market place. Decorations may also benefit commodity items as they draw attention to the product and reduce a customer's price sensitivity. Thus PoP decorations influence shopping behaviour when prices remain similar.

Furthermore, decorations are capable of reinforcing the overall brand message by using known key brand characteristics such as colours and text font (McGoldrick, 2003).

However a poorly placed PoP decoration may also result in a decrease in the featured product's sales. The argument lives in the matter that PoP activities reorganize the surrounding brands and products. This reorganization may then result in a more un-competitive rival product being placed in an improved section of the product category's display. For example an in-store investigation proved that a PoP displayed wine decreased sales compared to competitors. The reorganization of the wine section placed, competitive wines on shelves next to higher priced and prestigious wines giving them a better positioning in the mind of the consumers, which lead to increasing sales (Arwni, 1999).

Manufacturers and retailers alike are becoming increasingly aware of the notion that stores are becoming an effective, new type of advertising medium. The store itself provides marketers with the ideal platform to easily reach a high turnover of visiting target groups that have money to spend (Young, 2006). This increased attention has generated an interest in discovering and knowing which type of in-store marketing tool most effectively reaches the customer. Consequently new innovative PoP-tools such as in-store TV-screens are emerging.

2.6 In-Store TV-Screens

As already mentioned this study will specifically investigate TV-screens that are used at the PoP of a certain product. This method of using TV-screens is at present not fully utilizing the possibilities (Liljebrunn, 2007). This is due to the fact that the medium is under development (Carroll, 2006). Nevertheless, TV-screens are an effective in-store marketing tool as they are considered to have the capability of more effectively reaching target markets than traditional home TV advertisements, (Boyle, 2003). Through using TV-displays as an in-store marketing tool it is possible to accurately tailor campaigns and messages towards different consumer segments.

Certain drawbacks that are associated with this medium are that it is considered more expensive than traditional PoP displays. Furthermore it is also felt that it lacks the tactile element (Williamson, 2004).

It has now been shown that consumers are likely to react to certain stimuli such as atmospherics and more specifically in-store PoP TV-screens. The presence of TV-screens at the PoP within the store is such a new medium that little relevant research has been carried out. Existing non academic literature shows a positive correlation between the use of the TV-screen and improved sales figures. This shows that consumers are showing a reaction towards the stimulus. However it is still unknown how different consumer segments react to and perceive this innovative in-store marketing stimulus. One of the aims of this research is to give an insight into this area. The following sections will investigate how the in-store atmosphere and consumer mood can influence shopper reactions. Different consumer demographics will also be explored and their corresponding behaviours and attitudes towards the in-store shopping environment detailed.

Reactions to environmental stimuli such as the ones that can be found inside a store can be classified into approach- or avoidance-behaviour (Hoffman & Turley, 2002). The following sub-chapter will elaborate on this.

2.7 Approach-Avoidance Behaviour

The consumer's response to a set of environmental stimuli is called approach-avoidance (A-A) behaviour (Hoffman & Turley, 2002). These behavioural reactions can express themselves in for example the desire to stay (approach) or leave (avoid) the environment. To further explore and interact with the environment (approach) or ignore it fully (avoid) or in a feeling of satisfaction (approach) or disappointment (avoid) with the store or the environment (Hoffman & Turley, 2002). Further examples for approach behaviour are browsing, choosing and purchasing while avoidance behaviour can be seen when customers delay, defer and leave the store without having made a purchasing decision (Foxall & Greenley, 2000). Approach-Avoidance tendencies are both based upon a previously learned drive and are associated with the reduction of perceived risk for the consumer (Hoffman & Turley, 2002; Maher, 1964). This means in the case at hand that it is necessary to see whether the consumer sees the TV-screen as a source of information that could aid the shopping decision or if it is a too alien concept that increases the perceived risk.

A-A-behaviour can be grouped into four categories: time, exploration, communication and satisfaction. The category of time deals with the customer's decision whether to enter a store and spend time within it or not as well as the time spent inside. An appealing and interesting in-store environment greatly influences this factor. Exploration involves the area of a store the customer visits. The greater the willingness to explore the environment the more advantageous it is for the retailer. Special features such as hidden displays reward the shopper for his curiosity and encourage further exploration of the store (Yalch & Spangenberg, 2000). Through strategic placement of high-draw items or placing high-impulse items into relevant locations exploration as well as impulse shopping are encouraged (Aghazadeh, 2005). Communication is a factor especially important in retail environments as it involves the willingness of the customer to communicate with others. This mainly includes the social interaction with e.g. sales personnel (Yalch & Spangenberg, 2000). Should customers dislike direct communication with staff, TV-screens could serve as an alternate source of information. Finally satisfaction deals with the efficiency with which a customer can execute the task of shopping. This includes factors such as quick item location, minimal waiting time or convenient lay-out (Yalch & Spangenberg, 2000).

2.8 The Effect of Mood on Consumer Behaviour

Different stimuli within the store such as atmospherics or in-store marketing measures affect the customer who then reacts to this environment within three dimensions: pleasure, arousal and dominance (Yalch & Spangenberg, 2000). The first, pleasure, is considered to effectively measure whether the shopper views his/her surroundings as enjoyable or not. Arousal deals with the degree to which the shopping environment stimulates the consumer. If the environment is built to relax the customer for example with slow music or subdued colours then customers tend to move through the store more slowly thus spending more time shopping. This is attributed to a decrease in arousal. The final dimension is that of dominance. This deals with whether the shopper feels in control (dominant) or under control (submissive) when faced with the shopping environment (Yalch & Spangenberg, 2000).

These three reactions influence more noticeable and visible consumer behaviour such as the earlier mentioned approach and avoidance behaviour. They also have an impact on consumption and the money spent in the store. Research by Sherman, Mathur & Smith (1997) shows, that the consumer is more inclined to make a purchase if the in-store environment is pleasant. Design of the store has a positive impact on pleasure while consumer arousal is more affected by the atmosphere within the store (Sherman, Mathur, & Smith, 1997). This

shows the importance of developing consumer pleasure and arousal states while avoiding submissiveness (Hoffman & Turley, 2002).

At the PoP positive emotions can be elicited in many different ways. A convenient layout, cleanliness or appealing PoP displays all influence the mood of the consumer (Sherman, Mathur, & Smith, 1997). Creative displays or demonstrations live or on-screen, may capture the attention of the shopper prompting an impulse purchase reaction (Sherman, Mathur, & Smith, 1997). It has been shown that a positive mood also influences the number of items purchased and time spent in a store (Yalch & Spangenberg, 2000).

This shows that creating a pleasurable atmosphere inside a store encourages approach behaviour by the customer. However what is considered pleasurable is highly subjective. As the focus of this research, the PoP TV-screens, is a relatively modern technology it is important to consider how different consumer segments perceive the medium.

2.9 Market Segmentation

Competition between retailers is constantly evolving and intensifying. As Underhill (2000) states *“we all move through the same environments, but no two of us respond to them exactly alike”*. Consequently *“it is necessary for a retailer to segment potential shoppers and to manage the marketing mix variables according to the requirements of a particular target segment”* (Gonzalez-Benito, Greatorex, & Munoz-Gallego, 2000). Therefore it is becoming imperative for retailers to undertake systematic forms of market segmentation. Retailers need to find reasonable homogenous shopper groupings and then effectively target them better than the competition. McGoldrick (2003) suggests that bases for market segmentation can include demographics, geographical location, lifestyles and psychographics (McGoldrick, 2003). As has been previously mentioned; the use of TV-screens as a PoP display tool and as a medium is relatively unexplored. Therefore it is unknown as to how different demographics react and feel towards this medium. It is thought that the demographic aspects of gender and generations two of the most basic, important and measurable segmentation components. Information as to how these demographics react to the medium of in-store TV will provide marketers with valuable information that will allow for the effective tailoring of in-store marketing campaigns. Furthermore, these demographics provide a strong research foundation that will enable further demographic investigations into other more advanced segmentation issues such as income and lifestyle. The following chapter will investigate shopping tendencies that are prevalent among different gender and generation segmentations.

2.9.1 Gender

Research has indicated that gender differences are prevalent in shopping behaviour, retail format choice, sensitivity to travel time and household shopping responsibilities (Park & Park, 1997; Otnes & McGrath, 2001). It is also widely accepted that men's and women's shopping habits differ in terms of shopping spend and frequency. Further to this, notable gender differences have been observed in people's attitudes towards the travel time needed to reach stores (Ou, 2007). There exists a strong association between gender and corresponding shopping responsibilities (Dholakia, 1999). Several studies conclude that women conduct about 70% of shopping trips (Ou, 2007; Kim et al., 1994). The purchasing of consumer goods is dominated by women with 82% of all spending coming from women (Sadler, 2005). Women also shop more frequently than men. (Dholakia, 1999). Dholakia (1999) found that when specifically analysing household groceries a gender and shopping responsibility relationship is extremely notable. 57.6 % of women claim sole household shopping responsibility whilst men only claim 15 %. Those claiming primary shopping responsibility

also recorded a higher frequency of shopping trips. Joint responsibility is prevalent in 30 percent of households (Dholakia, 1999). Berni claims that men are more likely to make more “fill-in” shopping visits (Berni, 2001). Therefore household shopping responsibilities are predominantly female and to a certain extent jointly orientated. A study by Dholakia shows that men rate “pleasure” and “utilitarian” shopping motives as less important than their female counterparts. However the factor “interactions with family members” gain a higher degree of importance to men than with women (Dholakia, 1999).

In the past the male segment has generally been viewed as an unenthusiastic consumer and therefore not an attractive segment (Lee, Ibrahim, & Hsueh-Shan, 2005). However the role of men in today’s shopping arena is becoming more and more significant. Gender role transcendence is resulting in men taking up a more egalitarian role. Modern day time constraints for both sexes mean that shopping duties are increasingly becoming a shared activity. Men are staying single for longer and therefore are learning to shop for items that their fathers never had the need to buy (Underhill, 2000). An example of this can be found in the male apparel market. In 1998 it grew 3.1 percent more at 6.8 percent than that of the women’s market (Schneiderman, 1999). A study by Dholakia et al. (1995) reinforced the belief that the men’s market segment is growing in importance by stating that men are becoming much more visible in the retail environment. (Dholakia, Perderon, & Hikmet, 1995) Therefore one can conclude that men are participating in more shopping related activities and are doing more purchasing than ever before. (Lee, Ibrahim, & Hsueh-Shan, 2005) (Underhill, 2000) This highlights why it is important to establish how this growing segment reacts to In-store TV as a PoP display tool.

2.9.1.1 In-Store Gender Behaviour

Men and women wander the aisle equally (Bird, 2002). However Underhill (2000) states that men move more quickly than women through aisles and spend less time looking. They are more carefree, lack discipline and seem to want to get out of the store as quickly as possible (Underhill, 2000). He also mentions that it is difficult to get men to look at anything other than what they intend to buy. If they can’t find the product they are looking for then they are more likely to give up and leave the store than ask a member of staff for the whereabouts of a product. Underhill also concludes that instead of speaking to retail staff “men like to attain information at first hand preferably from written materials, instructional videos or computer screens” (Underhill, 2000). A further study by Underhill (2000) found that almost all women carried shopping lists while less than one quarter of men did. 72 % of men look at product price tags when shopping whilst for women this is 86 %. (Underhill, 2000). Research found that men were more likely to be enticed by and search for items that are on sale. Sales and promotions were also found to significantly add to a man’s shopping pleasure (Lee, Ibrahim, & Hsueh-Shan, 2005). Women were also more likely to carry coupons and try new products (Berni, 2001). Furthermore eye catching displays were found to be particularly attractive to men (Underhill, 2000).

From this information one can assume that women are less likely to notice in-store TV-displays as they are preoccupied with their shopping list. However they may improve a woman’s shopping experience through the clear visual presentation of product prices. Although it seems harder to attract a man’s attention in-store, men may be enticed to a greater extent by TV than women as they are not preoccupied with a shopping list, are more attracted to eye catching displays and prefer gaining product information themselves.

2.9.1.2 Product Preferences

Research by Berni (2001) also has found that there are in-store product preference gender differences. The greatest disparity was found in dairy (women 61.1%, men 45.3%), laundry products (women 31.5%, men 13.2%), snack foods (women 31.5%, men 20.8%) and over the counter (women 16.7%, men 5.7%). The only items men bought that women didn't were automotive products (9.4% men, 0.0% women). Berni's study found that stereotypically male product areas such as deli, meal solutions, fast food and beer did not generate a notable gender difference. However Underhill states that in supermarkets men generally buy the beer, junk food, chips, nuts, pretzels and other entertainment food (Underhill, 2000). Other categories such as frozen foods, cheeses, hot deli/takeout, bakery, beverages, canned foods, toiletries, paper goods and seasonal goods showed marginal gender purchasing differentials (Berni, 2001). Gender product category preferences may affect this study as either a male or female might have a stronger preference towards the displayed product. Therefore a gender neutral product will be used.

2.9.2 Generations

Used sensibly age can be a valuable segmentation variable (Hare, Kirk, & Lan, 2001). A study by Joyce & Lambert show that age significantly affects a consumers shopping experience (Joyce & Lambert, 1996).

In order to effectively segment different age groups a generation segmentation approach has been adopted. This has been done as it allows the researchers to capture a wide range of age groups through a limited amount of categories. Generation Y (8-26), Generation X (26-42), Baby Boomers (43-62) and the Silent Generation (63+) were selected. Although these groups are all still living in the present, they can however find themselves living in different worlds due to growing up in different societies. *"Different generations have different general characteristics, which have been formed by the events that shape their lives"* (Brown, 2007, p. 205). Furthermore there are many inherent characteristics prevalent within each of these generations with regards to experience and acceptance of technology and media (Marconi, 2000). The following sections will provide an overview and insight into each generation.

2.9.2.1 Generation Y

Generation Y was born between 1981 and 1999 (Nelson, 2007). Therefore in 2007 Generation Y ranges between the ages 8 and 26. The term 'Generation Y' refers to the last generation to be born in the twentieth century and is therefore also known as the "millennium generation" (Reed, 2007). This youth generation is considered to be one of the most popular marketing segments of all. This is due to their substantial spending power, ability to set trends and their receptivity to accepting new products. This makes them early adopters (Wolburg & Pokrywczynski, 2001). Focus group observations show that Generation Y: is smart, aware and fair-minded. They like to be entertained in the ads directed at them. They love spoofs and anything that makes them laugh. This generation is environmentally conscious and this is also reflected in their purchasing habits (Gronbach, 2000).

Generation Y is considered to be individualistic, anti-corporate and resistant towards marketing efforts (Brand, 2000). This generation is likely to remain single throughout their 20s and early 30s meaning that they spend a substantial period of their adulthood unmarried (Ritchie, 1995). It has experienced traumatic parental divorces, corporate downsizing, limited financial aid and a weak job market (Wolburg & Pokrywczynski, 2001). Furthermore it has the potential of providing lifetime consumers and parental influencers for major purchases (Wolburg & Pokrywczynski, 2001). The above information highlights why this generation is of great importance to companies.

Generation Y is considered to be a challenge for marketers as they are very racially and ethnically diverse. Furthermore they seek entertainment and information from a large number of media (Wolburg & Pokrywczynski, 2001). This makes it hard for marketers to choose the most effective media mix. Their preferred media choices are radio, television and the Internet. It can therefore be argued that this segment accepts new media as they are both considered to be early adopters and heavy media users. Researchers also claim that this group is easier to target as they have grown up in a consumer oriented society (Wolburg & Pokrywczynski, 2001). Certain authors also believe that the key to reaching Generation Y is through avoiding traditional mass media messages as they do not like forced advertising messages. This generation has a very fragmented media interest and gets bored easily. Therefore in order to effectively reach this generation companies should adopt a complex and interesting communication strategy (Ciminillo, 2005).

As this generation has a high technological knowledge and are early adopters it can be assumed they are more likely to accept PoP TV-screens as an in-store marketing medium. However as Generation Y do not like forced advertisements this medium may prove ineffective.

2.9.2.2 Generation X

It is widely believed that people born in between 1964 and 1981 belong to Generation X. This means that in 2007 it includes everyone between the age of 26 and 42 (Nelson, 2007). Kotler describes this generation as people that have been shaped by bad economic times, the 'Challenger' Space Shuttle disaster, and the rising awareness of AIDS. Furthermore they are considered to be cynical towards advertising. It also seems apparent that they place the quality of personal life ahead of their professional career and they are not considered to be team players (Kotler, 2003). Generation X was raised during the period when women become working mothers. Moreover they are computer literate, tend to question authority and want explanations as to why something has to be done (Dietz, 1999). The generation is also typified as being street-smart and hungry to achieve the goals of being comfortable, wealthy or influential (Ritchie, 1995). According to Morrison Generation X is very knowledgeable of marketing activities and technology. Further to this they seem overwhelmed and exhausted by all the different channels of media. (Morrison, 1997).

Consumer research argues that Generation X have been raised on television and therefore have a very high understanding of this medium. Studies have also found that hype and flashy advertisements don't impress them and that they would rather be targeted in an honest manner (Healea, 1995). The generation's desire for honesty in turn means that they are potentially very loyal consumers. Once brand commitment has occurred it may prove extremely difficult for manufacturers to get this generation to switch brands. Their dislike of flashy advertising and hype further complicates this task (Ritchie, 1995).

Based on the above information it becomes apparent that targeting this generation is not an easy task. In order to be successful marketing efforts should be much more orientated around the functionality of the product. They are more likely to respond to advertising and marketing messages that are sincere, do not exaggerate and ones that deliver on its promises (Wolff, 2006). Marketers are somewhat unsure of what medium to use when targeting this segment. New media have proved popular, however some authors are unsure whether the Internet is a more effective communication tool than more traditional mediums such as television, print and radio (Bunker, 1995). Others claim that new interactive media offer advantages that might influence this media-hardened generation of the television age. These interactive technologies are preferred by some marketers as it allows them to target their

message more precisely to the generation and thereby build an interactive relationship (Bunker, 1995).

Using PoP TV-screens towards Generation X may have negative consequences as this segment seems too media saturated and also dislike flashy advertising and hype. However one can also argue that PoP TV-screens can be used as an interactive medium that delivers on its promises through providing accurate and honest product information. Varying levels of disappointments throughout their childhood will forever make Generation X cautious and cost-conscious consumers that are sceptical towards advertising (Ritchie, 1995). Therefore Generation X is very hard to influence through marketing activities.

2.9.2.3 Generation Baby Boomers

Baby Boomers are born between immediately after the Second World War in 1945 and 1964. Therefore in 2007 they are aged between 43 and 62. This generation is considered to be the largest and most diverse (Marconi, 2000). The Baby Boomers grew up at a time of economic expansion and this has created a generation that likes to win, be in charge, and to make an impact (Stauffer, 2003). Having grown up in a post-war world with economic growth, the Baby Boomers were the focus of society and this has to some extent resulted in a self-indulgent generation (Stauffer, 2003). Baby Boomers are concerned with social issues and causes and the majority of them are considered to be idealists who would like to change the world. Moreover they tend to marry later, divorce more often, and have children later in life compared to other generations (Marconi, 2000).

According to Marconi, Baby Boomers are the first generation that grew up with television and entertainment. They are considered to be more independent learners which has resulted in a less team and group focus and instead a more self orientated and self improvement approach. The focus on self improvement is depicted in the fact that Baby Boomers were the first generation to use deficit financing for personal lifestyle advancement (Marconi, 2000).

Baby Boomers are the fastest growing Internet user segment and that is challenging their traditional purchasing habits. The generation have grown up in the information age and therefore they seek facts, data and peer input before they will make up their mind (Business Wire, 2007). This is supported by the a survey conducted by JWT BOOM that state that the generation is vastly influential as 96% seem to share information with family and peers (Business Wire, 2007). Furthermore it has been found out that Baby Boomers frequently use the internet as an information tool for purchasing or researching products before shopping (Nolan, 2006). This interest in seeking information has created a generation which is not brand loyal, and thereby more willing to test new products that appeal to their current lifestyle (Business Wire, 2007).

The Baby Boomer generation consists of niche segments and is not considered to be homogenous. Targeting this group can therefore be difficult as one cannot assume that a single medium can reach and influence the entire boomer market (Stauffer, 2003). It is therefore hard to know if the use of PoP TV-screens will be an effective in-store marketing tool for retailers. Based on the above information it can be argued that the PoP TV-screens will be useful as an extra source of information as the Baby Boomer generation is very informative oriented. However as the segment seems not to be brand loyal and is more willing to try new products it could be assumed that PoP TV-screens will be more effective for attracting the Baby Boomers attention towards a product. The only common denominator for the whole generation is that they are influenced by images of a rich past and positive images of today (Marconi, 2000).

2.9.2.4 The Silent Generation

The Silent Generation are born between 1920 and 1945 which makes them aged above 63. They were raised during the great depression and World War 2 and therefore have experienced a period of rebuilding. This has taught them loyalty, respectfulness, patience and willingness to sacrifice (Mitman, 2006). They have grown up in traditional family patterns in relation to gender roles, meaning that the husband was working while wives took care of the home and children (Pension benefits Journal, 2005). The silent generation has now reached retirement age and is considered to be part of the older people segment.

Studies conducted by Hare, Kirk & Lan (2001) have found that in-store shopping environments cause difficulties for older people. It has also been found that clear pricing displays were important for this segment (Hare, Kirk, & Lan, 2001). As older consumers sight is often deteriorating product labels are found to be too small (Mason & Bearden, 1979), (Underhill, 2000). It is difficult to increase the type font on packaging due to limiting space constraints. Therefore TV-screens used at the PoP display have the ability to clearly highlight product information and prices to older consumers. They also provide the retailer with the option of presenting product information via audio (Mason & Bearden, 1979). A study by Schmidt, Segal & Cartwright (1994) discovered that product choice, quality of store environment and service features were most important to older consumers. In-store TV communicates a greater quality and premium in-store environment and may also be seen as an additional store service feature (Schmidt, Segal, & Cartwright, 1994). Therefore from this information it is possible to hypothesise that In-store TV may be an effective tool to target older consumers. The majority of this segment has been found to live alone with readymade meals and frozen foods proving popular food choices. Therefore product quantities were often found to be excessive (Gregoire, Nyland, & Morcos, 1993). Changing displays regularly disorientates the older consumer and therefore is viewed negatively (Hare, Kirk & Lan, 2001; Mason & Bearden, 1979). Therefore in order to effectively target this segment via in-store TV, products within the stated categories should be used. Furthermore smaller packages should be designed for this segment (Hare, Kirk, & Lan, 2001).

3 Methodology

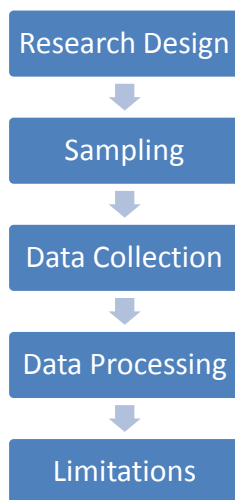


Figure 2: Market Research Steps

Source: Adapted from Homburg/Krohmer (2003)

This part of the thesis will explain how consumers' behaviours and attitudes towards in-store PoP TV-screens was analysed. In order to undertake systematic market research several steps need to be taken. *Figure 2* provides a process overview whilst also serving as a guideline for the reader. To begin with the research design will be described and the employed methods discussed. This will include a detailed description of the survey used. Another aspect that will be discussed in this section is the pre-testing process and all the practical problems that are associated with the design of the research methods. The subsequent section will explain the sampling techniques and empirical data collection methods. In-depth practical issues such as how, whom, where, and when the data was collected will be covered in this section. The data processing necessary for using it within a statistical program is then described. Finally the limitations of the research at hand will be examined.

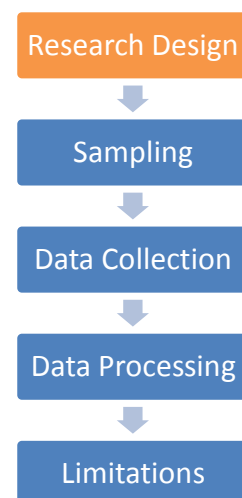
The posed research question was answered as objectively as possible using quantitative methods. The subjective opinion of the researchers was considered unimportant for the purposes of this study which tries to find a causal explanation for the behaviour of consumers. By gathering knowledge a basis was given for an inductive process in answering the research question. A positivistic, epistemological stance is taken as it is believed that in order to provide the best answer possible an objective, standardized approach must be used in order to gather the primary data (Easterby-Smith, Thorpe, & Lowe, 2004). Consumer behaviour during the conducted research was considered to be objective as it was outside of the researcher's realm of influence. Therefore the ontological approach in this study was deemed objectivistic (Bryman & Bell, 2003).

3.1 Research Design

This chapter will give a clear definition of the research design namely the methods used and the reasons for their implementation. As has been mentioned before the use of in-store TV is a new phenomenon. This is why this study mainly relied upon primary data. Secondary data was primarily used to provide a theoretical framework as well as a reference point for the construction of the methodological approach.

In addition to the two main methods which will be described throughout this methodology an unstructured interview was conducted with Leif Liljebrunn of Zeta Display. However this interview was solely conducted to gather information about the research subject. As it has no other purpose for this thesis it is only mentioned as a source however it is not further detailed within the paper. For a transcription of the interview see *Appendix 14*

A large sample of quantifiable data is needed to provide a variation in opinion. Thus in order to adhere to sampling procedures a cross-sectional research design was used for this research (Bryman & Bell, 2003). This particular design was suitable as it was possible to complete in a relatively short period of time and the answers were derived more or less immediately (Bryman & Bell, 2003). Furthermore it produced the desired quantitative data which then



made it possible to make inferences about the consumer behaviour that was asked for in the research question.

One of the methods chosen to answer the research question was *structured observations*. The observations serve to measure the responses that consumers show when facing the stimulus provided by PoP TV-displays. However a limitation of structured observation is that it is not possible to find out what the intentions or reasons behind the observed behaviour are. This is pointed out by Bryman & Bell (2003) who state that “*structured observations do not readily allow the observer to get a grasp of the meaning of behaviour*” (Bryman & Bell, 2003, p. 87). For example the observer in this study will never be able to fully ascertain the reasoning behind the consumers approach avoidance behaviour. Therefore this method was used in combination with *surveys* that were carried out through *structured interviews*. The use of this combination is reinforced by Bryman & Bell (2003) who point out that “*structured observation is a method that works best when accompanied by other methods*” (Bryman & Bell, 2003, p. 88). The accompanying questionnaire calculated attitude and was used on 15 percent of the overall number of observed participants. This combination made it possible to deduct the causality between actual behaviour and attitude. The following sections provide a detailed explanation of the chosen research methods and highlight any related issues.

3.2.1 Structured Observation

In order to measure consumer behaviour towards in-store PoP TV-screens a structured observation method otherwise known as systematic observation was used. This involves the employment of explicitly formulated rules for the observation and recording of behaviour (Bryman & Bell, 2003). This is advantageous as it allows behaviour to be observed directly. Generated rules are used to inform the observers about what needs to be looked for and how the behaviour should be recorded. An observation schedule in the form of a tracking sheet ensures that every participant’s behaviour is systematically recorded making it possible to aggregate the behaviour of all sampled participants in respect to each type of behaviour recorded. The rules for the observation schedule are kept extremely specific so that the behavioural aspects needed for an accurate answer can be ensured. When observations are standardized and systemized they can be a way of generating highly quantitative data. This technique is known as activity sampling and was used in this study (Bryman & Bell, 2003). It involves a classified and recorded observation process that hopes to establish behavioural trends. In this particular case the specific technique of field simulation was used. This technique has been shown to work well with a quantitative research strategy (Salancik, 1979). This type of observation involves the researcher directly intervening in and manipulating a natural setting in order to observe the outcomes of the intervention (Easterby-Smith, Thorpe, & Lowe, 2004). In this case the in-store PoP TV-screen was placed in front of a demographically neutral product in a prime observation area. One further aspect of this type of observation is that participants will be unaware that they are being observed. This type of research can result in extremely striking findings and also circumvents the problem of false participant reactivity that may occur when the person is aware of being observed. One ethical consideration is that this method may evoke certain problems in terms of consumer deception (Bryman & Bell, 2003). However as the present research was conducted on anonymous consumers with their personal data not being recorded in any way this issue was not considered to be a problem. Moreover this method allows for the study to be carried out by relatively untrained observers. Further to this it allows for observations to be undertaken simultaneously and high accuracy can be attained with a high number of participants.

Appendix 1 shows the designed observation sheet which was used for measuring different consumer demographic behaviour towards in-store TV as a PoP display tool. The initial aims

of the observation sheet were that it should be easy to use and effectively measure consumer's approach and avoidance behaviour with regards to the PoP TV-display. The following section will describe the design phase of this document.

The first phase of the observation sheets recorded basic information such as day, time frame and observers initials. The next phase sought to gauge the respondent's demographic information in the form of age and gender. As previously mentioned the ages were segmented into the four generations of Generation Y (8-26 years of age), Generation X (27 - 42 years of age), Baby Boomer Generation (43 – 62 years of age) and the Silent Generation (63+ years of age). It was felt that these age groups were most appropriate both from a demographical standpoint and from an observing position making it relatively easy for the observers to estimate the age group of the customer.

The third phase of the observation sheet aimed to systematically record respondent's response to the stimulus of the PoP TV and the displayed products. The observation sheet consisted of five different behavioural variables; *Ignore*, *View TV*, *View Product*, *Touch Product*, *Product in Basket*. These variables could occur in various different combinations across a maximum of five steps, thereby resulting in many different behavioural sequences. For example one consumer may have initially viewed the TV, subsequently viewed the product and then ignored the display. Another consumer may purely have viewed the product without paying any attention to the screen. From this it would then be possible to draw a variety of conclusions regarding how customers react towards the stimuli of the PoP TV-screen. Extensive analysis and pre-testing showed that respondents were highly unlikely to participate in more than 4 behavioural steps. Therefore in order to cater for all possibilities five possible steps were included in the observation sheet. The most common behavioural sequences will be detailed in the Data Analysis and Presentation section of the paper once they have been identified from the observations.

3.2.2 Surveys conducted in Structured Interviewing

As was mentioned before, using only structured observations would pose a major disadvantage as it would only yield information about directly visible behaviour without providing an explanation for the observed subject's actions (Bryman & Bell, 2003). A complementary, more probing method was also needed so that the attitudes of different demographics towards TV-screens being used at the PoP could also be investigated. This is why a *survey* was also carried out on approximately 15 percent of the observed customers. For this a *questionnaire*, a typical tool for the investigation of consumer preferences and opinions, was administered through the method of *structured interviewing* (Easterby-Smith, Thorpe, & Lowe, 2004). In the following methodological tools will be discussed further.

3.2.2.1 Structured Interviews

Structured interviews were used as they provided various characteristics advantageous to the research at hand. As the attitude of different demographic groups towards TV-screens was the focus of this second step of the research it was important to standardize the questions that were to be administered. This method allows for the answers to be processed and for them to be made comparable (Bryman & Bell, 2003). Normal interviews are a potential source of error due to a variation in questioning (Bryman & Bell, 2003). In comparison, the advantage of structured interviews is that all questions are standardized within the survey. The point of this is to give all respondents exactly the same context of questioning. The interviewer did not receive formal training prior to the data collection process. The standardization of the interviewing process ensured that this did not pose a problem as any variations in respondent's answers were more likely to stem from a true difference of opinion as opposed

to the context of the interview (Bryman & Bell, 2003). The above stated points highlight why surveys conducted through structured interviews are an ideal complement to the observations. The development of the questionnaire will now be explained.

3.2.2.2 Questionnaire

The principle goal of the survey was to find out consumer attitude towards TV-screens used as PoP display tools. However, it would have been problematic to simply ask people for their attitude. Terms can have different meanings to different people. That is why the term *attitude* was broken down into several components (Fink, 2006). This made it possible to identify the dimensions that were of relevance to this research.

In order to do so the theoretical term *attitude* was divided into the *sub-dimensions* of *Attitude towards screens as a source of information* and *Attitude towards screens as an atmospheric factor*. These two dimensions were considered to be of significant interest to the research as the screens are designed to act as an interesting in-store stimulus that provides information for the consumer in the form of prices, promotions or brand messages. The creation of this interesting stimulus should be achieved without the consumer perceiving the screen as being ‘dominant’ according to Yalch & Spangenberg (2000) The above serves to clarify the dimensions of attitude with regards to in-store TV-screens (Mayer, 2004). It needs to be further pointed out that attitude is a latent characteristic and therefore the only way to measure it is in an indirect manner. Consequently it was necessary to further divide the aforementioned dimensions into so called *indicators* (Mayer, 2004).

Three indicators for the dimension of *screens as a source of information* were chosen. The first one was *attitude towards the message on-screen* and provided information about how customers perceived the message that was communicated at the point of purchase. The second indicator *attitude towards the value of the product-information* aimed to show whether consumers value the screens as a source of information about new or unknown products. The third indicator measured *attitude towards risk-reduction value* and was designed to discover whether the information given on-screen reduced the associated perceived risk of buying an unfamiliar and new product. Two indicators were selected for the dimension of *screens as an atmospheric factor*. The first indicator, *attitude toward cluttering* provided information about whether consumers felt that the atmospheric stimuli that was generated by the TV-screens was excessive and impeded their shopping experience and therefore might have acted as a source of avoidance-behaviour The second indicator *Attitude towards the image of screens* sought to determine the consumers general opinion towards the screens as part of the in-store environment. The featured messages and products were deemed irrelevant for this indicator.

The stated five indicators were used so that the latent characteristic of attitude could be more thoroughly examined. A further advantage of dividing attitude into several indicators was that it reduced the margin for possible errors. The indicators were subsequently divided and constructed into the individual statement-questions within the questionnaire. The questions are commonly referred to as Items (Fink, 2006). This further division into items was necessary for reliability purposes. The ‘true’ attitude of a respondent may not have been accurately measured through the use of one item as it may have contained an error. However if several items measured the same attitude then the aggregated mean of all the items should have balanced out any errors that might have been prevalent within one of the questions (Mayer, 2004). An overview of all the items as well as the interrelation between the theoretical construct, dimensions, indicators and items can be found in *Appendix 2*.

The guidelines given by Fink (2006), Bryman & Bell (2003) and Mayer (2004) were used during the development process of the individual questions/items. This ensured that the

questionnaire was fully understandable for the respondents whilst it also certified that the respondents' attitude and sub dimensions were being accurately measured In the following the composition of the questionnaire will be explained.

The survey starts with a standardized introduction in order to make contact with the respondent and to give information about the purpose of the survey. In the first part of the questionnaire the respondents were asked to state whether they had noticed any of the PoP TV-screens in the store prior to the interviewer pointing them out. If the respondent answered 'Yes' to this they were presented with several possible answer choices about which aspect of the screen in particular captured their attention. This was done so that it would be possible to determine whether a correlation existed between the consumers actual observed behaviour and the perceived behaviour existed by the customers. The second part of the survey consists of closed questions that are meant to measure the attitude of the consumer towards the TV-screens. An explanation that detailed the development process of the questions was stated earlier. Closed questions in the form of a graphic five point Likert Scale were used. A verbal format was used for the response section of the questionnaire. This means that could attach a meaning to their answer while still answering within the confines of the Likert Scale. Closed questions are advantageous as they facilitate the survey both during and after the actual research. As the surveys were conducted within the in-store environment whilst the respondents were conducting their shopping it was important for the interview to be as short as possible. Closed questions are easy for respondents to complete whilst they also reduce possible answers. This facilitates the analysis of the data (Bryman & Bell, 2003).

One disadvantage of using closed questions is that they do not allow for much detail when answering. However, using a Likert Scale allows for more variation in answering the questions (Easterby-Smith, Thorpe, & Lowe, 2004). The Likert scale is a common tool to measure attitude in market research. The respondents are presented with the aforementioned items (Mayer, 2004). The response possibilities are presented in a verbal format that asks to which degree the respondent agrees or disagrees with the provided statement (Bryman & Bell, 2003).

Finally an opportunity to comment freely on the research object, the TV-screens, was presented at the end of the questionnaire which made it possible to obtain any additional information that was not covered in the closed questions. The complete questionnaire in English and Swedish can be found in *Appendix 3 & 4*.

There are several aspects both in the choice of the research method and the questionnaire development process that emphasised high validity and reliability. As previously mentioned choosing the method of structured interviewing with a fixed set of questions reduced the likelihood of interview variability, meaning that the possible influence of the interviewer on the respondent was minimized (Bryman & Bell, 2003).

Furthermore, using proven methods by Mayer (2004) and Fink (2006) for the construction of the survey heightened the validity of the survey and the accompanying questionnaires. The reliability of the surveys was further increased as they could be repeated at any time using the questionnaire found in *Appendix 3 & 4*.

The questions were originally formulated in the English language and were then translated into the Swedish language as the actual survey itself was undertaken in Swedish. Therefore there was a danger that questions may have lost meaning during the translation. To ensure that all meaning was transferred during the translation a highly skilled, bilingual translator was used. This further enhanced validity.

3.2.3 Pre-Testing

The primary data was collected in two phases. The pre-testing phase and the research phase. The pre-testing phase was important for administering the questionnaires as it exposed errors in the methods used. This was also the case for the method of observation. Another advantage in doing pre- or pilot testing is that it may improve the response rate. This is due to the fact that it eliminates several potential sources of problems such as badly worded questions or providing experience in observing and approaching customers (Fink, 2006).

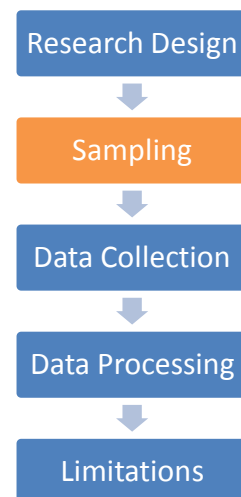
The pre-tests were conducted in an ICA Kvantum store in Lund, Sweden where a PoP-TV-display was present. The store was of comparable size to the ICA in which the actual research was conducted. One hour was spent conducting observations and 10 customers were interviewed using the preliminary observation-sheets and questionnaires. The test laid open weaknesses in the construction of both research tools. The observation-sheets were found to be too complex; it proved difficult to accurately observe behaviour whilst simultaneously having to record actions via an over-comprehensive observation sheet. Therefore the observation sheet was shortened and adapted accordingly. The pre-test also showed that one of the items within the questionnaire produced a predominantly neutral answer. This indicated that the respondents either failed to understand the posed question or were disinterested by it. The problem stemmed from a question that asked for the respondents' opinion about the TV-screen's design. In order to counter this, the wording of the question was then changed. The neutral response may also have been affected through some of the interviews being conducted away from the screen as it made it difficult for the respondent to visualise the TV-screen. All subsequent interviews were held in view of the screens which vastly improved the clarity of the question and therefore the response rate. Upon the pre-test interviews being completed the respondents were informed that the research was still in a pre-testing phase. They were then asked to state their opinions on the suitability of the questionnaires time frame and also whether they thought any of the questions were formulated in an unclear manner. Any feedback was then interpreted and suitable changes implemented.

The pre-testing phase serves to improve the design of the methods whilst also improving overall reliability and validity (Fink, 2006). Improved reliability leads to more consistent information while improved validity leads to greater accuracy in the derived information (Mayer, 2004).

3.3 Sampling

In order for the research to be as valid as possible a suitable sample of the overall statistical population needs to be taken (Easterby-Smith, Thorpe, & Lowe, 2004). As this research focuses on the reactions and attitudes of different demographic segments it was necessary to observe and survey consumers during the actual shopping process. *Tables 1&2* give an overview over the total amount of customers observed and surveyed.

For the observations little choice was given in selecting a sampling method. Customers were observed as they approached the monitored TV-screen giving a perfectly random sample of the shopping population within the store. Conducting the observations throughout the entire day provided a strongly representative sample of the entire shopping population. By using a random sample sampling-errors are kept to a minimum and thus the validity of the answers is also improved (Bryman & Bell, 2003).



Gender/Age	8-26	27-42	43-62	63+	Σ
Male	15,0%	25,0%	47,0%	13,0%	42,0%
Female	8,5%	39,3%	39,3%	12,8%	58,0%
Total	23,5%	64,3%	86,3%	25,8%	100,0%

Table 2: Distribution of Observation Sample

with regards to their attitude towards TV-screens. As it was imperative to capture a sufficient amount of respondents from each generation and gender demographic a *stratified random sample* was taken. In order to ensure that each demographic was represented in equal parts a list was kept detailing how many respondents have been questioned within each segment or

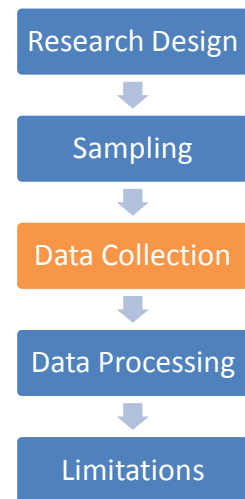
Gender/Age Group	8-26	27-42	43-62	63+	Σ
Male (%)	14,3%	12,9%	10,0%	11,4%	48,6%
Female (%)	15,0%	13,6%	14,3%	8,6%	51,4%
Total (%)	29,3%	26,4%	24,3%	20,0%	100,0%

Table 1: Distribution of Survey Sample

missing segments. Within this systematic search for respondents the consumers were chosen at complete random adding a probability element to the sampling of the surveys. As comparisons will be made between the different strata this was believed to be the most precise sampling method as it homogenizes the groups (Fink, 2006).

3.4 Data Collection

For this study the ICA Kvantum supermarket *Flygfyren* in Norrtälje, Sweden was chosen. This location provided an optimal setting for research on TV-screens as PoP-displays as it is one of a limited number of stores in Sweden operating with over 20 in-store TV-screens (Liljebrunn, 2007). In comparison the usual amount of TV-screens in a store of comparable size is only two as the concept of in-store TV as PoP displays is still very new (Liljebrunn, 2007). This made it possible to accurately measure behaviour and attitude according to the purpose of this paper. The research was conducted on a Tuesday (8th May, 2007) and Wednesday (9th May, 2007) as research has shown that these particular days have similar number of shoppers (East et al., 1993). To ensure that both observers and interviewers remained concentrated research was conducted within three daily time frames; 08:00 h – 12:00 h, 12:00 h – 16:00 h and 16:00 h – 20:00 h. Breaks were taken between the time frames. In the following details will be given to the exact process of the data collection for each individual method.



3.4.1 Data Collection for Structured Observations

Easterby-Smith (2002) point out that observation times must be carried out during representative periods of the day to ensure non-bias (Easterby-Smith, Thorpe, & Lowe, 2002). Therefore observations were recorded during two similar mid-week days during equal time frames as was mentioned above. One PoP TV-screen was chosen for the observation.¹ This was selected as the ideal observation position as it was located in a highly frequented aisle. This allowed for a high number of respondent recordings in the limited two-day time frame.

¹ See Appendix 5, Photo 1 for illustration.

Furthermore the TV PoP screen was located amongst a plethora of other product displays. Therefore the consumer was faced with various stimuli and it was thus possible for the observer to accurately measure response behaviour towards the TV-screen. In order to ensure that no product preferences would distort the demographic results, a neutral product was selected. Therefore the most neutral product that was being used at a PoP in-store display in the store was considered to be ICA home brand chopped tomatoes.²

One designated observer watched and recorded consumer behaviour continuously on the earlier mentioned Observation sheet during the two day period. In order to ensure a maximum of concentration observers switched every hour. As was mentioned in the chapter on pre-testing, the exact observation technique was practiced earlier in order to standardize the procedure even though it was conducted by two different persons. Bryman & Bell (2003) highlight that it is challenging for the observer to remain unseen under a heavy observing schedule. Therefore precise planning was involved during the set up phase of the observation. This ensured that the consumer was completely unaware that they were being observed whilst also allowing the observer to record accurate and genuine results. *Appendix 5.1, 5.2 & 5.3* highlight the hidden yet effective observation spot. As the observations allow for the natural movement of the shoppers without affecting regular behaviour, high ecological validity is achieved (Bryman & Bell, 2003).

Bryman and Bell also highlight that the observation sheet and system must be easy to use and that the observers must familiarize themselves with the layout, format and aims of the study. Therefore the observer familiarised themselves extensively with the observation sheet during the pre-test phase. This ensured that the observer did not become flustered when they were faced with too many options (Bryman & Bell, 2003).

The observation period was triggered by consumers approaching a previously designated in-store TV-display. The respondent leaving the entire product display section signalled the end of the observation.

3.4.2 Data Collection for Control Group

An observation on a control group was also undertaken. An identical observation was carried out only this time the stimulus of the in-store TV was taken away from the display. All other aspects of the display remained identical. From this it was possible to further investigate the TV-screens causal influence. As Bryman and Bell state “the purpose of the control group is to control the possible effects of rival explanations of a casual finding”. (Bryman & Bell, 2003). Therefore the control group ensures high validity as it eliminates the possibility of bias. The store manager only permitted for the stimulus of the TV-screen to be taken away for a period of one hour due to external contractual obligations. The time frame between 16:00 h and 17:00 h was taken as the researchers were informed by supermarket staff that this represented the busiest time of the day. Two observers were also used during the controlled phase as opposed to one, ensuring that as many as possible subjects could be measured. It was previously agreed that one observer recorded the behaviour of males whilst the other that of females.

3.4.3 Data Collection for Surveys administered through Structured Interviewing

The interviewing schedule consisted of the hours mentioned above. In order to administer the interviews customers were approached during their shopping routine. Special care was taken to administer the questionnaire in close proximity of a TV-screen displaying PoP

² See Appendix 5, Photo 1, p. 73.

advertisement as pre-testing showed that this improved understanding for the respondent aiding validity. The consumers were approached and after initial greetings and introductions the origin and purpose of the study was explained. Following this the customers were asked to participate in the study. If they declined they were thanked and a new respondent was sought out. If they accepted, the questionnaire was administered according to the structure laid out in [Chapter 3.1.2](#). The questions were read to the respondent while at the same time providing the opportunity for the customers to read the questions and the answer-options to ensure clarity.

As several respondents did not answer the questions according to the verbal format given to them or had problems understanding the meaning of the question some probing by the interviewer was necessary. As intervention by the interviewer may influence the respondents answer great special care was taken to give the same probes to all respondents (Bryman & Bell, 2003).

An example for consumers not answering the questions correctly was when *No* was given as an answer instead of the provided *Disagree* or *Strongly disagree* options. In such cases, the respondents were asked specifically which negative answer more accurately reflected their feeling towards the statement. Care was also taken not to point toward one of the two, in this example, negative choices as pre-tests had shown that this seemed to influence the answer given.

The second type of probing was done when customers did not exactly understand the posed questions. An example for a question that needed frequent probing is No. 13 *I feel the TV-screens improve the store*. Here customers were given examples for ways in which the store could improve the store (e.g. from a customer-service or atmosphere standpoint). However every customer was given the same probe ensuring that the questioning remained standardized. Thus validity was not significantly influenced. Further supporting the validity of this particular method is the fact that the surveys were conducted in Swedish by a native speaker of the language. During the process of the interview random statements given by the respondents were noted in the *Additional Comment* field to provide extra information about consumer attitude to be used in the discussion. Following the interview the respondents were thanked and left to continue with their shopping.

3.5 Data Processing

In order to process the acquired statistical data initially MS Excel and subsequently SPSS (Statistical Package for Social Science) was used. The data had to be edited and processed in a three step process. This consisted of: data management, the definition of the variables and the statistical analysis (Mayer, 2004).

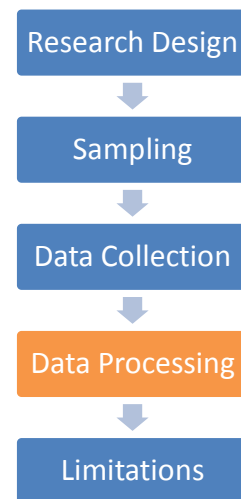
Data management combines the process of codification, entry and control. This essentially involves assigning numbers and names to the items and subsequently matching answers in order to create a so called code book (Fink, 2006). The first step involved assigning numbers to both the questionnaire and observation sheet. A pole reversal was needed as some of the questions asked in the questionnaire were formulated in a contradictory manner (Mayer, 2004). This method was however not relevant or applicable for the data management that concerned the observations.

The first section of the questionnaire was assigned specified numbers: one and two measured whether or not the respondent noticed the TV-screens inside the store. If the respondents answered yes (1) then it led on to several further choices that determined which elements in particular caught the consumer's attention. These elements were then categorized from one to seven. The answer corresponding to the number seven provided the respondent with the opportunity to select "other" thus providing the choice of adding extra elements for the case that their reason was not listed or they wanted to record an opinion. The second part of the questionnaire was divided into 14 closed questions that were codified accordingly from one to five. Number one depicted a positive view of the TV-screens, whereas five reflected a negative attitude. For the second section a pole reversal was needed for questions 3, 7 and 9. This means that the format of the answer options was structured in a reverse manner. While 'strongly agree' signifies a positive attitude for most of the questions, for the questions in need of pole reversal this answer option signifies a negative attitude. For instance the possible options listed for answering question seven; *I feel that TV-screens get in the way of my shopping* would range from 'strongly agree' (five) to 'strongly disagree' (one).

This section also included an 'additional comments' box which was designed to generate discussion material regarding the respondents attitude towards the screens. Therefore it was not codified. This information also provided an additional insight into the consumers' understanding of the medium. The final section of the questionnaire captured demographic elements; male (one) female (two) and age group (one to four) were the numbers assigned to the different segmentation variables.³

A similar codification approach was used for the observations. The first section of the observation sheet captured the date and time of the observation as well as the demographic elements of age and gender. The main section recorded five possible different types of consumer behaviour that could occur upon the respondent being faced with the PoP TV stimulus. Ignore (one), View TV (two) View Product (three) Touch Product (4) and product in basket (5). Zero was used to fill in the blank reactions.

Once the data was codified it was entered into MS Excel and subsequently imported into the statistical program SPSS. The program then classified the data into cases and variables that identified the key tendencies that were prevalent in the answer sheets of the questionnaire and



³ See Appendix 3 & 4, p. 69.

observation sheets. The data underwent a strict control process to ensure that the codification and data had been entered correctly (Mayer, 2004). This was done to prevent miscoding and the entry of incorrect data preventing so called 'dirty data' to negatively influence the results (Fink, 2006). By entering the data correctly it should be able to generate the same results every time it is used. This step further heightens the validity of the research results.

A *Definition of the Variables* was required once the data had been codified, entered and finally controlled. This step recoded and created new variables (Mayer, 2004). The two variables, generation and gender were created from the last two questions of the questionnaire.

The *statistical analysis* was the key factor of the data processing and was furthermore considered to be an independent step of academic research. It will therefore be analyzed individually in *Chapter 4 – Data Analysis and Presentation*.

3.6 Limitations

This section will attempt to give an overview of the limitations of the methods used within this research. Factors that may have decreased the validity will be explained for each method chosen. In addition to this an explanation of why it is felt that these factors do not significantly decrease the accuracy of the findings will be provided.

3.6.1 Structured Observations

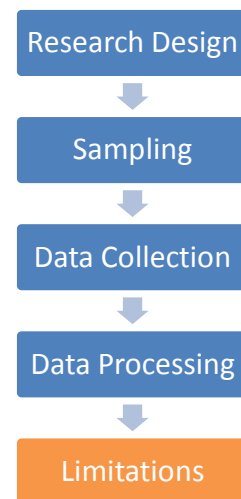
A limitation regarding the structured observations may stem from the fact that at the time of observation the displayed product was subject to an attractive price promotion. Therefore it is possible that the price attraction may have generated more response behaviour than the stimuli from the PoP TV-screen and product display. However it should be noted that the majority of products surrounding the observed area were also subject to price promotions.

Furthermore the recording of age groups might to a certain extent be unreliable. This limitation is due to the fact that the observer had to estimate the respondent's age under a time pressure. However the groups were kept broad enough to make a relatively precise assessment possible.

3.6.2 Structured Interviews & Survey

One factor that may be considered detrimental to the validity of the survey is the fact that the sample population was not taken from the one used for the observations. While some respondents may have by chance been part of the observed sample no conscious effort was made for this to be so. As the observed screen was located to the side of a narrow aisle intercepting consumers in order to interview them would have created an 'unnatural' distraction within the shopping environment. Therefore the interviews were conducted out of sight of the observation spot near other similar TV-screens. However as was explained in [chapter 3.2](#) a type of random sample was used. It can be argued that by keeping the sample random and sufficiently large the derived answers are representative despite the differences.

Furthermore as interviews were used to administer the survey the presence of the interviewer invariably had an influence on the respondents. As the interviewer had no prior training in conducting surveys it is possible that the customers were inadvertently probed for example when hesitating to answer a certain question. As mentioned before using structured interviews



with pre-determined questions and a fixed set of answers is a way of circumventing this problem (Bryman & Bell, 2003). In order to prevent the interviewer from exerting any influence the conversations with the respondents were kept to a minimum and were not taken beyond the interview structure. This way the exact intention of the survey was not divulged and thus consumers who already answered the questionnaires could not influence other shoppers with background information.

3.6.3 Questionnaire

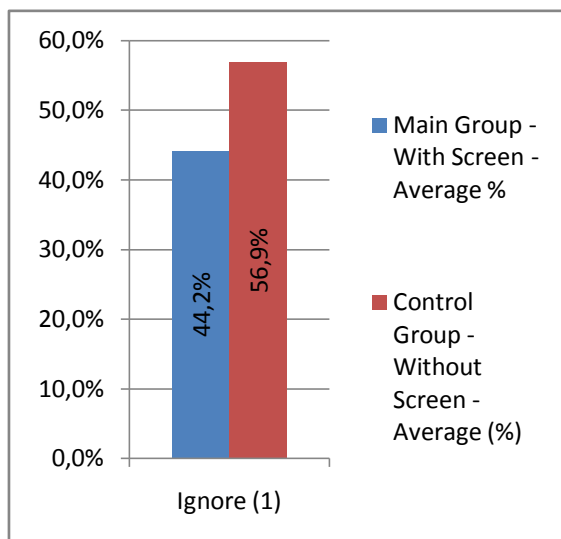
As has been mentioned before a limitation regarding the questionnaires is that they have not been tested before this research. Other questionnaires of course do exist from various online sources. However, these were not free and as this research was conducted by students a lack of money was the main reason for not purchasing a questionnaire that was developed by professionals and that was shown to be true in previous research. In order to ensure the highest possible validity a variety of academic sources such as literature by Bryman & Bell (2003), Mayer (2004) and Fink (2006) were used as an instruction manual to design the questionnaires.

4 Data Analysis and Presentation

The following section will provide an overview over the collected data. The makeup of the samples taken for each method will be described in more detail and the analysis.

4.1 Data Analysis – Control Group

As previously mentioned, the control group consisted of a one hour time frame where the stimulus of the PoP TV-screen was taken away. 130 subjects were observed during the manipulated period. 46.9 percent of these were men and 53.1 percent were women and the overall number of observed subjects equated to approximately 23 percent of the main test group. It was then possible to compare the control groups' ignore behaviour towards the entire



Graph 1: Average Ignore Rate

display with that of the main study when the TV-screen was present. Graph 1 demonstrates that the stimulus of the TV-screen reduced the average ignore rate from 56.9 percent to 44.2 percent. Thus the researchers conclude that the stimulus of the TV-screen most definitely inflicts a causal influence upon consumers' approach-avoidance behaviour. Any found tendencies do not serve to act as a comparative study however they reinforce the notion that the stimulus of the TV-screen inflicts a causal influence upon different consumers. The control group showed that taking away the stimulus had a more profound effect upon men than women. The ignore rate among men went from 40 percent when the screen was present to 70 percent when the screen taken away. Whereas

women's ignore rate only marginally increased, reaching 43.5 percent from an original value of 40.9%. Generation Y showed an 11.6 percent, Generation X a 13.5 percent, Baby Boomers a 17.7 percent and the Silent Generation a 7.8 percent increase in ignore rate.

4.2 Data Analysis and Presentation for Observations

During the two day period at the ICA Kvantum supermarket *Flygfyren* in Norrtälje, Sweden 567 observations were recorded. Furthermore a control group consisting of 130 subjects was also observed. The following section will provide a detailed presentation of the data collected through the observations.

Of the 567 observations 42.2 percent of the observed respondents were male and 57.8 percent female. These figures reflect the general gender shopping tendencies that were mentioned in Chapter 2.9.1. Generation X and the Baby Boomer Generations are the most prevalent segments within the in-store environment. There are an equal amount of Generation X and Baby Boomer women shopping whilst it appears that Generation X males are outnumbered in the supermarket by their parents from the Baby Boomer Generation. The observation periods were divided into three different time frames; from 8 h-12 h (40,2%) 12 h-16 h (35,3%) 16 h-20 h (24,5%). This was done in order to see whether the impact of the in-store TV-screen changed throughout the day. Results showed that as the day went by the stimulus of the screens generated fewer responses; 38.6 percent of subjects in the 8 h-12 h time frame ignored the screens whilst 46.0 percent of the 16 h-20 h time slot did.

4.2.1 Definition of Behavioural Sequences

Section 3.2.1 in this paper explained how the observation procedure systematically recorded respondents' behavioural responses to the stimulus of the in-store TV-screen. It was explained that the sheet used to track the respondents behaviour consisted of five different behavioural variables; *Ignore, View TV, View Product, Touch Product, Product in Basket*. These variables could occur in various different combinations across a maximum of five steps, thereby resulting in many different behavioural sequences. The gathering of the data resulted in a total of 13 different behaviours. From this six behaviours were eliminated from the data analysis and presentation phase as they consisted of a percentage representation of less than 0.5 percent. It was deemed that analysis of such a small number of respondents would not be sufficient to form meaningful conclusions. The following section will provide a definition for the seven most common behavioural sequences and will explain how each behavioural sequence relates to the theories of Approach-Avoidance and Stimulus-Organism-Response theory.

Behavioural Sequence 1 'Ignore': Ignore behaviour means that the observed person completely ignores the entire observed display. The display is comprised of the TV-screen, the card-board display and the product itself. This behaviour means that the stimulus of the entire display is ineffective for the observed individual.

Behavioural Sequence 2 'View TV – Ignore': This behaviour means that the participant enters the observation area and responds to the stimulus of the TV-screen. It has roused the individual into the action of looking at the TV-screen and can be seen as a type of browsing approach behaviour. However the participant does not show further approach and exploration behaviour and thus upon having looked at the TV they go on to ignore the rest of the display and continue to the end of the observed area. One can assume that the stimulus of the TV-screen attracts the attention of people who participate in this behavioural sequence.

Behavioural Sequence 3 'View Product – Ignore': This behaviour means that upon the subject entering into the observed area they will only view the product itself and then continue through the observation area without paying any attention to the accompanying TV-screen. This behaviour means that the stimulus of the product display itself is the source of the reaction and that the presence of the TV-screen does not encourage further exploration behaviour. From this it may be possible to conclude that TV-screens do not provide an interesting stimulus for people partaking in this behaviour. Therefore products targeted to demographics that predominantly show this type of behaviour towards TV-screens should not use TV as an in-store marketing tool.

Behavioural Sequence 4 'View TV – View Product – Ignore': Here the subject enters the observation area and shows that they view the TV-screen as a noticeable stimulus that triggers a response. The subject appears to view the TV in a favourable and interesting light as the communicated on-screen information causes them to show further exploration through continuing to explore the display and the product. The reason for the eventual avoidance behaviour might stem from a dislike to the product. This behaviour implies that the TV acts as an effective attention grabbing device that can lead to the consumer viewing the product in more detail. Therefore using TV as an in-store marketing tool for demographics that show this behaviour would be a sensible strategy.

Behavioural Sequence 5 'View Product – View TV – Ignore': The initial eye catching stimulus in this behaviour is the product display itself. However in this scenario the TV acts as the stimulus that is the source of further exploration behaviour. Subjects explore the display and the main role of the TV-screen in this behavioural sequence appears to be that it provides

a source of information for the consumer. As the stimulus of the TV-screen creates an interest and a point of reference for those participating in this behaviour it can be suggested that TVs are an effective PoP marketing tool for demographics demonstrating this behavioural sequence.

Behavioural Sequence 6 'View TV – View Product – Product in Basket': This behavioural sequence indicates that the subject responded positively to both the initial and subsequent stimuli of the TV-screen and product. Both stimuli motivated exploration behaviour which resulted in the subject placing the product in their basket which implied that they will buy it. It is difficult to establish the core reason for the subject engaging in this behaviour. However it is thought that the subjects' preference towards the actual displayed product has a greater impact than the initial response that was generated from the stimulus of the TV-screen. Therefore one can conclude that people that engaged in this behaviour were initially attracted by the stimulus of the TV-screen, however it is unknown whether the presence of the TV-screen played any part in the purchasing decision.

Behavioural Sequence 7 'View Product – Product in Basket': This sequence means that the subject went into the observation area and was attracted by the stimulus of the product. This attractiveness triggered further exploration behaviour that resulted in a purchasing decision being made without the subject even noticing the stimulus of the TV-screen. This implies that people engaging in this activity to not respond very well to the stimulus of the TV inside the store.

4.2.2 Breakdown of Behaviour

Table 3 provides an overview and breakdown of the seven different behaviours observed when consumers were faced with the stimuli of the product display. The table reflects the total collected data without a further breakdown into gender and generation segments. The total

Total observations	Frequency	Percent
Ignore	237	41,8
View TV-Ignore	83	14,6
View Product-Ignore	125	22
View TV-View Product-Ignore	78	13,8
View Product-View TV -Ignore	16	2,8
View TV-View product-Prod in Basket	6	1,1
View TV-Product in Basket	12	2,1
Total	567	98,2

Table 3: Distribution of observed behaviour

percentage of the table is only 98.2 percent as the six remaining behavioural sequences that all consisted of less than 0.5 percent were not included in this phase of the study.

All gathered behavioural data was then separated into gender and generations. This allowed for the analysis of how each gender and stated generation reacted to the stimulus of the in-store PoP TV-screen. Generations will firstly be investigated and then gender differences will be highlighted.

4.2.3 Data Analysis of Gender

The following section will analyse any gender trends that are prevalent in the empirical observation data. The collected data was analysed based on each of the previously mentioned seven different behaviour sequences.

Graph 5 in *Appendix 6* shows that there are noteworthy differences as to how males and females respond towards the overall product display which is comprised of different stimuli. The entire display, which is comprised of the PoP TV-screen, product and cardboard display, was ignored somewhat equally by both genders. A combined average ignore rate of 41.8% was scored from 43.1 percent of males ignoring the display in comparison to 40.9 percent of women. This indicates that both genders react to the stimulus of the display as a whole in a similar manner.

As *Graph 5* highlights there are notable gender variations throughout the other behavioural sequences in terms of approach-avoidance behaviour. Behaviour 2 results point towards men being more receptive to the stimulus of the in-store PoP TV-screen. 17.2 percent of men engaged in initial approach behaviour towards the screen, compared to only 12.8 percent of women. This positive male tendency towards the stimulus of the TV-screen was also mirrored in behaviour 4; 18 percent of men appeared to react positively towards the information value of the screen as they subsequently engaged in explore approach behaviour and viewed the product itself. No more than 10.7 percent of women showed this behaviour.

Analysis of Behaviour 3 illustrates that the stimulus of the product and the cardboard display upon which it is situated attracts women to a greater extent than men. Approach behaviour towards the product as an initial stimulus is prevalent among 25.6 percent of females as opposed to only 17.2 percent of men. This shows that women are more likely to respond to a display that does not feature a TV than men.

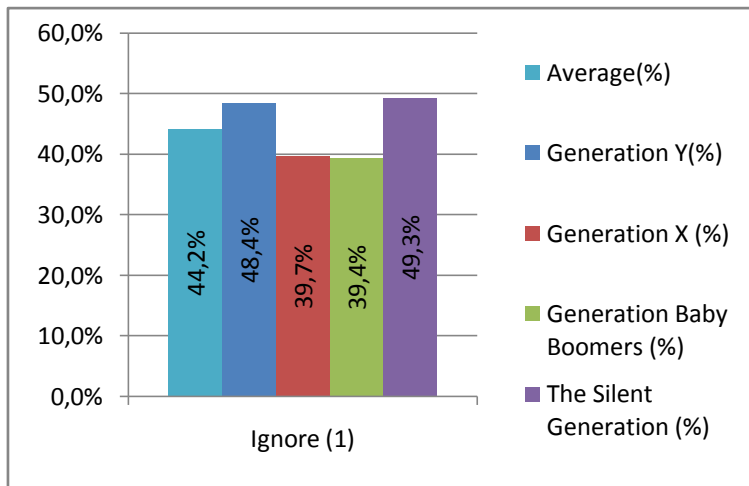
Behaviour 5 does not reflect a significant gender difference; 3.3 percent of men and 2.4 percent of women demonstrate explore approach behaviour towards the TV-screen after initially being attracted by the stimulus of the product. However, the last two approach behaviours (6 and 7) depicts a clear gender difference as more woman than men place the displayed product in the basket.

Based on the 567 observations it can be concluded that there are important differences in how each gender responds to the stimulus of the PoP TV-screen. Both men and women ignored the entire display to the same extent. However, men were more inclined to respond to the stimuli of the PoP TV-screen than the stimuli of the product and cardboard display. On the contrary, women appear to respond more towards the stimuli of the product and cardboard display as opposed to that of the PoP TV-screen. Additionally, women were the ones that placed the product in the basket the most. Results from the control group, where the stimulus of the TV-screen was taken away, also support the finding that men react much more positively to the TV-screens than women. The ignore rate among men went from 40 percent when the screen was present to 70 percent when the screen taken away. Whereas women's ignore rate only marginally increased, reaching 43.5 percent from an original value of 40.9%. These findings support existing research that claims that gender differences are prevalent in shopping behaviour (Park & Park, 1997), (Otnes & McGrath, 2001).

4.2.4 Data Analysis of Generations

The following subchapter will present an analysis of how the defined different generations respond towards the stimuli of the PoP TV-screen. The collected empirical data will be analysed based on each of the seven different behaviour sequences as in the section above. However, this section will focus upon and discuss generational differences and trends within each of individual behavioural sequence.

Behavioural Sequence 1 'Ignore'

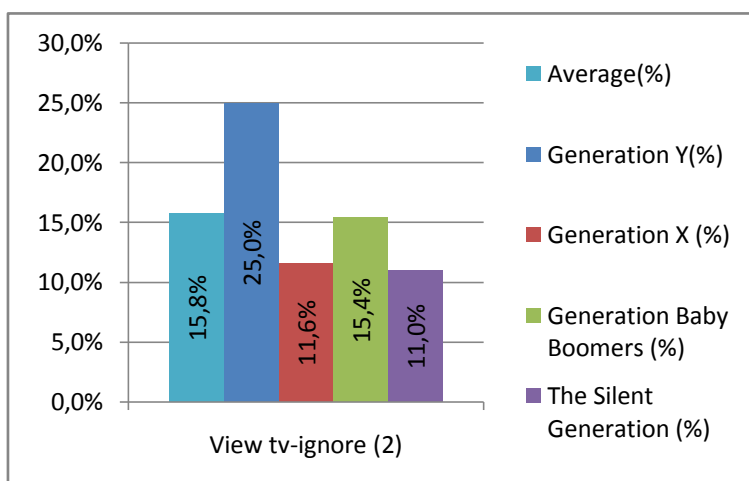


Graph 2

Graph 2 indicates that Generation X and Baby Boomers respond in a near identical manner towards the stimulus of the overall display. Around 40 percent of both these generations ignored the entire display and moved through the observation area without noticing the atmospheric stimuli of the TV or product. Generation Y (48.4%) and the Silent Generations (49.3%) also showed highly similar ignore rates towards the overall display. However as

Generation X and Baby Boomers' ignore rate is around 10 percent lower it is possible to state that they are more susceptible to be receptive towards an atmospheric stimulus in the form of a TV-screen or interesting display than Generation Y and the Silent Generation.

Behavioural Sequence 2 'View TV-Ignore'

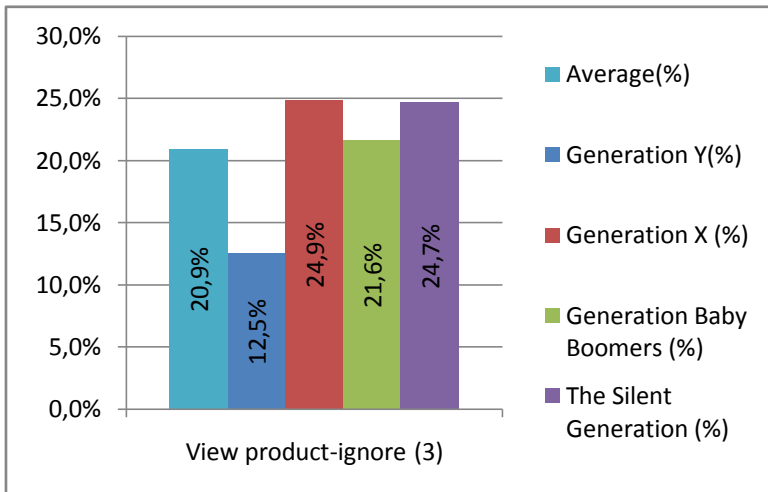


Graph 3

Analysis of behavioural sequence 2 shows that the Silent Generation and Generation X have matching Approach-Avoidance behaviours. Around 11 percent of both generations react to the stimulus of the TV, which is the least out of all the generations. 15.4% of the Baby Boomer Generation react to the stimulus of the TV and therefore show a slightly more positive Approach behaviour than that of Generation X and the Silent Generation. However, table X

illustrates that distinct differences exist between Generation Y's reactions to the stimulus of the TV in comparison to the other generations. 25 percent of the youngest generation reacted to the initial stimulus of the TV which highlights them as being the most receptive generation.

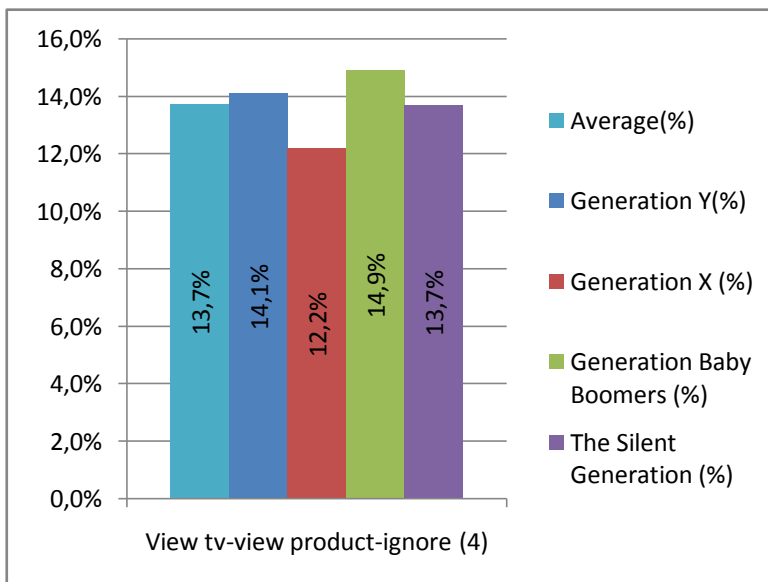
Behavioural Sequence 3 'View Product – Ignore'



Graph 4

Generation Y are influenced by the stimuli of the product and the display to a much lesser extent than the other Generations. The other generations show clear approach behaviour towards the product itself.

Behavioural Sequence 4 'View TV – View Product – Ignore'



Graph 5

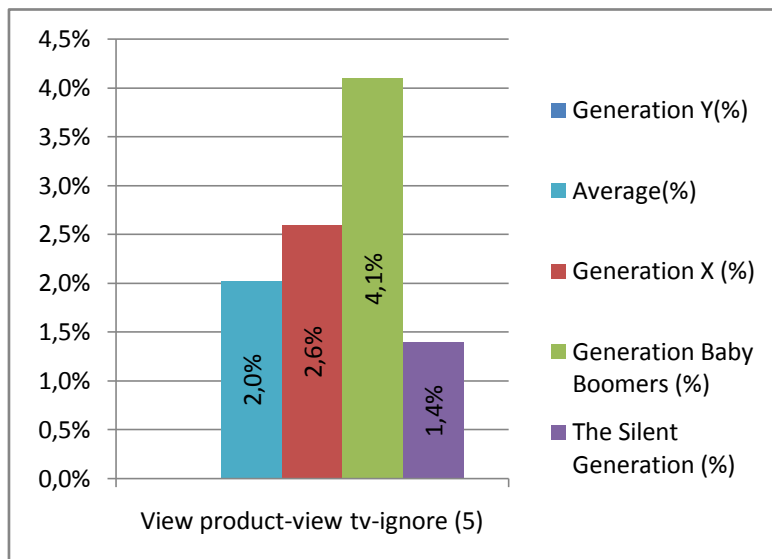
therefore possible to presume that TV-screens trigger an interest in the product, which results in the consumer viewing the product.

A breakdown of Behavioural Sequence 3 shows that Generation Y engages in this behaviour noticeably less than the remaining generations. Only 12.5 percent react to the stimulus of the product in comparison to 21.6 of Baby Boomers. Around 25 percent of both Generation X and the Silent Generation undertake Behaviour Sequence 3 and therefore react the most

positively. Based on this data it can be concluded that

Graph 5 illustrates that Behaviour Sequence 4 is equally apparent across all generations. All four generations appear to similarly engage in approach behaviour towards the TV and subsequently explore the display by looking at the product itself before engaging in avoidance behaviour for unknown reasons. This analysis indicates that the tendency of viewing the product after initially approaching the TV might be a distinct reaction to the stimulus of the TV. From this it is

Behavioural Sequence 5 'View Product – View TV – Ignore'



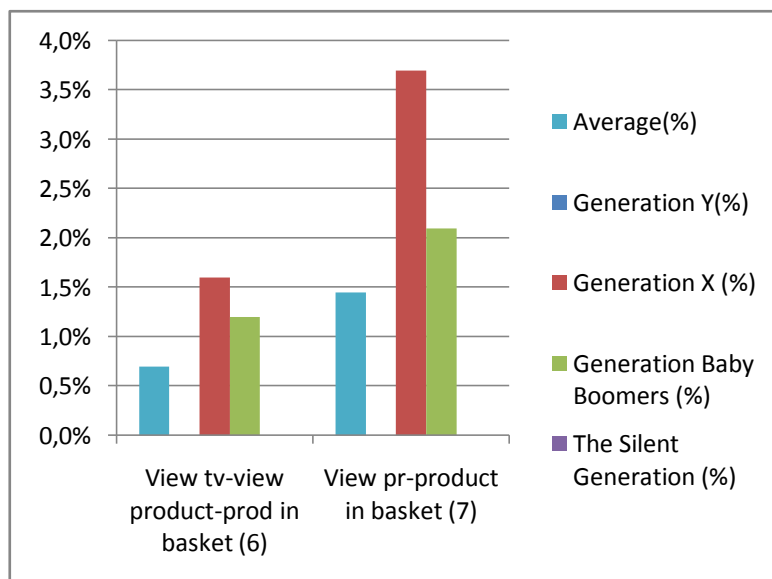
Graph 6

the Silent Generation (1.4%) complete the order of rank. It is hard to conclude much from these figures, as the percentage and numbers of respondents are rather low, thus not representative. Although, one conclusion would be that Generation Baby Boomers seem to use the TV-screen as a source of information regarding the displayed product.

A mere 2% of the total observations exercise Behavioural Sequence 5. This sequence consists of consumers firstly showing approach behaviour by looking at the product itself. They then look at the TV as a source of information before viewing engaging in avoidance behaviour. No members from Generation Y followed this behavioural sequence. The Baby Boomer Generation (4.1%) engages in this

behavioural sequence the most, while Generation X (2.6%) and

Behavioural Sequences 6 & 7 'View TV – View Product – Product in Basket' (6) and 'View Product – Product in Basket' (7)



Graph 7

consumers had for placing the product in their basket. Perhaps they chose the product due to the stimuli of the TV-screen or maybe they already had planned to buy chopped tomatoes as they entered the store. As it is not the focus of the study to measure sales, the questionnaire did not ask questions about why the respondents placed the product in their basket.

The two last behavioural sequences have been combined for analysis. Both Generation Y and the Silent Generation did not engage in either of the two behavioural sequences, hence they are not represented in the table. One tendency that can be derived from the analysis is that Generation X places the product in the basket more frequently than the Baby Boomer Generation. However, due to low representational figures it is hard to conclude that this trend is reliable. Moreover, it is difficult to know what motives the

4.2.5 Identifying the Generations

The analysis of the behavioural sequences presented above demonstrates that generations react differently whilst in the in-store environment. These findings will be used to identify the characteristics of the four generations when faced with the stimulus of PoP in-store TV-screens.

4.2.5.1 Generation Y

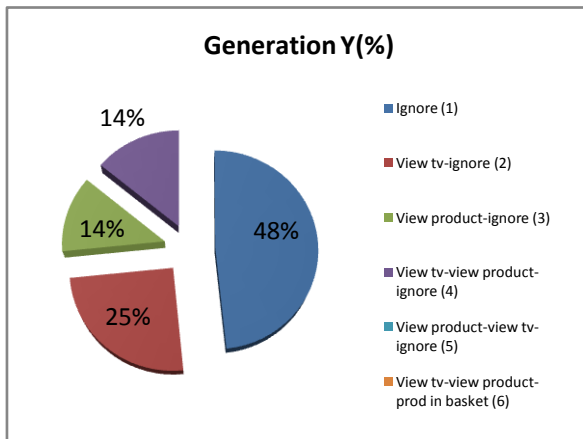


Diagram 1: Observed Behaviour for Generation Y

Based on the carried out observations it became clear that Generation Y demonstrated a high level of ignore behaviour towards the general display. However, a substantial percentage (25%) of the generation also responded to the stimulus of the TV-screen. This tendency is mirrored by the fact that 14 percent of the segment also engaged in “View TV-View product-ignore” behaviour. In comparison only 14 percent of the Generation reacted to the stimulus of the product and entered into the View Product-Ignore behaviour. Therefore it can be concluded that Generation Y responds much better to the stimulus of the TV-screen than that of the product.

4.2.5.2 Generation X and Generation Baby Boomers

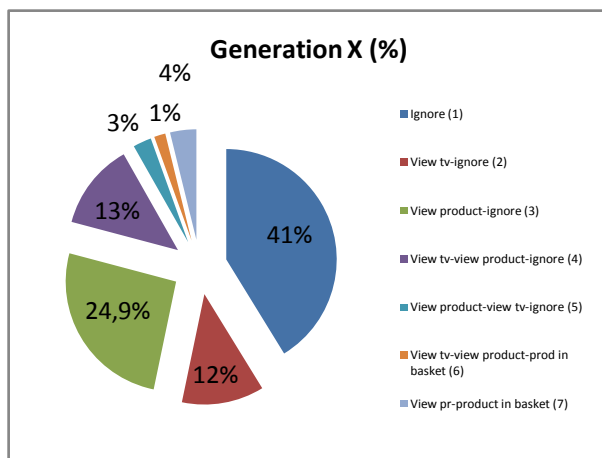


Diagram 3: Observed Behaviour for Generation X

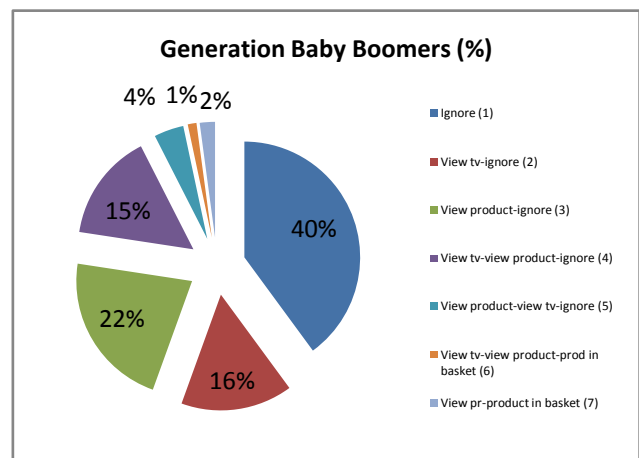


Diagram 2: Observed Behaviour for the Baby Boomers

During the analysis of the different behavioural sequences it was concluded that Generation X and Generation Y share similar response behaviours. Therefore, one single analysis will be performed for the two generations. Diagrams 3 & 4 clearly highlight the prevalent similarities between the two generations. Both generations ignore the product display and the PoP TV-screen relatively equally. Therefore the two generations respond to the stimulus of the TV significantly less in comparison to Generation X and the Baby Boomer Generation. However, Generation X and the Baby Boomers engaged in the highest percentage of behaviour that resulted with the product being placed in the basket (Behavioural Sequences 6 and 7).

4.2.5.3 The Silent Generation

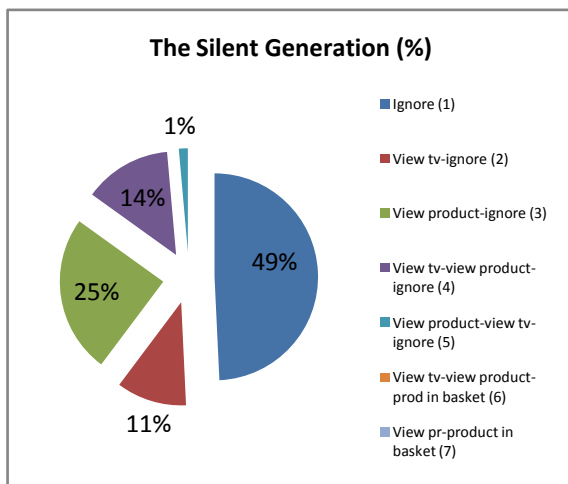


Diagram 4: Observed Behaviour for the Silent Generation

As was the case with Generation Y, the members of the Silent Generation show high ignore behaviour towards the general product display. This could mean that the generation is less affected by atmospheric stimuli from the in-store environment. In correspondence with the behaviours demonstrated by Generation X and the Baby Boomer Generation, the Silent Generation also engages in similar levels of View TV-Ignore and View Product Ignore behaviour. This indicates that the stimulus of the product display may be more appealing to the Silent Generation than the stimulus of the TV-screen.

A general tendency is that all generations react similarly within Behavioural Sequence 4 (View TV-View Product-Ignore). This could signify that a certain percentage of consumers across the different generations respond equally to the stimuli of the PoP TV-screen. In this case the stimulus of PoP TV-screen attracts the consumers' attention and then encourages them to look at the product itself.

4.3 Data Analysis and Presentation for Questionnaires

For the data analysis of the questionnaire cross tables were created using the statistical program SPSS. Here the demographic variables are cross analyzed with the 14 attitude questions in order to see how these variables influence the attitude towards TV-screens. The upcoming subchapters will be divided as follows: first a descriptive analysis of the findings will be given in order to give a general overview over the acquired data. Next it will be explained how the cross-tabulated data was tested using a *chi-square test* to determine the significance of any correlations between the demographic variables and the questions. The final step that is explained is the cluster-analysis conducted on the significant questions and demographics. In conclusion the thus derived clusters are described.

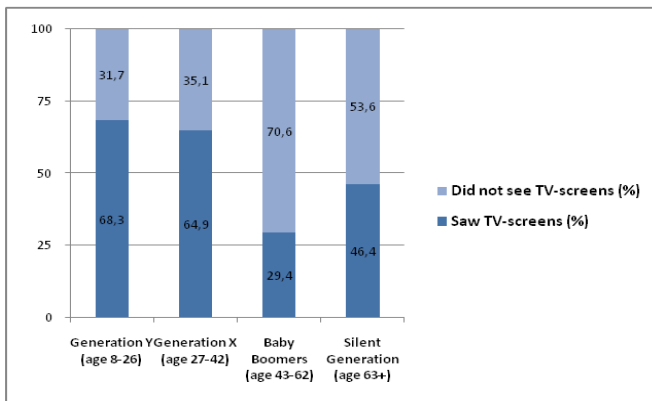
4.3.1 Descriptive Analysis of Questionnaire

For this part of the research 140 cases approximately 15 percent of the number of the observed customers were chosen. Of these respondents a total of 68 (48.6 %) were male and 72 (51.4 %) female. The generation segments were represented with 41(29.3%) respondents in the group of the 8-26 year old *Generation Y* and 37 (26.4%) of the 27-42 year old *Generation X*. 34 (24.3%) 43-62 year old *Baby Boomers* and 28 (20%) 63+ year olds of the *Silent Generation* were also included. For an overview and further information on the division of age and gender within a certain group see *Table 4*.

Gender/ Generation	Males (Frequency)	Males (%)	Females (Frequency)	Females (%)	Total Respondents (Frequency)	Total Respondents (%)
Total Respondents	68	48,6	72	51,4	140	100
Generation Y (age 8-26)	20	14,3	21	15	41	29,3
Generation X (age 27-42)	18	12,9	19	13,6	37	26,4
Baby Boomers (age 43-62)	14	10	20	14,3	34	24,3
Silent Generation (age 63+)	16	11,4	12	8,6	28	20

Table 4 Total Distribution of Respondents

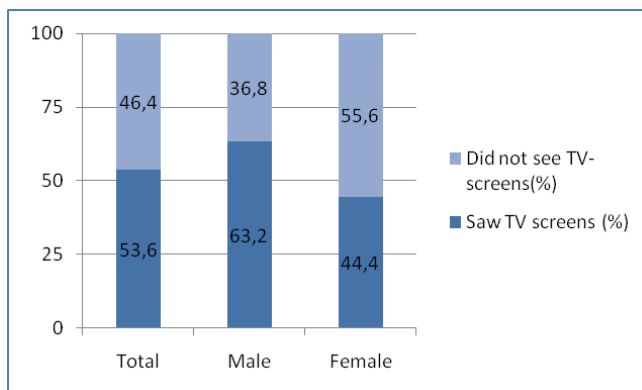
The TV-screens were mainly noticed by the youngest generation. Generation Y claimed to have noticed the innovative PoP-displays the most with almost 70 percent of respondents claiming to at one time or other to have seen the TV's. Generation X also is strongly aware of the screens inside the store with approximately 65 percent of consumers having noticed them. The most oblivious generation is the Baby Boomers of whom only 30 percent claim to have



Graph 8 Generation Distribution of TV awareness

ever seen the screens in-store before. The Silent Generation on the other hand again is more aware of the promotional tool with approximately half of them (46.43%) having seen the screens at one time or other. When comparing gender segments males are much more likely to at least notice the stimulus than women. 63 percent of men say they have noticed the screens while only 45 women say the same. For an overview over question 1 see *Graphs 11&12*.

The factor drawing the most attention to the PoP-display was the screen itself with 40 percent of respondents claiming to have noticed the screens due to their mere presence. Other factors that received much mention were general stimuli such as sound or the fact that the pictures on the displays were moving. The latter was not an answer option given within the second question of the questionnaire but rather the only given answer for 'other'.



Graph 9 Gender Distribution of TV awareness

The fact that the displays themselves grabbed the most attention is mirrored across demographic segments. Men as well as women and the different generations all noticed the screens before other factors such as message, product displayed or others. One noticeable difference can be seen with the Baby Boomers who seemed to be responding to the screens due to many different factors equally. Generation X and the Silent Generation claimed to respond to the sound element of the PoP medium

more strongly than other generations. For a more comprehensive overview of how question two was distributed across age and gender see *Appendix 7*.

4.3.2 Cross-Tables and Chi-Square Test

The following sub-chapter details the results of the cross tabulation of the demographic variables with the 14 attitude questions. The cross tables were created using the statistical software SPSS and show the percentages for how each demographic segment answered each specific item. A *chi-square test* was then conducted to determine the significance of the influence of the demographic variable on the attitude questions. All items with a p-value below 0.05 can be considered significant while items with a value below 0.005 are highly significant and below 0.001 extremely significant (Bühl & Zöfel, 2005). *Appendix 8* give an overview of the major findings.

As can be seen Item 8 shows some significance regarding gender with a p-value of $p = 0.038$. Seven further items are influenced to a significant degree by the generation variable. This is not to mean that the demographics do not have any influence on the other items. However the influence is not strong enough to warrant further analysis. Thus only a brief overview over the tendencies of the relatively insignificant items will be given before the significant items will be explained in greater detail.

4.3.2.1 Insignificant Items⁴

Item 1 The TV-screens give the store a modern image: This item elicited a mostly positive response from respondents. Over 70 percent of total consumers strongly agree or agree with this statement while only a minority disagrees. There is virtually no difference in how men and women perceive this item. However it is noticeable that the two youngest generations agree slightly more with the statement while most neutral answers come from the older segments.

Item 4 I am more likely to buy a new product if the product is shown on-screen: Respondents of all demographics were disposed to answer negatively to Item 4. While approximately 15 percent of the overall sample stated they were more likely to buy a product displayed on the TV-screens a large majority, approximately 60 percent, of the overall sample stated the opposite. No noticeable trends within the segments could be discerned.

Item 7 I feel that TV-screens get in the way of my shopping: Virtually all demographics disagreed with Item 7. 82 percent of the sample felt that they were not disturbed by the screens with the 20 percent left being divided among the negative answer options and neutral. No relevant demographic differences were found.

Item 9 The TV-screens inside the store make me feel stressed: A large majority of consumers does not feel stressed by TV-screens inside a supermarket. Almost 90 percent of customers disagree with this item with 56 percent disagreeing strongly. The few customers who do claim to feel stressed are distributed relatively evenly across all demographic segments. Baby Boomers do tend to feel the most stressed by the screens with 15 percent of that segment agreeing with the statement.

Item 10 The TV-screens made me look at the product: Answers to this item are divided evenly across demographics. On average 40 percent of consumers agree with the statement while 48 percent do not. Women tend to disagree more with this statement (37.5%) than men who are more inclined to agree (35.3%). Conversely men tend to disagree less (29.4%) while women agree less (26.4%). Similarly younger generations tend to slightly more agree with this statement than disagree while older generations do the opposite.

⁴ See Appendix 9 for graphic overview.

Item 14 I like having TV-screens inside the store: A majority of 55% of respondents agree with the while only 19 percent disagree. No noticeable differences can be seen between the demographics.

4.3.2.2 Gender-Significant Item⁵

Item 8 I like the design of the TV-screens (p = 0.038): The design of the screens evoked almost no negative attitude among respondents. 61 percent of consumers responded positively towards the screens while another large group does not care about the design. This is reflected in the 35.7 percent neutral answers given. Generational differences did not change the distribution of answers however men tend to be more positive towards the design of the screen (approx. 70%) while women are more neutral (44,4%).

4.3.2.3 Generation-Significant Items⁶

Item 2 I would like to see more TV-screens being used in-store (p = 0.004): While the overall tendency shows a negative attitude towards this item there is still a highly significant difference in how the different generations feel. 59 percent of all negative answers come from Baby Boomers and the Silent Generation while they provide only 30.8 percent of all positive responses. The Silent Generation is especially opposed to seeing more TV-screens inside supermarkets with 75 percent of the segment displaying a negative attitude. Only 7 percent state that they *agree* with the statement with no *strongly agree* answer given. The Baby Boomers are similarly adamant in their opposition of screens in-store with 70.6 percent showing a negative attitude. This segment agrees even less with Item 2 (5.9%) than the previous. Within the younger generations only Generation Y is the only generation to *strongly agree* with the above statement (4.9%) and the highest positive attitude overall (19.5%). Generation X has the highest *neutral* count with 51.4 percent but also agrees with the statement the least of all groups (2.7%).

Item 3 I feel that TV-screens do not belong inside a supermarket (p = 0.005): For this statement a pole reversal was needed. Agreement with this item signifies a negative attitude towards the TV-screens. Of all respondents almost 63 percent disagreed with this item indicating that screens as an atmospheric tool are not an abstract thought to most consumers. A large majority of Generation Y and X is positively inclined towards the screens inside the supermarkets with 75 percent of the respective segments not believing the screens look out of place inside a supermarket. However the older generations are not quite as ready to accept the new technology in-store. Approximately 30 percent of respondents within the Baby Boomer and Silent Generation segments display a negative attitude towards the screens while only a small minority of younger respondents (2.4% Generation Y; 5.4% Generation X) did the same.

Item 5 The TV-screens make shopping more interesting (p = 0.001): More than half of the respondents (53%) disagree with this item. However age plays a major factor here. While the gender differences for the answers can be neglected there is a strong trend towards the older generations disagreeing with the statement. The positive responses are almost exclusively given by members of Generation Y with 55%. Generation X provides another 22 percent of the positive answers. The Silent Generation displays one of the more negative attitudes among the segments. 71.4 percent do not think the screens make the shopping experience more interesting. However the most negative attitude is that of the Baby Boomers. Only 11.8

⁵ See Appendix 10 for graphic overview.

⁶ See Appendix 11 for graphic overview.

percent of this generation claim they *agree* with this statement, the least overall, while disagreeing the most (73.5%).

Item 6 I pay more attention to the screen if I know the product being displayed (p = 0.005): Faced with this statement 50 percent of overall consumers displayed a positive tendency with women tending to be slightly more positive towards this item (58%) than men (44%). However men did not display a more negative attitude but tended to answer more neutral for this particular item (29% for men vs. 14% for women). Generational differences play a large role for the attitude towards this item with 68 percent of positive answers coming from younger generations and 74 percent of negative answers coming from the Baby Boomers and the Silent Generation. However while Generations Y and X answer predominantly positive the older generations are spread out more evenly. A majority of the Silent Generation even agrees with this item (46.4%) while 39.3 percent disagree. Baby Boomers display the most negative attitude towards this question with 50 percent disagreeing and only 29.4 percent agreeing, the least of any generation.

Item 11 TV-screens provide me with useful information about a product (p = 0.008): Consumers tend to agree with this statement. Half the sample (48.6%) agrees with this statement while only a quarter (26.4%) disagrees. No relevant differences can be found between the gender segments however Generations Y and X are more likely to derive product information from TV-screens in-store than their older counterparts the Baby Boomers and the Silent Generation. Especially Generation X is inclined to derive product information from the TV-screens. 19.5 percent claimed to *strongly agree* with this statement while 41.5 percent claimed that they *agree*. Overall only 14.7 percent of this generation disagreed with the statement. As can be seen from Diagram X Generation X displays similar tendencies. However this segment tends to be more indifferent towards screens as a source of information with 37.8 percent *neutral* answers. It is noticeable that more than 50 percent of the Silent Generation agree with the statement second most of any generational segment (53.6%).

Item 12 The TV-screens make it easier to see discounts and promotions (p = 0.00): 58 percent of respondents agree with this statement. No relevant differences were found between genders. However there is a large difference in how different generations view this issue. While in general Baby Boomers and the Silent Generation agree with this statement (38% and 57% respectively) the groups do not strongly agree at all and disagree with the item much more than Generations Y and X. 35.5 percent of the older generations have a negative attitude towards the screens while only 14 percent of the younger generations do. Conversely 68 percent of the young generations answered this item with a positive answer while 'only' 48 percent of the old generations did the same.

Item 13 I feel the TV-screens improve the store (p = 0.00): The overall sample showed a relatively positive attitude towards the screens. While a large part of respondents gave a neutral answer to this question (40%) 42 percent of the sample agree that the store is improved by the TV-screens. Again gender does not play an important role in analyzing this question. Across generations however it becomes evident that it is mainly Generations Y and X who agree with the statement with 73 percent of all positive responses coming from these segments. Baby Boomers and the Silent Generation combine to provide only 26.6 percent of positive answers. When analyzing the negative attitude it becomes evident that almost all negative responses stem from the older generations (83.4%) with Generation X providing the final 16.6 percent. Generation Y does not have a negative attitude towards this item at all.

In the subsequent paragraphs it will be described how a *factor analysis* was conducted using SPSS in order to find any influence of the dimensions of *Attitude towards information value*

of the TV-screens and Attitude towards TV-screens as an atmospheric factor and individual items.

4.3.3 Factor Analysis

A factor analysis was done to reduce the 14 attitude items into a smaller number of independent variables, called factors and in order to see if the dimensions used to create the questionnaire could be traced back. The reduction is possible because the variables are highly correlated, as shown in *Appendix 8 (Correlation Matrix)*. The attributes that have a high correlation are the ones to be put together to form a factor (Bühl & Zöfel, 2005). First, the variable values were transformed into z-values and then the Pearson correlation coefficient between the standardized variables was calculated. Regarding the communalities the items

The TV-screens give the store a modern image

I pay more attention to the screen I know the product being displayed

I like the design of the TV-screens

did not have an extraction greater than 0.5 and were therefore not included in the factor analysis. Next the eigenvalues and eigenvectors of the remaining variables were determined. There were two eigenvalues greater than one and the eigenvectors belonging to the eigenvalues were the chosen factors. As extraction method a *Principal Component analysis* (the total variance in the data is considered) followed by an *orthogonal varimax rotation* was done. Two interpretable factors that represent items reflecting similar attitudes were revealed and could be interpreted and named according to the correlated content. However these two factors do not mirror the initial dimensions used to formulate the questions within the questionnaire. The following sub-chapter explains how a cluster analysis was performed using the significant attitude questions from the cross-table (generation and attitudes) and the generations.

4.3.4 Cluster Analysis

A *Two-Step cluster analysis* was chosen as categorical and continuous variables can be handled simultaneously and the optimal number of clusters is automatically determines the optimal number of clusters. Also more cases can be included which is not true for the more common *Hierarchical Cluster Analysis*. The different cases of the data are the objects that are to be clustered. The variables represent the attributes that build the basis for the segmentation (Bühl & Zöfel, 2005). The categorical variables consist of the four generations while the continuous variables are the seven attitude questions found to be significantly influenced by the generations through the chi-square test. The *log-likelihood* was chosen as the distance measure which takes into account the similarities between two clusters.

The Two-Step cluster analysis which includes all 140 cases automatically revealed four

	Generation	N	% of total sample
Cluster 1	Generation Y	41	29,3
Cluster 2	The Silent Generation	28	20
Cluster 3	Generation X	37	26,4
Cluster 4	Baby Boomers	34	24,3
	Total	140	100

Table 5 Distribution of Clusters

clusters. The first cluster holds 41 cases (29.3%), while the second consists of 28 (20.0 %), the third one of 37 (26.4 %) and the fourth one of 34 (24.3%). The clusters

correspond with the generational segments. Thus

cluster one is equal to Generation Y; cluster two is the Silent Generation; cluster three Generation X and cluster four the Baby Boomer generation.

A cluster analysis can only be considered successful if a clear profile can be given to each cluster (Bühl & Zöfel, 2005). In order to do so a clear distinction has to be made between the inner- and the outer profile of the clusters. The *outer profile* compares the different clusters against one another. The relevant question here is: Which characteristics distinguish one cluster from another? The *inner profile* on the other hand examines each individual cluster and its characteristics. This is the vertical calculation of percentages. Here the question is: Which attributes make up the cluster? (Bühl & Zöfel, 2005). The tables in *Appendix 12* display the percentages of the categorical variables for each cluster leading to the inner profile approach. The tables in *Appendix 13* specify the percentages of respondents in how far they agree to the different categorical variables. This is the basis for the outer profile approach.

In the following each cluster or generation will be defined using the inner and outer profiles. Strong tendencies were found for each cluster/generation. Within the description of the clusters each item will be examined separately in regard to the profiles giving an overview over their attitudes. This material will then be used within the following discussion surrounding gender and generational differences in regard to PoP TV-screens.

4.3.4.1 Cluster 1 (Generation Y) Say somewhere why only significant items were used

An analysis of the outer profile shows that Generation Y views in-store TV at PoP much more positively than other generations. Even for items which tend to be viewed negatively by the overall sample this generation holds a relatively positive stance. For instance while 54.3 percent disagreed with the statement *I would like to see more TV-screens being used in-store* the outer profile shows that Generation Y responded much more positively by providing all *Strongly Agree* answers and more than half (54.5%) of the overall *Agree* answers given. Only 34.1 percent of the youngest generation disagreed with the statement, the lowest of all clusters.

Another clear example that highlights Generation Y's overwhelmingly positive attitude towards the TV-screens stems from Item 5. 54.3 percent of the overall sample population either disagreed or strongly disagreed with the statement that *TV-screens make shopping more interesting*. In comparison an inner profile analysis of Generation Y showed that only 31.7 percent disagreed within the cluster. 48.7 percent either agreed or strongly agreed with the above statement. The outer profile revealed that these positive answers were the large majority of all positive answers given.

It is also noteworthy that this generation states that they are more likely to [...] *pay attention to the screen if [they] know the product being displayed*. Within the inner profile 63.4 percent of Generation Y agreed towards this statement whilst the overall tendency was only 54.1 percent.

The inner analysis reveals that when the overall tendency is negative Generation Y tends to answer *Neutral* rather than give disagree with a statement.

The trend of Generation Y providing most of the positive answers given can be seen throughout most of the seven significant items. Not only do most positive answers come from here but the generation seems reluctant to give negative answers as can be seen in Item 13 *I feel the TV-screens improve the store* with which zero percent disagreed. The overall attitude can be summed up by saying this cluster is by far the most positive towards TV-screens within the in-store environment.

4.3.4.2 Cluster 2 (The Silent Generation)

A thorough analysis of the outer and inner profiles in all seven items of the Silent Generation points towards an overall negative attitude in regards to in-store TVs being used at the PoP. An investigation of the cluster's inner profile showed that a resounding 75% either disagreed or strongly disagreed with the statement that *I (they) would like to see more TV-screens being used in-store*. An outer analysis emphasised this by showing that of all the generations they placed the greatest importance on strongly disagreeing with the statement. This notion is also reinforced by the fact that the Silent Generation also places the most emphasis on answering negatively towards the item *I (they) feel that TV-screens do not belong inside a supermarket*. Further to this the outer profile analysis shows that they come second only to the Baby Boomer Generation in not agreeing with the statement that *The TV-screens make shopping more interesting*. Another negative response can be found in the Silent Generations attitude towards item of *The TV-screens provide me with useful information about a product*. 35.7 % of the generation disagreed or strongly disagreed with the statement in contrast to the overall tendency of 26.4%. The outer profile showed that the Silent Generation recorded the largest disagreement majority which further emphasises their negative attitude towards this statement and the screens in general. The generation also failed to react in a positive manner towards the statement that *The TV-screens make it easier to see discounts and promotions*. 32.2 % of the generation took a negative stance towards this in comparison to an overall tendency of 23.68%. A further outer analysis also highlights that of all the generations they appear to have the have the most pessimistic attitude towards the item *I (they) feel the TV-screens improve the store*. However it is interesting to note that 39.3% of the Silent Generation did not agree with the statement *I pay more attention to the screen if I know the product being displayed* in comparison to an overall tendency of 27.2%. Further to this an unusually large percentage (56.8%) of neutral responses were generated from this statement from the Silent Generation.

Results show that this cluster is the most opinionated out of all the generations which is reflected by a consistently low neutral question response rate. It is possible to conclude that the Silent Generation does not have a very positive view of TV-screens within the in-store marketing. Not one of the seven items draws a positive response from this generation.

4.3.4.3 Cluster 3 (Generation X)

As is befitting a generation that is oversaturated with advertisement Generation X provides only 7.6 percent of all positive answers to the item *I would like to see more TV-screens being used in-store*. However while the overall tendency is a negative one this age group does not stand out due to its especially negative attitude. The inner analysis shows that Generation X is far less negative than its older counterparts but instead is very much indifferent towards the use of in-store TV (51.4% neutral answers).

When faced with the item *I feel that TV-screens do not belong inside a supermarket* only the technology friendly Generation Y matches the positive attitude of Generation X. The inner profile reveals that 75.7 percent of all answers given by Generation X are positive while only 5.4 percent are negative.

Cluster 3 does not seem to gain any extra benefit from having the TV-screens at PoP as the respondents here tend to not agree with the statement *TV-screens make shopping more interesting*. 48.6 percent of Generation X respondents answer negatively. However when compared to the other segments only Generation Y provides more positive answers. Again a large portion of the segment is indifferent towards the item with 29.7 percent giving neutral answers.

All generations tend to *pay more attention to the screen if [they] know the product being displayed* however Generation X once again agrees more with this than the older generations and only Generation Y has a more positive inner profile. When compared to other clusters this generation remained neutral when compared to other clusters being responsible for 40% of all *Neutral* answers given.

The item *TV-screens make it easier to see discounts and promotions* received positive responses across all segments and again Generation X provides second most positive answers with Generation Y showing the most positive attitude. Also Generation X provides the most neutral answers with 36 percent of all neutral answers stemming from this segment.

The majority of the generation agrees with the statement *I feel the TV-screens improve the store* (54%) with a further 35.1 percent being indifferent. This leaves only 10.8 percent of Generation X to disagree with the statement. This statement sums up the general attitude of the generation well. While inclined to be positive towards TV-screens as PoP displays they are a link between the youngest Generation Y and the older generations. Not quite against the screens and tending towards liking the screens in-store they do however display the highest amount of *Neutral* answers (30.5%).

4.3.4.4 Cluster 4 (Baby Boomers)

An examination of both the outer and inner profile of this cluster reveal a very anti-in-store TV-screen attitude. A negative attitude is clearly visible across all seven of the significant questions.

70.6% of the Baby Boomer generation disagree with the statement that *I (they) would like to see more TV-screens being used in-store in contrast to an overall tendency of 54.3%*. This also mirrors their response towards the statement that *I (they) feel that TV-screens do not belong inside a supermarket*. For this item the Baby Boomer generation has around twice as many negative subjects than the overall average.

They demonstrate the greatest level of negativity in both the outer and inner profiles in comparison to all other generations on numerous occasions. For example for all of the following items; *the TV-screens make shopping more interesting, I pay more attention to the screen if I know the product being displayed, the TV-screens make it easier to see discounts and promotions*, the Baby Boomer generation responded the most negatively.

It also becomes apparent that the Baby Boomer generation does not see the in-store PoP TV as a very useful point of information. This can be concluded from the fact that 35.3% of the generation either disagree or strongly disagree with the statement that *The TV-screens provide me with useful information about a product* in comparison to an overall tendency of 26.4%.

The general attitude of the Baby Boomer Generation is accurately summed up by their negative response to the very general statement of *I (they) feel the TV-screens improve the store*. 29.4 % of the generation reacted negatively in contrast to the overall tendency of 17.2 %.

5 Discussion

The following section will discuss how different genders and generations react to and consider the stimulus of in-store PoP TV-screens. The discussion will be based on empirical findings from 567 observation and 140 questionnaires as was detailed in the previous chapters. Research was conducted within the in-store environment of an ICA supermarket in Norrtälje, Sweden. The observations measured how males and females react differently to the in-store environment. The questionnaires investigated the attitudinal gender differences towards the PoP TV-screen. Additionally, gender specific market segmentation theory will be included in the discussion. This theoretical aspect will assess the findings and add further perspectives to the discussion. The combination of empirical findings and theory will provide essential understanding of the use of TV-screens in supermarkets.

5.1 Discussion of Gender

As the sample respondents for the observation were not controlled, the majority of the observed turned out to be women. This gender difference in the observations is also described in existing literature on gender relating to shopping behaviour. Studies show that women conduct about 70% of shopping trips (Ou, 2007). The observations for this study found that 57.8% of the shoppers were women. Furthermore, approximately 80% of them were between 27-62 years old. This wide female segment is extremely important for marketers and retailers as they are predominantly responsible for the household shopping (Berni, 2001).

From the in-store observations it was concluded that there were significant differences in how the genders responded to the stimuli of the PoP TV-screen and the general product display. This was to be expected as retail marketing literature claims the women and men behave differently in supermarkets (Underhill, 2000). However, other studies claim that there is no behavioral difference amongst gender as both men and women walk the aisles equally (Bird, 2002). The observations of the study partly supported this claim, although only when analysing how many men and women ignored the TV-screen and the product display. Approximately 40% of both women and men ignored the TV and product.

The overall conclusion from the questionnaires is that there was no significant difference between genders in relation to their attitude towards the TV-screens. Nevertheless, a few tendencies were found. For instance, men liked the design of the TV-screens much more than women who did not seem to care. This could be one of the reasons why the observations show that men tend to look more at the TV-screen than women. Another potential reason for this may be that men are more likely to be enticed by items that are on sale such as the chopped tomatoes displayed at the ICA supermarket (Lee, Ibrahim, & Hsueh-Shan, 2005). Furthermore, sales and promotional activities are considered to add to a man's shopping pleasure (Lee, Ibrahim, & Hsueh-Shan, 2005). However, this argument was not supported by the findings from the questionnaire, as men did not want to see more TV-Screen in the stores. This was also the case for women. Even so, men still seem more likely to be influenced by the stimulus of the PoP TV-screen than women. When asked, 63% of men claimed they noticed the screens whilst only 45% of women said the same. This might be because eye-catching displays are found to be particularly attractive to men (Underhill, 2000). In addition, men appear to react more positively towards the information value of the screen compared to women. Men seem to view the product first and then the TV, thereby indicating that they use the TV as a point of information about the product.

The observations found that women reacted more positively to the stimulus of the product and to the cardboard display rather than the PoP TV-screen. This could indicate that women are more likely than men to respond to displays that do not feature TV-screens. Nonetheless, the stimulus of the product and the PoP-TV-screen appears to influence women although they do not appear to pay much attention to the surrounding atmosphere. This could be contested as women placed the product in the basket more than men. However, this might be a weak argument as the observed product could have been on the respondents shopping list anyhow. According to Underhill's (2000) studies this is highly likely as almost all women carry shopping lists in the in-store environment compared to only one quarter of men. However, the stimulus of the PoP TV-screen probably still exerts a great influence on the female consumers that bought the product. This is based on an assumption that the PoP-TV-screens highlight the product and thereby increase the likelihood of sales compared to competing brands of chopped tomatoes

As the discussion has stressed, there appears to be a difference in how the different genders react to and feel about the use of in-store PoP TV-screens. The observations give a clear indication of this, whereas the questionnaire only found only some differences. The general impression is that men tend to be more inclined towards the stimuli of the PoP TV-screen, than to stimuli from the product and cardboard display. This correlates with the fact that they also seems to have noticed the screens, when asked about it. Moreover, results from the control group, where the stimulus of the TV-screen was taken away, showed that the ignorance rate amongst men went from 40% when the screen was present to 70% when the screen was absent. The control group also showed that amongst women the ignorance rate only marginally increased, reaching 43.5% from an original value of 40.9%. Women in general appear to respond less to the stimulus of the PoP TV-screen, and more towards the stimuli of the product and cardboard display. This could be due to their preoccupation with their pre planned shopping list.

5.2 Discussion of Generations

A systematic discussion will be undertaken examining each generation individually taking into account the findings of the observations and the surveys. These will then be related to the theoretical framework and conclusions will be drawn.

5.2.1 Generation Y

Results from the observations show that Generation Y had the second highest *Ignore-Response* rate towards the display in general. Even so this generation responded to the pure stimulus of the TV-screens the most of all segments. This correlates with the conscious awareness the youngest generation has of the screens inside the store. The questionnaires show that 70 percent of Generation Y claim to have noticed the TV's being used as PoP-displays. This favourable behaviour towards the TV-screens could be attributed to the fact that these consumers enjoy being entertained (Gronbach, 2000). This corresponds with the further finding from the questionnaires which shows that Generation Y perceives TV-screens to make the shopping experience more interesting.

As is claimed by Ciminillo (2005) a danger in advertising to this youngest segment is that, as they do not like to be forced into viewing an advertisement message, placing TV-screens inside the store may induce short-term avoidance behaviour towards the TV and therefore the product itself. Long-term avoidance behaviour may then be realized towards the store itself. However as this research has shown the overall attitude towards the screens is overwhelmingly positive. Generation Y is the only segment that willingly accepts this

innovative medium. This is reflected in the fact that a large majority of Generation Y showed a very positive attitude towards the presence of TV-screens within the in-store environment. This is further support for Wolburg & Pokrywczynski's research (2001) that this generation typically adapts to new innovations earlier than other generations.

Ciminillo (2005) states Generation Y quickly loses interest in its surroundings. The relative excitement these PoP-displays generate in the supermarket environment may induce long-term approach behaviour towards the store as it provides extra motivation to explore it (Yalch & Spangenberg, 2000). All empirical data drawing both on attitudinal and behavioural aspects points towards Generation Y showing the greatest level of acceptance towards having this new medium inside supermarkets.

TV-screens as a PoP-marketing tool may be the perfect solution to communicate with this traditionally hard to reach segment (Wolburg & Pokrywczynski, 2001). This is well summed up by a female Generation Y respondent who elaborated on the questionnaire that TV-screens are a very inconspicuous marketing tool much less annoying than for example direct mail.

5.2.2 Generation X

The observations reveal that this generation has a low overall *Ignore*-rate which could mean that they are more receptive to in-store stimuli. They seem very aware of their surroundings as 65 percent of Generation X respondents claim to have noticed the TV-screens. However this is not translated into the observed behaviour; they are the second least receptive generation towards the stimulus of the TV. This may be due to the fact that they are known not to be impressed by flashy advertisements and would rather be targeted in a more practical manner (Healea, 1995).

Overall Generation X does not seem very impressed by the TV-screens as PoP-displays. The questionnaires show that they do not feel that the screens add much to the shopping experience which is reflected in relative indifference when asked whether the screens make shopping more interesting. This generation, while in general more positive than negative seems rather neutral towards the use of TV's as PoP displays. This may be due to the fact that Generation X has been raised with TV and therefore have a higher understanding of this medium (Healea, 1995).

In the questionnaire Generation X shows that they are the second most positive towards the statement that TV-screens make it easier to spot discounts and promotions which highlights their preference towards. This implies that they respond better to the functional, informative aspects of the screens such as pricing information as opposed to image. One male respondent when faced with a three-screen TV-display pointed out to the interviewer that the message showing the price promotion was of much greater interest than the visual image which showed fast moving brand logos. This was perceived as a source of annoyance.

The fact that product information seems more important than emotional advertisement is reflected in the observations that show that Generation X responds better to the stimulus of the product than the screens. In addition to this they tend to pay more attention if they know the product being displayed. These research findings are supported by Ritchie (1995) who states that this generation tends to be very brand loyal and therefore engage in minimal brand switching activity.

5.2.3 Baby Boomers

On the surface Baby Boomers display very similar behaviour as Generation X. They have one of the lowest *Ignore*-rates and relatively product-oriented behaviour was observed. However they also demonstrate relatively positive behaviour towards the stimulus of the TV-screen. Nevertheless the questionnaires highlight that the Baby Boomer generation has the most negative view of PoP TV-screens in the in-store environment. This could be due to the fact that Baby Boomers were the first generation to grow up with TV used as a home-entertainment device (Marconi, 2000). It can therefore be argued that the use of televisions outside the home is an alien concept. This belief is reflected in the fact that compared to other generations the Baby Boomers most strongly believes that TV-screens do not belong in an in-store environment.

Growing up in a time of economic expansion and during an information age means that the Baby Boomers like to be in charge through the thorough seeking of data and facts (Stauffer, 2003), (Business Wire, 2007). This is reflected in their greater reaction rate towards the stimulus of the product as this allows them to rely on facts (product) rather than emotional (TV) stimuli. This makes it all the more strange that this generation does not even value the TV-screens as a source of information regarding product and price.

While based purely on the observations one might deduct that the Baby Boomers hold a similarly positive attitude towards the screens as Generation X. However the questionnaires revealed major differences between the two generations. The survey findings reveal that Baby Boomers do not appreciate having the TV-displays inside the supermarkets. This implies that while the stimulus produces an immediate response it may influence long-term brand and store perception possibly resulting in avoidance behaviour towards brand as well as store.

5.2.4 The Silent Generation

Surprisingly the Silent Generation reacts relatively strongly towards the stimulus of the television itself. A reason for this may be that the use of television was not as widespread among this generation's childhood in comparison to the others. (Bellis, 2007) Therefore the unfamiliarity of the stimulus may be the cause of this unforeseen tendency. Conversely this Generation demonstrates a comparatively high *Ignore*-behaviour towards the entire observed product display.

Another important factor to do with the period when this generation grew up is the change in shopping venues. Having grown up with smaller grocery stores where good service was expected the Silent Generation still values product choice, quality of the store environment and service features. Some generations perceive the TV-screens as an added valuable service providing additional information about a product. However the Silent Generation do not share this perspective as results from the questionnaire highlight.

Another reason why this generation should view the TV in a more positive light is that it can serve as a conspicuous price and product information source. Product labelling has been found to be too small for this generation due to their deteriorating eyesight (Underhill, 2000). The questionnaires reveal that this segment does not take advantage of this feature of the TV-screens as PoP-displays.

Overall this segment holds a similarly negative attitude towards the TV-screens as the Baby Boomer generation.

6 Conclusion

The following chapter will provide a summary of the study. This will be done by answering the research question that was set forth in the introduction. Furthermore a comprehensive overview over the research findings will be given and the meanings translated into academic and practical implications. Recommendations for further research will also be provided.

The purpose of this study was to add knowledge to the field of in-store marketing. More specifically it was set out to provide an academic study that analyzed the effects that in-store TV used at the point of purchase had on the consumer segments of gender and generation. In order to provide a thorough and conclusive analysis the following research question was posed:

“How does consumer-response and -attitude towards the stimulus of in-store point-of-purchase TV-screens differ across the demographic segments of gender and generation?”

The research question was based on an interest in investigating how consumers respond when faced with the stimulus of in-store TV. Structured observations within the in-store environment was considered the most effective way of measuring consumer’s initial response when faced with this innovative PoP marketing tool. However in order to establish the causal influence of the demonstrated behaviour a complementary questionnaire was conducted. Thus it was possible to provide conclusive findings that provided explanations for any behavioural tendencies that were prevalent among the different demographic segments of gender and generations.

6.1 Academic Contribution

Once the data had been collected it was possible to firstly analyse the observations. This allowed for the identification of any interesting or relevant findings in relations to the actual behaviour of the different segments. The same process of analysis was then applied to the data that was generated from the questionnaires. This allowed for the detection of any significant attitudinal findings across gender and the generations.

The next process consisted of matching the behaviour of each segment with its corresponding attitude. This allowed for the discovery of how each segment reacted and felt towards TVs being used at the PoP.

Findings on gender showed that the observations found that male behaviour towards the screens was much more positive than that of women. In contrast the women appeared to react more towards the product itself. The findings from the questionnaires showed that apart from minor differences men and womens’ attitudes were the same. The only obvious difference was that the design of the screen was more attractive to the men. Therefore the stimulus of the PoP TV-screen generated a greater response among men than women.

The most important findings for each generation will now be concluded. For Generation Y the TV-screens created much more visible and noticable differences within the different generations. It can be concluded that all empirical data drawn from both the observations and questionnaires point towards Generation Y displaying the greatest level of acceptance. The generation clearly displays a greater awareness to the prevalence of the screens within the in-store environment; with 70 percent noticing their existence. Their general attitude towards TV-screens is perfectly summarized by the fact that they think TV-screens make their shopping experience more interesting. Furthermore the observations clearly support this

finding as Generation Y responded overwhelmingly to the stimulus of the TV-screen throughout the observation period.

Generation X findings show that the observations demonstrate that they display both the second least receptive behaviour towards the TV-screens and most receptive behaviour towards the product in comparison to all other generations. This negative behaviour towards the screens is also prevalent in their attitude. The questionnaires show that they do not feel that the screens add much to the shopping experience which is reflected in relative indifference when asked whether the screens make shopping more interesting.

The observation findings for the Generation Baby Boomers show that the Baby Boomer's behaviour towards in-store TVs is relatively positive. However their attitude tells a different story; only 30 percent of this generation claimed to have noticed the screens. The questionnaires further emphasise this gloomy notion as they highlight that the Baby Boomer generation has the most negative view of PoP TV-screens in the in-store environment. This belief is reflected in the fact that compared to other generations the Baby Boomers most strongly believe that TV-screens do not belong in an in-store environment. Therefore it can be concluded that the stimulus of the TV is attracting the Baby Boomers attention for negative reasons.

Findings from the observations allow for the conclusion that The Silent Generation responds relatively strongly towards the stimulus of the television itself. However, the questionnaires show that this segment has an extremely overall negative attitude towards the TV-screens.

On the whole the above stated findings show that differences exist in how generations and gender react to and feel towards TV-screens in the in-store environment. The most noteworthy findings are that the youngest generation, Generation Y, displays an extremely positive overall response for both behaviour and attitudes, whilst the stimulus of the TV-screen proves to be a very useful tool in attracting the males' attention. The remaining Generations' attitudes towards the medium appear to be more negative than positive. Nevertheless at least 11% of all the generations engage in the behaviour of View TV-Ignore which proves that no matter what a subject thinks of the screen TVs inside the store undoubtedly attract their attention. Further to this the observations show that around 15% of each generation engages in behaviour 4 (View TV-View Product-Ignore). This shows that across all generations the TV-screen is capable of consistently generating an initial response which causes the consumer to subsequently look at the product.

Therefore it is possible to conclude that findings from this paper shows that the stimulus of in-store TV-screens capture the attention of consumers who view the medium in a negative light.

As the youngest generation overwhelmingly responds the best to the medium it can be assumed that even more technology orientated future generations will view this form of in-store marketing in a similar way to Generation Y. Therefore, the overall long term future of in-store TV-screens looks to be an exciting one. However based upon the empirical findings of this study a selection of practical implications, targeted towards the different demographic segments will be formed. These will provide guidelines on how best to use the screens in a way that matches their preferred characteristics.

6.2 Practical Implications

As the problem discussion highlights, the existing literature only focuses on the fact that TV-screens used at the PoP appear to improve the sales of the featured product. The findings from this study also come to a general conclusion that the PoP TV-screen creates behavioural reactions that increase the likelihood of sales. However, as previously mentioned in section 1.2 there lays a major problem in simply relying on sales figures for featured products as it fails to consider the overall picture. For example Underhill (2000) states that while the effect might be positive for the particular product the marketing measure might have an adverse effect on overall category sales, store image or other factors. This could imply that short term gains might result in long term drawbacks in the form of brand dilution or store avoidance behaviour.

Findings from this study will provide managers with information that cannot be reflected in sales figures. For instance the observations in this study show that the Baby Boomer Generation reacts relatively strongly towards the stimulus of the TV-screen. However the questionnaire shows that they dislike the TV-screens the most out of all the generations. Therefore each time they react to the annoying stimulus of the screen they may build up further negative connotations towards the brand/product category and store. Therefore findings from this study clearly show that marketers and retailers should be aware of the possibility that their target markets could show a negative attitude towards TV-screens which may then translate to their product/brand or store. Thus studies such as this should be taken into consideration before an in-store TV marketing campaign is decided upon.

If marketers and retailers decide upon the implementation of a PoP TV campaign, aspects such as the target audience's characteristics and preferred communication and advertising methods must be considered. It should firstly be mentioned that the advertisements used during the study were presented in a flashy, entertaining, fast moving, brand orientated manner. For instance this study shows that Generation X did not display a very positive attitude towards PoP TV-screens. However they show several important attitudes/characteristics that imply that PoP TVs have the potential to effectively appeal to and serve their needs.

For instance a comparatively very high 65 percent consciously viewed the TV-screen; whilst they also showed high positivity in their response to the statement that *the TV-screens makes it easier to spot discounts*. Therefore it seems they are interested by the medium and a more orientated around the functional and informative aspects of the TV-screens. This goes hand in hand with data presented in the theoretical framework that states that Generation X would rather be targeted in an honest manner (Healea, 1995). Therefore this information strongly suggests that this generation would show more of a positive attitude if the screens communicated information in a way that appealed to them; namely in a functional manner without flashy irritating advertisements.

These highlights that the wrong type of communication tone, language and visuals have the capability of creating negative attitudes and therefore inflicting a negative impact upon the brand or store.

The effects of implementing the right kind of communication visuals and language on the screens can be seen through Generation Ys overwhelming positive attitude towards the screens. It has already been stated that the TV advertisements in the store revolve around a more entertaining and flashy theme. Furthermore it has also been seen in the theoretical framework that Generation Y likes to be entertained in the advertisements directed at them (Gronbach, 2000). Therefore it appears to be no coincidence that they show by far the highest

positive attitude to the statement *TV-screens provides me with useful information about a product*.

Thus it is important for marketers to treat the creation of the visual element with extreme care. Much preparation, research and design should go into this phase so that the screen will effectively appeal to the target audience.

As this study focused on gender and generational aspects the general tendencies from all 140 questionnaire respondents has not been discussed. However it is thought that the general overall findings have relevant practical implications for both marketers and retailers alike.

75.7% of the overall respondents agreed with the statement that *the TV-screens give the store a modern image*. This is a relevant implication for retailers looking to upgrade the image of the store or create a new modern look as a clear correlation exists between the screens and a more modern image. Furthermore 55% stated that they agreed that they *like having TV-screens inside the store and only 19.3 percent disagreed*. These findings are applicable to retailers and will aid their decision making process as to whether they should implement TV-screens in their in-store environment. 82.1 percent disagreed with the statement *that they feel that TV-screens get in the way of their shopping* and an even higher percentage of 88.5 disagreed that *the TV-screens inside the store made them feel stressed*. This is also relevant to management of retail stores as it shows that the TV-screens do not appear to cause an overall negative influence. It is also important for retailers to know that 54.3 percent disagreed that *they would like to see more screens being used inside the store*. This shows that at this point in time it is maybe too early to add many screens into one retail environment. 51.4 per agreed that *they pay more attention to the screen if they know the product being displayed*. This has an implication for brand manufacturers as it highlights the need to support the in-store marketing strategy with a strong brand building strategy through traditional marketing channels. The fact that 58.6percent agreed that *TV-screens make it easier to see discounts and promotions* is also relevant for manufacturers wanting to quickly sell stock through promotional discounts. As 62.9 disagreed that they are *more likely to buy a product if the product is demonstrated on-screen* and 48.6 percent disagreed that *TV-screens made them look at the product* are of relevance to brand manufacturers as it shows that in-store TV may not have a great impact on sales or approach behaviour. It is of relevance to the manufacturers of in-store TV and for advertising companies that 48.6 percent disagreed that *TV-screens provide them with useful information about a product*. This highlights that a conscious effort should be made to make the screens for informative. As 61.4 percent agreed that *they liked how the TV-screens look* it shows that the design appears to fit in well in the in-store environment and is therefore applicable to the manufacturers of the screens themselves.

The practical implications highlighted in this section clearly state the importance of knowing how ones target group respond and feel towards PoP TV-screens. This is clearly a purpose that this study fulfils as regards to generation and gender.

6.3 Contribution and Further Research

From a practical standpoint, this study provides marketers and retailers with valuable information concerning how large consumer groups respond and feel about the PoP TV-screens within supermarkets. A wide segmentation approach was chosen for this study. It was felt that gender and generations would create a firm foundation upon which which marketers and retailers could build on and use as starting point when identifying their own target groups.

From an academic point of view, this study will create a wide understanding of consumer behaviour in relation to the new phenomenon of in-store TV used at the PoP. This will provide the academic community with a study that can be used as springboard for further research with in the field of *Retail Marketing*.

Other demographic elements such as income level could be included in further research. This would provide an even better understanding of how different consumers respond and feel towards PoP TV-screens. Furthermore, other features of the PoP TV-screen could be explored. The sound element of the TV-screen has not been included in this study. Nevertheless, sound is considered to be an important stimulus that influences consumer's in-store behaviour. PoP TV-screens were chosen for this particular study as it was considered one of the most interesting and innovative forms of in-store marketing. However, other forms of in-store TV- screens are becoming more prevalent within the retailing sphere. It would therefore be very interesting to conduct this same study with other types of in-store TV. This would reflect if there are any similarities in how different genders and generations respond and feel towards in-store TV-screens.

While TV-screens as PoP-displays have not yet fully arrived in the marketing world this study has hinted that the future seems promising with younger generations more eager to accept this form of in-store promotion. It is hoped that this study has provided a first step towards making this form of in-store marketing more effective.

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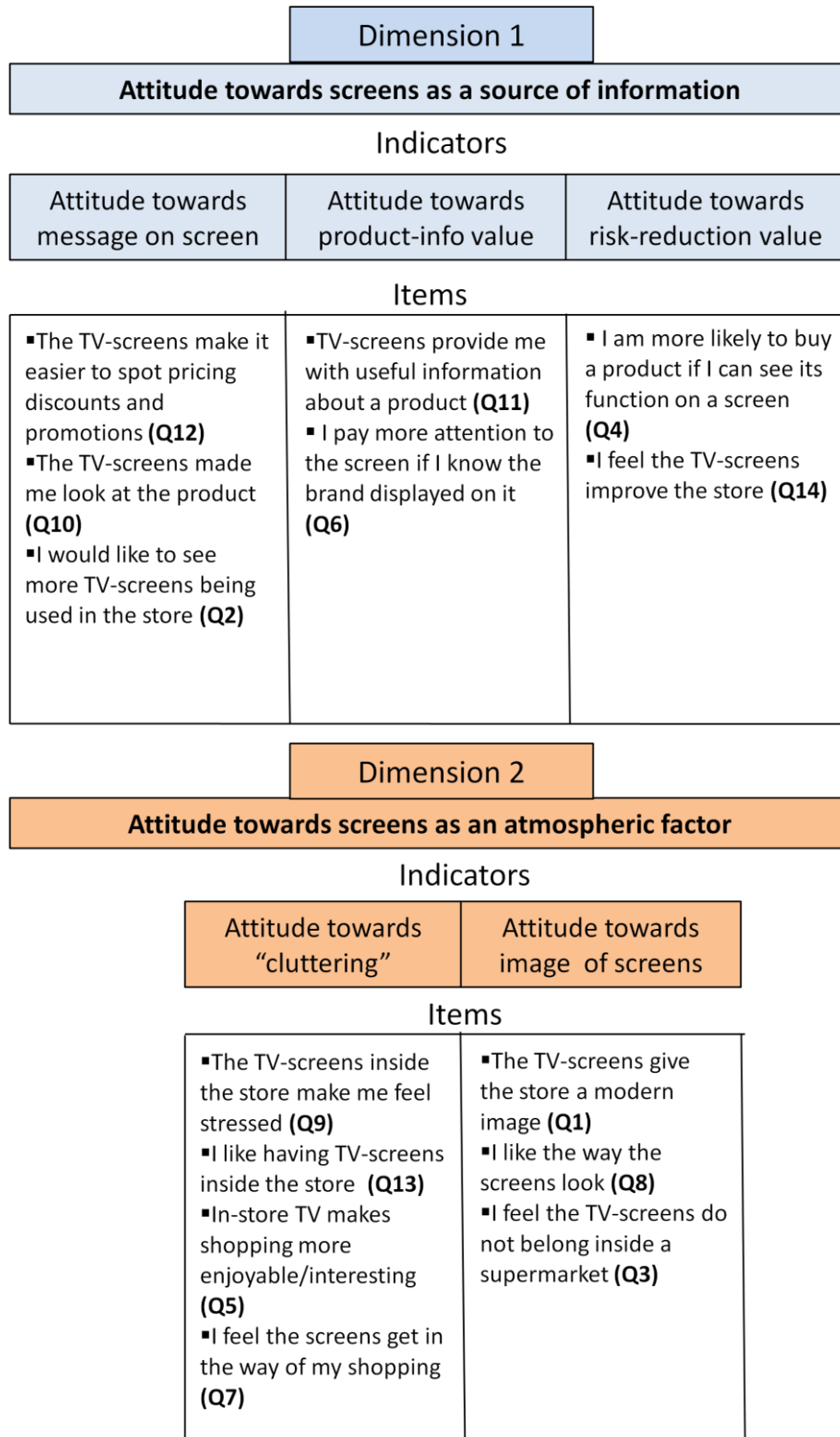
Appendix

Appendix 1: Observation Sheet

<u>Observation Sheet</u>				
Observers initials				
DM	BW	SB		
Date of observation:	08/05/07	09/05/07	10/05/2007	
Time of observation:	08:00 - 12:00	12:00 - 16:00	16:00 - 20:00	
<u>Demographic information</u>				
Respondents Gender				
Male		Female		
Age				
8-26	27-42	43-62	63+	
<u>Behaviour analysis</u>				
Behaviour 1				
Ignore	View TV	View Product	Touch Product	Product in Basket
Behaviour 2				
Ignore	View TV	View Product	Touch Product	Product in Basket
Behaviour 3				
Ignore	View TV	View Product	Touch Product	Product in Basket
Behaviour 4				
Ignore	View TV	View Product	Touch Product	Product in Basket
Behaviour 5				
Ignore	View TV	View Product	Touch Product	Product in Basket

Appendix 2: Questionnaire Design Overview

Hypothetical Construct: *What is consumer attitude towards TV-screens as an in-store marketing measure?* → **Consumer Attitude**



Appendix 3: Survey Questionnaire (English) I

Lund University, School of Economics and Management



SURVEY REGARDING CONSUMER ATTITUDE TOWARDS IN-STORE TV-SCREENS

Name of interviewer: _____

Questionnaire n^o:

Address subject:

Hello, my name is _____ . I am a student at Lund University. We are currently conducting a survey regarding consumer attitude toward TV-screens as an in-store advertisement measure. Would you be so kind to answer me some questions regarding this? It will only take a few minutes.

Interv.: Possibly offer to show subject student ID! If „No“, politely thank participant and say goodbye. If „Yes“, give Incentive.

Did you notice the TV-screen advertising product X?

YES _____ **NO** _____

Questions

What element of the TV-screen caught your attention the most?

Displayed Product Type of Product Displayed Message on Screen

Sound The Screen itself Do not know

Other _____

Attitude Questions

Example:

“To me grocery shopping is a fun household task.”

If you agree with this sentence, but do not agree strongly, however, you agree more than you disagree, mark the position 2, as seen below.

Assessment	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
To me grocery shopping is a fun household task		X			

Appendix 3: Survey Questionnaire (English) II

Lund University, School of Economics and Management



Now, please tell me the answer that best fits your opinion.

Assessment	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1) The TV-screens give the store a modern image					
2) I would like to see more TV-screens being used in the store					
3) I feel that TV-screens do not belong inside a supermarket					
4) I am more likely to buy a new product if I can see the product on-screen					
5) In-store TV makes shopping more interesting					
6) I pay more attention to the screen if I know the product being displayed					
7) I feel that TV-screens disturbs me while shopping					
8) I like the design of the TV-screens					
9) The TV-screens inside the store make me feel stressed					
10) The TV-screens made me look at the product					
11) TV-screens provide me with useful information about a product					
12) The TV-screens make it easier to see discounts and promotions					
13) I feel the TV screens improve the store					
14) I like having TV-screens inside the store					
Additional Comments:					

MALE _____ FEMALE _____

AGE GROUP: 8 – 26 _____ 27 – 42 _____ 43 – 62 _____ 63 + _____

Appendix 4: Survey Questionnaire (Swedish) I

Lund Universitet, Ekonomihögskolan



SURVEY REGARDING CONSUMER ATTITUDE TOWARDS IN-STORE TV-SCREENS

Namn av intervjuare: _____

Questionnaire n°:

Address subject:

Hej, mitt namn är.....Jag är student vid Lunds universitet. Vi håller på med en enkät om hur kunder reagerar på TV skärmar som reklammedel i affären. Skulle du vilja hjälpa mej och svara på ett par frågor. Det tar bara ett par minuter.

Lade du märke till TV-skärmen som gjorde reklam för produkt X?

JA _____ NEJ _____

Frågor

Vad var det som fångade din uppmärksamhet mest?

Den visade produkten Typ av product som visades Meddelandet på skärmen
Ljudet Skärmen själv Vet inte
Annat _____

Attityd frågor

Exempel:

"Jag tycker det är roligt att handla mat."

Om du håller med om detta påstående, inte 100 procent, men mer än du inte håller med så sätt ett kryss i spalt 2 som i exemplet nedan.

Värde	Håller med helt	Håller med	Neutral	Håller inte med	Håller inte med als
Jag tycker det är roligt att handla mat		X			

Appendix 4: Survey Questionnaire (Swedish) II

Lund Universitet, Ekonomihögskolan



Fyll I det svar som passer bäst med din egen åsikt.

Värde	Håller med helt	Håller med	Neutral	Håller inte med	Håller inte med alls
1) TV skärmen ger affären en modern prägel					
2) Jag skulle vilja se fler TV-skärmar I affären					
3) Jag tycker inte att TV-skärmar passar I en supermarknad					
4) Jag är mer benägen att köpa en produkt om den visas på skärm					
5) TV-skärmar gör handlandet intressantare					
6) Jag lägger mer märke till skärmen om jag redan känner produkten					
7) Jag tycker att skärmen stör när jag handlar					
8) Jag tycker om skärmens utformning					
9) Jag känner mig stressed av TV-skärmar I affären					
10) TV-skärmen fick mig att titta på produkten					
11) TV-skärmar ger mig nyttig information om en produkt					
12) TV-skärmar gör det lättare att hitta special-erbjudande och rabatter					
13) Jag tycker TV-skärmar förbättrar affären					
14) Jag gillar TV-skärmar I affären					
Mer information:					

MAN _____ KVINNA _____

Åldersgrupp: 8 - 26 _____ 27 - 42 _____ 43 - 62 _____ 63 + _____

Appendix 5: Photos of Observation Station

Photo 1: PoP TV-display

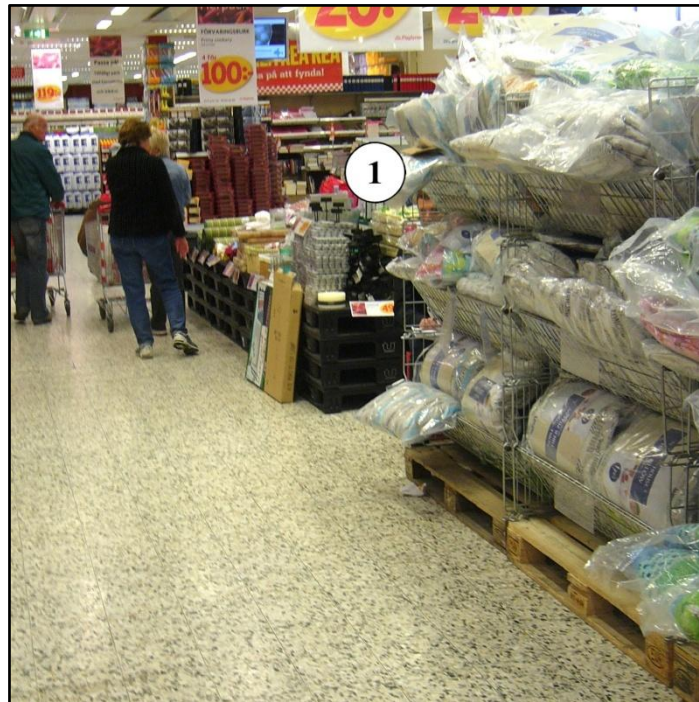


Photo 2: Observation Station Overview



1 – Observer; 2 – Display; 3 – Approaching customers

Photo 3: Customer View of Observation Station



1– Observer as seen by Customer

Appendix 6: Behavioural Sequence Distribution by Gender

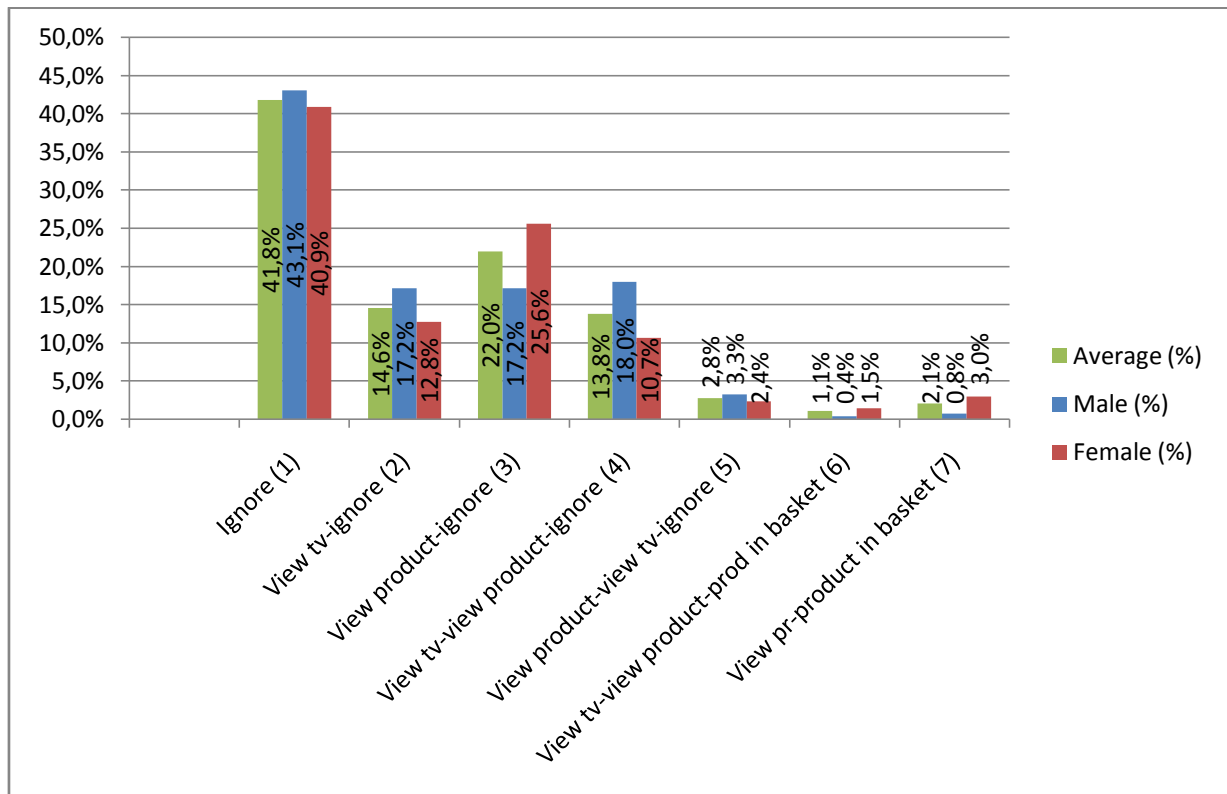


Table 4

Appendix 7: Distribution of Answers to Question 2

Table 6: Gender Distribution

			Elements of TV-screen							
			Displayed product	Type of product displayed	Message on screen	Sound	The screen itself	Do not know	Other	Total
Gender	Male	Count	6	2	5	6	18	1	5	43
		% within Gender	14,00%	4,70%	11,60%	14,00%	41,90%	2,30%	11,60%	100,00%
	Female	Count	2	1	5	6	12	2	4	32
		% within Gender	6,30%	3,10%	15,60%	18,80%	37,50%	6,30%	12,50%	100,00%
Total		Count	8	3	10	12	30	3	9	75
		% within Sample	10,70%	4,00%	13,30%	16,00%	40,00%	4,00%	12,00%	100,00%

Table 7: Generational Distribution

Age Group				Elements of TV-screen						Total	
				Displayed product	Type of product displayed	Message on screen	Sound	The screen itself	Do not know		Other
8-26	Gender	male	Count	4	0	3	2	6	0	1	16
			% within Gender	25,00%	0%	18,80%	12,50%	37,50%	0%	6,30%	100,00%
	female	Count	2	0	0	1	7	0	2	12	
		% within Gender	16,70%	0,00%	0,00%	8,30%	58,30%	0,00%	16,70%	100,00%	
Total		Count	6	0	3	3	13	0	3	28	
		% within Age Group	21,40%	0%	10,70%	10,70%	46,40%	0%	10,70%	100,00%	
27-42	Gender	male	Count	1	0	1	1	9	0	2	14
			% within Gender	7,10%	0%	7,10%	7,10%	64,30%	0,00%	14,30%	100,00%
	female	Count	0	0	2	4	2	1	1	10	
		% within Gender	0,00%	0,00%	20,00%	40,00%	20,00%	10,00%	10,00%	100,00%	
Total		Count	1	0	3	5	11	1	3	24	
		% within Age Group	4,20%	0%	12,50%	20,80%	45,80%	4,20%	12,50%	100,00%	
43-62	Gender	male	Count	0	0	0	2	1	1	1	5
			% within Gender	0%	0,00%	0,00%	40,00%	20,00%	20,00%	20,00%	100,00%
	female	Count	0	1	2	0	1	0	1	5	
		% within Gender	0%	20,00%	40,00%	0,00%	20,00%	0,00%	20,00%	100,00%	
Total		Count	0	1	2	2	2	1	2	10	
		% within Age Group	0%	10,00%	20,00%	20,00%	20,00%	10,00%	20,00%	100,00%	
63+	Gender	male	Count	1	2	1	1	2	0	1	8
			% within Gender	12,50%	25,00%	12,50%	12,50%	25,00%	0,00%	12,50%	100,00%
	female	Count	0	0	1	1	2	1	0	5	
		% within Gender	0,00%	0,00%	20,00%	20,00%	40,00%	20,00%	0,00%	100,00%	
Total		Count	1	2	2	2	4	1	1	13	
		% within Age Group	7,70%	15,40%	15,40%	15,40%	30,80%	7,70%	7,70%	100,00%	

Appendix 8: Chi-Square Test Results

Table 8: Gender

Pearson χ^2 p-value	χ^2	Item
p = 0.898	1,079	The TV-screens give the store a modern image
p = 0.218	5,759	I would like to see more TV-screens being used in the store
p = 0.060	9,049	I feel that TV-screens do not belong inside a supermarket
p = 0.569	2,936	I am more likely to buy a new product if the product is demonstrated on-screen
p = 0.532	3,159	In-store TV makes shopping more interesting
p = 0.247	5,414	I pay more attention to the screen I know the product being displayed
p = 0.558	2,998	I feel that TV-screens get in the way of my shopping
p = 0.038	10,164	I like the design of the TV-screens
p = 0.166	6,475	The TV-screens inside the store make me feel stressed
p = 0.437	3,78	The TV-screens made me look at the product
p = 0.451	3,681	TV-screens provide me with useful information about a product
p = 0.898	1,075	The TV-screens make it easier to see discounts and promotions
p = 0.630	2,58	I feel the TV screens improve the store
p = 0.414	3,939	I like having TV-screens inside the store

Table 9: Generations

Pearson χ^2 p-value	χ^2	Item
p = 0.266	14,558	1) The TV-screens give the store a modern image
p = 0.004	28,913	2) I would like to see more TV-screens being used in the store
p = 0.005	28,3	3) I feel that TV-screens do not belong inside a supermarket
p = 0.168	16,537	4) I am more likely to buy a new product if the product is demonstrated on-screen
p = 0.001	32,981	5) In-store TV makes shopping more interesting
p = 0.005	28,119	6) I pay more attention to the screen I know the product being displayed
p = 0.595	10,242	7) I feel that TV-screens get in the way of my shopping
p = 0.720	8,804	8) I like the design of the TV-screens
p = 0.377	12,895	9) The TV-screens inside the store make me feel stressed
p = 0.116	17,981	10) The TV-screens made me look at the product
p = 0.008	26,728	11) TV-screens provide me with useful information about a product
p = 0.000	41,817	12) The TV-screens make it easier to see discounts and promotions
p = 0.000	42,063	13) I feel the TV screens improve the store
p = 0.167	16,55	14) I like having TV-screens inside the store

Appendix 9: Insignificant Items

Item 1: The TV-screens give the store a modern image

Diagram 5: Total Respondents & Gender Differences

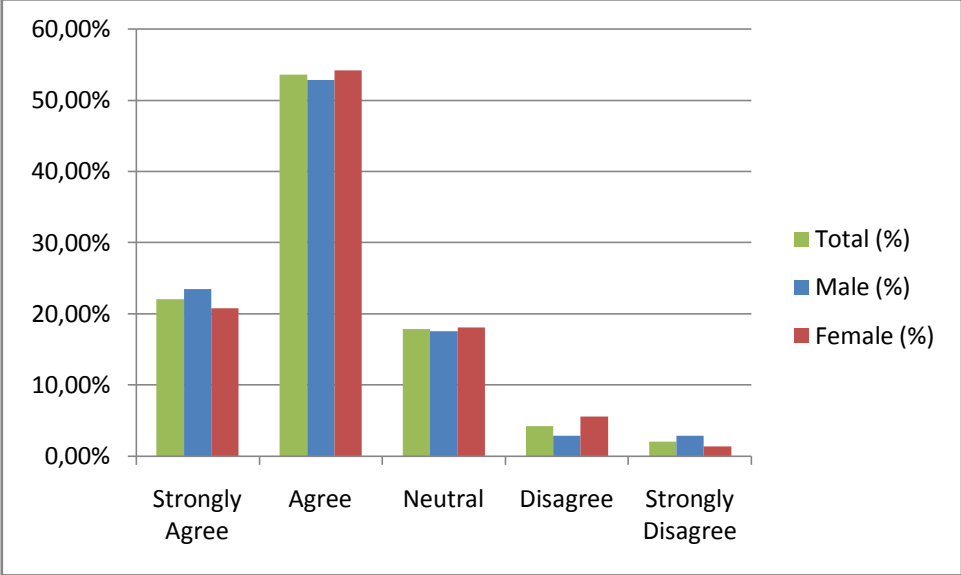
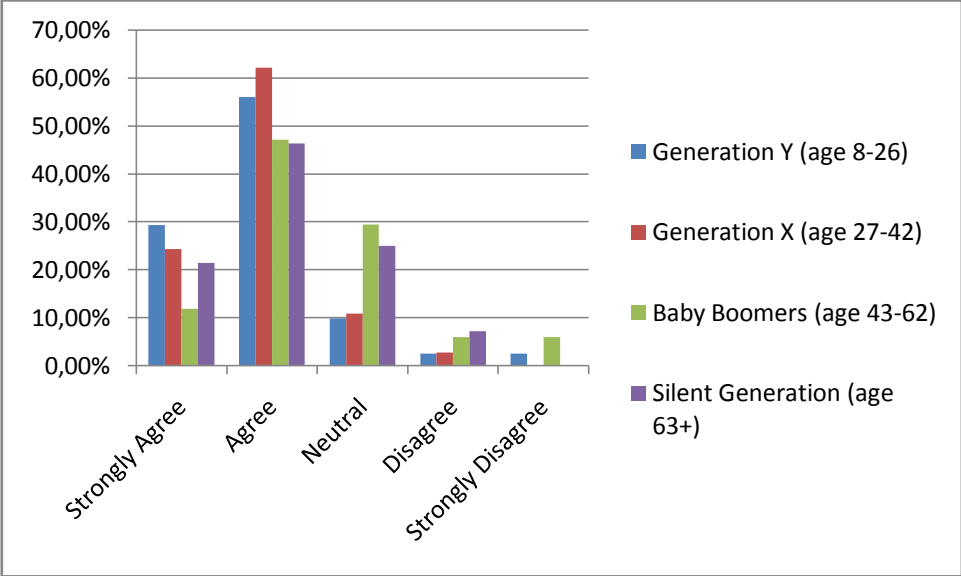


Diagram 6: Generational Differences



Item 4: I am more likely to buy a new product if the product is demonstrated on-screen

Diagram 7: Total Respondents & Gender Differences

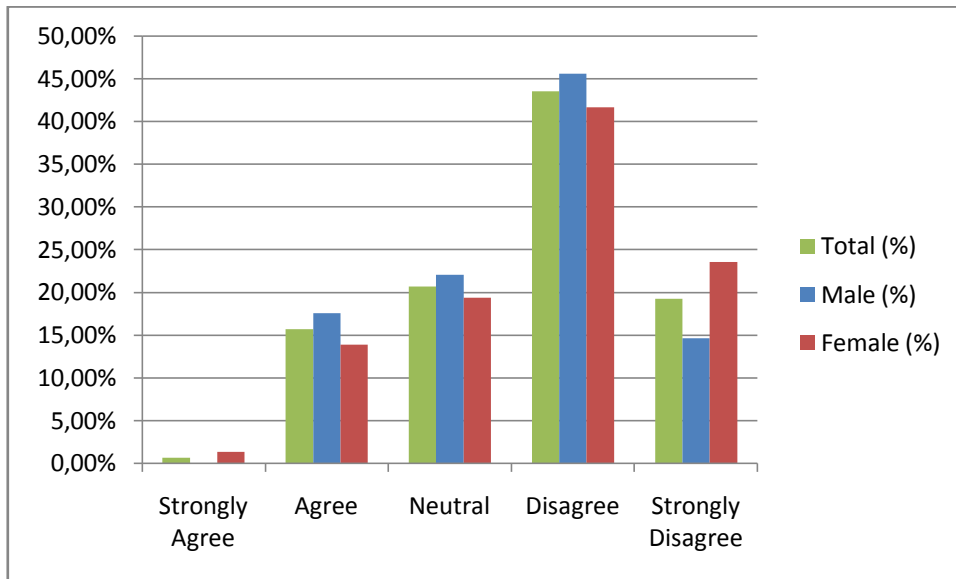
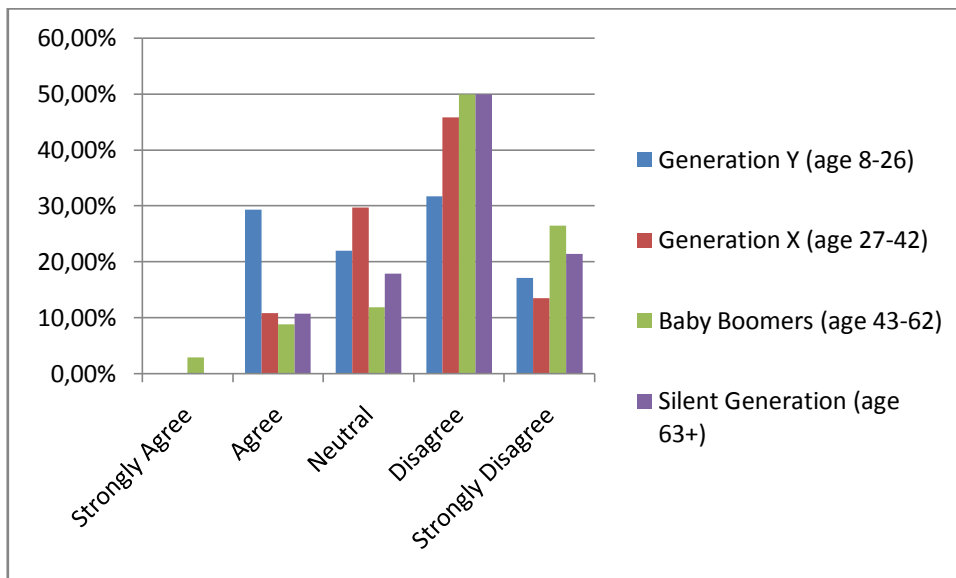


Diagram 8: Generational Differences



Item 7: I feel that TV-screens get in the way of my shopping

Diagram 9: Total Respondents & Gender Differences

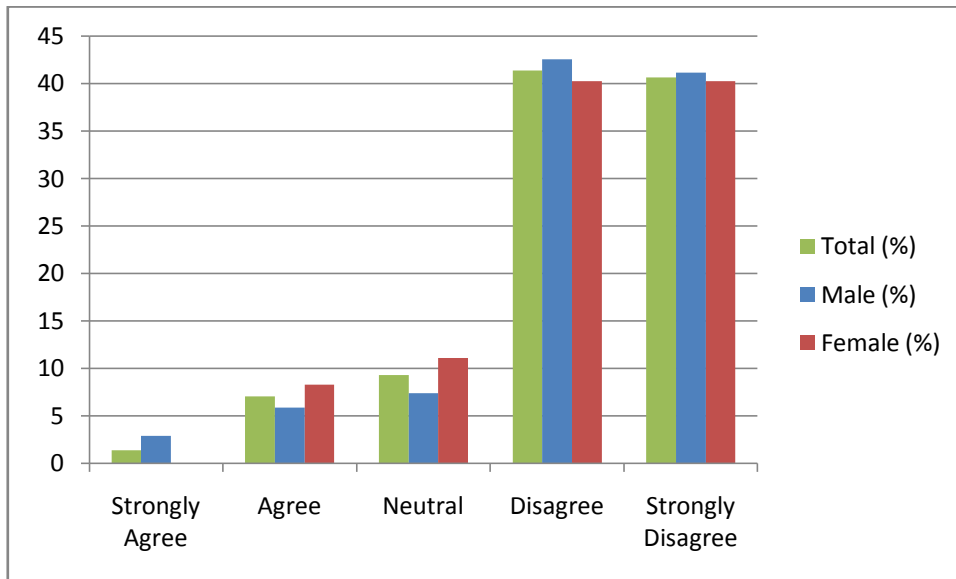
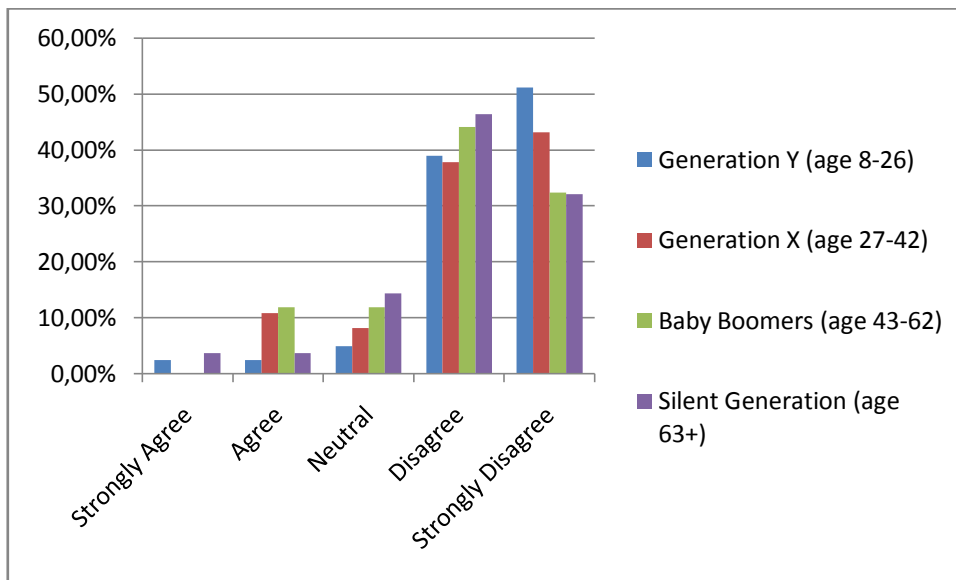


Diagram 10: Generational Differences



Item 9: The TV-screens inside the store make me feel stressed

Diagram 11: Total Respondents & Gender Differences

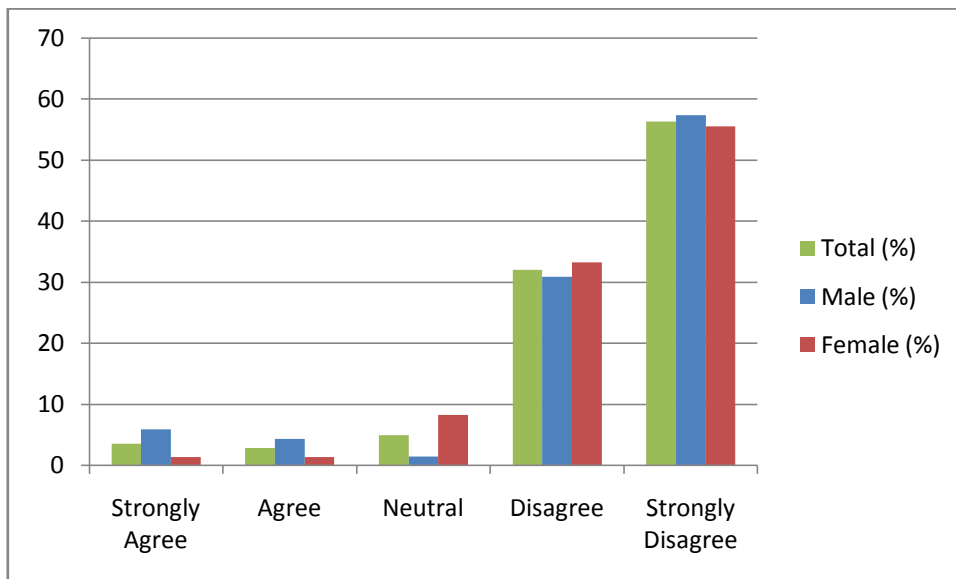
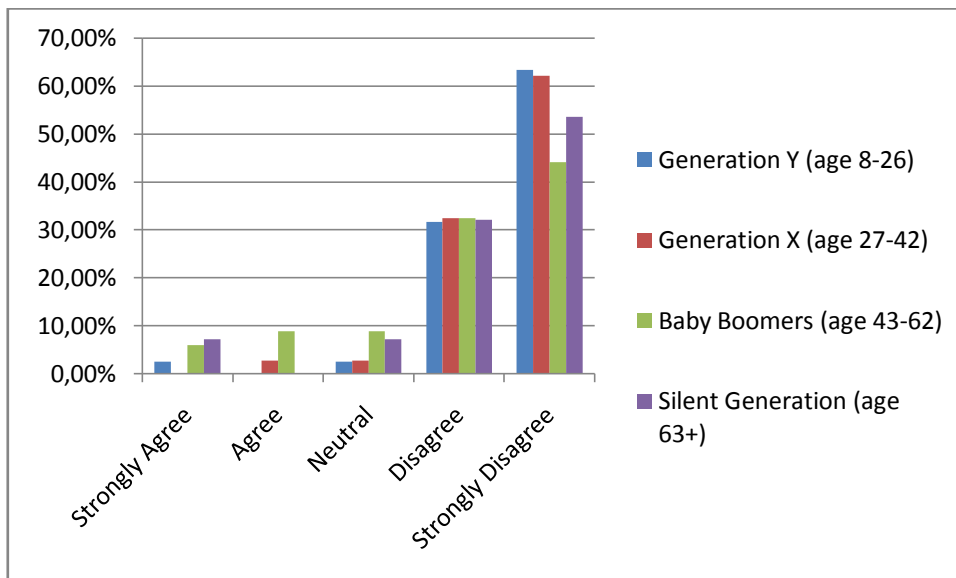


Diagram 12: Generational Differences



Item 10: The TV-screens made me look at the product

Diagram 13: Total Respondents & Gender Differences

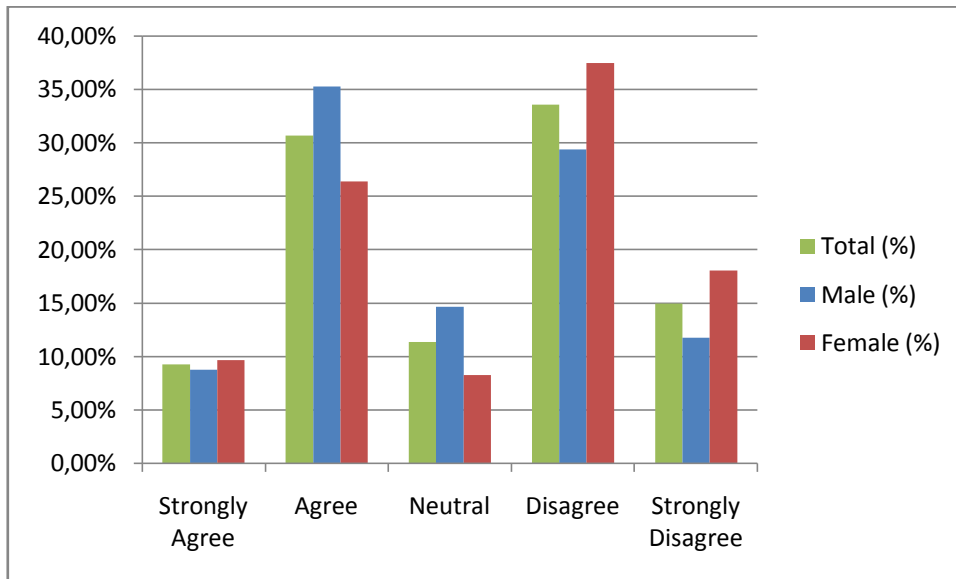
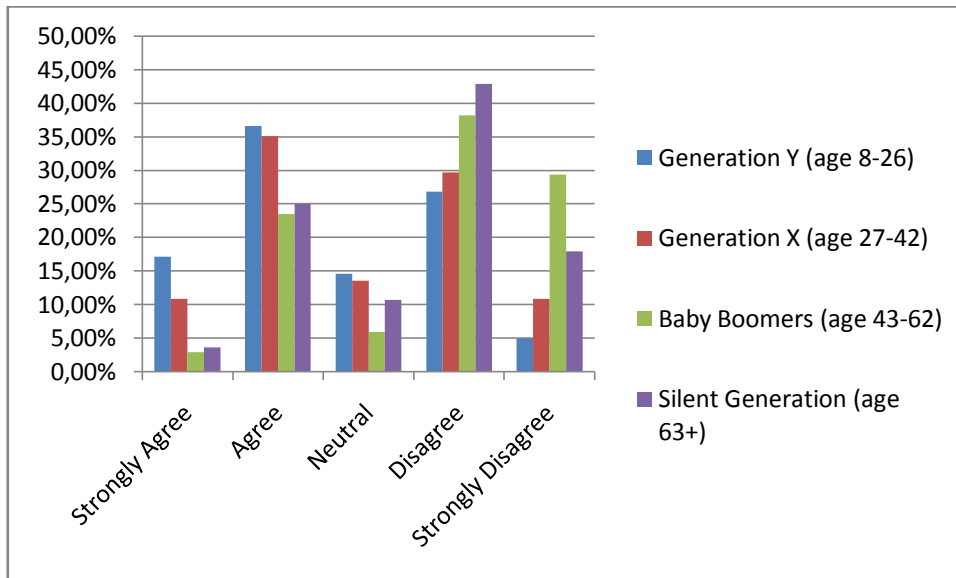


Diagram 14: Generational Differences



Item 14: I like having TV-screens inside the store

Diagram 15: Total Respondents & Gender Differences

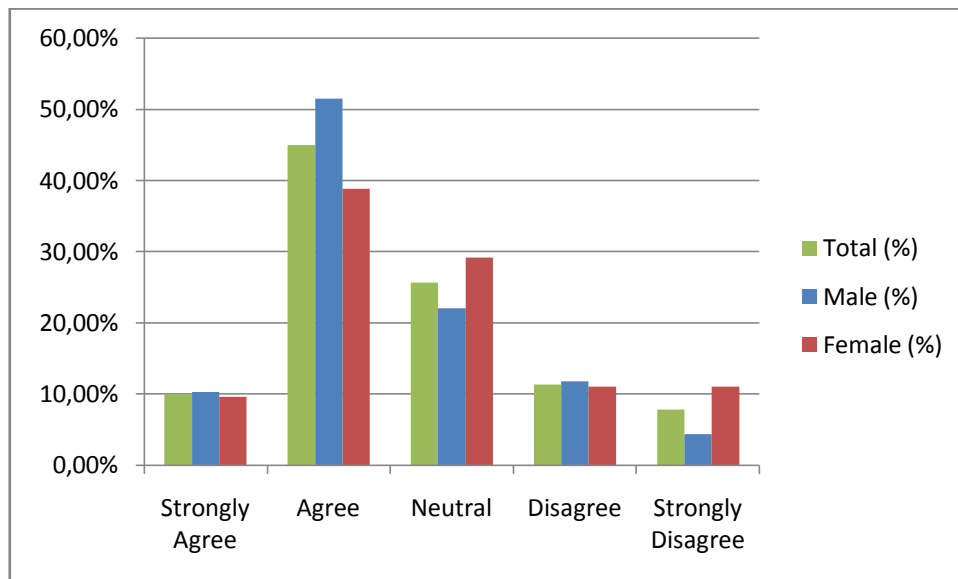
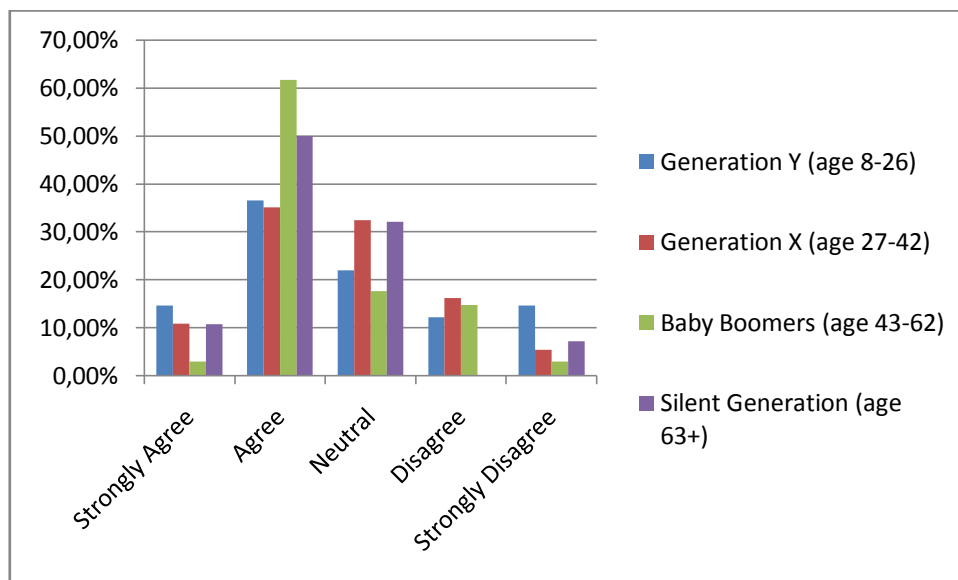


Diagram 16: Generational Differences



Appendix 10: Gender Significant Items

Item 8: I like the design of the TV-screens

Diagram 17: Total Respondents & Gender Differences

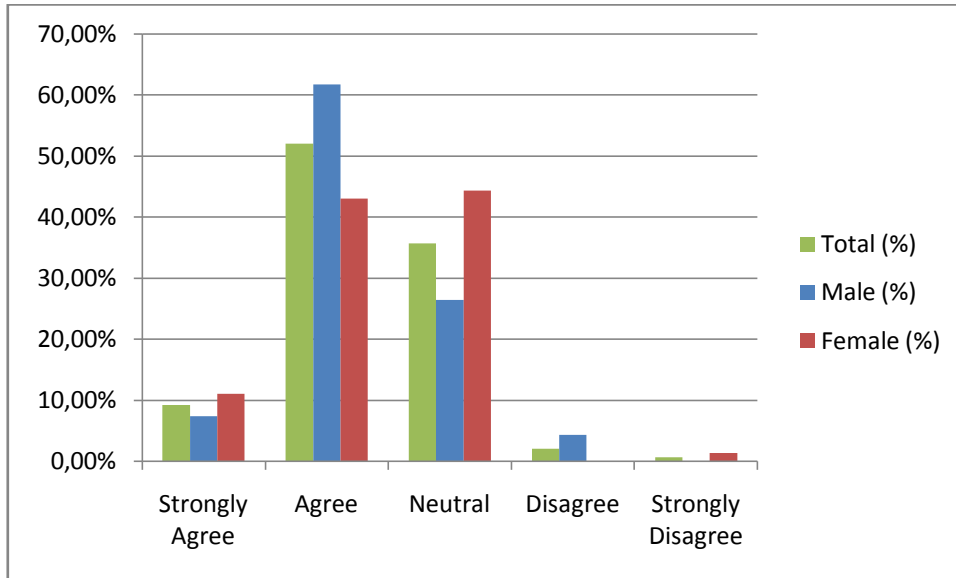
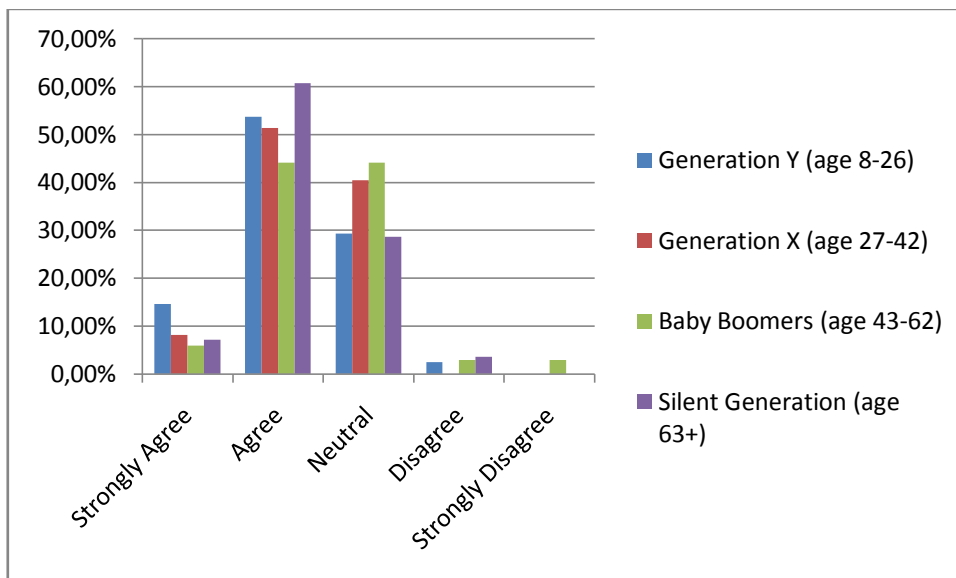


Diagram 18: Generational Differences



Appendix 11: Generation Significant Items

Item 2: I would like to see more TV-screens being used in the store

Diagram 19: Total Respondents & Gender Differences

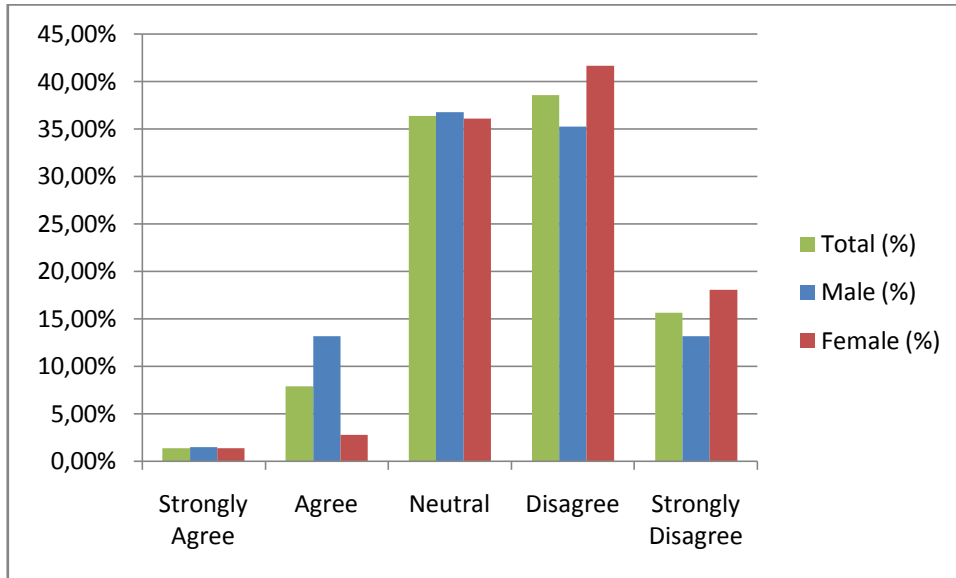
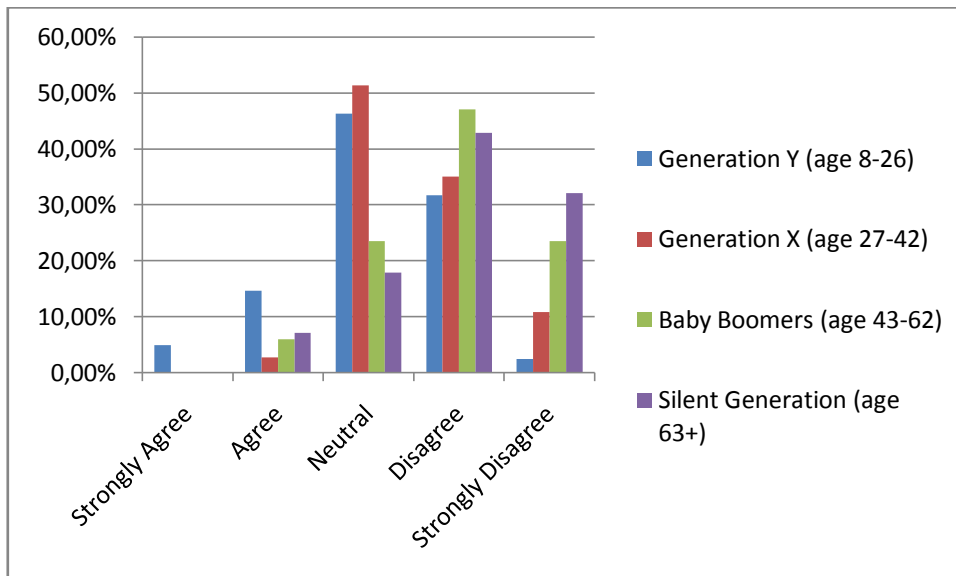


Diagram 20: Generational Differences



Item 3: I feel that TV-screens do not belong inside a supermarket

Diagram 21: Total Respondents & Gender Differences

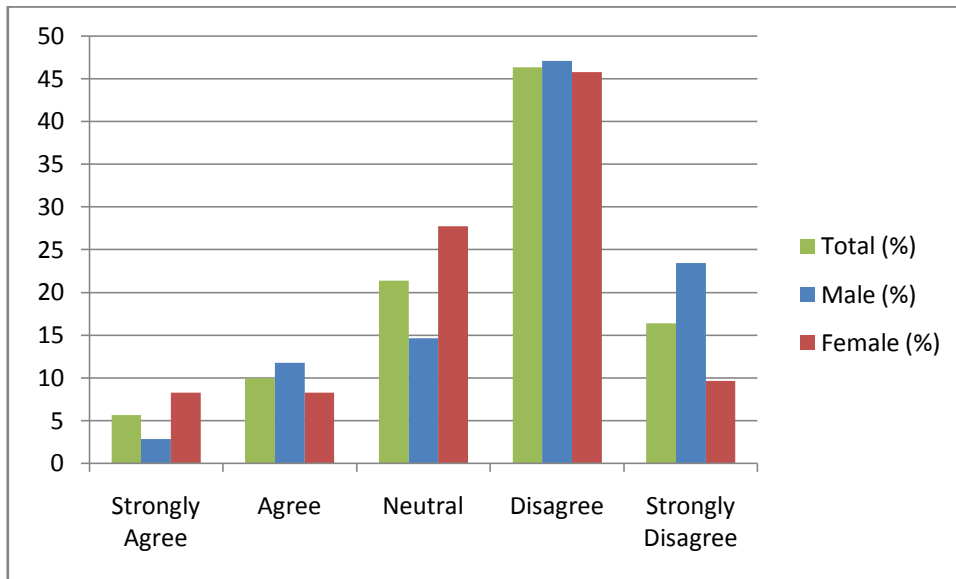
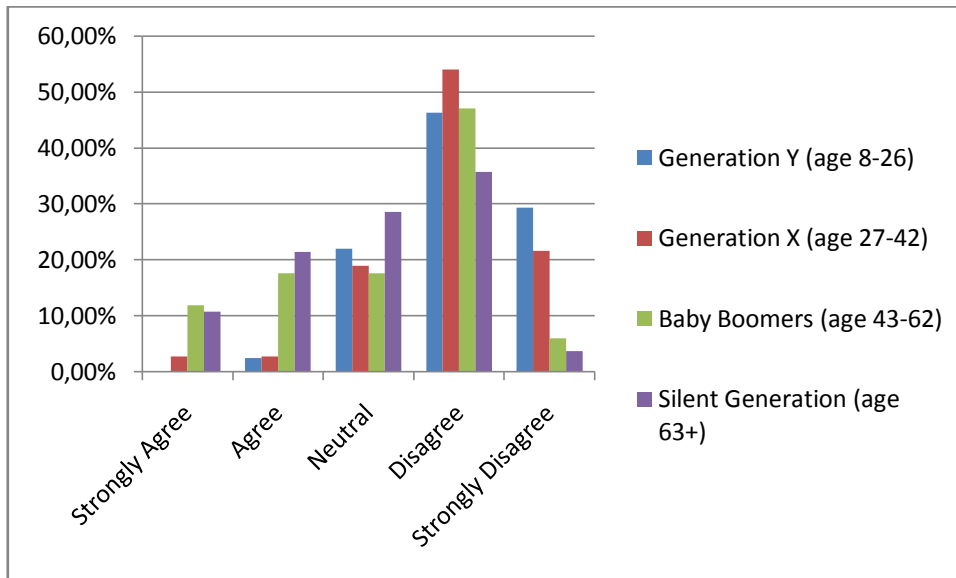


Diagram 22: Generational Differences



Item 5: The TV-screens make shopping more interesting

Diagram 23: Total Respondents & Gender Differences

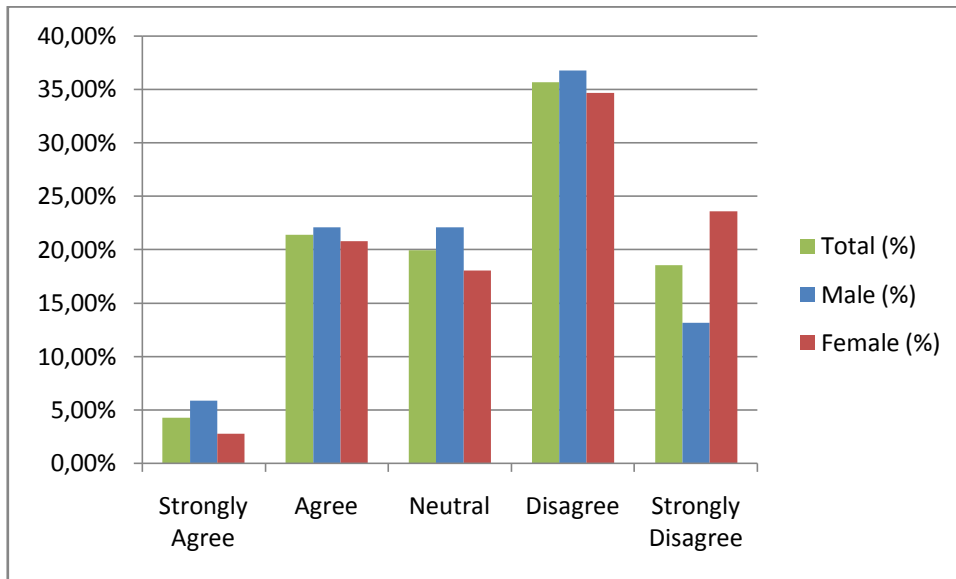
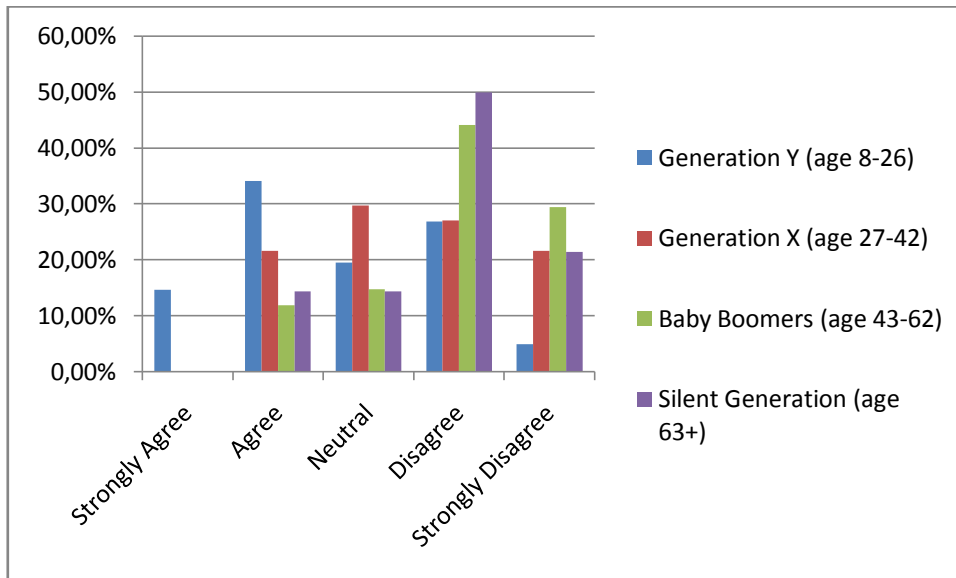


Diagram 24: Generational Differences



Item 6: I pay more attention to the screen if I know the product being displayed

Diagram 25: Total Respondents & Gender Differences

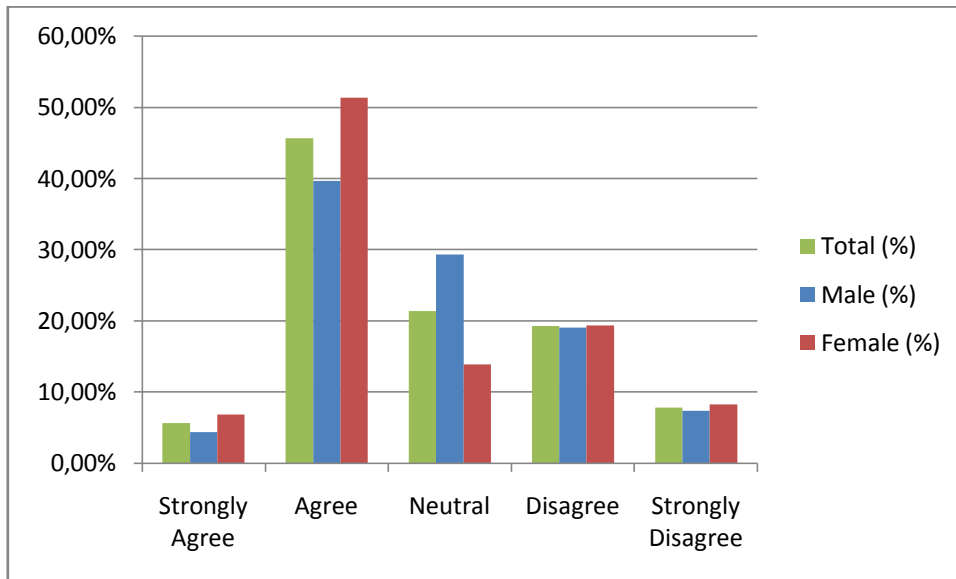
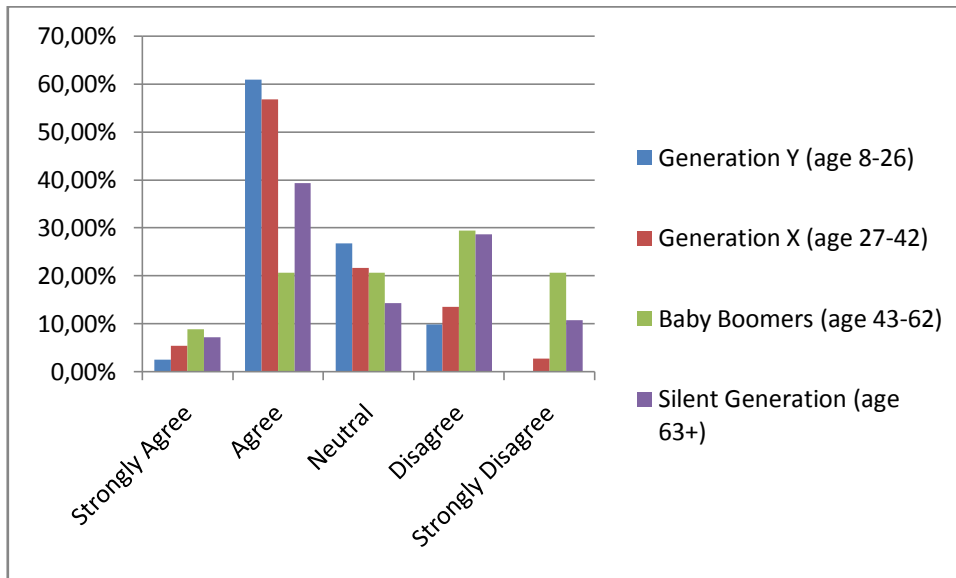


Diagram 26: Generational Differences



Item 11: TV-screens provide me with useful information about a product

Diagram 27: Total Respondents & Gender Differences

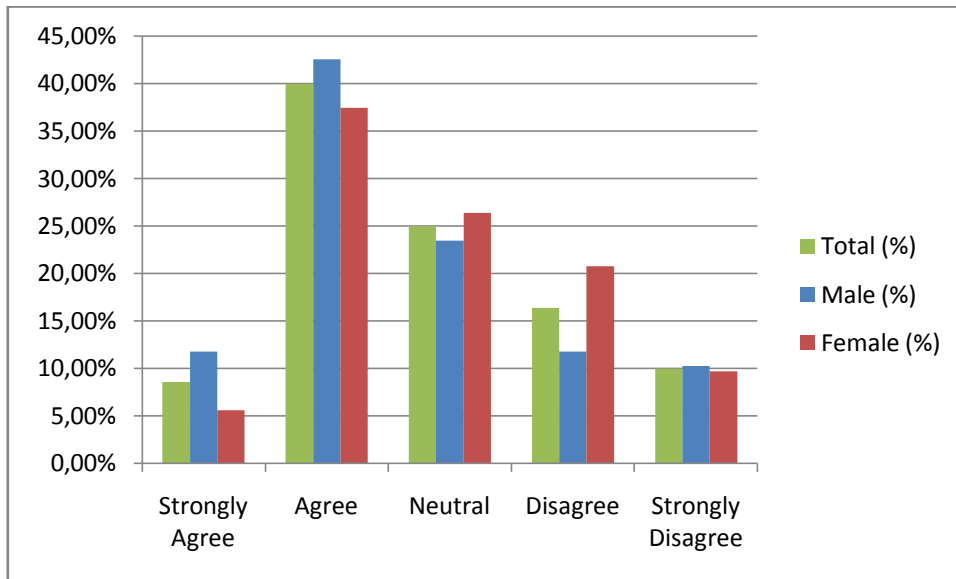
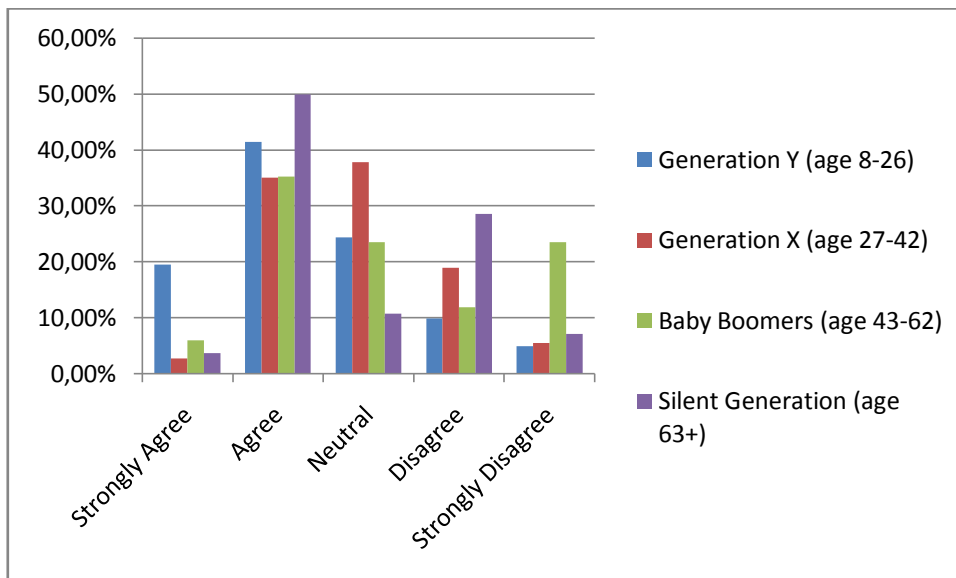


Diagram 28: Generational Differences



Item 12 The TV-screens make it easier to see discounts and promotions

Diagram 29: Total Respondents & Gender Differences

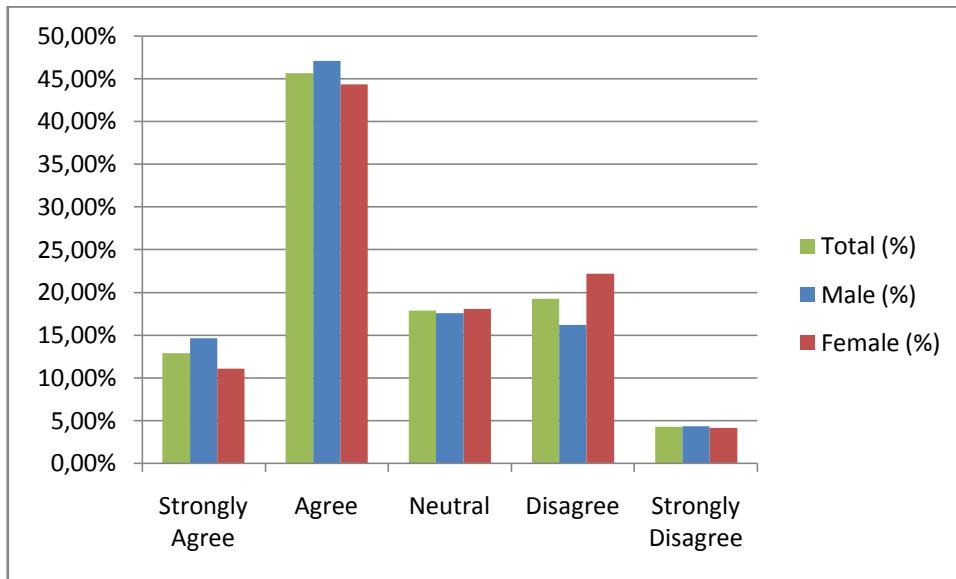
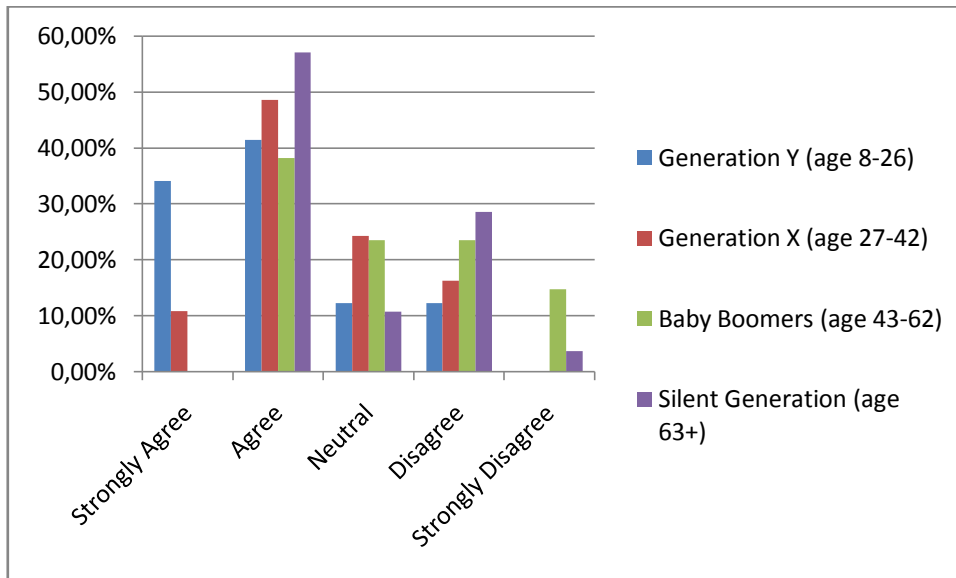


Diagram 30: Generational Differences



Item 13: I feel the TV-screens improve the store

Diagram 31: Total Respondents & Gender Differences

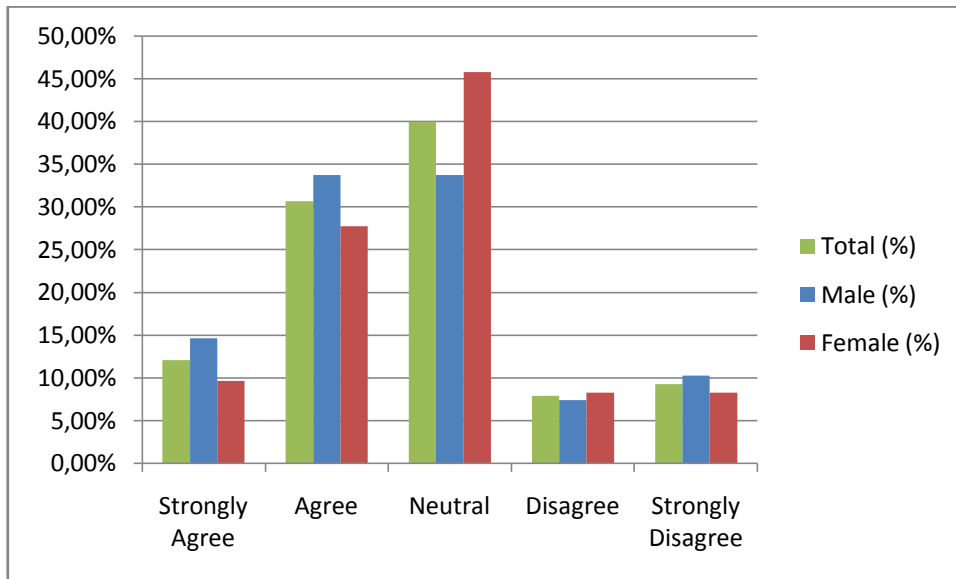
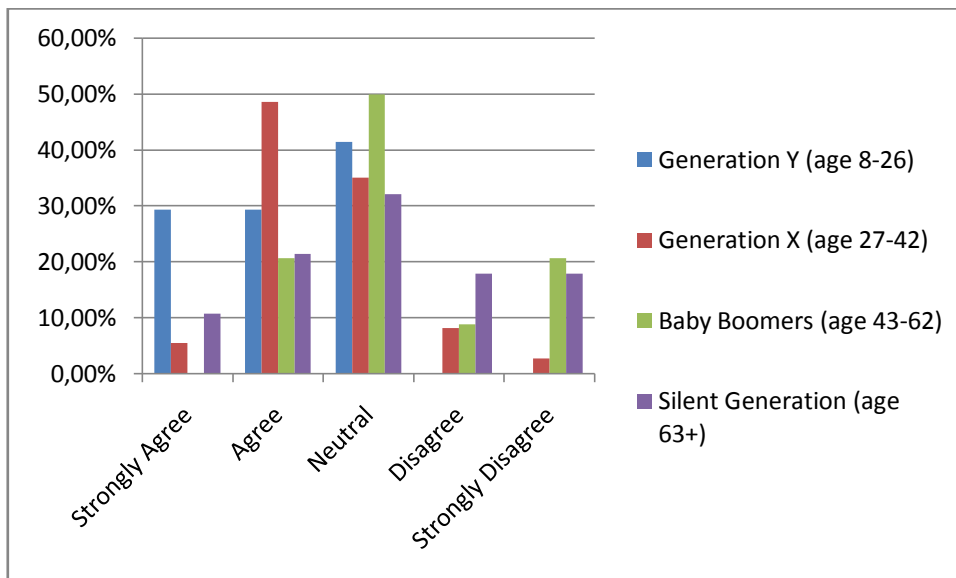


Diagram 32: Generational Differences



Appendix 12: Inner Profile Tables for the significant items

	Attitude (%)	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers
Item 2 I would like to see more TV- screens being used in-store	Strongly Agree	4,9	0,0	0,0	0,0
	Agree	14,6	7,1	2,7	5,9
	Neutral	46,3	17,9	51,4	23,5
	Disagree	31,7	42,9	35,1	47,1
	Strongly Disagree	2,4	32,1	10,8	23,5
	Total		100	100	100

Table 10

	Attitude (%)	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers
Item 3 I feel that TV- screens do not belong inside a supermarket	Strongly Agree	0,0	10,7	2,7	11,8
	Agree	2,4	21,4	2,7	17,6
	Neutral	22,0	28,6	18,9	17,6
	Disagree	46,3	35,7	54,1	47,1
	Strongly Disagree	29,3	3,6	21,6	5,9
	Total		100	100	100

Table 11

	Attitude (%)	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers
Item 5 The TV-screens make shopping more interesting	Strongly Agree	14,6	0,0	0,0	0,0
	Agree	34,1	14,3	21,6	11,8
	Neutral	19,5	14,3	29,7	14,7
	Disagree	26,8	50,0	27,0	44,1
	Strongly Disagree	4,9	21,4	21,6	29,4
	Total		100	100	100

Table 12

	Attitude (%)	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers
Item 6 I pay more attention to the screen if I know the product being displayed	Strongly Agree	2,4	7,1	5,4	8,8
	Agree	61,0	39,3	56,8	20,6
	Neutral	26,8	56,8	21,6	20,6
	Disagree	9,8	28,6	13,5	29,4
	Strongly Disagree	0,0	10,7	2,7	20,6
	Total		100	100	100

Table 13

	Attitude (%)	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers
Item 11 TV-screens provide me with useful information about a product	Strongly Agree	19,5	3,6	2,7	5,9
	Agree	41,5	50,0	35,1	35,3
	Neutral	24,4	10,7	37,8	23,5
	Disagree	9,8	28,6	18,9	11,8
	Strongly Disagree	4,9	7,1	5,4	23,5
	Total		100	100	100

Table 14

	Attitude (%)	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers
Item 12 The TV-screens make it easier to see discounts and promotions	Strongly Agree	34,1	0,0	10,8	0,0
	Agree	41,5	57,1	48,6	38,2
	Neutral	12,2	10,7	24,3	23,5
	Disagree	12,2	28,6	16,2	23,5
	Strongly Disagree	0,0	3,6	0,0	14,7
	Total		100	100	100

Table 15

	Attitude (%)	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers
Item 13 I feel the TV- screens improve the store	Strongly Agree	29,3	10,7	5,4	0,0
	Agree	29,3	21,4	48,6	20,6
	Neutral	41,5	32,1	35,1	50,0
	Disagree	0,0	17,9	8,1	8,8
	Strongly Disagree	0,0	17,9	2,7	20,6
	Total		100	100	100

Table 16

Appendix 13: Outer Profile Tables for the significant items

	Attitude	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers	Total
Item 2 I would like to see more TV-screens being used in-store	Strongly Agree	100,0%	0,0%	0,0%	0,0%	100,0%
	Agree	54,5%	18,2%	9,1%	18,2%	100,0%
	Neutral	37,3%	9,8%	37,3%	15,7%	100,0%
	Disagree	24,1%	22,2%	24,1%	29,6%	100,0%
	Strongly Disagree	4,5%	40,9%	18,2%	36,4%	100,0%

Table 17

	Attitude	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers	Total
Item 3 I feel that TV-screens do not belong inside a supermarket	Strongly Agree	0,0%	37,5%	12,5%	50,0%	100,0%
	Agree	7,1%	42,9%	7,1%	42,9%	100,0%
	Neutral	30,0%	26,7%	23,3%	20,0%	100,0%
	Disagree	29,2%	15,4%	30,8%	24,6%	100,0%
	Strongly Disagree	52,2%	4,3%	34,8%	8,7%	100,0%

Table 18

	Attitude	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers	Total
Item 5 The TV-screens make shopping more interesting	Strongly Agree	100,0%	0,0%	0,0%	0,0%	100,0%
	Agree	46,7%	13,3%	26,7%	13,3%	100,0%
	Neutral	28,6%	14,3%	39,3%	17,9%	100,0%
	Disagree	22,0%	28,0%	20,0%	30,0%	100,0%
	Strongly Disagree	7,7%	23,1%	30,8%	38,5%	100,0%

Table 19

	Attitude	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers	Total
Item 6 I pay more attention to the screen if I know the product being displayed	Strongly Agree	12,5%	25,0%	25,0%	37,5%	100,0%
	Agree	39,1%	17,2%	32,8%	10,9%	100,0%
	Neutral	36,7%	13,3%	26,7%	23,3%	100,0%
	Disagree	14,8%	29,6%	18,5%	37,0%	100,0%
	Strongly Disagree	0,0%	27,3%	9,1%	63,6%	100,0%

Table 20

	Attitude	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers	Total
Item 11 TV-screens provide me with useful information about a product	Strongly Agree	66,7%	8,3%	8,3%	16,7%	100,0%
	Agree	30,4%	25,0%	23,2%	21,4%	100,0%
	Neutral	28,6%	8,6%	40,0%	22,9%	100,0%
	Disagree	17,4%	34,8%	30,4%	17,4%	100,0%
	Strongly Disagree	14,3%	14,3%	14,3%	57,1%	100,0%

Table 21

	Attitude	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers	Total
Item 12 The TV-screens make it easier to see discounts and promotions	Strongly Agree	77,8%	0,0%	22,2%	0,0%	100,0%
	Agree	26,6%	25,0%	28,1%	20,3%	100,0%
	Neutral	20,0%	12,0%	36,0%	32,0%	100,0%
	Disagree	18,5%	29,6%	22,2%	29,6%	100,0%
	Strongly Disagree	0,0%	16,7%	0,0%	83,3%	100,0%

Table 22

	Attitude	Cluster 1 Generation Y	Cluster 2 The Silent Generation	Cluster 3 Generation X	Cluster 4 Baby Boomers	Total
Item 13 I feel the TV- screens improve the store	Strongly Agree	70,6%	17,6%	11,8%	0,0%	100,0%
	Agree	27,9%	14,0%	41,9%	16,3%	100,0%
	Neutral	30,4%	16,1%	23,2%	30,4%	100,0%
	Disagree	0,0%	45,5%	27,3%	27,3%	100,0%
	Strongly Disagree	0,0%	38,5%	7,7%	53,8%	100,0%

Table 23

Appendix 14: Zeta Display Interview

Interview with: Leif Liljebrunn

Interviewers: Daniel McCartney, Benjamin Wallenborn

Date: 17th April, 2007

L: Leif Liljebrunn

D: Daniel McCartney

B: Benjamin Wallenborn

L: When they measure sales they always compare to a shop without TV displays. You are not measuring the sales?

D: No we are measuring the actual display itself and then the shoppers attitude towards it

B: Our dream-scenario would be if we would have one or two days with just a cardboard display and the next two rounds would just be with the screens.

D: Do you think it would be worthwhile getting in contact with Staffan?

L: He is quite hard to reach in Ahus

D: In terms of countries which use displays how are things going on in England, Germany, etc.?

L: Started in England, in Tesco.

D: Tesco is more in-store TV not a display tool

L: True

D: Are you taking the POP display to mainland Europe and England?

L: We are doing tests in the UK and Italy right now

B: In-store TV programs didn't work did they?

L: No they didn't

B: Have you found that retailers are now against displays? Do they realize it is a different concept or is the stigma spilling over to the POP displays?

L: You have two different concepts. The queue-vision and we have the advertisement screens which we sell inside the ICA stores. ICA e.g. owns the place and you see the programs in the store only. Not outside.

D: Interesting.

L: The business idea is different.

B: Do the businesses realize it is a different idea?

L: It is changing towards this now yes. TV and traditional is hard to keep in together.

D: So are other retailers moving in that direction as well?

L: They will have to eventually yes.

D: Do you have much contact with manufacturers such as L'Oreal? Are you in direct contact with them?

L: Yes. We have a studio and we are getting film from them and we publish that on the screens.

D: What feedback are you getting from the manufacturers? If I were a representative from L'Oreal would I be saying? Are they very positive?

L: Very positive. It is better for them to put the money in the store for these displays than TV Ads. More or less 70% of the buying decision takes place in-store so...

B: Do you think with groceries (low-involvement) and the brand reminder do you still think it will still shift away from TV advertisement? You have to keep reminding the customer of the product all the time. Will it be only restricted to the store?

L: It won't be restricted to just the store but there you will have the offer, e.g. take 2 for 1. And short messages. Not like TV 30-60 seconds but only 10-12 seconds.

D: What type of screen would be more useful to observe for you? The three-screen model or the biggest screen?

L: The biggest screen. You will ask the respondents before and after the shopping?

B&D: No. What we have been thinking [explanation of method]. Do you think it is fine if we observe without the knowledge of subjects?

L: You would have to do the survey in Swedish.

B: That should not be a problem. I speak Swedish and S speaks some as well.

D: How do you see in the future how many screens would you see in a store?

L: We don't know yet. Can't have too many. But we really don't know.

B: If you can't have too many because of clutter, etc. wouldn't there be a price war for screen time among manufacturers.

L: What is happening in Ahus there they have 30 displays.

B: Is that the same size as in Lund?

L: It is a Kvantum so it is similar.

D: Do other retailers also have your displays?

L: No not yet. If you work with ICA you are not supposed to work with Hemköp. And if you have ICA you have to close to 50% of the market. With ICA you can also reach Holland and Norway.

D: What sort of product categories do the displays work the best for?

L: [explains about how the displays work]; [inaudible]

D: You working with the manufacturers who make the shelves? You could really incorporate the screens into the shelves

L: That is what we see happening in the future. Today we are doing it without that.

L: We are working with sound displays we will see smell in the future.

D: We are currently working on smell and sound. That will then be something that is happening?

L: Yes. It is very hard in the store. You have different volume levels in the morning and afternoon. The personnel keep tinkering with the volume so it becomes difficult.

B: Can you actually work the screens with sounds? Because if you have some kind of in-store background music that would maybe be a little too much no?

L: Yes. But there is a technique that can be used. It is a *sound shower*. So if you stand here [*standing right in front of the TV-screen*] you can only hear it here. But it is quite expensive right now.

B: But the loudspeakers right here cannot do that.

L: No. These ones are not that good yet.

D: So in time [the screens] will become interactive, with smell, sound everything?

L: The next step will be interactive, to communicate with the customer and customer loyalty. If you have a good atmosphere in the store people will go back.

The manager in Ahus for example has a special display just for him. It has a special program that is sending there so you can connect the displays into the network and he is changing the messages through the program over the internet. So in stores you can change the message.

B: So that is an option the retailers have then? Control the messages themselves?

L: Yes. For example there is northern Sweden where skiing is more popular and southern Sweden where football is more popular so e.g. you could change the message (displayed on screen) in different regions and shuffle the messages like on an iPod. Or if something is sold out the product displayed on the screen can be changed at all times.

D: What I saw in the ICA store the other day, that's why I didn't realize it was all synchronized, they had turned it off and put a sticker in the front and put a new price on that.

L: So the screens are changing messages once a week. So e.g. L'Oreal is paying for the film showing on the video. ICA buys the structure and L'Oreal is paying for the time on the screen. That is the important difference.

D: If I were L'Oreal, would I have to pay a lot more to have my message on a screen than on a traditional display?

L: Yes.

D: So it is quite a bit more expensive...

L: Yeah. There is a fight between the manufacturers and the retailers about that.

[break]

L: [showing us screens on a Power Point slide depicting info on how to use hand held scanners] If you move inside the ICA store it is also information for the consumer how to use the scanners.

B: But you really have to be careful not to put up too many screens up don't you?

D: Yeah but otherwise you would just have regular displays wouldn't you?

B: But would you really have the same effect (of the single screen) if it were only one of many?

D: You would get more info across though...

L: That's changing now. People pay for it so...

B: Have any ICA stores given you negative feedback? Is there any criticism?

L: No. They are actually surprised at how good these screens work. They are so good that they are actually not telling us any good things about them anymore.

D: Another question: There is always a difference in opinion between central management and the individual store managers. How do the actual store managers react to the extra hassle of setting them up, etc.? Have you gotten any complaints from them?

L: Not yet. It will probably come. I think it will come. The top-managers are now trying to control what is shown in the stores and I don't think the individual managers like that too much. They would like to have the same message showing all over all ICA stores.

B: From a neutral perspective now it doesn't make that much sense though does it? Doesn't the store manager know best where the screens have the greatest effect and where to best use it?

L: They are buying screen time and if they are for example a L'Oreal advertisement in all ICA stores at the same time, you can get more money from L'Oreal saying that you show it all over Sweden.

D: The retailer set is quite different in England compared to Sweden. Tesco is very centralized compared to ICA...

L: ICA stores are all franchises.

D: In England it is all fully owned.

B: What product category is the most effective for screens.

L: It differs...

D: But from your personal point of view what type of product category is it the most effective for in a grocery store.

L: I can show you some results where you can see the effect on different types of products.

[showing us several Power Point slides about how the displays can be used)

B: To be honest at ICA Kvantum I was actually looking for the screens but did not notice them.

L: Was it the small ones?

B: Yes.

L: You need more than one or two in the store to have an effect.

(Showing a screen displaying a Ramlösa advertisement)

B: I think what makes a big difference, because this is Ramlösa and they are a very big brand in Sweden, so I think this is actually something you would notice quicker than say noodles or a lesser known brand.

L: Well the thing is that you just pick up water without much thinking. It could be more effective for a product where you have a big involvement. So I don't think that Ramlösa is a very good example.

B: But just from an attention point of view I think a known brand might make a difference in attracting more attention...

L: Yes. That is true.

[Showing us a e-on advertisement]

L: That is another kind of message for the customer for e-on. They wanted to show the customer the kind of tools they had ... [Inaudible]

[Showing us screens hanging over the check-out]

L: When you are in queue checking out, you don't want to have offers but a different kind of message. More like: Don't forget to buy something at the newsstand behind the cashier. Newspapers, etc. You want the customer to feel entertained: "Oh I didn't spend a lot of time in here..."

L: You can again change the message here for different regions. E.g. news, weather, etc.

L: The screens will be used by different kinds of retailers. The difference between e.g. fashion and grocery is the message...

B: With the surveillance, how do you control if one of the retailers turns off the screen...

L: We notice it.

B: Exactly but can you turn it back on? Because on one hand the manufacturer wants his message displayed...

L: If the retailer turns it off we can call him and say "We can see that it is turned off, why is it not turned on?"

B: Do you penalize them if they turn off the screen?

L: No. We just call them.

L: But that would then be the manufacturer's problem as well. We can send reports to ICA Central as well and they can then take care of it. Because the manufacturers are paying for time and the retailers have to show that the customer got what he paid for.

D: How would you say the screens compare to traditional displays?

L: Sales rise between 40% and 800% with screens.